

Lukas Peter
Democracy, Markets and the Commons

Lukas Peter (Dr. phil.), born in 1981, is a philosopher and has taught at the Universities of St. Gallen, Zürich and Lucerne. He studied at the University of Zurich in Switzerland and, previously, at McGill University in Montreal, Canada. During his dissertation, he was a member of the Swiss National Center of Competence in Research for Democracy. His research topics include freedom, democracy, economics and ecology. He otherwise makes cheese, participates in community supported agriculture projects, is a father of two children and lives in Zurich.

Lukas Peter

Democracy, Markets and the Commons

Towards a Reconciliation of Freedom and Ecology

[transcript]

This study was accepted as a dissertation by the Faculty of Arts and Social Sciences at the University of Zurich in the fall semester 2017 on the recommendation of Prof. Dr. Urs Marti-Brander, Prof. Dr. Francis Cheneval, Prof. Dr. Philipp Gonon and Prof. Dr. Ugo Mattei.

Published with the support of the Swiss National Science Foundation.

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>



This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 (BY-SA) which means that the text may be remixed, build upon and be distributed, provided credit is given to the author and that copies or adaptations of the work are released under the same or similar license. For details go to <http://creativecommons.org/licenses/by-sa/4.0/> Creative Commons license terms for re-use do not apply to any content (such as graphs, figures, photos, excerpts, etc.) not original to the Open Access publication and further permission may be required from the rights holder. The obligation to research and clear permission lies solely with the party re-using the material.

First published in 2021 by transcript Verlag, Bielefeld

© Lukas Peter

Cover design: Kordula Röckenhaus, Bielefeld

Manuscript editing: Marc Hiatt, Gegensatz Translation Collective, Berlin

Printed by Majuskel Medienproduktion GmbH, Wetzlar

Print-ISBN 978-3-8376-5424-0

PDF-ISBN 978-3-8394-5424-4

<https://doi.org/10.14361/9783839454244>

Printed on permanent acid-free text paper.

Contents

Preface	9
Introduction	13
1. The concept of democracy	19
1.1 Democracy as a contested concept	19
1.2 Models of democracy	21
1.3 Foundational and surplus dimensions of the concept of democracy	23
2. The competitive market and the state	29
2.1 Hobbes: anarchy, leviathan and the competitive market	30
2.2 Justifying the market: social order, protection from arbitrary powers and unlimited wealth	30
2.3 Self-regulation, limited politics and the open-access market	34
2.4 Economist kings, authoritarian liberalism and structural constraints	38
3. Garrett Hardin's tragedy of the unregulated commons	45
3.1 The tragedy: maximization strategies and the double C-double P game	45
3.2 Social institutions against tragedy: privatism or socialism	48
4. Overcoming the tragedy with the Ostroms	51
4.1 Collective action and "grim" social dilemmas	52
4.2 The tragedy of monocentric orders	54
4.3 The tragedy of privatization and the market	57
4.4 Overcoming tragedy through collective action	70
4.5 Self-governing commons with the aid of eight design principles	75
4.6 Institutional diversity and polycentricity	81
4.7 Interim conclusion.....	85

5. An ecological understanding of the commons	89
5.1 Nature, language and social relations	90
5.2 Concepts of nature and social reality	93
5.3 Autopoiesis and the interdependent co-creation of reality	100
5.4 Ecosystems, abundance and natural commons	106
5.5 Empathy, cooperation and a common(s) reality	115
5.6 Ecological freedom, democracy and care	119
5.7 The civic tradition of ecological democracy and commoning	130
 6. Towards a commons theory of property	 143
6.1 The normative language of goods	144
6.2 Common needs, common resources and common property	148
6.3 Reinterpreting John Locke's theory of property from a commons perspective	155
6.4 Predistribution: commons in a property-owning democracy	180
6.5. Consumption goods: individual or common property?	194
6.6 Interim conclusion	205
 7. The role of the state in a commons-creating society	 207
7.1 Preliminary reflections on the state-commons relationship	207
7.1. Varieties of the state and the role of the commons	210
7.2 Public goods versus state-supported commons:	
housing, health care and education	216
7.4 Creating commons in a non-ideal world – in and against the state	239
 8. Commons and the market	 251
8.1 The market in commons literature	252
8.2 Enclosing commons and opening markets	256
8.3 The market as a commons	260
8.4 Responses to possible critiques of the market commons	274
 9. Conclusion	 279
 Literature	 299

“We stand at the gates of an important epoch, a time of ferment, when spirit moves forward in a leap, transcends its previous shape and takes on a new one. All the mass of previous representations, concepts, and bonds linking our world together are dissolving and collapsing like a dream picture. A new phase of the spirit is preparing itself. Philosophy especially has to welcome its appearance and acknowledge it, while others, who oppose it impotently, cling to the past.”

G. W. F. Hegel, in a lecture on September 18, 1806,
quoted in Francis Fukuyama's *End of History* (1992)

“There is enormous inertia – a tyranny of the status quo – in private and especially governmental arrangements. Only a crisis – actual or perceived – produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes politically inevitable.”

Milton Friedman, Preface to
Capitalism and Freedom (1982)

Preface

It is always difficult to know where a book begins and where it ends. The origins of this book most likely lie far back in my own past and, ultimately, in the historical roots of humanity. Put somewhat less philosophically, while I was growing up I would often ask myself if ‘this’ is the only ‘reality’ that has ever existed. By ‘this reality’ I meant – in an unconscious and general way – the prevalent form of social organization based on competition and economic monetary growth, or what most people call ‘capitalism’. It always seemed strange to me that human beings are ever so intelligent, yet appear to have set up rather peculiar organizations and institutions in which they seem to be forced to perpetually accumulate wealth, ultimately undermining the ecological and socio-political conditions of their own existence. Furthermore, I was for some reason always suspicious of the widespread belief that humans are independent beings and that freedom is primarily considered as the non-interference of others. I always had a hunch that people’s existences depended on one another and that these interdependencies also include the ecological webs that people find themselves in. These intuitions have not let me go since and have led me to deal with these issues in a more fundamental, theoretical and systematic manner. Even though this book was originally written as a dissertation, the intellectual endeavor was never merely an exercise in arm-chair philosophy, nor was it ever solely aimed towards an academic audience. Before beginning this book, I was inspired by numerous commons projects, such as housing cooperatives and community supported agriculture, that opened my eyes to ‘another reality’ or another way of organizing social activities and life in general. These people rejected the belief that the invisible hand of the self-regulating market will look after them and took their economic activities and fates into their own hands by democratically self-regulating their common realities. But soon enough, I realized that commons were not merely charming niches in a belligerent environment. Instead, these shared realities and the cooperation that results from them constitute the bedrock of all of life.

Such a perspective radically puts into question the narrative that Western societies have been telling themselves for some time now: that life is “solitary, poor, nasty, brutish, and short” (Thomas Hobbes). Obviously, a positive and optimistic

understanding of reality can easily be put off as naive or utopian. Yet this positive take on humanity and reality does not mean that everyone should get along and live in harmony with one another. Instead, I believe that the way we understand ourselves influences how human beings interact with each other, with non-human beings and with 'nature' in general. Theory is not merely an objective analysis of a given reality, but influences what type of world is created. Simply in virtue of their mutual interdependence as living beings, human beings co-create their common realities whether they like it or not. That is one of the main points being made in this book. And that's why theory matters. It is in this sense that commons and basic forms of democratic cooperation can be understood as fundamental pillars in the constitution of reality. Yet democratic cooperation implies that conflicts are not suppressed or wished away, but actually dealt with through confrontation, negotiation and deliberation. And commons provide the institutions and organizations where this can take place. Yes, commons and democratic cooperation are difficult and tiresome. Hence only by *thinking* of reality as shared can people be empowered to claim their rights in the democratic organization of their interdependent lives in the form of commons. This path is stony and strenuous. And I believe that only by taking these ideas seriously is it possible to reconcile human freedom with ecological flourishing.

This being said, a book on commons can never be understood as an individual endeavor or achievement. As already mentioned, I was deeply inspired by the many people who initiate and maintain all sorts of commons projects. In this sense, I am largely indebted to the many commons activists who already paved the way to this book by formulating these activities, organizations and institutions into words, arguments and theories. These include the people from the Commons Institute in Bonn, including Johannes Euler, Silke Helfrich and Stefan Meretz, and those from my regional community supported agriculture project *ortoloco* in Zürich, such as Tex Turtschentaler, Christian Müller, Ursina Eichenberger and many others. Within academia, I am extremely grateful for the institutional and financial support from the National Centre of Competence in Research "Democracy – Challenges to Democracy in the 21st Century" and the Doctoral Program in Democracy Studies at the University of Zurich. Even though my topic did not fit into any single academic discipline, I nevertheless was made to feel welcome to pursue my interests and research rather freely. At the University of Zurich I am otherwise extremely thankful for Urs Marti-Brander's time, support and critical comments, who, being my first supervisor, was probably the most difficult person to convince with my arguments. I am also grateful for my second supervisor, Francis Cheneval, for his work on democratic theory and his critical feedback on my work. Furthermore, I appreciate the feedback I received in the colloquium for political philosophy at the University of Zurich. A big thanks goes to Alice El-Wakil for her collaboration and support throughout the doctoral program and in the academic association Democ-

racyNet. Importantly, I also wish to thank my third supervisor, Philipp Gonon, at the Chair for Vocational Education and Training at the University of Zurich for enabling me to be a research assistant during my doctorate and for generously allowing me to write my dissertation in another academic field. Here, I am also grateful for having been able to learn about Vocational Education and Training, which opened my eyes to more widespread institutions of democratic coordination and management of economic activities. I also appreciate the support from Philipp Eigenmann, Michael Geiss, Barbara Hof, Stefan Keller and Lea Zehnder from this department throughout my doctorate. Closer to the end of my project, I am greatly indebted to my fourth supervisor, Ugo Mattei, who seemed to be one of the few academics who understood what I was on about and who supported me by taking part in the Law of the Commons workshop in 2016 at the University of Zurich and by inviting me to the Common Core of European Private Law Project in 2017 in Turin. I am also grateful for the feedback that participants at that workshop gave me, particularly José Luis Vivero Pol, Christine Frison and Samuel Cogolati. For the finalization of the book, I am thankful to the Swiss National Science Foundation for their generous grant, which has enabled me to publish it under an open-source commons license, to transcript for publishing the book and to my manuscript editor Marc Hiatt, who spent many hours meticulously going over the document. Last but not least, I am very grateful for the support of my wife, Anita Weiss, my children, Bruno and Moira, and my parents, who cheered me on no matter what I chose to devote myself to.

Introduction

Since the end of the Soviet Union in 1989, it has largely been assumed that liberal democracy or democratic capitalism provides people with the best social institutions possible. While capitalism ensures individual economic freedom, democracy provides people with political freedom. Private property coupled with markets and periodic elections ensure that people receive the most efficient economic and political systems that they could possibly want. Francis Fukuyama famously propagates this thesis in his 1992 book *The End of History and the Last Man*. Here, Fukuyama writes,

The apparent number of choices that countries face in determining how they will organize themselves politically and economically has been diminishing over time. Of the different types of regimes that have emerged in the course of human history, from monarchies and aristocracies, to religious theocracies, to the fascist and communist dictatorships of this century, the only form of government that has survived intact to the end of the twentieth century has been liberal democracy. (Fukuyama 1992: 45)

Although Fukuyama admits that much can be improved in this system, he nevertheless believes that “we have trouble imagining a world that is radically better than our own, or a future that is not essentially democratic *and* capitalist” (ibid: 46; emphasis added). After the fall of the Berlin Wall, people’s ability to imagine a better and, importantly, different world has supposedly come to an end. Thus, humanity has reached the end of history, at least regarding its political and economic institutions.

It might appear somewhat tedious to begin a book on democracy, markets and commons with a reference to Francis Fukuyama. Many people have already written about his bold thesis. Nevertheless, it must be acknowledged that Fukuyama’s book articulates an idea that has taken hold of Western society – that democracy and capitalism exist in a mutually supporting relationship. However, the assumption that open, competitive markets and the material wealth that results from them are preconditions for democracy is not new and has also been espoused in more recent studies (Lipset 1960: 48-50; Boix/Stokes 2003; Boix 2011; Acemoglu/Robinson 2006;

Bühlmann/Kriesi 2013: 31-33). A central pillar of this argument is the Hobbesian and Lockean postulate that individual private property secures the basic liberty that is necessary for a free and pluralistic society (Hobbes 1985: 234; Locke 2008: II, V; Epstein 2011a, b; Hayek 2013). As Jan Narveson succinctly puts it, “Liberty is Property” (1988: 66). Generally speaking, the justification of individual private property is largely based on a critique of the idea of holding property in common with reference to two diverse yet interrelated arguments. Firstly, it is largely assumed that common property would normally not be cared for and overused. This age-old idea is already expressed by Aristotle who says that “what belongs in common to the greatest number, receives the least looking after” (Aristotle 2002: 24). A more recent interpretation of this notion is formulated by Garrett Hardin in his article *The Tragedy of the Commons* from 1968. Here, he concludes that “freedom in a commons brings ruin to all” (Hardin 1968: 1244). As Hardin – and many others – believe, there are only two alternatives to this tragedy: State ownership or privatization or, in other words, socialism or capitalism. This leads us to a second critique of common property. Here, it is often argued that the historical examples of socialist regimes during the 20th century demonstrated that common property arrangements ultimately lead to an inefficient economic system, totalitarianism and oppression. A combination of these theoretical assumptions and historical experiences has thus led to a widespread consensus that individual private property or, more generally, democratic capitalism is the only game in town. Or, in the (in)famous words of Margaret Thatcher: “There is no alternative” (Berlinski 2008).

However, since the turn of the millennium, diverse political, economic and environmental crises have increasingly put this grand narrative of democratic capitalism into question. I am aware that the term ‘crisis’ is problematic because it induces an alarmist and apocalyptic interpretation of reality. Apocalyptic narratives have probably existed since the beginning of human history and crisis theories have been prevalent ever since democracies and capitalist market economies were developed (Merkel 2014b: 11-12). Nevertheless, the existence or resurgence of these debates in diverse fields suggests that democratic capitalism is facing some fundamental challenges. Without going into the details, I would like to mention some central issues. Firstly, current political ‘crises’ revolve around a decline in political participation since the 1980s in many Western countries (Whiteley 2012; Merkel 2014a: 118-120; Schäfer 2015), the internationalization of politics and democratic deficits in many supranational political institutions such as the EU, the IMF and the World Bank (Held 1991, 1995; Glenn 2010; Bellamy/Staiger 2013; Lavenex 2013; Habermas 2015) and, finally, the more recent resurgence of populism (Mudde 2004, 2014; Gherghina et al. 2013). Secondly, economic ‘crises’ became most apparent in the global financial crisis of 2007/8 and have their roots, among other things, in the deregulation and denationalization of the economy (Streeck 1998; Stiglitz 2010) and in increasing socio-economic inequalities in many Western countries since

the mid-1970s (Piketty 2014; Streeck 2014). Thirdly, environmental ‘crises’, which can generally be defined as the overstepping of planetary boundaries in ways that lead to the degradation of soil fertility, the loss of biodiversity and global warming, appear to be increasing (Rockström et al. 2009; Steffen et al. 2015). These changes have led scientists to argue that humans have, after approximately 11,700 years, left the geological epoch of the Holocene behind them and entered the new and increasingly unstable epoch of the Anthropocene (Steffen et al. 2011). As we see, contemporary democratic and capitalist societies are facing diverse and rather serious political, economic and ecological challenges.

Yet what do these diverse political, economic and environmental ‘crises’ have to do with each other – and with democratic capitalism? This is one central yet underlying question that I will attempt to answer in this book. For now, it is sufficient to declare that I do believe that these crises are interrelated and have a common core: An open and competitive economic system based on individual private property that enables and, importantly, requires perpetual and exponential economic growth – on a finite planet. I will demonstrate that these background social arrangements lead to the appropriation and unequal accumulation of resources from socio-ecological systems, which not only cause detrimental effects on the environment but also large socio-economic inequalities which, in turn, both hinder political participation and cause economic instability or ‘crises’. Furthermore, the prioritization of negative rights in individual private property and a belief in the self-regulation of competitive markets structurally limit people’s ability to democratically alter their social arrangements and thus to collectively deal with the negative effects of these market arrangements. It is interesting to note that this situation is similar to – if not identical with – Garrett Hardin’s previously mentioned tragedy of the commons. However, it is not the commons that is the main cause of tragedy here, but rather privatization and the open and competitive market. Or, in other words, Hardin’s theory of the tragedy of the open and unregulated commons also turns out to be a story of the tragedy of the unregulated and supposedly self-regulating market. Put in this perspective, it appears as though we might have to reinterpret Margaret Thatcher’s slogan with an ironic twist: There is no alternative – but to search for alternatives.

As a reaction to the widespread acceptance of Hardin’s theory, one answer to this tragedy of democratic capitalism that has increasingly been debated since the turn of the millennium is the notion of the commons. A main reason for this upsurge of interest in commons is the work of the political economist Elinor Ostrom who received the so-called Nobel Prize in Economics in 2009. Since the 1960s, Elinor Ostrom and her colleagues have extensively studied existing examples of sustainable self-governance of common pool resources such as water systems, fisheries, forests and alpine meadows. A central point that can be drawn from her work is that her empirical research refuted the widespread belief that commons

inherently lead to destruction. Instead, she was able to demonstrate that the management of common property by those who use the specific resources was an alternative form of democratic and ecological governance “beyond markets and states” (E. Ostrom 2010). This, in turn, has led to an explosion of literature on commons that developed the concept in relation to diverse goods and resources such as information, open-source software, genetic code, seeds, food, land, housing, urban space, firms and credit (Shiva 2005; Benkler 2006; Hess/Ostrom 2007; Tortia 2011; Bollier et al. 2012; Bollier/Helfrich 2015, 2019). A main focus in this literature is often the contrast of commons to individual private property. As the renowned commons scholar Yochai Benkler states in his book *The Wealth of Networks*,

‘Commons’ refers to a particular institutional form of structuring the rights to access, use, and control resources. It is the opposite of ‘property’ in the following sense: With property, law determines one particular person who has the authority to decide how the resource will be used. (Benkler 2006: 60)

Although, as I will later show, commons can be understood as property arrangements, Benkler’s juxtaposition remains significant: While individual private property is based on exclusion and dominion, commons are often structured according to the principles of (regulated) access and democratic (network) governance. The emphasis of commons theorists on inclusion and democratic regulation has, more generally, made commons a name for an alternative, emancipatory and emerging form of social organization. Here, economic activities are based on needs-oriented and non-hierarchical ‘peer-production’, which short-circuits the competitive market, the price mechanism and perpetual economic growth (Rifkin 2015; Mason 2015). In this sense, it can be said that commons are providing people with concrete examples of how to create a more inclusive, democratic and ecologically sustainable society within or beyond democratic capitalism.

To assess this possible solution to the diverse challenges contemporary societies face, I will examine whether – and if so, how – the concept of commons can strengthen democratic practices and institutions by limiting or even overcoming negative socio-economic, political and ecological effects of capitalist markets. I will begin my paper with a discussion of democracy to lay an important stepping-stone for subsequent arguments. Here, I will reflect on the diverse and conflicting definitions of democracy and conclude that democracy fundamentally implies the rights and capabilities of people to codetermine their shared social conditions. In a second step, I will turn to the justifications of competitive and self-regulating markets and analyze their relations to the (democratic) state. I will demonstrate that a belief in the self-regulating market undermines people’s ability to solve social, economic and ecological problems in collective and democratic ways. As an answer to this, I will turn to the concept of commons as a possible alternative to the market-state dichotomy that underlies democratic capitalism. I will begin this discussion with an

analysis of Garrett Hardin's article "The Tragedy of the Commons" from 1968. After this preliminary discussion, I will examine the works of Elinor Ostrom and her husband, Vincent Ostrom. Here, it will be demonstrated that tragedy can be overcome through communication, reciprocity and trust, on the one hand, and democratically governed institutions of shared resource systems, on the other hand.

As will become clear, however, the Ostroms' work not only lacks a critique of privatization and markets but also a more fundamental, normative justification of commons in the name of ecological sustainability and human freedom. Due to this weakness, I will then develop an ecological understanding of commons that prioritizes the common reality of humans, the non-human world and their co-creation thereof. In turn, this will enable us to develop an ecological understanding of freedom that recognizes the rights of humans and non-human beings in the codetermination of their shared socio-ecological systems. I will thus argue that ecological freedom is based on the principles of care for others and on the civic tradition of democracy, which enables us to understand commons not simply as a resource, but rather as a practice of commoning in, with and through nature.

With this theoretical background, I then shift my focus and explore what a commons theory of property might look like. To do this, I contrast such an exemplary theory with John Locke's classical labor theory of property and John Rawls' more recent theory of a property-owning democracy. In my critique of Locke's labor theory of property, we will discover that the pillars of a commons theory of property are guardianship, non-domination and needs satisfaction. In the following reinterpretation of John Rawls' property-owning democracy, I argue that a more ecologically sound theory of (pre)distribution should not focus on productive monetary assets, but rather on the access to resources and their sustainable maintenance. In a final step, I emphasize that a commons theory of property must also include access to collective consumption goods, thereby increasing the freedom of individuals and the number of convivial social arrangements, while simultaneously decreasing humans' detrimental ecological impact. Ultimately, I hope to demonstrate that commons property arrangements enable the creation of a relative abundance on a planet with limited resources.

After this development of a commons theory of property, I examine the relations between commons and the state and then between commons and the market. In both cases, I argue that a commons-based or commons-creating society requires a significant democratization of both the state and the market. With reference to the Ostroms' notion of coproduction, I maintain that a commons-creating society would not only imply that access to vital goods and resources should be provided by the state, but, more importantly, that state provision of public goods is transformed into a state support of commons and commoning. I illustrate this through the examples of housing, health care and education. Finally, in my analysis of the market-commons relationship, I contend that we should not simply condemn the

market, but that we should, rather, transform the open and competitive market into what I call a market commons. While the former is supposedly self-regulating, the latter is democratically governed and regulated by those significantly affected by it. I explore this notion of the market commons with reference to the concepts and examples of associative and corporatist democracy, the social and solidarity economy and, finally, community-supported modes of production. In all these examples, antagonistic and thereby competitive relationships between isolated agents are mitigated through institutional arrangements of democratic negotiation and cooperation. Ultimately, I will argue that this democratic form of governance that lies at the heart of commons has the potential to solve the diverse and interrelated political, economic and ecological problems that we face today. That being said, it becomes clear that commons provide us with normatively robust and, simultaneously, practical alternatives to the tragedies of democratic capitalism. Yet as I will show, this alternative does not exist beyond markets and states, but lies, instead, in the democratic and ecological transformation of these institutions through commons and commoning.

1. The concept of democracy

I begin my analysis of the relationship of democracy, markets and commons with an analysis of the concept of democracy, because it can generally be said that during the 20th century democracy has become, as Hans-Peter Kriesi affirms, the “only legitimate [political] game in town” (Kriesi 2013: 1). Despite this broad agreement, it often remains rather unclear what democracy actually means. For this reason, I will firstly discuss the contested nature of the concept of democracy. In a second step I will critically reflect diverse models of democracy, with a main focus on the work of the political scientist Wolfgang Merkel. In a third step, I will argue that we must unearth a more foundational meaning of democracy that lies at the heart of all of these different models. Here, I will conclude that democracy inherently entails that people have the rights and capabilities to codetermine their shared social conditions. This definition of democracy will ultimately lay the normative foundation for my subsequent development and defense of the commons.

1.1 Democracy as a contested concept

As is common knowledge, the word ‘democracy’ etymologically means the rule (*kratos*) of the people (*demos*) (Held 1987: 2). What this precisely means, however, is quite unclear and often highly contested. With Michael Saward (2003), we could even say that democracies exist wherever there is a debate over the definition and interpretation of democracy (Cheneval 2015: 18). Or, in more general terms, it can be agreed upon that there is no agreement on the definition of democracy.

Despite this general disagreement, most democratic theorists assume that democracy provides a method of legitimizing political authority or rule and that different models of democracy exist. Let us therefore begin with the legitimate use of political power. Although he was no democrat, since Thomas Hobbes, it has generally been assumed that the use of political authority and a monopoly on the use of coercive force in society should be legitimized through the consent of the people – be that with an actual or hypothetical social contract or periodic elections and votes in a ballot box (Held 1991: 203). Democratic or, in the words of

Rawls, liberal legitimacy makes it possible for social order to be created through the understanding and acceptance of and therefore the identification with the rules and institutions governing society (Rawls 2005: 137).¹ This form of legitimacy differs, for example, from a theocratic or customary legitimation of political and legal power in which the right to use coercive force is either justified on the basis of a specific religious order of society (transcendental beliefs) or hereditary rights. In both cases, however, the people in power are not necessarily accountable for their actions and their responsibility towards others because their positions and rights – at least theoretically – cannot be questioned, challenged or altered. In contrast, democratic legitimacy not only requires consent, but also provides people and citizens with the possibility to criticize and alter the rules and regulations of one's society either through public debate and the ballot box. Ideally, the withdrawal of support from a political authority increases the responsiveness and accountability of those in power to the demands of the people (Bühlmann/Kriesi 2013).

There are different implicit factors in this notion of legitimacy that lead us, in turn, to a better understanding of democracy. These are most clearly formulated in Robert Dahl's classic statement in which he broadly defines five criteria for a democratic process. These include effective participation, voting equality, enlightened understanding, exercising final control over the agenda and the inclusion of all adults (Dahl 1998: 37-8). Similarly, Francis Cheneval defines the essence of the adjective "democratic" as "members recognized with equal status that are included in collective decision-making processes" (Cheneval 2015: 19; transl. LP). While these definitions are very broad, I would agree with Bühlmann and Kriesi that "under contemporary conditions, democracy essentially means representative government" (Bühlmann/Kriesi 2013: 46). Although representative democracy appears to be the most widespread, it can take on different shapes, including "liberal democracy, protective democracy, competitive elitism, pluralism, or legal democracy" (ibid.: 45). Despite these differences, a common feature of representative models of democracy – in comparison, for example, to more participatory models – is that there is a clear separation between governors and the governed. Furthermore, the democratic process and the legitimacy that results therefrom are confined to the public sphere and the state's use of coercion. While this may be the most widespread understanding, to assume that representative democracy is the best form of democracy would be a naturalistic fallacy. In contrast to this assumption, I will argue that democracy and democratic legitimacy cannot be confined to

1 According to Rawls, "our exercise of political power is fully proper only when it is exercised in accordance with a constitution the essentials of which all citizens as free and equal may reasonably be expected to endorse in the light of principles and ideals acceptable to their common human reason. This is the liberal principle of legitimacy" (Rawls 2005: 137).

elections of representatives in government but that they must deal with the question of power more generally and be extended to the sphere of economics in specific. To make a case for this, I will now turn to incremental models of democracy as described by Wolfgang Merkel and with reference to those developed by C.B. Macpherson and David Held.

1.2 Models of democracy

In discussing the question whether contemporary democracy is in a crisis, Wolfgang Merkel distinguishes between minimalist, medium-range and maximalist models of democracy. Merkel associates the minimalist model with Joseph Schumpeter's competitive and elitist model of democracy. Here, "free, equal, and secret ballots are not only the core of democracy, but democracy itself" (Merkel 2014b: 12). Other names for this type of democracy are, for example, Max Weber's "plebiscitary leadership democracy" (Held 1987: 158) or the "pluralist elitist equilibrium model" (Macpherson 1977: 77). Competitive elitist democracy emphasizes the existence of social inequality in the form of a ruling elite as political producers vis-à-vis the less well-off and less educated masses as political consumers. The model presupposes a pyramidal and bureaucratic structure of society and is based on what Vincent Ostrom calls "machine politics and boss rule" (V. Ostrom 1997: 19). Political power is located at the center and top of society and is made responsive and vertically accountable through competitive elections. Due to the danger of such centralized power, this competitive elitist model of democracy is often coupled with protective and legal models of democracy (Held 1987: 37-71, 243-254; Macpherson 1977: 23-43). To further limit the power of the state and the representatives in office, the minimalist concept of democracy also requires a clear separation of the public from the private and of political from economic spheres. This separation supposedly provides people with a realm of private economic freedom that protects them from state coercion. This is what is normally understood as negative freedom: The freedom from arbitrary interference by the state or public (Berlin 2008: 169-78). In turn, this freedom also disciplines the state through the power of private individuals, which is mostly based on their "countervailing power of private capital" (Held 1987: 160). We will return to this model of democracy when discussing the justification of open and competitive markets later. According to Wolfgang Merkel, this minimalist model does not provide us with the information to discern whether a democracy exists or is in crisis, because we cannot know whether the elected representatives are governing on behalf of the people or "on behalf of large corporations, banks, lobbies, and supranational regimes" (Merkel 2014: 13).

In comparison to this minimalist model, Merkel argues that a medium-range democracy goes beyond periodic elections and vertical accountability. Here, he ar-

gues that a medium-range democracy must be “embedded in guaranteed human and civil rights and in checks and balances” (ibid.). Although Wolfgang Merkel only discusses the rule of law as a central element of democracy in the mid-range model, I would argue that Merkel does not differentiate between specific types of the rule of law. In a minimalist model, the rule of law is limited to the protection of private property, the enforcement of contracts and the guarantee of periodic elections. In the medium-range model, the rule of law is extended to other civil rights which include, most importantly, the right to participation in political decision-making processes (Merkel 2015: 12). This comes close to Cheneval’s second definition of the adjective ‘democratic’, which “means a decision-making procedure of a political community or people, in which all citizens have the right to participate in the organization of collective action and to control the use of political authority/power” (Cheneval 2015: 19; transl. LP). The focus lies here on the input-dimension of democracy and background institutions that provide just procedures. The specific output of democracies is not included in this definition, but, rather, depends on the outcomes of deliberation processes. Input and output, form and substance are separated. The emphasis on political procedures and participation implies that a middle-range democracy includes certain forms of developmental democracy such as the one propagated by John Stuart Mill, in that it enables people to develop their intellect and moral capabilities through political participation (Macpherson 1977: 44-76). This can, in turn, be understood as a formal understanding of positive freedom, or the freedom to reflexively develop one’s self in deliberative interaction with others (Honneth 2014: 29-41). Furthermore, Merkel (2015: 12) argues that this model of democracy also theoretically includes more demanding forms of participatory democracy as propagated by Benjamin Barber (1984) and Archon Fung and Erik Olin Wright (2003). It appears, therefore, that Merkel’s notion of medium-range democracy is very broad and includes a wide variety of specific democratic concepts ranging from representative to more participatory forms of democracies.

In contrast to this procedural understanding of democracy in the medium-range model, Merkel argues that the maximalist model of democracy emphasizes the output dimension. According to Merkel, this

include[s] public goods, such as internal and external security, economic welfare, welfare state guarantees, fairness in the distribution of basic goods, income, social security, and life chances. In particular, they emphasize the need to avoid extreme inequalities in the distribution of income, and view the provision of primary and social goods at the core of democracy. (Merkel 2014: 13)

This, in turn, comes close to Cheneval’s third concept of the adjective ‘democratic’, which “generally means the normative ideas of a form of living that is egalitarian, inclusive, deliberative, transparent, free from oppression and exploitation, fair, etc.” (Cheneval 2015: 19). The inclusion of the output dimension or, rather, specific

normative content into the definition of democracy implies an extension of the rule of law to include social and economic rights such as the right to education, housing, health, a minimum wage or the means of production. This maximalist model attempts to deal with the problem of a purely procedural concept of democracy in which the door to participation might be wide open, but if people lack the resources and capabilities to enter the realms of politics, participation becomes an empty promise. The model attempts to give substance to form – and transform formal freedom into a more substantive, positive freedom. However, Merkel is critical of the maximalist model because it does not necessarily require democratic procedures and can easily be realized in more authoritarian regimes (Merkel 2015: 13). Furthermore, Merkel rejects the maximalist model because normative standards are supposedly so high that “only a few democracies can pass their ‘social-democratic test’” (Merkel 2014: 14). And because the minimalist model is so meager, Merkel argues that it is necessary to adopt a medium-range definition of democracy that enables people to measure the grades of a democracy without automatically assuming that all democracies are either in perfectly good health or permanently in crisis (Merkel 2015: 14).

1.3 Foundational and surplus dimensions of the concept of democracy

Wolfgang Merkel's three-tier model of democracy is sufficient if one wants to measure existing democracies. Yet, because the model's focus is on measuring the qualities of existing democracies, especially with reference to their procedural institutions, it obviously lacks the ability to grasp the full potentiality of democracies. This would be like attempting to measure a child's future height and weight when it will be an adult. Nevertheless, this is not to say that a democracy must forever remain in the specific form that it currently exists in. Simply because a certain form of democracy is more widespread or easier to measure does and should not imply that this specific model of democracy must be maintained. Put in a more general perspective, I agree with Ernesto Laclau and Chantal Mouffe that all terms and identities are “polysemic” and therefore “overdetermined” (Laclau/Mouffe 2001: 121). This implies that terms bear a “surplus of meaning” that disrupts, breaks up and goes beyond the present dominant and hegemonic understanding of a word (ibid.: 97–114). In the words of Laclau and Mouffe:

The practice of articulation, therefore, consists in the construction of nodal points which partially fix meaning; and the partial character of this fixation proceeds from the openness of the social, a result, in its turn, of the constant overflowing of every discourse by the infinitude of the field of discursivity. (ibid.: 113)

While this potentiality cannot be easily measured, this does not imply, in turn, that it does not exist. On the contrary, it implies that meanings and realities change over time – for better or worse. In relation to democracy, this is easily shown by the expansion of the enfranchised population from only male adults who own property to all male adults, to women and to people who were previously considered to be slaves. However, the understanding of democratic inclusion must not stop there but could, in the future, also include immigrants, teenagers and children or, as I will later argue, even non-human beings. The same can be said about the understanding of democratic equality which is for some the central aspect of democracy (Christiano 2010: 199; Christiano 2008). There exist, however, different interpretations of democratic equality. We can, for example, understand equality as the equal protection of property rights for the existing distribution of resources and the equal right of citizens to elect a representative every four years (minimalist model). Another notion of equality implies the equal right to participate in politics more actively (medium-range model). Yet another denotes the more or less equal distribution of material resources to enable people to lead a self-determined life in concert with others. Merkel, for example, accepts the shift in the rule of law from minimal property rights to other basic civil rights that aim to secure political participation but, in turn, rejects the further shift to equal socio-economic rights. Furthermore, he completely ignores the question of why democracy is limited to the public sphere. Put in such an historical context, Merkel's normative demarcation appears contingent and arbitrary, suppressing a more fundamental, dynamic and normatively demanding understanding of democracy. To be fair, we must distinguish here between political science that aims to measure reality and political theory that opens up possibilities of how this reality can or should be transformed. While Merkel is of the former camp, I would position my argument, which I will develop here, in the latter group.

That being said, I would like to push this argument for a more demanding understanding of democracy a little bit further. In our discussion of models of democracy, there appears to be an implicit normative linearity from bad to good to best. One could argue that this linearity corresponds with the chronological linearity of the development of democracy from a minimal model in the late 19th and early 20th centuries to a medium-range, proceduralist model since the Second World War and possibly to more substantive forms of democracy in the future. Here, substantial participation is nice to have, yet not a necessary and inherent aspect of democracy. Contrary to this account, I would argue with numerous others such as Chantal Mouffe, Axel Honneth and Charles Taylor that both minimal and proceduralist accounts of democracy are already expressions of substantive values. As Mouffe explains with reference to Wittgenstein:

Rules [of law], for Wittgenstein, are always abridgements of practices, they are inseparable from specific forms of life. The distinction between procedural and substantial cannot therefore be as clear as most liberal theorists would have it. In the case of justice, for instance, it means that one cannot oppose, as so many liberals do, procedural and substantial justice without recognizing that procedural justice already presupposes acceptance of certain values. It is the *liberal* conception of justice which posits the priority of the right over the good, but this is already the expression of a specific good. (Mouffe 2000: 68; original emphasis)

As we can see, this procedure–substance dichotomy is based on the “liberal” distinction between the right (form/procedure) and the good (substance). Mouffe argues, however, that the specific definition of the right is also always an expression of a specific good. In other words, while procedural democracy emphasizes an individual or particularistic concept of the good, the realization of such individual rights is based on more fundamental social freedom. Along these lines, in his book *Freedom's Right* (2014), Axel Honneth defines the concept of social freedom in contrast to negative and reflexive positive freedom:

While the idea of negative freedom [...] must fail because the ‘content’ of action cannot itself be grasped as ‘free’, the idea of reflexive freedom is insufficient because it opposes the actions it views as free in substance, viz. as self-determined acts, to an objective reality that must continue to be regarded as completely heteronymous. [...] Not only must individual intentions be developed without any external influence, but the external, social reality must be able to be conceived as being free of all heteronomy and compulsion. The idea of social freedom, therefore, is to be understood as the outcome of a theoretical endeavor that expands the criteria underlying the notion of reflexive [positive] freedom to include the sphere that is traditionally set in opposition to the subject as external reality. [...] The idea is rooted in a conception of social institutions in which subjects can grasp each other as the other of their own selves [...] Because the individual’s striving for freedom can thus be fulfilled only within – or with the aid of – institutions, the ‘intersubjective’ concept of freedom expands once again into a ‘social’ concept of freedom. A subject is only ‘free’ if it encounters another subject, within the framework of institutional practices, to whom it is joined in a relationship of mutual recognition; only then can it regard the aims of the other as the condition for the realization of its own aims. (Honneth 2014: 43–4)

Or in somewhat simpler terms: “We must first regard all subjects as integrated in social structures that ensure their freedom, before they then participate as free beings in a procedure that monitors the legitimacy of the social order.” (Honneth 2014: 57) This implies that form and content, procedure and substance, other and self, and an objective social order and subjective freedom always exist in circular, dialectical

and interdependent relationships that advance each other. In the debate between liberalism and communitarianism, this implies that social, democratic freedom and the definition of a common good are inherent ontological preconditions for individual freedom (Taylor 2003). Or in other terms, democratic rights can only be realized through substantial participation in collective action – which often involves questioning and contesting existing democratic norms and laws. Translated back into the debate on democracy, this implies that the supposed ‘maximalist’ model of democracy in fact underlies both minimalist and medium-range models. Norms that underlie the maximalist model can be understood as the foundation of all other existing forms of democracy.

This normative reversal of the sequence of democratic models opens our insight, firstly, to the fact that procedure and substance in democratic models cannot be so clearly separated and that means and ends are reciprocally determined (Dorf/Sabel 1998: 284). Second, it has become clear that democratic freedom should be inherently understood as deeper and broader than minimalist and medium-range models. But what does this mean for our definition of democracy? It suggests that although democracy is often understood either as representative democracy or the more active participation in political decision-making procedures, the word democracy simultaneously bears a normative surplus, which invariably points to transformations and – in an optimistic interpretation – improvements of social arrangements.

On the one hand, and in Rawls’ somewhat technical language, this refers to the realization of a more just or democratic basic social structure that realizes “the fair value of the equal political liberties that enable citizens to participate in public life” (Rawls 2001: 148). On the other hand, this dynamic and social reading of democracy also demonstrates that democracy has an inherent tendency to overflow from political spheres into other spheres of social life, be that the family, church, media or the economy. Or more precisely, democratic politics constitutes these other social spheres. However, this does not imply that democracy originates in the political sphere. Instead, I would agree with John Dewey’s well-known saying that a “democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience” (Dewey 2008: 93). Here, democracy is understood as an inherently intersubjective and social form of being in everyday life. Or, that our everyday and intersubjective reality is or, rather, has the potential to be democratic.

Nevertheless, I would go further than this somewhat vague notion of everyday associative democracy and specify with Joshua Cohen and Joel Rogers that a democratic way of living implies “the idea that free and equal persons should together control the conditions of their own association” (Cohen/Rogers 1983: 18). In this definition it remains unclear, however, how the specific relation between the individual and democratic freedom is to be understood. To comprehend this rela-

tionship, it is helpful to turn to David Held's "principle of autonomy", which takes the relationship between individual and democratic freedom into account:

Individuals should be free and equal in the determination of the conditions of their own lives; that is, they should enjoy equal rights (and, accordingly, equal obligations) in the specification of the framework which generates and limits the opportunities available to them, so long as they do not deploy this framework to negate the rights of others. (Held 1987: 271)

Although this concept of autonomy is framed as individual, it is essentially social and democratic in that it enables people to participate in the codetermination of the institutions that structure one's life. Important aspects of this principle for Held are the "key conditions for the realization of the principle of autonomy" (*ibid.*: 275), which include, for example, the limitation of private property, access to resources and necessary changes in the organization of household or care activities. Here, our concepts of democracy and politics are broadened to deal with the distribution of resources and questions of power more generally. As Held writes, democratic politics

is about the capacity of social agents, agencies and institutions to maintain or transform their environment, social or physical. It is about the resources that underpin this capacity and about the forces that shape and influence its exercise. Accordingly, politics is a phenomenon found in and between all groups, institutions (formal and informal) and societies, cutting across public and private life. It is expressed in all the activities of cooperation, negotiation and struggle over the use and distribution of resources. It is involved in all the relations, institutions and structures which are implicated in the activities of production and reproduction in the life of societies. Politics creates and conditions all aspects of our lives and it is at the core of the development of problems in society and the collective modes of their resolution. (*ibid.*: 275-7)

For this reason and according to Held, politics are considered "a universal dimension of human life" (*ibid.*: 277), which should be subject to democratic legitimacy based on the principle of autonomy and democratic decision-making procedures. It can be said here with Laclau and Mouffe that politics become more 'political' in that they are now understood as "a practice of creation, reproduction and transformation of social relations [that] cannot be located at a determinate level of the social" (Laclau/Mouffe 2001: 153). Democracy thus becomes more 'political' as it is understood to be the ability to alter and determine the diverse arrangements that structure society. Furthermore, democracy is understood as a means to deal with the distribution of resources, power and the problems that result therefrom. It is this broad yet fundamental concept of democracy that I will further develop in relation to the ecologically grounded concept of commons.

For the moment, however, let us now turn to an analysis of the relationship between the market and the state, for I will now show that this concept of democracy is ultimately incompatible with the open and competitive market.

2. The competitive market and the state

Besides democracy, the other main social institution that has gained widespread acceptance over the last 200 years is that of the capitalist or open and competitive market. In this section, I therefore analyze the justifications of the open and competitive market and its relation to both the state and to democracy. I will begin this analysis with a short discussion of Thomas Hobbes' influential work on the state-market relation. In a second step, I argue with reference to Montesquieu and, most importantly, Adam Smith that two key justifications of the competitive market are its creation of a peaceful social order and the unlimited generation or, rather, accumulation of monetary wealth. Thirdly, I demonstrate with reference to several more recent economists that a central feature of the competitive market is that it operates in a self-regulating manner, which requires both limited state interference and an open institutional structure. In a final step, I argue with reference to Friedrich August von Hayek that the strict implementation of an open and competitive market severely undermines democracy and can potentially lead to a type of authoritarian liberalism.

Before beginning with this discussion, however, I would like to briefly explain why I do not refer to capitalism here, but instead use the term market or, more precisely, open and competitive markets. The reason for this is not only because capitalism is often used in a critical or pejorative manner, but also because it describes a more encompassing historical socio-economic transformation of society (Kocka 2014: 6). In contrast, the terms 'market' or 'market economy' is not only less polemical, but also refers to a more idealized, and thus somewhat ahistorical, model of the market. It is this idealized institutional arrangement of the open and competitive market that I would like to focus on here. As I demonstrate later, in my discussion of the market commons, openness and competition are, however, not characteristic of all markets, but merely specific institutional arrangements of capitalist markets. And within the existing "varieties of capitalism" (Hall and Soskice 2004), they refer to the ideal model of liberal market economies. But for now, let us turn to the origin, justification and implications of the open and competitive market in the history of political thought.

2.1 Hobbes: anarchy, leviathan and the competitive market

In the history of ideas, it can generally be said that the concept of the competitive market arose with Thomas Hobbes (1588-1679) and his individualistic portrayal of humans in antagonistic relationships (1985).¹ In Hobbes' book *Leviathan*, an absolute sovereign should overcome the anarchic state of nature, thereby enabling people to pursue their self-interest in a less destructive manner. By possessing the monopoly on the use of coercion, this Leviathan can secure individual property rights and enforce contracts. As in the minimalist notion of democracy, freedom is here understood negatively, as non-interference that provides people with the legal framework and security to trade and accumulate goods freely in a competitive market. Simply put, the monopoly of the state shall overcome an anarchic state of nature by creating a competitive market economy.

Because it is important to understand Hobbes' theory in its historical context, I would argue with C.B. Macpherson (2011) that Hobbes' *Leviathan* was not primarily an answer to an imagined anarchic state of nature, but more concretely to the development of a merchant class with "market-made wealth" that then led to the English Civil War of 1642, which lasted until 1651 (ibid.: 65). Here, "war was an attempt to destroy the old constitution and replace it with one more favorable to the new market interests" (ibid.). This social disorder that Hobbes experienced was then projected onto a theoretical state of nature. In turn, Hobbes' concept of the *Leviathan* was not used to legitimate and secure a minimal, parliamentary democracy, but to legitimate the rule of an absolute sovereign. It could be argued that with Hobbes' contractual theory of the state, absolute authority was secularized and shifted from the Church to a socially legitimated state monopoly. Nevertheless, both the *Leviathan* and its laws were understood as virtuous and absolute and the people constituting the social order as corrupt. Social order was therefore conceived by means of a dichotomy of coercion and repression from above and obedience by the people below. Here, the sovereign is to be understood as the watchmaker of an "automated machine" (ibid.: 31) of a competitive market society that is held together by the overarching monopoly of the state.

2.2 Justifying the market: social order, protection from arbitrary powers and unlimited wealth

Writers soon began to look to the rise of bourgeois society and Hobbes' new understanding of a competitive market economy as things that would not only legit-

1 For a discussion of this individualistic and antagonistic portrayal of social reality, see for example, C.B. Macpherson's introduction to Hobbes' *Leviathan* (Macpherson 1985: 48-53).

imize the existence of Leviathan, but also create a more peaceful and prosperous social order. As Albert O. Hirschman convincingly explains in his book *The Passions and the Interests: Political Arguments for Capitalism before Its Triumph* (1997), the pursuit of economic self-interest was not only intended to overcome the capricious and belligerent passions of feudal lords, but also to limit the monopoly of power of absolute monarchs. Hirschman shows that this assumption is set out most clearly by Montesquieu in his book *De l'esprit des lois* (1748), who assumes that “commerce [...] polishes and softens barbarian ways” (Montesquieu quoted in Hirschman 1997: 60). Put somewhat simply, the idea is that steadfast economic interests in trade and commerce will tame wild and capricious passions. Or, conversely, irrational passions should be channeled into rational economic interests as in a process of sublimation. For these reasons, commerce can not only tame feudal lords, but also pacify entire peoples and nations. Furthermore, in enabling people to pursue their economic interests and move their capital about freely, Montesquieu saw an economic means of checking the abuse of unlimited political power (ibid.: 77-8).² This is what was implied by the “countervailing power of private capital” (Held 1987: 160) in our previous discussion of the minimalist model of democracy. Thus, market competition is expected not only to overcome the anarchy of warring feudal lords, but also to limit the monopoly of power of absolute sovereigns.

We find another twist to this general legitimization of competitive markets in the works of two other writers of the same time period, Bernard Mandeville (1670-1733) and, more importantly, Adam Smith (1723-1790). It could be said that Mandeville made the point most bluntly in his postulate that through competition and commerce, “private vices” turn into “publick benefits” (Mandeville 1924). Although Adam Smith was unlike Mandeville in that he was not a cynic, Mandeville’s conviction is very similar to Smith’s well-known metaphor of the “invisible hand” in *The Wealth of Nations* from 1776 in which self-interest leads to social order and an increase in society’s material wealth (Smith 1994: 485).³ The importance of this paradigm shift in moral and political philosophy cannot be underestimated. In line with other ‘modern’ thinkers such as Hobbes and Machiavelli and, possibly, for the first time in human history, social order and well-being did not arise when vice was opposed by virtue, but instead when the vices or self-interest of individuals were opposed by

2 It should be noted here that while Montesquieu was concerned with limiting the unlimited power of kings, Adam Smith was more concerned with the pacification and limitation of the power of feudal lords (Hirschman 1997: 102).

3 It must be mentioned that the “invisible hand” is only mentioned twice in Adam Smith’s works. Once in his *Theory of Moral Sentiments* (Smith 2009: 215) and a second time in *The Wealth of Nations* (Smith 1994: 485). Although the term is only mentioned twice in his works, I would argue that the concept itself retains a central position throughout his economic theory and is also implicitly expressed in his concept of harmony between supply and demand.

the vices or self-interest of other individuals. As with Hobbes, in the social arrangements of Mandeville and Adam Smith individuals are conceptualized as separate and self-interested entities that find themselves in antagonistic and competitive relationships with each other. Similar to Montesquieu, Smith emphasizes his somewhat surprising and paradoxical conclusion that by unleashing self-interest and competition, a more disciplined and orderly society should arise. Smith explains this in relation to corporations (i.e. guilds) and the monopoly on coercive force:

The pretence that corporations [i.e. guilds] are necessary for the better government of the trade is without any foundation. *The real and effectual discipline which is exercised over a workman is not that of his corporation, but that of his customers.* It is the fear of losing their employment which restrains his frauds and corrects his negligence. An exclusive [monopolistic] corporation necessarily weakens the force of this discipline. (ibid.: 149; emphasis added)

Adam Smith's notion of corporations is to be equated with the guild system that monopolistically controlled most trades and markets in medieval Europe. In contrast to the belief that a monopoly on coercion, which in this case takes the form of the guild system, is the best instrument for providing social order, Smith argues that it is the competitive market that does a better job of disciplining its citizens. The reason for this is that, in order to survive in a competitive market, people have to satisfy consumer demands and offer (better) products at lower prices. Simply put, the fear of losing one's job forces people to work harder and produce more. In this sense, competing interactions between self-interested individuals on the market create a disciplinary mechanism that is not exerted by any individual or organization. This is not to say that the coercion from overarching institutions should disappear, but rather that the power of the guilds should be replaced with that of the state in its enforcement of property rights and contracts, on the one hand, and that social order will simultaneously be reinforced by the disciplinary mechanism of the competitive market, on the other.

This market mechanism leads to Adam Smith's second important assumption, that the competitive market – or what he calls “perfect liberty” (ibid.: 63) – leads to greater material wealth. The increase in material social wealth results not only from the mechanism of competition, but also from the positive connotation of self-interest and therefore the release of egotistical springs in human action from other moral obligations.⁴ This moral transformation is closely intertwined with

4 Although Adam Smith expresses an ambivalence towards this paradigm shift and emphasizes the importance of non-economic motives in human action (Smith 2009; Hirschman 1997: 108), he argues similarly to Montesquieu that economic motives enable the satisfaction of all other non-economic values – or conversely, that all non-economic motives (including “passions”) “feed into” and “reinforce” economic motives (Hirschman 1997: 109–110). I agree, however, with Hirschman that although Adam Smith endorsed the positive outcomes of a

the changes in the legal framework that made new ways of accumulating property possible. It can generally be said, therefore, that a shift occurred both in moral philosophy and in political and legal philosophy. Similar to John Locke's labor theory of property, Adam Smith declares, "The property which every man has in his own labour, as it is the original foundation of all other property, so it is the *most sacred and inviolable*." (ibid.: 140; emphasis added) This concept of individual property is a clear critique of earlier, medieval forms of property that were based on feudal, customary law and, in certain cases, collective rights, in which individual appropriation was highly regulated and the possibility that property would be arbitrarily confiscated by lords and monarchs was pervasive (Holt 1972; Schneider 1997; Blickle 2000; Zückert 2003; Linebaugh 2008). With this new concept of property – and the increase in durable, mobile property (i.e. money) – individuals could, at least theoretically, appropriate property through their labor and trade and accumulate it freely (Locke 2008: II, §25-51).

We will discuss Locke's theory of property in further detail later on, but for the moment, it is important to note that this economic right to private property was understood as a natural or sacred right that stood *above* the political rights of absolute monarchs and states. We must therefore understand these new property rights as a central means to not only limit the power of the state, but also to open the door for wealth generation and accumulation. Here, the monopolistic structure of the sovereign ruler over a clearly delineated territory is replicated in the absolute sovereignty of an individual over their clearly delineated private property. From this perspective, the sacred character of the subject and of the right to absolute rule is maintained yet shifted to the hierarchical and Cartesian structure of the human being's ownership over *res extensa*, irrespective of whether one merely has property in one's own person or also in other things of the world. In this sense, the "possessive individualism" (Macpherson 2011) of the competitive market should not only limit the monopoly of power of absolute rulers, but should also – at least theoretically – undermine the monopoly power of corporations and guilds (Smith 1994: 136-156). Thus, the divine right to private property should ultimately decentralize economic power, protect the individual from arbitrary political intervention, and enable the freedom to accumulate property without limit, thereby supposedly increasing the general material wealth of society.

competitive market (social order and an increase in material wealth), he found the means to this end problematic and unfortunate (ibid.: 105). This ambivalence can be found in his description of the flipside of the division of labor which greatly increases material wealth yet simultaneously weakens the moral and intellectual capabilities of laborers (Smith 1994: 840). Elsewhere in Adam Smith's *Lectures*, he also expresses the problem of commerce leading to "debilitating luxury and corruption" (Hirschman 1997: 106).

2.3 Self-regulation, limited politics and the open-access market

Aside from these moral and legal paradigm shifts to a society geared towards the accumulation of material wealth, let us now discuss the concept of the invisible hand a little more. Although the invisible hand has often been criticized (Stiglitz 2006; Dupuy 2014; Amir-ud-Din/Zaman 2016),⁵ it can be said that the metaphor still holds a central place in both economic thought and the social imagination in Western societies, ultimately laying the foundation for the legitimacy of the competitive market. Besides its disciplinary and wealth-generating functions, another aspect of the market's ability to create social order is its supposed ability to enable the self-regulation of economic activity. First and foremost, this notion of self-regulation is not to be understood as the kind of democratic self-governance I have already mentioned. Instead, the supply of goods and services is brought into equilibrium with the demand for them – *without* political or state intervention. But how does this magical mechanism work? In the words of Adam Smith:

It is thus [in a competitive market] that the private interests and passions of individuals naturally dispose them to turn their stocks towards the employments which in ordinary cases are most advantageous to the society. But if from this natural preference they should turn too much of it towards those employments, the fall of profit in them and the rise of it in all others immediately dispose them to alter this faulty distribution. *Without any intervention of law*, therefore, the private interests and passions of men naturally lead them to divide and distribute the stock of every society among all the different employments carried on in it as nearly as possible in the proportion which is *most agreeable to the interest of the whole society*. (Smith 1994: 680; emphasis added)

In this passage, it is assumed that a competitive market economy will, first and foremost, serve the demands of consumers and therefore society at large. As we can see, the motivation for this service is a pecuniary profit. If too much investment from competing firms flows into a certain line of business, however, then both the price and the rate of profit decrease. This allocates investments into the production of other goods and services that are in demand and into places where greater profits can be realized. This balancing process also occurs for changes in demand, which

5 In this rather famous interview, Joseph Stiglitz argued that “Adam Smith, the father of modern economics, is often cited as arguing for the ‘invisible hand’ and free markets. [...] But unlike his followers, Adam Smith was aware of some of the limitations of free markets, and research since then has further clarified why free markets, by themselves, often do not lead to what is best. [...] [T]he reason that the invisible hand often seems invisible is that it is often not there.” (Stiglitz 2006)

drive prices and profit rates up or down and thus theoretically bring about changes in production.

These descriptions, images and metaphors that Adam Smith presented during the 18th century are readily found in today's economic discourse. The image that arises from this description of self-regulating competitive markets is that of individual entities of resources, producers, products and consumers freely and harmoniously interacting in a vacuum-like space. This is portrayed by the well-known simple graphs of introductory economics courses in which supply and demand curves shift and intersect according to changes in production and consumption. Neoclassical economists such as Walras, Arrow and Debreu have since dubbed this balancing-out process between supply and demand the general or competitive equilibrium theory (Walras 1965; Arrow and Debreu 1954). Named after the economist Vilfredo Pareto, the terms 'Pareto efficiency' or 'Pareto optimality' refer to the assumption that a competitive market economy is the most efficient way to allocate society's resources.⁶ Although Friedrich August von Hayek later criticized these notions of perfect equilibrium and Pareto optimality, his notion of *catallaxy* must still be understood as a reinterpretation of this old notion of a social order that spontaneously arises from the dynamic self-regulating functioning of the competitive market (Hayek 2013; Butos 1985; Vaughn 2013).

Furthermore, the self-regulation of the market must also be understood as a process in which power is supposedly shifted from producers to consumers. This has already been mentioned in relation to Adam Smith's quote on the discipline of the market. Today, this notion is discussed under the name of consumer sovereignty, as presented by William H. Hutt (1936, 1940) and as propagated by Milton and Rose Friedman in their book *Free to Choose* (1980). Along the same lines, Ludwig von Mises likened the decision to buy a product on the market to the casting of a vote. Mises writes,

When we call a capitalist society a consumers' democracy we mean that the power to dispose of the means of production, which belongs to the entrepreneurs and capitalists, can only be acquired by means of the consumers' ballot, held daily in the marketplace. (Mises 1951: 21)

This interpretation of consumer sovereignty gives the market a political twist and reinterprets the competitive market as a consumer or market democracy. While

6 Amartya Sen criticizes the term Pareto optimality because it "is an extremely limited way of assessing social achievement" (Sen 1988: 35). He explains this with a rather alarming example: "A state in which some people are starving and suffering from acute deprivation while others are tasting the good life can still be pareto optimal if the poor cannot be made better off without cutting into the pleasures of the rich – no matter by how small an amount. Pareto optimality is faint praise indeed." (Sen 1984: 95)

decisions are made daily and producers must react accordingly to regular changes in demand in the market, in political democracy, citizens often only have the possibility of electing a representative every four years. According to this argument, the competitive market not only exercises a quasi-divine and harmonizing self-regulating authority but is ultimately also a better, more responsive form of authority than any other secular, political organization.

For specialists in the field of economics, it might appear to be highly imprecise and anachronistic to superficially compare classical economists with neoclassical, Austrian, and Chicago school economists. Nevertheless, I would emphasize that despite their different interpretations of (partial) equilibrium theory, in the end the main gist of their arguments often boils down to a common belief in the self-regulating abilities of the market and a more general common political vision. As has already been mentioned, Adam Smith saw both the monopoly of power that guilds possessed and the interference of the state in the pursuit of material wealth as important economic problems. In fact, Smith argues that it is precisely the intervention of politics in economic matters that lead to inequalities or disequilibria,

first, by restraining the competition in some employments to a smaller number than would otherwise be disposed to enter into them; secondly, by increasing it in others beyond what it naturally would be; and, thirdly, by obstructing the free circulation of labour and stock, both from employment to employment and from place to place. (Smith 1994: 136)

The state should therefore neither limit nor support free competition. This being said, it remains quite unclear where this “perfect liberty” truly lies. Nevertheless, the prevailing consensus amongst economists is that for markets to be competitive, no monopolies should exist, and this supposedly works best in markets that are open and free. Here, it is assumed that unlimited and self-regulating competition will eventually destroy all monopolies and decentralize economic power. While Adam Smith’s work was mostly aimed against the monopolies of guilds and the support they received from the mercantilist system, economists of the late 19th and 20th centuries criticized the socialist and welfare states for similar reasons. In all these cases, the state’s use of its monopoly of power to interfere in the ‘private’ sphere of economics is a prominent target of criticism. The objection to state interference is thus not only based on the principles of negative rights to individual private property, but also on the maintenance of the self-regulating mechanism of the competitive market. States should therefore keep their hands off the invisible hand; their attempts to ‘artificially’ constrain or abolish competition by regulating markets or managing economic affairs need themselves to be placed under strict limitations.

Since Adam Smith, the answer to this state interference has therefore generally been, at least in principle, the opening of markets. In this sense, the new

institutional economist Douglass North understands capitalist markets as “open access orders” (North et al. 2009). Similarly, Friedrich Hayek argues that economic freedom⁷ cannot be limited to any community or nation, but that it is inherently open and international (Hayek 2007: 226). All national boundaries restricting the free movement of people and capital should be kept to a minimum, integrating all economies into one single common market (Hayek 1980: 258). Since the open market is international, nation states must, he thinks, pass their powers on to international bodies. In other words, Hayek urges that the role of the state be limited to the impersonal and impartial implementation of international economic laws and the preservation of the apparent mutual independence of economic and political realms of human interaction. As Douglass North et al. explain,

Open access societies limit access to violence [through the state monopoly on coercion] while ensuring open access to political and economic activities. Because the political system in an open access order does not limit economic access, it *appears* that the economy exists independent of the political system. As the neo-classical economists’ fiction holds, markets exist and then politics intervenes. This seeming independence of politics and economics in an open access society overlays a much deeper and fundamental connection. It is here that *impersonality* occupies central stage. (North et al. 2009: 121; emphasis added)

As we see, this political neutrality of the state should create a legal setting in which all humans are, at least theoretically, equal and included in the impersonal market exchange. The separation of political from economic matters is ultimately supposed to secure the desired competition in the market that, in turn, is meant to enable self-regulating markets to function properly (ibid.: 110–115, 121–2).⁸

7 I refer here to the ‘negative’ freedom to trade or exchange goods with others through contracts and the freedom to accumulate private property – without illegitimate state intervention.

8 As Douglass North et al. explain, “Open access orders prevent disorder through competition and open access. Consolidated, political control over violence combines with the rules governing the use of that violence to reduce and control access to violence. Constitutions and rule of law provide limits on governmental policymaking, thus limiting the ways in which citizens can feel threatened by the government that in natural states induce them to support the use of violence and extra-constitutional action to protect themselves. In addition [...] competition is intimately involved in enforcing the constitution and rule of law that support these limits on violence.” (North et al. 2009: 115)

2.4 Economist kings, authoritarian liberalism and structural constraints

In all these theories of the competitive market from Hobbes to Douglass North, the *political* question remains: Who shall rule? And who possesses the knowledge and insight to create economic laws and policies that will ensure just the right amount of competition – neither too little nor too much? The problem becomes most clear when we juxtapose the assumption of humans as self-interested and egotistical beings, on the one hand, with the necessity of a strong and neutral government that impartially imposes law, on the other hand. Furthermore, another tension appears to arise between the necessity of a strong and overarching Hobbesian state that enforces strict property laws and contractual agreements and its simultaneous self-limitation when it declines to interfere in economic affairs.

For this reason, it is interesting to turn to the work of Friedrich August von Hayek, who provides a rather insightful solution to these tensions between the state and the market. Importantly, Hayek transforms the simple mechanistic understanding of equilibrium theory into a more dynamic and evolutionary concept of perpetual social adaptation. This evolutionary adaptation occurs in a spontaneous manner and therefore cannot be planned by any political body. Here, we are again reminded of the invisible hand of the self-regulating market. Furthermore, he also admits that the distribution of wealth in a market economy is not just. More to the point, he argues that the category of justice cannot be applied to markets at all. The reason for this is that there exist no individuals or groups who are responsible for the “spontaneous” distribution of resources (Hayek 2013: 233). Put somewhat bluntly, Hayek acknowledges that the open and competitive market can create a good deal of human suffering through bankruptcies, unemployment, inequalities and economic crises (Dupuy 2013: 163-4). Yet for Hayek, these effects are merely natural occurrences in what he understands as a dynamic and spontaneously evolving social order. For this reason, he recognizes that if people possessed the power to alter their social conditions – in what he named an “unlimited democracy” – they would most likely do away with the competitive market or would not develop it in the first place. In his words:

If in a society in which the spirit of enterprise has not yet spread, the majority has power to prohibit whatever it dislikes, *it is most unlikely that it will allow competition to arise*. I doubt whether a functioning market has ever newly arisen under an unlimited democracy, and it seems at least likely that unlimited democracy will destroy it where it has grown up. To those with whom others compete, the fact that they have competitors is always a nuisance that prevents a quiet life; and such direct effects of competition are always much more visible than the indirect benefits which we derive from it. (Hayek 2013: 415)

From Hayek's perspective, people do not desire an open and competitive market arrangement because it implies a threat to what he calls "a quiet life". But understood more generally, the opposition to such a social arrangement is not only due to a desire to lead a calm and peaceful life, but also most likely due to a deep aversion towards the perpetual change, injustices and existential insecurities that open competitive markets bring about. Here, it is interesting and important to note that Adam Smith also recognized this widespread aversion towards open and competitive markets, as he writes,

To expect, indeed, that the freedom of trade should ever be entirely restored in Great Britain, is as absurd as to expect that an Oceana or Utopia should ever be established in it. Not only the prejudices of the public, but what is much more unconquerable, the *private interests* of many individuals, irresistibly oppose it. (Smith 1994: 501; emphasis added)

According to Smith, this aversion is due to the monopoly position of guilds and manufacturers who perceive open and competitive markets as a threat to their economic power – and security. Nevertheless, Smith admits here that open and competitive market arrangements are a somewhat utopian goal, given the egotistical nature of human beings.

But isn't this peculiar? Suddenly, we see that both Smith and Hayek believe that people are in fact *too* self-interested and that they therefore want to limit market competition to their advantage. This egotistical aversion to competition can be interpreted as a social counter-reaction to the creation of open markets through economic deregulation that Hayek's contemporary Karl Polanyi describes as the "double-movement" in his book *The Great Transformation* (Polanyi 2001: 136-157). In his book, Polanyi understands this reaction to open and competitive markets as an attempt that people make to alter and socially "re-embed" economic activities in order to satisfy their own needs and desires (i.e. the desire to have a secure income and lead a somewhat stable life). In contrast, it appears as though Smith and Hayek perceive these people to be blinded by their egoism, which prevents them recognizing the supposedly more subtle and "indirect" achievements of a competitive market economy and, ultimately, from believing in the providential nature of the self-regulating market.

But who, then, is there to implement the rules of such a social arrangement that a large portion of the population does not desire? Interestingly, Adam Smith remains silent on the question of who shall rule. For Hayek, the creation of a spontaneous social order requires people who have an insight into its hidden fruits and impartial laws. Only these people are able to restrain themselves from the hubris of collectively creating social institutions according to their particular needs and desires. Paradoxically, only such rulers can implement political institutions against the self-interest of the people, enabling a social order to 'spontaneously'

arise through the pursuit of people's self-interest in economic affairs. While people should pursue their self-interest on a competitive market in 'private' economic affairs, they should not, however, pursue their self-interest in political or 'public' matters. Because most people do not possess this insight and humbling knowledge, Hayek literally argues that democratic politics must therefore be "dethroned" (Hayek 2013: 481-5). This is supposed to occur by creating a body of universal rules that primarily protects individual negative freedom from arbitrary interference and coercion, which is nothing other than the Hobbesian protection of individual private property rights and the enforcement of contracts (ibid.: 447). Furthermore, the democratic state should include both a Legislative Assembly and a Governmental Assembly that is elected by the entire population every couple of years. The Legislative Assembly consists of adults of a "relatively mature age for fairly long periods" (ibid.: 448), more specifically between 45 and 60 years old and for a period of 15 years. This long period should keep members independent from the "fluctuating wishes of the electorate" and from political parties "committed to support[ing] particular interests and particular programmes of actions" (ibid.). In contrast to the Governmental Assembly, the Legislative Assembly is only elected by people of the age of 45 once in their lifetime who then choose someone of their generation whom they can "trust to uphold justice impartially" and to possess qualities such as "probity, wisdom and judgment" (ibid.). This political body would revise and sanction all laws, including those concerning taxation and regulations for safety, health and environmental matters. In other words, members would ultimately possess the power to create an "adequate framework for a functioning competitive market" (ibid.: 450). To ensure that these laws are compatible with the constitution, Hayek also suggests that there should be a constitutional court that oversees the work of these two assemblies. The judges of this court are, in turn, appointed by the Legislative Assembly and would often include former members of this assembly.

As becomes clear, Hayek's concept of a 'democratic' state is not very democratic. The problem of conflicting interests is solved by a council of the wise who should be – in contrast to the other self-interested citizens – highly impartial. This group supposedly possesses the insight into the true nature of a free market society while simultaneously limiting citizens' ability to democratically codetermine its laws and social arrangements in ways that might interfere with the price mechanism, market competition and the resulting distribution of resources and wealth. In other words, while Hayek understands the open and competitive market as an evolutionary process of discovery and adaptation dependent on the decentralized decision-making of individual agents, its legal framework remains abstract and immutable. While the interactions in the market should occur spontaneously, its laws are enforced and protected in a rather unspontaneous and calculated manner by supposedly wise and objective human beings. Simply put, it appears that Hayek is defending a social order that is ruled by technocratic economic experts

or platonic economist kings. According to this interpretation, I believe it to be adequate to argue that Hayek's concept of society based on an international, open and competitive market comes close to what Hermann Heller called "authoritarian liberalism" as early as 1933 (Heller 2015). Furthermore, this interpretation of Hayek would allow us to agree with historian Philip Mirowski, who argues that although many economists and economic agents often argue for a minimalist state, they are in fact not *against* the state but merely want to take over the driver's seat in government (Mirowski 2014).

It must be acknowledged, however, that such an anti-democratic political model could easily be put off as the somewhat embarrassing blunder and obscure thought experiment of an elderly economist. Furthermore, it can be expected that most economists would reject such a political model, because it not only denies fundamental political freedoms, but it is also highly improbable that such wise and impartial people could be found. For this reason, it is often argued that open and competitive markets must be coupled with the periodic open and competitive election of government officials (North et al. 2009). Here, we appear to have returned to Fukuyama's notion of liberal democracy or democratic capitalism, in which the underlying mechanism of the market – i.e. competition in the sphere of economics – is applied to the democratic decision-making process in the political sphere.

I would like to show, however, that even with the existence of periodic elections, open and competitive markets nevertheless severely limit peoples' rights and capabilities to democratically alter their social arrangements. Wolfgang Streeck lucidly describes this problem in his book *Buying Time* (2013). Here, he explains that democratic citizens (what he calls a *Staatsvolk*) are bound to a national territory and have specific rights and obligations, including the equal right to vote and the ability to express one's opinion freely. In contrast, the people of the market (*Marktvolk*) are generally understood as internationally mobile investors and creditors, who possess the right to demand profits. Importantly, while the first group is more or less geographically bound, the second can move easily and more or less freely from one country to the next. Because the well-being of economies, societies and states are largely dependent on private investors, the *Marktvolk* becomes a second and, in some cases, even more important constituency. Here, elections are supplemented by continuous auctions, public opinion by the rate of return on investment, and political loyalty by the "confidence" of investors in market stability (Streeck 2013: 117-132). When the *Staatsvolk* attempts to raise taxes or to implement environmental regulations, the *Marktvolk*, fearing a decline in profits, will often withdraw its investments. In turn, these "investment strikes" (ibid.: 50, 118-119) lead to unemployment and economic crises, thereby punishing the people for attempting to alter their politico-economic institutions and, ultimately, constraining democratic choices. In Streeck's words,

The limitation of national sovereignty by 'market forces' amounts to a limitation of the freedom of the *Staatsvolk* to make democratic decisions and a corresponding empowerment of the *Marktvolk*, which becomes increasingly essential for financing government decisions. Democracy at national level presupposes nation-state sovereignty, but this is less and less available to [...] states because of their dependence on financial markets. (Streeck 2013: 126)

Here, we are again reminded of the "countervailing power of private capital" (Held 1987: 160). Yet this time economic power is used not to limit the power of absolute sovereigns and warring feudal lords, as was the case with Montesquieu and Adam Smith, but instead to undermine the democratic powers of a nation state. Joshua Cohen succinctly calls this the "structural constraints argument". As Cohen explains,

According to the structural constraints argument, the private control of investment importantly limits the democratic character of the state by subordinating the decisions and actions of the democratic state to the investment decisions of capitalists. Political decisions are structurally constrained because the fate of parties and governments depends on the health of the economy, the health of the economy on investment decisions by capitalists, and investment decisions by capitalists on their expectations of profits. While groups other than capitalists also control strategic resources, and can use that control to constrain decision-making, the structural constraints argument holds that the power of capitalists and the fact that everyone's welfare depends on their decisions singles them out for special attention. (J. Cohen 1989: 28)

This problem of structural constraints can, on the one hand, be understood as a tension between national democracies and an international open market economy (Streeck 1998; Rodrik 2012). On the other hand, it also must be understood as a fundamental tension between the realms of society that are considered to be private and public. Within the classical Hobbesian state-market dichotomy, the maintenance of one's life and livelihood is largely considered to be a private affair that occurs within the supposedly neutral framework of the state. Yet the framework of the state or the public is never neutral and in this case subjugated to the arbitrary decisions and powers of the *Marktvolk*.

For this reason, I would agree with the political scientist Charles E. Lindblom who provocatively argues in his article *The Market as Prison* from 1982 that the open and competitive market can be interpreted as a type of political prison that does not entirely stop, but substantially suppresses institutional change (Lindblom 1982: 326). As he explains,

Many kinds of market reform automatically trigger punishments in the form of unemployment or a sluggish market economy. [...] Punishment is not [however]

dependent on conspiracy or intention to punish. If, anticipating new regulations, a businessman decides not to go through with a planned output expansion, he has in effect punished us without the intention of doing so. Simply minding one's own business is the formula for an extraordinary system for repressing change. [...] That result, then, is why the market might be characterized as a prison. For a broad category of political/economic affairs, it imprisons policy making, and imprisons our attempts to improve our institutions. It greatly cripples our attempts to improve the social world [...]. (ibid.: 325-329)

Yet even without Hayek's impartial economic rulers, once the institutions of individual private property and the open and competitive market are in place, the actual possibilities of people to democratically alter these central institutions remain severely limited. With Adam Smith, we can therefore say that this repression of institutional change is merely another form of discipline that results from open and competitive markets. In this sense, we might even say that Heller's authoritarian liberalism does not even require Hayek's economist kings, but rather functions through the economic institutions themselves. Here, it doesn't matter who is in the driver's seat, because whoever it is must acquiesce to the demands of the market. Thus, it can be concluded that both the supposedly neutral legal framework of the state and the self-regulating, open and competitive market undermine our previously developed concept of democracy, in which people possess the rights and capabilities to codetermine their social conditions.

This being said, this rather negative portrayal of the market as a political prison should not be taken as a denial of the positive aspects of capitalist markets. It cannot be denied that open and competitive markets have expanded the realm of individual freedom and increased the number of goods that a large portion of the world's population can enjoy today. In this sense, we must agree with Fukuyama that democratic capitalism is a good thing. Nonetheless, as I have shown, the institutions of the open and competitive market inherently limit the democratic freedom that people can realize. This might not be a problem if everyone was satisfied with life within the framework of an open and competitive market. But as Adam Smith and Hayek already acknowledged, this is not the case. Furthermore and as we will soon see, social arrangements that prioritize individual freedom based on the negative rights of private property bring about serious social, economic, and ecological problems that often cannot be solved due to the structural constraints of capitalist markets. For this reason, it is necessary to develop our understanding of other social arrangements that are more compatible with our more demanding understanding of democracy and thereby provide people with the capabilities to institutionally adapt and collectively solve the problems that threaten them. As already mentioned, one alternative to democratic capitalism that is increasingly being discussed is that of the commons. For this reason, let us now turn to this

discourse on the commons and analyze whether it provides us with a normatively sound and feasible alternative 'beyond markets and states'.

3. Garrett Hardin's tragedy of the unregulated commons

Before we can examine the question of whether the commons provide us with a reasonable alternative to the social institutions that underlie democratic capitalism, we must firstly analyze what is widely assumed to be the necessary failure of commons, as expressed in Garrett Hardin's influential 1968 article *The Tragedy of the Commons*. Although the concept of the commons can be traced back much further, Hardin's article has greatly increased the contemporary interest in the topic and has framed a heated debate that has lasted until today.¹ In this short chapter I therefore firstly analyze Hardin's argument as to why commons are inadvertently overused. In a second step, I discuss his suggestions of how to overcome this tragedy. In a nutshell, I will demonstrate that Hardin's theory is not a critique of the commons per se, but rather of unregulated commons, which bring about open and competitive social arrangements.

3.1 The tragedy: maximization strategies and the double C-double P game

To begin with, it is worth mentioning that Garrett Hardin's theory implicitly repeats the basic arguments of Malthus' *Essay on the Principle of Population* from 1798. Accordingly, Hardin opens his theory of "The Tragedy of the Commons" by assuming two general yet conflicting principles. His first premise is based on the laws of conservation and postulates that resources on earth are scarce. His second premise is based on biologists' observations that all living organisms have an inherent tendency to perpetually increase their population in order to secure their survival (Hardin 1968: 1243). Understood mathematically, this existential drive leads to the

¹ According to Elinor Ostrom, "Hardin's article is one of the most cited publications of recent times as well as among the most influential for ecologists and environmental policy researchers. Almost all textbooks on environmental policy cite Hardin's article and discuss the problem that Hardin so graphically identified." (Ostrom 2008b)

exponential growth of populations. In nature, however, this tendency is kept in check by limited resources and other scarcity-related mechanisms such as hunger, disease, predators and, ultimately, death. In comparison to other animals, humans are reflexive beings that must make choices between the forms of their consumption, or rather between the amount of resources they utilize per person and their population size. For this reason, Hardin dismisses the utilitarian principle of “the greatest good for the greatest number” and declares that we must choose between maximizing our offspring and maximizing goods – or that we find a middle way between these extremes. With this reasoning, Hardin sets the stage for his critique of “laissez-faire” policies in reproduction and, more generally, of unregulated commons.

Hardin explains this conflict between limited ecological resources and both demographic and economic growth by envisaging a scenario involving a pastoral commons. In Hardin’s scenario, a pasture is held in common and is “open to all” (Hardin 1968: 1244), to be used by herders for the grazing of their privately-owned cattle. Hardin borrows this “heuristic image” (Hardin 1977a: 68) from William Foster Lloyd’s pamphlet *Two Lectures on the Checks of Population* that was first published in 1833 and utilizes it as a model to portray and understand the relationship between humans and their environment. For us to comprehend the underlying problem, Hardin’s two premises need to be reformulated. Firstly, the scarcity of resources implies that the carrying capacity of a pasture is limited. Hardin therefore defines the carrying capacity of a resource as “the maximum number of animals that can be sustained by this food source *year after year, without a diminution of the quality of the pasture*” (Hardin 1993: 207; original emphasis). The second premise, postulating the supposedly natural exponential growth in the population size of every species must be translated into the size of the herds that are bred and controlled by the herders. While this second premise originally assumed an innate biological drive to increase one’s own population size, we must now ask ourselves why herders desire and choose to increase the number of their cattle.

Hardin answers this question within a general framework of methodological individualism and in both biological and utilitarian terms. Although not explicitly formulated by Hardin, his biological reasoning provides us with a Social Darwinist and ‘existential’ understanding of the tragedy of the commons. In contrast to other animals, in humans, an innate drive to survive can manifest itself either in the increasing number of human offspring produced or in the amount of resources accumulated for future production and consumption. When population sizes and consumption levels are far below the carrying capacity of the available resources, abundance prevails and the use of commons provides no serious problems. In Hardin’s words: “So long as there is a great sufficiency of pastureland, commonized real estate is efficient: no fences need be maintained and there is little call for human supervision.” (Hardin 1993: 216) This implies that although the

carrying capacity creates a limitation to economic and demographic growth, if human existence remains largely below these boundaries, people should nevertheless experience a certain sufficiency or even abundance. Yet, owing to the supposedly natural urge to survive through the growth in population size or wealth accumulation, resources become scarcer. This increase in scarcity, however, ironically leads to a greater existential threat and an intensified attempt to secure one's own survival through increased growth and accumulation.

Although the foundation of Hardin's argumentation is based on this 'biological' reasoning, he resorts to utilitarian terms and rational choice theory to explain the tragedy of the commons. Accordingly, Hardin declares that "as a rational being, each herdsman seeks to maximize his gain" (Hardin 1968: 1244). Along this line of thought, he assumes that each herder calculates the utility of increasing the number of animals in their herd and that they realize that one additional animal increases the individual's utility (meat, milk etc.) by +1 while the negative effects of overgrazing are distributed among all herders, creating a fraction of -1 utility for themselves. In other words, the responsibilities for losses do not correlate with the gains of one's actions. For this reason, Hardin calls this situation the "double C–double P game", in which costs are communized and profits are privatized (Hardin 1993: 237). By assuming that other humans are also rational beings and that they will act accordingly, each herder realizes that resources will predictably become scarce and that they *must* act in this manner so as not to be a 'sucker'. Hardin explains this dynamic and its problematic outcome in this key passage:

Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another.... But this is the conclusion reached by every each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is *locked* into a system that *compels* him to increase his herd *without limit* – in a world that is limited. *Ruin is the destination toward which all men rush*, each pursuing his own best interest in a society that believes in the freedom of the commons. *Freedom in a commons brings ruin to all.* (ibid.: 1244; emphasis added)

The tragedy of the commons can thus be understood as a 'race to the bottom' in which each herder attempts to gain as much as possible from the common pasture before its resources are completely depleted. While individuals strive to survive in the short term, the conditions necessary for the long term reproduction of the group are undermined and destroyed. In other words, the tragedy of the commons portrays a type of Hobbesian state of nature in which supposed subjective rationality ultimately leads to an objective, social and ecological irrationality. Due to the assumed functioning of human nature in such a social setting, Hardin declares that this destructive dynamic in the tragedy of the commons is "inevitable" (ibid.).

3.2 Social institutions against tragedy: privatism or socialism

Yet in spite of this supposed inevitability, Hardin argues that the situation can be changed. In this sense, Hardin sees the problem not necessarily in a supposedly egotistical human nature or in a lack of individual morality but in the institutional organization of society and of its resources (Hardin 1993: 218). As Hardin admitted in an article published thirty years later, the actual problem of the commons is not the commons per se, but rather that they are *unmanaged* and open to all (Hardin 1998). Particularly, the problem of the tragedy of the commons is that the use of its resources is institutionally structured in an open and highly competitive manner. In this sense, the tragedy of a pastoral commons is not limited to an agricultural society but can be understood as metaphor for the general problem of open and competitive social arrangements in which profits can be privatized and costs spread onto the rest of society (Hardin 1979). Interestingly, Hardin also sees this problem in Adam Smith's "laissez-faire" policies of unregulated free enterprise and its adverse effects on pollution levels² (ibid.; Hardin 1968: 1244; Hardin 1993: 223) and the supposedly Marxist principle of open-access: "to each according to his needs" (Hardin 1977b). According to Hardin, both principles create social arrangements in which rights and responsibilities fail to correlate and therefore ultimately lead to over-use and destruction. However, I would add here that the negative externalities of these open and competitive social arrangements also include social inequalities and other related social problems such as unemployment, economic crises and the like. The ability of all agents to appropriate an unlimited amount of resources implies that certain (stronger) parties can inevitably accumulate more, ultimately leading to the limitation of access to these resources for others. We will discuss the social effects of this mechanism in more detail when analyzing what I call the tragedy of the market. But for now, it is important to emphasize that Hardin demonstrates that this lack of regulation opens the possibility for a small minority to free ride and "bleed the jointly owned resource dry," which, in turn, forces others to "follow their lead" (Hardin 1979). According to Hardin, this problem cannot be resolved through a plea for more moral behavior because "a system that depends only on conscience rewards the conscienceless" (Hardin 1972: 129). Or, specifically, an open-access system penalizes the prudent and rewards the reckless and more powerful.

Hardin's answer to this problem is, at least at first glance, relatively simple: "mutual coercion, mutually agreed upon by the majority of the people affected"

2 In relation to the problem of externalities and pollution, Hardin writes that "we are locked into a system of 'fouling our nest,' so long as we behave only as independent, rational, free-enterprisers" (Hardin 1968:1245). For further thoughts on the problem of laissez-faire policies and externalities, see also page 240 in Hardin's *Living within Limits* (1993).

(Hardin 1968: 1247). In order to break this tragic vicious circle, everyone must agree to be forced to follow rules and regulations – without exception. Only through a democratic social contract that regulates and limits everyone's individual freedom can the freedom of everyone be secured in the long run. Here, we are reminded of Hobbes. But what is an institutional arrangement based on mutually agreed-upon coercion supposed to look like? Hardin's response to this question is, again, quite straightforward: "privatism" or "socialism" must replace all forms of unmanaged "commonism" (Hardin 1978: 315; Hardin 1979; Hardin 1993: 218-9). "Privatism" occurs, according to Hardin, when both the land and animals are owned by the same individual. Responsibilities and gains, resources and harvests correlate fully. This property regime, however, becomes problematic when ownership is separated from occupancy and operation, which can lead to new problems of over-use and exploitation. While "socialism" is similar to "privatism" in that responsibilities and gains correspond, it must be understood as a regulated common because it is collectively owned, managed and harvested. However, this property regime is problematic because larger groups often require appointed managers who administer and enforce rules. This delegation of power leads to the fundamental problem of *Quis custodiet ipsos custodies?* Or in English: Who will watch over the watchmen themselves?³ Due to the problems of both property regimes, Hardin argues that neither form is clearly better than the other. It is important to Hardin that the tragedy of unmanaged commons is avoided through either regime or – as is most often the case – through a mixture of the two, depending on the different empirical conditions.

Despite this openness towards both political systems and property regimes, Hardin's position must nevertheless be interpreted as Neo-Hobbesian (Ophuls 1977: 148). The reason for this is that in the case both of privatization and of socialization, Hardin argues that freedom must be limited by coercion implemented from 'without':

The persistent dream of freedom is the suicidal dream of a state in which individual conscience is the only coercive force. But in truth, when we are dealing with real human beings rather than paragons, if ruin is to be avoided in a crowded world, people must be responsive to a coercive force *outside their individual psyches*, a 'Leviathan,' to use Hobbes' term. [...] In a crowded world, this is the closest we can get to freedom. (Hardin 1978, 314; emphasis added)

Hardin argues that because it cannot be assumed that all humans are virtuous, human life and liberty can only be protected through coercive laws that precisely limit this freedom. And these limiting rules must ultimately be implemented from

3 The literal translation refers to guards and not watchmen, but the problem remains the same: the social control of those who must create and enforce rules.

without, from outside the affected individual's psyche and thus from outside the affected group.

In summary, it can be claimed that Hardin's approach leads to three rather significant fallacies. Firstly, it is often mistakenly assumed that commons inherently will be overused, while Hardin actually argues that the *unmanaged* commons leads to tragedy. Here, I would agree with Hardin. Secondly, it is often mistakenly believed that the destruction of common resources can only be averted if privatized or socialized. In this case, socialization is often interpreted as nationalization through the state. It can generally be said that this dualism has reinforced the often held assumption popular during and since the Cold War that the only options people have to organize society are either according to the principles of individual private property and the market or to those of a centralized nation-state. This is problematic, however, because it simply brings us back to the market–state dichotomy that we had hoped to escape in democratic capitalism. Lastly, Hardin assumes that while people are theoretically able to democratically agree on laws to limit their freedom and the destruction of the planet, the implementation of these laws must, however, come from an external sovereign, a Leviathan. If these options are truly the only possibilities available, three questions remain: Firstly, how are people able to enter a contract that might be rational for society in the long run, while being harmful or irrational for the individual in the short run? Secondly, are private property and state ownership truly the only forms of resource management available to humans? And thirdly, where will this virtuous, absolute Leviathan that can administer and enforce laws “from the outside” come from? Considering these problems, which remain unsolved in Hardin's work, it appears necessary to explore Elinor and Vincent Ostrom's research on the commons, which provides us with theoretical and empirical answers to these three questions – and opens the door to an alternative to democratic capitalism.

4. Overcoming the tragedy with the Ostroms

Having analyzed the social structure and logic of the tragedy of the unmanaged commons, I now turn to consider how to avert this supposedly inevitable catastrophe. An important characteristic of the approach I outline is that it aims to provide us with a different conception of social arrangements that overcome or dissolve the traditional market-state dichotomy of democratic capitalism, which inherently limits democratic ways of shaping social institutions and solving social and ecological problems. In order to do this, we will turn to the work of Elinor and Vincent Ostrom on the sustainable and democratic management of the commons. The exploration of their work will be structured as follows. Firstly, I analyze what Elinor Ostrom understands as “grim” social dilemmas that underlie not only the tragedy of the commons but almost all forms of collective action. In a second step, I consider the Ostroms’ arguments against a centralized and hierarchical state or “monocentric order” as a possible answer to these social dilemmas. In a third step, I critically examine several problems or tragedies that result from privatization and the market. After having discussed the limitations of both monocentric orders and markets, I then turn to the Ostroms’ work on how collective action can be cultivated and realized in order to overcome social dilemmas. A central feature of this is the development of reciprocity, trust and reputation through the communication of the affected agents. The stabilization of this collective action requires, in turn, the democratic definition of rules for both the use of common pool resources and their mutual monitoring. I will then discuss these ideas with reference to Elinor Ostrom’s eight design principles for the sustainable self-governance of commons. In a final step, I explore how these insights from microsituational settings can be scaled up into what Elinor and Vincent Ostrom call a polycentric system of democratic governance. Last but not least, I critically examine the limits and blind spots of their work.

Before delving into this investigation, I would like to briefly explain why I largely focus on the work of Elinor Ostrom and only marginally on that of Vincent Ostrom. The reason for this is rather simple: Elinor Ostrom’s extensive empirical and theoretical work provides us with an amazing array of examples of common pool resources and public services, including fisheries, forests, pastures, ir-

rigation systems, water basins and police security. Throughout her life, Elinor Ostrom searched to define the contingent conditions of possibility for overcoming the tragedy of the commons – or put differently, the conditions of possibility for human cooperation, democratic governance and ecological sustainability. And it is for this work that she then received the Nobel Prize in Economics in 2009. In contrast, while Vincent Ostrom also used the tragedy of the commons as a starting point for the development of his ideas, his focus was less on commons and more on the political theory of a polycentric or federal model of the state that was based on many of Elinor Ostrom's more empirical insights. For this reason, while I focus on Elinor Ostrom's work, I also integrate Vincent's arguments and ideas in order to complement those of Elinor.¹

4.1 Collective action and “grim” social dilemmas

In Elinor and Vincent Ostrom's theories, the notion of democracy is of central importance as a means to overcome the tragedy of the commons. While much literature on democracy focuses on issues such as voting behavior, party politics, parliamentary institutions and the state, Elinor Ostrom approached the problem of democracy from a micro-situational perspective, drawing on game theory and focusing on social dilemmas and collective action. In her Presidential Address of the American Political Science Association in 1997, Ostrom explains the importance of collective action theory for political science – and for almost all human interactions:

The theory of collective action is *the* central subject of political science. It is the core of the justification of the state. Collective action problems pervade international relations, face legislators when devising public budgets, permeate public bureaucracies, and are at the core of explanations of voting, interest group formation, and citizen control of governments in a democracy. (E. Ostrom 1998: 1; original emphasis)

According to Ostrom, collective action dilemmas are present in “all major economic, political, and social projects requiring individuals to associate in allocation activities” (E. Ostrom 2003: 21). For this reason, it has been her lifelong aim to develop intellectual tools to understand “the capabilities and limitations of self-governing institutions for regulating many types of resources” (E. Ostrom 2008a: 2).

¹ In order to deal with the rather awkward and cumbersome repetition of the names Elinor Ostrom and Vincent Ostrom, I will sometimes also refer to the two authors simply as Vincent and Elinor.

In this sense, Ostrom understood the “tragedy of the commons” as a collective action or social dilemma, which, in turn, can also be understood as a prisoner’s dilemma involving two people (E. Ostrom 2008a: 2-5). According to Elinor, social dilemmas arise in situations in which “individuals make *independent* choices in an *interdependent* situation” (E. Ostrom 1998: 3; emphasis added). This is an important point in my later, more in-depth discussion of an ecological understanding of the commons. For now, it is important to note that such dilemmas occur “whenever individuals in interdependent situations face choices in which the maximization of short-term self-interest yields outcomes leaving all participants worse off than feasible alternatives” (ibid.: 1). As we have already seen, these dilemmas should, according to theoretical models such as the one proposed by Hardin, generate defective strategies that ultimately lead to suboptimal outcomes (resource depletion, inequalities etc.). In economic literature on game theory these outcomes are defined as a Pareto-inferior Nash-equilibria; in more colloquial terminology we might generalize from Hardin’s reference to a “tragedy of the commons” and speak simply of ‘tragedy’. In general terms, Ostrom argues that such tragic situations boil down to the “free rider problem”, which she defines in this way:

Whenever one person cannot be excluded from the benefits that others provide, each person is motivated not to contribute to the joint effort, but to free-ride on [i.e. take advantage of] the efforts of others. If all participants choose to free-ride, the collective benefit will not be produced. (E. Ostrom 2008a: 6)

The reason for the general fascination with these models is that their structures create a situation in which the best individual strategies ironically lead to a suboptimal joint outcome. For this reason, Elinor Ostrom writes, “The paradox that individually rational strategies lead to collectively irrational outcomes seems to challenge a fundamental faith that rational human beings can achieve rational results.” (E. Ostrom 1986: 4) It must be noted that this insight is quite striking because it contradicts, first and foremost, the previously mentioned assumption in economics that individual subjective interests lead to positive social outcomes, which is the basic principle of the invisible hand that underlies belief in the self-regulation of the market.² Furthermore, these dilemmas also suggest, more generally, that cooperation

2 It could be argued that the two models (the “invisible hand” and the “tragedy of the commons”) cannot be compared because one model is based on private property regimes and the other on common property regimes. In economic theory, the answer to the problem of over-use and tragedy is therefore privatization. We will discuss the limits and problems of privatization in more detail later. For the time being, however, it is important to note that privatization cannot overcome the problem of tragedy because people are intersubjective beings that share a common reality and therefore also share certain goods that cannot be privatized. One example of this shared reality is, for example the shared legal structure of the market itself. To illustrate the relationship between the market and the commons, we

is impossible or, rather, irrational for supposedly rational agents within specific social arrangements. Although Ostrom agrees with Hardin that “from within the game, participants are trapped in an eternal struggle of tragic proportions” (ibid.: 6), she questions whether such a situation truly represents the full diversity of social interactions and institutions.

Thus, Elinor Ostrom not only criticizes the simple model based on this “grim trap” but also the policy prescriptions whose equally “grim character” has resulted from such models (E. Ostrom 2008a: 8). Her main criticism is aimed at the simple dualism, both sides of which are frequently presented and discussed as alternatives to the tragedy: centralized state authority versus privatization and the market. Before examining the Ostroms’ own alternative to the tragedy, I would like to analyze their interpretations and criticisms of the centralized state and the market in more detail in order to clarify the limitations of these two models as answers to the problem of the tragedy of the commons. Let us therefore begin with the centralized state, which Vincent Ostrom calls the “monocentric order”.

4.2 The tragedy of monocentric orders

According to Vincent Ostrom, monocentric orders are realized according to a theory of sovereignty that only envisages a single center of ultimate authority. This is the Hobbesian model of the Leviathan that Hardin propagated. The assumption underlying this idea is that to overcome perpetual war or the destructive competition between private, egotistical individuals, a single center of authority must create a single system of law for all. In order to be able to do this, the center of authority must be “the source of law, [...] above the law, [and] cannot be held accountable to law” (V. Ostrom 2011b: 352-3). Furthermore, this law is enforced by the same source of authority (ibid.: 353-4). The conflicting violence between factions is therefore resolved by creating a “monopoly of the legitimate use of physical force in the organization of a society” (ibid.: 353; emphasis omitted). The monopoly of the use of force in society transforms all these quarreling individuals and groups into a unified organization called the state. Abstractly speaking, oneness is to supersede, contain and structure the many. The function of such a monocentric order is to “dominate [...] all patterns of organization that are subject to law” (ibid.) so as to limit and enable individual freedom.

Drawing on Max Weber, Vincent Ostrom further argues that a monocentric order is not only characterized by a single center of supreme authority, but that it

could thus say that the commons provides the stage or background setting for the market. While the self-regulation of the market might function *on* the stage, I argue that it leads to the destruction *of* the stage.

is closely associated with and dependent on hierarchical command structures that are realized in a bureaucratic form of organization. In general terms, the command structure in monocentric, hierarchical organizations is justified based on an increase in efficiency, rationality and objectivity. The hierarchical command structure and the monopoly of the use of force in society enables monocentric orders to impose effective sanctions to prevent free riding and to collect levies for protecting and developing both common-pool resources and public goods (V. Ostrom 1974: 58-9). This ability to enforce rules and collect taxes provides an efficient answer to the relatively high deliberation and transaction costs created when pooling resources by creating contracts between all individuals. Furthermore, the management of a resource through a single organization enables externalities to be internalized (ibid.: 63).³ Thus, monocentric orders are assumed to increase the efficiency and rationality in the organization of human affairs.

In relation to the efficient implementation of impartial and uniform laws, Elinor Ostrom emphasizes, however, that uniform rules are problematic when dealing with commons, because of the ways that common pool resources often differ from one another. If uniform rules are applied across such different contexts, the problem is that either false incentives are created or people do not take the rules seriously and thus end up pursuing short-term maximization strategies nevertheless (E. Ostrom 2008a: 11). This problem is sometimes accentuated when resources that were held in common by local communities are nationalized by the state. The problem arises where the state, however, lacks the ability to monitor and enforce the regulation of those resources, with the result that a common-property resource is transformed into an unregulated open-access resource (ibid.: 23; E. Ostrom 1999: 495).

Vincent Ostrom's rather fundamental critique of monocentric orders is not, however, based on common-pool resources, but rather on the widespread and well-known critique of bureaucratic systems in welfare states, made especially popular by the work of Ludwig von Mises, Gordon Tullock and, more generally, public choice theory. Here, it is argued that individuals working in large bureaucracies are – like all human beings – self-interested, which ultimately leads to corruption and to the organization's executives losing control over it. Here, Elinor Ostrom also points to the paradox that it is assumed that the Leviathan will be a wise and ecological ruler while the individuals using the resources are short-sighted, ecologically ignorant egoists (E. Ostrom 1986: 8). Second, she argues that state bureaucracies are

3 It is important to note that this economic rationale of vertical integration drives *both* public agencies and private firms to become centralized, hierarchical organizations, as Robert Coase argued in his article *The Nature of the Firm* (Coase 1937: 390-1; V. Ostrom 1974: 59). This insight radically contrasts the common interpretation of bureaucracy as a form of organization only found in governments and public administration.

not exposed to competition and are therefore prone to being inefficient and unresponsive to the diverse and changing demands of citizens and consumers. Continuing this line of criticism, Vincent argues that monocentric, hierarchical bureaucracies enable a monopoly over the legal instruments of coercion and thus provide “unique opportunities for a few to exploit the many” (V. Ostrom 1993: 59), opening the door to oppression and tyranny. Vincent rounds out these criticisms of monocentric, bureaucratic orders by concluding – again with reference to Max Weber – that such organizations can become self-perpetuating organizations that reduce all individuals – rulers and ruled – to subservient cogs in an “iron cage” (Weber 2001: 123; V. Ostrom 2011b). This leads us to a supposed “paradox of bureaucracy” in which collective attempts to enable individual positive freedom – through welfare services, for example – will be undermined by an unresponsive and possibly corrupt paternalism on the part of governmental officials (V. Ostrom 2011b: 355–6).⁴ Furthermore, through its individualistic conception of rights, a monocentric, bureaucratic (welfare) state supports the atomization of individuals and, thereby, undercuts the desire and capacities of individuals to collectively care for common goods (Allen/Ostrom 2008: 148). According to Vincent Ostrom, the monocentric order thus appears to reproduce the tragedy of the commons through its monopoly of the use of force and its corrupt and exploitive bureaucratic administration.

Before discussing the Ostroms’ answer to the problems of monocentric orders, I wish to offer a few critical reflections on their depiction of monocentric orders, which is admittedly somewhat simple and problematic. Firstly, it must be emphasized that the notion of a monopoly on coercion appears, at least to me, to

4 The assumption that a monocentric bureaucracy is a threat to individual positive freedom is famously formulated in Tocqueville’s account of “democratic despotism” where he writes: “That power is absolute, minute, regular, provident, and mild. [...] The will of man is not shattered, but softened, bent, and guided; men are seldom forced to act, but they are constantly restrained from acting. Such a power does not destroy, but it prevents existence; it does not tyrannize, but it compresses, enervates, extinguishes, and stupefies a people, till each nation is reduced to nothing better than a flock of timid and industrious animals, of which the government is the shepherd.” (Tocqueville 2004: 861–2) Although the state that Tocqueville is describing is not the same as the one under which Vincent Ostrom lives, Vincent nevertheless repeats this argument throughout his work (e.g. V. Ostrom 1997: 278). In a different form, Claus Offe also presents a similar argument in his essay *Contradictions of the Welfare State* (1985) in which he explains that the socialist left also believes that the welfare state undermines individual self-determination: “The welfare state can be looked upon as an exchange transaction in which material benefits for the needy are traded for their submissive recognition of the ‘moral order’ of the society which generates such needs. One important pre-condition for obtaining services of the welfare state is the ability of the individual to comply with the routines and requirements of welfare bureaucracies and service organizations, an ability which, needless to say, often is inversely correlated to need itself.” (Offe 1985: 156)

be an important means of overcoming conflicts. Monocentric orders provide ways to define rules that limit free riding, enforce sanctions and redistribute scarce resources. Ultimately, these are similar to the mechanisms that Elinor Ostrom describes in her eight design principles for sustainably self-governing commons. Here, the monopoly of force can be understood as a pooling of coercive powers in a certain institutional arrangement. However, the difference between the state and the commons is simply that the state is a much larger institution with longer chains of trust and accountability than the social arrangements that Elinor analyzes. The mere fact that monocentric can be used as a means of tyranny and oppression should not, however, imply that we must entirely reject the concept of a monocentric order. This would be throwing the baby out with the bath water. We have already confronted this problem in Hardin's critique of commons, which turned out to be a critique of unregulated commons. Thus, the question is how the monocentric power of the sovereign can be controlled and how the monopoly on the use of force can be made legitimate and just. The question that is of central importance here is whether the state's rules and its authority are democratically legitimate. Furthermore, the question arises of how bureaucratic administrations should be designed to make them more responsive, effective and accountable. We will return to these questions in more depth later while discussing polycentric orders and the relation between the state and commons. Before that, however, let us turn to the other of the two answers to the tragedy of the commons: privatization and the market.

4.3 The tragedy of privatization and the market

Such criticisms of the state have been very influential, and it has often been said that privatization is a better answer to the tragedy of the commons (e.g. Demsetz 1967). As we have already seen in our discussion of Garrett Hardin's work, the main arguments for privatization are the internalization of costs and thus the correlation of costs and benefits. And as Adam Smith and other economists have argued, competitive market arrangements, in turn, provide us with more responsive and efficient social institutions.

Interestingly, Elinor and Vincent Ostrom do not discuss privatization or the market very much. While Vincent is rather fierce in his critique of the monocentric state, he remains somewhat silent on the problems of the market. In fact, while he speaks of a "moral economy", he simultaneously defends the open and competitive market using arguments similar to those that we have previously discussed (V.

Ostrom 1991: 229–231; V. Ostrom 1997: 107; V. Ostrom 2011a: 191).⁵ In contrast, Elinor does mention the problems of an open and competitive market, though she does so sparingly. To be fair, we can generally assume that this has to do with the historical context of the Cold War they lived and wrote in.⁶ Nevertheless, their empirical and theoretical framework does provide us with some rare insights into the problem of privatization and markets. The reason why I insist on a critique of privatization and markets here is that we must understand why privatization and markets are problematic in more detail in order to justify our defense and development of commons. Conversely, if privatization and markets work well, there is no reason to change their institutional arrangements. As Elinor Ostrom says herself, “If it ain’t broke, don’t fix it” (Ostrom 2008a: 211).

Different Types of Goods (Part I)

Before turning to privatization and the market, it is important to note that Elinor and Vincent Ostrom do not deal with these issues in detail because they often simply assume that public choice theory has already developed a sufficiently clear

5 Here, it can be noted that Vincent Ostrom does not like to use the general terms ‘markets’ and, more importantly, ‘capitalism’. He explains in an interview: “Probably the best way to characterize our approach would be to start with one of our most influential themes: the idea that broad concepts such as ‘markets’ and ‘states,’ or ‘socialism’ and ‘capitalism,’ do not take us very far in thinking about patterns of order in human society. For example, when some ‘market’ economists speak of ‘capitalism,’ they fail to distinguish between an open, competitive market economy and a state-dominated mercantile economy. In this, they follow Marx. He argued that ‘capitalism’ has a competitive dynamic that leads to market domination by a few large monopoly or monopoly-like enterprises. But what Marx called ‘capitalism,’ Adam Smith called ‘mercantilism.’ Similarly, many authors who write about ‘capitalism’ fail to recognize the complexity of capitalist institutions. They overlook the rich structures of communal and public enterprises in societies with open and highly competitive market economies. Instead, we should expect to find some combination of market and non-market structures in every society, and we should recognize the complex configuration of institutions behind labels such as ‘capitalism.’” (V. Ostrom in Aligica/Boettke 2009: 142) It is, however, quite a peculiar and problematic fact about Vincent’s work that while he demands an exact and differentiated analysis of the institutions of markets, he never – at least to my knowledge – provides such a differentiated analysis himself. I do, in fact, hope to develop such a differentiated understanding of markets in this book.

6 In an interview, Elinor Ostrom was once asked “Do you take issue with those who call your theories ‘implicitly socialistic?’”, Her answer to this question was: “Yes. I don’t think they are supporting socialism as a top-down theory. A lot of socialist governments are very much top down and I think my theory does challenge that any top-down government, whether on the right or the left, is unlikely to be able to solve many of the problems of resource sustainability in the world.” (E. Ostrom in Klein et al. 2013: 541)

categorization of goods, including private goods (Buchanan 1965). In distinguishing between goods, they emphasize two essential characteristics: exclusion and rivalry. In contrast to widespread theories on goods, Elinor and Vincent Ostrom, however, replace rivalry with joint use (Ostrom/Ostrom 1999: 78). The divisibility of goods creates the possibility of excluding others from their use, ultimately enabling a specific good or service to be privatized and traded as a commodity on the market. Access to such a good is only allowed when the terms and conditions of the vendor are met (ibid.: 76). In other words, access to these goods depends on a person's purchasing power or, in more plain language, on how much money a person has. In the case of goods that cannot be divided up or where this is more difficult, with things such as the air or peace, exclusion can generally not be realized. Here, "anyone can derive benefits from the good so long as nature or the efforts of others supply it" (ibid.). Joint use, on the other hand, implies that more than one person can consume a good simultaneously. Typical examples of such a good are a movie theater or a lighthouse. Goods that generally do not enable joint consumption are, for example, an apple or a fish. These goods are, in contrast, considered to be rival. If one person eats the fish, another person cannot eat it. Such goods are subtractive and therefore considered to be scarce and thus rival. These distinguishing characteristics of exclusion and joint use have led the Ostroms and other public choice theorists to differentiate between individual private goods, collective private goods or club goods, common pool resources and public goods. The following table sets out the four types of goods:

Table 1: Types of goods (Ostrom/Ostrom 1999: 78)

	Rival	Non-Rival/Joint Use
Exclusion Feasible	<u>Private Goods</u> : Bread, shoes, automobiles, haircuts, books, etc.	<u>Toll Goods</u> : Theaters, night clubs, telephone service, toll roads, cable TV, electric power, library, etc.
Exclusion Difficult/Infeasible	<u>Common-Pool Resources</u> : Water pumped from a ground-water basin, fish taken from an ocean, crude oil extracted from an oil pool	<u>Public Goods</u> : Peace and security of a community, national defense, mosquito abatement, air pollution control, fire protection, streets, weather forecasts, public TV, etc.

Here, it is important to note that common pool resources are similar to public goods because it is relatively difficult (i.e. costly) in both cases to exclude others from their use. Yet, in contrast to public goods, common pool resources can provide individuals with goods that can be consumed individually (e.g. a fish from an

ocean).⁷ In a similar manner, individual private goods can be distinguished from collective private or toll goods in that both types of goods enable exclusion while the former good is a rival good and the latter is – at least in principle – non-rival.

Although this schematic categorization of goods is helpful in differentiating between types of goods, Vincent Ostrom emphasizes that there are a few respects in which it is somewhat problematic. Firstly, few if any goods perfectly fit this categorization except for a few trivial and ideal cases such as gravity (V. Ostrom 1975: 847). In a similar sense, the possibility of joint consumption depends on the precise conditions of use. A public highway can, for example, become rival and a public ‘bad’ when over-used. Additionally, the schematic representation of goods fails to recognize that the differences between goods lie on a continuum. And lastly, it neglects the relationships that exist between goods of various types (e.g. the relationship between automobiles and the public highway). Vincent therefore explains that “within this continuum, the production or consumption of goods or services may involve *spillover effects* or *externalities*” (V. Ostrom 2011a: 190; original emphasis). In other words, the use of one type of good will most likely have positive or negative effects on other goods owing to their interdependence (e.g. the positive effects of education on a broader population and the negative effects of pollution on water quality). The interrelatedness of different goods therefore demands different access and utilization rules depending on the positive and negative effects of these goods. Also, these access and utilization rules are not simply given; they are highly contested.

Furthermore, it must be noted that this framework simply assumes that specific types of goods inherently or ‘naturally’ possess certain characteristics, which, in turn, means that they are more adequately dealt with as private, club, common or public goods. But as Elinor Ostrom and Charlotte Hess argue, “Common pool resources may be owned by national, regional, or local governments; by communal groups; by private individuals or corporations; or used as open access resources by whomever can gain access.” (E. Ostrom/Hess 2010: 58) Ostrom and Hess emphasize, therefore, that “there is no automatic association of common-pool resources with common property regimes – or, with any other particular type of property regime”

7 The concept of common pool resources is explained in a bit more detail in a longer passage by Elinor and Vincent Ostrom: “In the case of a common-pool resource, exclusion may be infeasible in the sense that many users cannot be denied access. But, use by any one user precludes use of some fixed quantity of a good by other users. Each pumper in a groundwater basin, for example, makes a use of water that is alternative to its use by each other pumper. Each fish or ton of fish taken by any one fisherman prevents any other fisherman from taking those same fish. Yet no basis exists for excluding fishermen from access to fish in an ocean. Once appropriated from a natural supply, water can be dealt with as a toll good to be supplied to those who have access to a distribution system; similarly, once taken from the ocean, fish can be dealt with as a private good.” (Ostrom/Ostrom 1999: 78)

(ibid.; original emphasis). In other words, it can be assumed, at least theoretically, that all goods could be privatized if purchasing power and the demand for a good increased while new technologies were to reduce the costs of exclusion (Engel 2002: 52; Euler 2018). Just as a few centuries ago it might have seemed absurd to imagine that water might be bottled and become an object of mass consumption, it is just as possible that fresh air will be bottled and sold one day. We can thus conclude with Tyler Cowen that the “costliness of exclusion is not a function of the nature of the good [itself]” (Cowen 1985: 61). Or, in more general terms, “nearly every good can be classified as either public or private depending upon the institutional framework surrounding the good and the conditions of the good’s production” (ibid.: 53). For this reason, it is necessary to investigate whether the Ostroms provide us with arguments for or against organizing specific resources in private or common property arrangements.

Market failure and privatization

It is important to emphasize that neither Elinor nor Vincent understands the tragedy of the commons to be the result of a common pool resource itself or of a common property regime. Rather, they understand the tragedy to be the consequence of specific institutional arrangements that enable people to act in a specific manner in relation to specific goods. In this sense, the unhindered individualistic freedom that Hardin describes in his model is not to be understood as a type of freedom in a state of nature, but rather as freedom that has been created through a public good: the legal framework implicit in Hardin’s imagined scenario (V. Ostrom 1993: 62; V. Ostrom 1999: 62). More specifically, Hardin assumes a legal framework that protects specific property and contract rights from arbitrary interference and that allows the unimpeded and unlimited accumulation of resources. In Elinor’s words, “The Hobbesian state of nature is logically equivalent to a situation in which rules exist permitting anyone to take any and all desired actions, regardless of the effects on others.” (E. Ostrom 2008a: 140) According to Vincent, this type of individualistic freedom and choice is not simply a characteristic of open-access common pool resources, but also a characteristic of the market (V. Ostrom 1974: 56). Furthermore, it is this individualistic choice that leads to the aforementioned spillover effects and externality problems. As Vincent explains:

When individuals act with the legal independence characteristic of decision making in market structures in a situation dominated by externalities, common-pool resources, or public goods, we can conclude that *institutional weakness* or *institutional failure* will occur. The magnitude of the weakness or failure will depend upon the importance of the externality, or the degree of indivisibility occurring in the common property or public good. (V. Ostrom 2011a: 193; original emphasis)

Here, tragedy arises when individual freedom affects other goods and third parties in the form of negative externalities, free riding or unlimited appropriation of common resources or public goods. Vincent refers to this problem as a form of “institutional weakness or failure”. The failure he refers to can be interpreted as what is generally called market failure. In turn, Elinor Ostrom defines market failure in a similar yet slightly different manner:

Market failure means that the incentives facing individuals in a situation, where the rules are those of a competitive market but the goods do not have the characteristics of ‘private goods,’ are insufficient to motivate individuals to produce, allocate, and consume these goods at an optimal level. (E. Ostrom 2005a: 23)

Although the acknowledgment of the problem of market failure is quite widespread, it should not be interpreted as a critique of privatization and markets per se but rather, as in Vincent’s argument on this point, as the “failure” of certain goods to be divided up and privatized. As Elizabeth Anderson remarks, correctly, “The theory of market failure is not a theory of what is wrong with markets, but of what goes wrong when markets are not available: it is a theory of what goes wrong when goods are not commodified.” (Anderson 1993: 192) The point is that the problem of externalities is often understood as an institutional weakness of common pool resources and public goods – and not as a problem of private property and markets.

This is a very prevalent argument that is especially brought up in relation to environmental problems such as pollution.⁸ For example, Arrow and Hahn argue in their book *General Competitive Analysis* (Arrow/Hahn 1971: 186) that a “competitive equilibrium” in allocation – and thus certainly no market failure – exists when literally *everything* is clearly defined and delineated as privatized commodities.⁹ This assumption is far-reaching and would imply the comprehensive commodification

8 Here is merely one example: “There is good reason, however, to believe that a genuinely free market economy would actually minimise negative externalities. A free market is not a free-for-all, but a system of private property rights enforced by law. Negative externalities without the possibility of amelioration can only arise where private property rights do not (or cannot) exist. [...] While there may be some externalities that cannot be made good via the enforcement of private property rights (principally because private property rights cannot be created or enforced), the presence of negative externalities should properly lead to an investigation to see how private property rights can be further extended, rather than an abandonment of the free market system.” (Meadowcraft 2004)

9 Arrow and Hahn write: “The implications of these conclusions [...] suggest that under appropriate hypotheses, especially convexity and the presence of all markets (*absence of externalities*), competitive equilibrium is very sturdy. There is no strong incentive for subgroups to try to coalesce and to achieve more than they could in the competitive equilibrium; for any such attempt would be unstable. This is contrary to the view sometimes expressed that competitive equilibrium has an inherent instability in that it would pay, for example, the owners of

of all things, including not only common-pool resources such as air, water, forests, pastures and ecosystems, but also 'things' like a recipe, the enjoyment of a sunset, every sexual act, every moment in which children are cared for and, theoretically, also all streets, all laws, all form of police protection and the state itself.

To be clear, it would be completely wrong to argue that Elinor and Vincent Ostrom defend this position. They worked throughout their lives to develop a better understanding of how commons and common property arrangements can be democratically governed. But the question arises whether the Ostroms provide arguments against this (implicit) demand to privatize all of life. Generally, their only arguments against privatization are the ones that result from their previously mentioned categorization of goods. As in her 1990 book *Governing the Commons* Elinor briefly discusses privatization. Here, she basically argues that privatization is undesirable because it increases the costs of property protection, monitoring and sanctioning (E. Ostrom 2008a: 12). She writes: "The setup costs for a new market or a new insurance scheme would be substantial and will not be needed so long as the herders share fodder and risk by jointly sharing a larger grazing area." (ibid.: 13) According to Elinor, an increase in costs makes it unlikely that shared land will be privatized. Furthermore, she argues that common pool resources such as pastures are supposedly relatively difficult to (fairly) parcel up because of the highly unequal structure of the landscape. According to Elinor, this would make privatization undesirable. In the case of fisheries, she also argues that the fishes' migrations make it "likely" that fisheries would "be owned in common rather than individually" (ibid.: 13). However, these arguments against privatization are simply based on the functional description of goods and their monetary utility. As we can see, we may search in vain for robust normative arguments against privatization in the work of the Ostroms.

In this sense, a more fundamental question that arises now is not only if privatization is possible (i.e. costly), but whether it is normatively desirable. What is neglected, here, is the simple insight that privatization and commodification fundamentally transform people's relationships with each other and the world (e.g. paid sex versus unpaid sex between people) and exclude people from resources essential to their life and liberty (e.g. water, land, housing etc.). For example, by enabling someone to appropriate and accumulate land without limit, other people will be excluded from the chance to access land. I believe this to be the main, simple and general argument *against* privatization. The position that I defend in this work and that I will elaborate on in more detail later is that people require access to common resources as a prerequisite for life and liberty. While individual private property might be necessary for the fulfillment of certain personal needs, an access

some one commodity to form a cartel and exploit their monopoly power." (Arrow/Hahn 1971: 186; emphasis added)

to democratically managed common property provides people with greater individual freedom in joint activities while simultaneously minimizing their ecological impact. Put somewhat differently, commons increase our autonomy, defined as the ability to codetermine our social conditions, and simultaneously provide us with a democratic means of creating abundance through the fairer distribution of goods in a world of limited resources. In turn, I believe this to be the main argument for a commons-based society.

Strikingly, Elinor and Vincent Ostrom's work lacks such an explicit critique of privatization and a clear normative defense of commons. As I have mentioned, it would be false to argue that Elinor or Vincent Ostrom defend privatization; but with the scant and somewhat misleading critique of market failure, the door is left wide open to privatization.¹⁰ To be fair, we could say that as political scientists, it was not their job to provide a normative defense of commons – they simply provided examples to demonstrate that commons can be democratically and sustainably managed. But before turning to their analysis of commons, let us push this argument further and investigate the subsequent problems that result from private property in competitive markets.

The tragedy of the market

Despite the lack of an explicit critique of privatization, Elinor Ostrom does in fact provide another rather slender but insightful criticism of markets that will help us in our general analysis of the relationships between markets, democracy and commons.

In *Governing the Commons*, Elinor mentions that privatization transforms the relationship that human beings have with nature. After privatization, she explains, “each herder will be playing a *game against nature* in a smaller terrain, rather than a game against another player in a larger terrain” (E. Ostrom 2008a: 12; original emphasis). She then declares that the reason for this “game against nature” is a “result of [the individual producer's] own profit incentive” (ibid.: 13). Here, we are confronted with a certain contradiction in property theory. On the one hand, it is often assumed that privatization leads to a more responsible and sustainable management of a specific resource owing to the correlation between costs and benefits. On the other hand, it is also assumed that people will use their resources more usefully or, rather, more productively and profitably. We will discuss this argument in further detail when we discuss Locke's justification of private property. For now, however, it is interesting to note that Elinor appears to claim that sustainability

10 For a (neo)liberal market-oriented (re)interpretation of Elinor Ostrom's work see, for example, Mark Pennington's article in *Elinor Ostrom, common-pool resources and the classical liberal tradition* (2012).

and profit contradict each other and that the problems of overuse and degradation remain present even if the specific resource is privately owned.

On the one hand, we might think that this overuse occurs because people are inherently greedy and short-sighted. This would support the thesis that if people are able to pursue their egotistical interests, then they will seek profits and exploit the resources that sustain their own existence. If this were the case, we could justify a power 'from without' that protects people from their own destructive drives. But we will see that this is not the case that Elinor is defending. On the other hand, it could just as easily be assumed that people will manage privately owned resources sustainably in their own long-term self-interests. This could occur when people are relatively informed about the effects of their actions. Yet why would people then nevertheless overuse their privately-owned resources? The reason becomes more apparent when we perceive individuals in their broader social context. In her article "Toward a Behavioral Theory Linking Trust, Reciprocity, and Reputation" (2003), Elinor explains that when privatization is coupled with open and competitive markets, the tragedy is simply repeated at a higher level. She explains: "In highly structured and competitive environments such as an open market [...] entrepreneurs have *no alternative* other than to seek profits. Those who do not pick maximization strategies [...] are *eliminated* by the selective forces of the market." (E. Ostrom 2003: 25; emphasis added) Much as in Hardin's portrayal of the tragedy of unregulated commons, Ostrom argues that the open-market arrangement transforms individuals into "determinate, calculating machine[s]" (ibid.) that are caught up in a single-exit or straitjacket situation (ibid.). In order to survive, private property in open competitive markets thus force people to increasingly extract and accumulate resources – irrespective of whether these resources are owned privately or collectively. Aside from these and other fleeting references to the problems of "rent seeking" (E. Ostrom/Hess 2010: 55), "roving bandits" (E. Ostrom 2007: 12) or even "robber barons" (V. Ostrom 2008: 244), I am not aware of any further critical reflections on privatization and markets in the work of Elinor or Vincent Ostrom.

Before continuing, I think it is important to pause for a moment and reflect on this insight of Elinor's in order to develop my own more elaborate critique of markets here. As we can now see, competitive and maximizing arrangements as described by Elinor are very similar to those described by Adam Smith in which markets discipline people to increase the "wealth of nations". Firstly, it must be noted that unregulated commons enable the unlimited appropriation and accumulation of resources. Yet, in contrast to Adam Smith's positive portrayal of wealth generation, we are reminded again that the discipline of open and competitive markets greatly limits and undermines the individual and collective freedom to alter one's social arrangements. Furthermore, in discussing the tragedy of unregulated commons, we have ironically discovered that open and competitive markets function according to the same paradoxical logic as unregulated, open-access commons:

One's existence is secured through the necessity of appropriating more and more material from a specific resource system, irrespective of whether the system is held in common or treated as individual private property. Both arrangements function according to the logic of 'survival through accumulation'. While Smith describes this process positively, as an increase in economic growth and monetary wealth, the commons perspective conceptualizes the same social arrangement as a tragedy that depletes and overuses people's common resources. Put in this perspective, we might even interpret the tragedy of the commons as the negative flip-side of the perpetual increase in the wealth of nations.

Yet, in contrast to Elinor, I would argue that privatization does not simply replace the "game against another player" with a "game against nature" (E. Ostrom 2008a: 12). Instead, antagonistic and competitive relationships exist in both social arrangements. The reason for this is that both the unregulated commons and the open market are structured according to the prisoner's dilemma or what is also known in economic terminology as the isolation paradox (Sen 1984: 123-4; Elson 1988: 13-20). In both, there exists an institutional setting in which individuals must act *ex post* without prior communication with the other person or knowledge of their intentions and actions. This is what Frank Knight and other economists call "uncertainty" in market situations (Knight 1921). The problem, however, goes beyond the difficulty of merely dealing with unforeseen events such as rainfall or the delivery of a package by post. As we know, the uncertainty of the prisoner's dilemma leads to maximization strategies and the depletion of resources – irrespective of whether these are held in common or owned privately. Hence, the privatization of all goods and resources is unable to overcome ecological problems, because competitive markets force one to extract more and more resources from one's own individual private property, ultimately depleting these resources too. A pertinent example of this is burnout, which can be interpreted as a type of depletion of one's resources in oneself in order to keep up with the other market participants (Rosa 2010). As we see, survival through perpetual accumulation in a world of finite resources is not only logically impossible, but also self-destructive.

Interestingly, this dynamic not only undermines the resources that are privatized and transformed into profit but also destabilizes the market itself. Due to the diversity of people's capabilities and their unequal starting positions, accumulation processes are also highly unequal. Simply put, people with better starting positions can, in turn, accumulate more at a greater rate. This cumulative advantage is often understood as the Matthew principle.¹¹ This implies that the competitive dynamic increases scarcity even more so for those who already have less, accentuating the

11 As Streeck quotes in his book *Buying Time*: "For to all those who have, more will be given, and they will have in abundance; but from those who have nothing, even what they have will be taken away." (Matt. 25,29 in Streeck 2013: 94)

divergence between the haves and have-nots. Those with little purchasing power become increasingly limited in their ability to buy the products that are sold on the market. This is, however, not only problematic for their own access to resources, but also for those producing the goods, for if the products are not bought, profits cannot be made, wages cannot be paid, and people lose jobs. The socio-economic inequality that results from such a divergence thus leads to what is generally known as an economic crisis due to a deficit in demand (Keynes) or over-accumulation (Marx). According to this rather straightforward logic, open and competitive markets inherently lead to economic instability and the destruction of livelihoods. Put somewhat differently, we could even say that the dynamic of the open and competitive market undermines that commons we call the market economy.

Neither ecological devastation nor economic instability would necessarily be a problem if people could solve the problems that result from the open and competitive market. But as we already know, the open and competitive market creates “structural constraints” (J. Cohen 1989: 28) or a “straitjacket situation” (E. Ostrom 2003: 25), which impedes people’s ability to alter their social institutions. We already have discussed this problem in relation to the tension between the *Staatsvolk* and the *Marktvolk*. This problem is, however, exacerbated by the maximization dynamic of the competitive market. If one producer increases its rate of production, all must follow suit in order to maintain their competitive edge. Thus, in order to survive on the market, agents must increase not only the *amount* but also the *rate* of appropriation and output. This is normally understood as producing efficiency gains through rationalization processes and is one of the main justifications of a competitive market economy. The sociologist Hartmut Rosa (2013) describes this process as one of perpetual social acceleration, which might increase economic output, yet does not necessarily increase people’s freedom and wellbeing. Importantly, this increased socio-economic acceleration also conflicts with the processes of democratic deliberation and governance. As he explains:

The central specifically temporal difficulty of democratic politics proves to be the fact that a participatory and deliberative will formation that includes a broad democratic public is capable of being accelerated only to a very limited extent and under specific social conditions. The aggregation and articulation of collective interests and their implementation in democratic decision making has been and remains time intensive. For this reason, democratic politics is very much exposed to the danger of desynchronization in the face of more acceleratable social and economic developments. (ibid.: 254)

We can thus understand this desynchronization as a divergence of the high speed socio-economic processes, on the one hand, and the time necessary for democratic practices, on the other. This incongruence leads to political action lagging behind economic developments. Importantly, it implies that “politics loses its role as an

influential actor that shapes the playing field itself and takes on the status of a predominantly *reactive* fellow player of the game” (ibid.: 264; original emphasis). Here, democratic politics is again dethroned, yet not by economist kings or a *Marktvolk*, but rather by the maximization dynamics of the market itself. Similar to the previously discussed structural constraints, this necessity to perpetually accelerate can thus also be perceived and understood as a function of natural or “objective forces” (ibid.: 269) that limit political deliberation and action. Again, we are confronted with a mechanism of the open and competitive market that thwarts people’s collective attempts to solve the problems that the socially constructed market institutions themselves bring about.

As we see, the isolation paradox that underlies open and competitive markets brings about numerous problems and mechanisms that limit democratic change and institutional problem solving. As Amartya Sen explains: “The market mechanism on its own confines its attention only to issues of congruence, leaving the interest conflicts [and social problems] unaddressed.”¹² (Sen 1984: 95) Along those lines, I would argue that by neglecting or suppressing conflicts through individual private property, market exchange, competition and the belief in perpetual accumulation and economic growth, conflicts and tragedies will inevitably erupt elsewhere. As we have just discussed, these tragedies can involve economic degradation, pollution and climate change, local and global social inequalities and economic crises. Here, I would agree with James Tully who conceptualizes these injustices with the help of what he calls the Medea Hypothesis, “that is, like Medea killing her own children, humanity’s current way of life is bringing about the destruction of the life conditions of future generations” (Tully 2013a: 3). On top of this, the democratic deficit resulting from a state-market dichotomy hinders people from institutionally dealing with these antagonistic interests and grave socio-

12 Hayek admits that markets do not actually deal with these conflicting values, but that they instead merely provide a method for agreeing on the means of obtaining different and conflicting ends. Hayek writes: “Among the members of a Great Society who mostly do not know each other, there will exist no *agreement on the relative importance of their respective ends*. There would exist not harmony but *open conflict of interests* if agreement were necessary as to which particular interests should be given preference over others. What makes agreement and peace in such a society possible is that the individuals are not required to agree on ends but only on means which are capable of serving a great variety of purposes and which each hopes will assist him in the pursuit of his own purposes.” (Hayek 2013: 171-2; emphasis added) Although it might appear that people do not agree on ends in an open, competitive market, I would argue that the ultimate notion that people in capitalist societies must (tacitly) agree on is perpetual and exponential economic growth as a means to deal with the fact that they do not agree on other ultimate notions. Ignoring planetary boundaries, endless growth provides the hope that one day all people will be able to realize their desired ends. Instead of dealing with conflicting values, people in an open and competitive market have thus agreed on economic growth as a social end in itself.

ecological problems. In turn, this is what Tully calls “the tragedy of privatization” and what I would also understand as the tragedy of open and competitive markets (Tully 2013b: 227; Tully 2014: 86). The underlying prisoner’s dilemma of both the unregulated commons and the open and competitive market underlines Charles Lindblom’s notion of the market as a prison that each person is “locked into” (Hardin 1968: 1244; Lindblom 1982). Thus, paraphrasing Hardin we may conclude that in an open and competitive market, every individual is locked into a system that compels them to increase their wealth without limit – in a world that is limited. Ruin is the destination toward which everyone rushes, with everyone pursuing their own best interest in a society that believes in the freedom of the self-regulating market. Unhindered individual freedom in an open and competitive market brings ruin to all. Returning to Elinor Ostrom, we might therefore conclude that although she recognizes the underlying straitjacket maximization logic of the open and competitive market, it appears that she has not followed through with a reflection on its consequences.

To avoid misunderstanding, I would again like to emphasize that my perhaps rather severe-sounding critique of markets is of course not a critique of markets per se, but rather of open or rather unregulated, competitive market arrangements. Nevertheless, some may say that this is a highly exaggerated and negative portrayal of markets. To a certain extent, I would agree with that criticism. Fortunately, not all markets function in this manner, as the regulations placed on labor markets and subsidies for farming both go to show. It could even be said that the markets in all goods and services are regulated in some form or another. In this sense, open and competitive markets have been portrayed in an abstract and idealized manner. Nevertheless, the mechanisms behind existing ‘imperfect’ markets still often function according to the dynamics I have just described. Furthermore, the problem that many people – especially in northern Western countries and especially people in upper social strata – are faced with is that the world does not appear to be as bad as I have just described it to be. Under this assumption, we could begin a discussion about whether the glass is half full or half empty. That, however, would be missing the point. The problem is that many of the issues I have discussed are not perceived directly but usually occur somewhere else, be that in poor neighborhoods that one does not live in or in the global South that is hit harder than the North by austerity policies and climate change. More to the point, the positive and negative effects of these maximization strategies are distributed unevenly and unequally throughout a society and between societies. When the negative ones touch us, we often fail to realize that they stem from institutional causes, but rather believe them to be individual problems or natural occurrences.¹³ Thus, while some of

13 This thought originally comes from my manuscript editor, Marc Hiatt, who wrote it as a comment when he was proof-reading this manuscript.

us may not be aware of these problems in our day-to-day life, I would nevertheless affirm that the structural logic that lies behind these diverse socio-economic, ecological and political problems is largely due to the institutional arrangements based on privatization and open and competitive markets.

That being said, we can now return to the Ostroms and see what answers to the tragedies of both hierarchical monocentric orders and privatization we can find in their account of democratically governed commons.

4.4 Overcoming tragedy through collective action

In order to conceptualize alternative forms of societal organization, Elinor Ostrom turns to the analysis and reflection of a central assumption of both Garrett Hardin's thesis and economic theory in general: that humans are rational, egotistical utility maximizers. While she questions the universality of complete rationality and rational choice theory, Ostrom insists that she does not present a new, alternative model, but that she merely formulates a number of attributes of human behavior that should be included in future efforts to formalize specific models of agency (Ostrom 2003: 54, 62).

A behavioral theory of bounded rationality and norm-oriented agents

As mentioned above, the tragedy of the commons is based on the prisoner's dilemma, in which agents are conceptualized according to a utilitarian model of complete rationality. The assumptions for such games are that (1) all participants have knowledge of the structure and possible outcomes, (2) the strategies are decided upon independently, and (3) there is no external authority to enforce agreements (ibid.: 23). Elinor lists some reasons for the peculiarity of this model: "no communication among the participants, no previous ties among them, no anticipation of future actions, and no capacity to promise, threaten, cajole, or retaliate" (E. Ostrom 1986: 10). Most importantly, the "only 'choice' available to rational human beings [in this situation is] a 'choice' *within* the constraints of an externally imposed structure" (ibid.: 11; original emphasis). Because people can supposedly only choose within these specific institutional arrangements, individuals are encouraged or forced to act as if they were 'naturally' egotistical utility maximizers. It is in this sense that Elinor denaturalizes both unregulated, open-access common property regimes and, in passing, the open competitive market. In contrast, she understands both the models of the completely rational agent and of the paradigm of the prisoner's dilemma situation to merely be "one model within a family of models [...] [that exists] in highly structured physical and institutional settings" (ibid.: 25).

Given her extensive analysis of vast amounts of empirical research both in the laboratory and in the field, Ostrom is in a position to relativize and reformulate the currently dominant rational-choice theory. Without going into too much detail about the laboratory experiments, it can generally be said that a lot of evidence contradicts the theoretical predictions of dilemmas – and Garrett Hardin's claim that freedom in a commons inevitably lead to tragedy (E. Ostrom 2003: 24, 27-37). The most important findings made in the laboratory are (1) the initially high yet suboptimal levels of cooperation in most social dilemma games, (2) the positive effect of communication on cooperation and (3) the willingness to invest in solving second-order dilemmas or, rather, in changing the structure of the game itself in order to improve joint benefits (ibid.). Despite these results, Ostrom remarks that some contextual variables (such as length of game, communication and sanctioning possibilities etc.) produce stark variations in levels of cooperation, which remains as the “really big puzzle in the social sciences” (ibid.: 39). In this sense, it could be said that these variances in laboratory settings and game outcomes has led Ostrom to broaden the scope of classical methodological individualism by emphasizing the importance of the social context for individual agency and collective action.¹⁴

It is this variety in the empirical results that has enabled Ostrom to attempt to formulate a behavioral theory of bounded rationality that brings together the constraints of specific contexts and the cognitive limitations of agents. In comparison to the “thin” theory of complete rationality in which humans are “self-interested, short-term maximizers” (E. Ostrom 1998: 2), Ostrom develops a broader, “second-generation” (ibid.: 9) model of bounded or incomplete rationality.

I assume that [humans] seek to improve values of importance to them (including what happens to other individuals who are of concern to them); select actions within interdependent situations in which what they do is affected by their expectations of what others will do; use information about the situation and about the characteristics of others to make decisions; and try to do as well as they can given the constraints they face. In addition, I assume that in the course of their lifetimes individuals learn heuristics, strategies, norms, rules, and how to craft rules. (E. Ostrom 2003: 39-40)

Remaining within a general utilitarian framework, Elinor Ostrom appears to understand human rationality as a means to an end, as an instrument to attain cer-

14 Ostrom writes: “The models of social dilemmas used in laboratory experiments appear to be quite robust. Researchers are able to create and replicate situations in which there is no cooperation, very high levels of cooperation, or moderate levels of cooperation. The amount of control that can be exercised indicates that the experimental models of dilemma situations are quite good. *The model of the individual actor used to explain outcomes appears to be the source of the problem.*” (E. Ostrom 2003: 39; emphasis added)

tain preferences (E. Ostrom 1998, 9). Yet in contrast to a classical rationalist model, however, Elinor does not assume the (short-term) maximization of interests but hypothesizes that people merely desire to improve the things they value. This teleological movement could be understood as a form of meliorism that is common in pragmatist thought (Koopman 2006). Although Ostrom's use of the term "value" is under-defined here, if we consider her critique of a purely economic or monetary understanding of value, it is plausible that her – and Vincent's – understanding of value is plural, conflicting and contingent (Dietz et al. 2003: 1909; V. Ostrom 1984).

It is important to note that this model of bounded rationality emphasizes that the definition and pursuit of these values is embedded in and constrained through the general material and social context. Having been influenced by Herbert Simon, Elinor understands the rationality of an agent to be limited by available resources (such as time and information) that enable people to attain specific ends (Wall 2014: 41-3). Furthermore, she argues that a number of empirical examples demonstrate that humans learn and make use of various heuristics, norms and rules to simplify this cognitive process of information analysis, evaluation and transmission. According to Elinor, instrumental heuristics or "rules of thumb" are created and refined by individuals in recurring situations in order to optimize outcomes. Norms, however, are used as positive and negative "internal valuations [...] that an individual attaches to a particular type of action" (E. Ostrom 2003: 40). Norms are generally learned through socialization and are affected by different situational variables (ibid.: 49). Ostrom understands these internal values as a scale or "delta parameter" (ibid.) that can weigh diverging and conflicting external ends against each other. Although norms are often associated with positive values such as sharing and caring, Ostrom conceptualizes the term more neutrally as encompassing individual orientation systems or societal "focal points" (ibid.: 40) that are created through past experiences and the expected actions of others. She explains,

After experiencing repeated benefits from other people's cooperative actions, an individual may resolve always to initiate cooperation in the future. Alternatively, after many experiences of being the 'sucker' in such situations, an individual may resolve never to initiate unilateral cooperation and to punish noncooperators whenever feasible. (ibid.: 40-41)

As Elinor emphasizes, norms, preferences and values can be changed throughout one's life in response to specific experiences (E. Ostrom 1998: 9). By contrast with unconscious heuristics and internalized tacit norms, rules tend to be self-consciously developed "shared understandings that certain actions in particular situations must, must not, or may be undertaken" (ibid.: 10). It is in this sense that Ostrom understands rationality as being bound, where the choices of means and ends that an agent makes are rarely based on complete knowledge and abstract, absolute principles. Instead, they are constrained by the limited resources

available and strongly influenced by implicit and explicit orientation systems created through human interactions and experiences. By including both situational constraints and societal norms and rules, Elinor Ostrom takes human agency, as methodological individualism conceives of it, and fundamentally transforms it. According to Ostrom's model, our agency is characterized by contingency¹⁵ because it is embedded in the social reality Habermas calls "communicative action" (1981).

The importance of reciprocity, trust and reputations

Ostrom's revision of the theory of human agency has important implications for the overcoming of social dilemmas. To understand the possibilities of creating social conditions for overcoming social dilemmas, she turns to norms of cooperation and reciprocity. According to Ostrom, "reciprocity is viewed by sociologists, social psychologists, and philosophers as one of the basic norms taught in all societies" (E. Ostrom 2003: 42). From an evolutionary perspective, cooperation and reciprocity enhances one's 'fitness' by promoting better outcomes. As a strategy for overcoming social dilemmas, it was in use long before mutual obligations could be enforced by external authorities (E. Ostrom 1998: 10). For this reason, it could even be said that reciprocity has the tendency to be people's dominant norm or default strategy. This hypothesis is supported by numerous laboratory experiments in which people use norms of reciprocity in one-shot, no-communication games and other short-term experimental environments (E. Ostrom 2003: 47-9).¹⁶ Despite this general tendency, Ostrom emphasizes that reciprocity is not biologically inherited. Instead,

individuals inherit a capacity to learn and value algorithms that enhance their capacity to increase their own long-term benefits when confronting multiple social-dilemma situations with others who have learned and value similar norms, even though each situation involves different people, payoffs, and levels of uncertainty. (ibid.: 44)

15 The contingency of human agency basically implies that the actions of human beings are neither completely predetermined – because chance, spontaneity and imagination open up possibilities for change – nor completely free, because actions are always dependent on specific conditions.

16 A famous laboratory game that demonstrates this tendency to use reciprocity is the ultimatum game (E. Ostrom 2003: 47-9). In reference to other experiments, Ostrom writes: "The evidence from experiments shows that a substantial proportion of the population drawn on by social science experiments (primarily college students in major universities in the United States, Europe, and Japan) – ranging from 50 to 60 percent – do have sufficient trust that others are reciprocators to cooperate with them even in one-shot, no-communication experiments." (ibid.: 49)

We will discuss the question of reciprocity and human nature in more detail later, but for the time being, it is important to emphasize that because reciprocity is cultivated through processes of socialization, individuals can develop different strategies for dealing with different social dilemmas. While some people learn strategies of reciprocity to overcome these problems in a variety of situations, others learn norms of behavior that are less 'nice' (*ibid.*). This can include either individually egotistical or collective parochial behavior. In this sense, reciprocity norms can also have a dark side. In reference to this problematic finding, Ostrom argues:

Tight circles of individuals who trust one another [and cooperate] may discriminate against others of a different color, religion, or ethnicity to keep them from access to productive opportunities. The focus on the return of favors for favors can also be the foundation of corrupt practices whereby those in official positions do favors for wealthy friends who then return the favors with various forms of financial enrichments. (*ibid.*: 45)

For this reason, reciprocity norms and practices that are inclusive and support basic moral standards must be differentiated from those that are highly exclusive, restrictive and repressive (*ibid.*).

According to Ostrom, central among the situation-internal or endogenous variables in human interactions that enable and strengthen reciprocity are those of trust and reputation. She defines trust as "the [positive] expectation of one person about the actions of others that affects the first person's choice, when an action must be taken before the actions of the others are known" (E. Ostrom 1998: 12). Simply put, I will be nice to you, because I expect you to be nice to me. The existing level of trust is therefore key to determining the first action in a social dilemma because it "affects whether an individual is willing to initiate cooperation in the expectation that it will be reciprocated" (*ibid.*). The existing levels of trust and the first action sets the (normative) stage for future interactions. The hope or expectation that one's cooperation will be returned is, however, not based on naïve altruism but rather on one's own previous experiences and the prevailing social norms, on the one hand, and on the reputation of the other person, on the other. Reputations are important for trust and reciprocity because they give information about an individual's history of overcoming social dilemmas. Or, in other words, reputations tell other people whether someone has been "keeping promises and performing actions with short-term costs but long-term benefits" (E. Ostrom 2003: 43). This, in turn, enables people to "estimate of the risk of extending trust, given the structure of the particular situation" (*ibid.*: 49). A good reputation makes a person trustworthy, implying that one can expect that they will reciprocate cooperative behavior in the future.

For this reason, Ostrom places the relationship between reciprocity, trust and reputation at the center of her understanding of how bounded rational agents over-

come social dilemmas: “At the core of a behavioral explanation are the links between the trust that an individual has in others, the investment others make in trustworthy reputations, and the probability of using reciprocity norms.” (E. Ostrom 2003: 49-50) If cultivated, trust, reputations and reciprocity are “valuable assets” (E. Ostrom 1998: 12) that can create a “mutually reinforcing core” (E. Ostrom 2003: 50) and transform Hardin’s negative vicious cycle of tragedy into a virtuous cycle of improved joint outcomes, ultimately increasing one’s evolutionary fitness (*ibid.*; E. Ostrom 1998: 12). As has hopefully become evident, these insights into the everyday and microsituational mechanisms of reciprocity, trust and reputation to overcome social dilemmas are fundamental to Ostrom’s theoretical development of an alternative to market or state policy prescriptions.

4.5 Self-governing commons with the aid of eight design principles

Despite these positive impacts on peoples’ capabilities to cooperate and trust one another, it must be emphasized that Elinor Ostrom’s research also reveals the contingency and fragility of these norms and behavioral patterns. This is made clear with her reference to various common-pool situations that were not successful and have failed (E. Ostrom 2008a). For this reason, she shifts her focus from internal and endogenous variables of an interaction situation to external or exogenous, contextual variables in order to understand how social conditions can strengthen these norms and enhance the likelihood that social dilemmas will be overcome. Ostrom’s analysis of the effect of institutional structures on human interactions takes first-order dilemmas of reciprocity, trust and reputation and transforms them into second- and third-order public good dilemmas of institutional supply, credible commitment and mutual monitoring (E. Ostrom 2008a: 41-5). Similarly to her findings on trust and reciprocity, while the classical theory of fully rational agents predicts that rule making will not occur because everyone will default to free riding,¹⁷ Ostrom’s meta-analysis of laboratory and field experiments reveals that people are actually often willing to invest time and energy into changing rules and institutions in order to secure cooperation and improve joint outcomes.

Before analyzing and discussing these exogenous factors in detail, it should be mentioned that one specific variable can be considered fundamental for overcoming social dilemmas at all levels of interaction: the possibility of communicating

17 On the problem of second-level dilemmas, Ostrom writes, “Spending time and effort designing rules creates a public good for all involved and is thus a second-level dilemma no more likely to be solved than the original dilemma. This is the foundation for the repeated recommendation that rules must be imposed by external authorities who are also responsible for monitoring and enforcing these rules.” (E. Ostrom 1999: 506)

with one another. Although no single variable automatically produces reciprocity norms, face-to-face communication is central for cultivating cooperation and creating institutions. In contrast to the situations of non-communication in Hardin's unregulated commons and the prisoners' dilemma, Ostrom explains:

With a chance to see and talk with others repeatedly, a participant can assess whether he or she trusts others sufficiently to try to reach a simple contingent agreement regarding the level of joint effort and its allocation. Communication thus allows individuals to increase (or decrease) their trust in the reliability of others. (E. Ostrom 2003: 51)

But face-to-face communication not only enables people to access more information about other participants, it also allows them to make promises and agreements in relation to future actions. Furthermore, communication can reinforce prior normative values and facilitate the development of a group identity, which also generally increases mutual trust (*ibid.*: 33). Thus, the possibility of face-to-face communication must be understood as a key variable in dealing with social dilemmas on different but interrelated levels of action.

Despite this emphasis on the importance of communication for creating robust¹⁸ institutions, communication per se does not solve the problems of supply, commitment and monitoring. In order to understand how these difficulties can be dealt with through communication and rule creation, we must now turn to Ostrom's eight design principles for durable institutions.¹⁹ Beginning with the importance of communication in dealing with multi-level social dilemmas, it makes sense to begin with Ostrom's seventh principle: "minimal recognition of rights to organize" (E. Ostrom 2008a: 90). According to Elinor, this entails "the rights of users to devise their own institutions [that] are not challenged by external governmental authorities" (E. Ostrom 2005a: 259). It is implicit in this principle that users have "long-term tenure rights to the resource" (*ibid.*).²⁰ These simple yet fundamental

18 The term robust is introduced here because it is a central term for the type of institutions Ostrom intends to help develop. She explains what is normally meant by robust: "[Kenneth] Shepsle considered a system to be robust if it was long-lasting and the operational rules had been devised and modified over time according to a set of collective-choice rules (which themselves might be modified more slowly over time within a set of constitutional-choice rules, which were modified, if at all, very unfrequently). The contemporary use of the term robustness in regard to complex systems focuses on adaptability to disturbances: 'the maintenance of some desired system characteristics despite fluctuations in the behaviour of its component parts or its environment' (Carlson and Doyle)." (E. Ostrom 2005a: 258)

19 I will not discuss the eight design principles in the order that Ostrom presents them in, but rather in a sequence that suits the logic of my argumentation.

20 This aspect of the seventh design principle was not included in her 1990 book *Governing the Commons*, but was added in her later book *Understanding Institutional Diversity*, published in 2005.

principles provide people not only with rights of access and use with regard to a given resource, but also with the right to define the institutional framework that regulates it. This enables people to have a long-term interest in the maintenance of the resource and allows communication and self-organizing to take place in the first place.

Given the opportunity to communicate and self-organize, people are also able to define clear boundaries for those with rights to access and utilize the resource (design principle 1).²¹ This is an important step that transforms open, unregulated commons threatened by overuse into closed and regulated commons (E. Ostrom 2008a: 90-1). The first set of rules to be defined can be located on the constitutional-choice level. Choosing a constitution means determining “the specific rules to be used in crafting the set of collective-choice rules that in turn affect the set of operational rules” (ibid.: 52). At the next step, “collective-choice arrangements” and the policy rules of “how a CPR [common pool resource] should be managed” (ibid.) are defined (design principle 3). People are then able to create operational rules that regulate the day-to-day use of the resource according to local conditions and the different inputs and needs of the people involved (design principle 2). According to Ostrom, it is especially important here to note a “proportional equivalence between benefits and costs” (E. Ostrom 2005a: 262). This supposedly implies that “when the rules related to the distribution of benefits are made broadly consistent with the distribution of costs, participants are more willing to pitch in to keep a resource well maintained and sustainable” (ibid.: 263). In simpler terms, fair rules are important for maintaining trust and reciprocity, on the one hand, and to uphold stable institutions and the sustainable use of resources, on the other.

Although the constitutional-, collective- and operational-choice levels of rules and rule-making are analytically differentiated here, Ostrom notes that self-organizing and self-governing people in field settings “go back and forth across levels as a key strategy for solving problems” (E. Ostrom 2008a: 54). In relation to all three levels of rule-making, it can generally be said that when most of the individuals who have an interest in a particular resource are able to continually configure and modify their own rules, these rules are then more likely to better suit local environmental conditions and the interested individuals’ needs. Furthermore, such participation not only limits elites’ ability to create institutions that only benefit themselves, but it also empowers individuals to coproduce rules and public goods

21 The definition of clear boundaries of a common pool resource is necessary, according to Elinor Ostrom, when the resource units consumed are rival or subtractive goods. In comparison to non-rival or non-subtractible goods such as information that can be organized as open-access regimes, the scarcity and subtractibility of goods makes it necessary to regulate the appropriation and consumption thereof. According to Ostrom, this distinction between common property and open-access regimes is crucial (E. Ostrom 2008a: 91-2; E. Ostrom 2010: 642, 644).

that are more likely to be considered fair, adhered to and fostered (E. Ostrom 2005a: 263).

Having discussed the general principles for the design of institutions, we must now turn our attention to the problem of adherence to these rules. Although the creation of fair and suitable institutions by those with an interest in the resource strongly increases the likelihood that people will commit to adhering to the rules, the fragility of reciprocity and trust implies that shared norms are not sufficient for maintaining cooperation and improved joint outcomes. To strengthen one's trust that one is not being taken advantage of, rule infraction and free riding must additionally be controlled and limited through certain forms of monitoring, sanctioning and other conflict-resolution mechanisms. While Hardin and many others believe that only external coercion can solve the problem of rule violation, Ostrom believes this solution to be a sleight of hand because it does not address the costs and motivations of the external enforcer (E. Ostrom 2008a: 44, 96). Although external enforcers can, in certain cases, be useful and necessary, she argues that in order to solve the commitment problem, interested individuals have to "motivate *themselves* (or their agents) to monitor activities and be willing to impose sanctions" (ibid.: 44; emphasis added). The adherence problem thus boils down to a problem of the willingness of interested individuals to adhere to collectively self-determined rules – and to the assurance that others will also act accordingly. For this reason, the adherence problem is inherently interwoven with the monitoring problem.

Monitoring generally implies that resource conditions and harvesting activities are visible and checked on. Ostrom's research on durable resource regimes has shown that monitoring works well if the monitors are appropriators themselves or are elected by and accountable to appropriators (design principle 4) (E. Ostrom 2005a: 265). In some cases, mutual monitoring simply occurs as a "natural by-product of using the commons" (E. Ostrom 2008a: 96). In cases where local monitors are elected, these officials are, in turn, often also monitored by the appropriators who are usually those who initially elected their officials. The redundancy in this system of mutual monitoring is a central strategy to minimize the '*quis custodiet ipsos custodes?*' problem that Hardin formulates for what he understands as "socialism." Furthermore, the attractiveness of formal and informal mutual monitoring by appropriators is increased – besides gains in status, prestige and other small material rewards from sanctioning – by access to valuable information concerning the resource and compliance rates for future strategic decisions (ibid.: 97). Although mutual monitoring can easily be considered highly inefficient because of its redundancy, research shows that it is actually an effective and low-cost mechanism to strengthen mutual trust and maintain higher joint outcomes.

For monitoring to have any effect on trust and compliance, however, it must be coupled with mechanisms for applying sanctions (E. Ostrom 2005a: 266-7). Sanctions can be applied either by the appropriators themselves or by officials account-

able to them – or by both (E. Ostrom 2008a: 90). Contrary to general assumptions that trust and compliance are maintained through harsh punishments,²² Ostrom's research demonstrates that graduated sanctions are both less costly and more effective than initial major fines (design principle 5) (ibid.: 98). She writes that "in many self-organized systems, the first sanction imposed by a local monitor is so low as to have *no* impact on the expected benefit-cost ratio of breaking local rules (given the substantial temptations frequently involved)" (E. Ostrom 2005a: 266; original emphasis). In many cases, the initial sanction that is 'imposed' is when the monitor merely informs both the person (and possibly the community) that they were caught violating the rules (ibid.). These low-cost sanctions have an impact because they are a subtle form of public shaming and damage the reputation and trustworthiness of the individual. This threatens the individual's social status and evolutionary 'fitness' because other people may – in a "tit-for-tat" or "measured reaction" (E. Ostrom 2003: 42, 52-3) – stop cooperating with this person, which, in turn, produces an incentive to quickly return to a more cooperative strategy.²³ Ostrom explains, however, that the more serious problem of repeated rule infractions is often dealt with by escalating sanctions because it "enables such a regime to warn members that if they do not conform, they will have to pay ever higher sanctions and may eventually be forced to leave the community" (E. Ostrom 2005a: 267).

With reference to Margaret Levi, Ostrom explains that monitoring and escalating punishment strategies create a regime of "quasi-voluntary compliance". Here, cooperation is initially voluntary because if non-cooperation arises, it will be subject to coercion (E. Ostrom 2008a: 94-5). More importantly, it must be noted that these strategies generally maintain or increase levels of quasi-voluntary compliance and trust among appropriators so that – and contrary to Hardin's assumption – one-hundred-percent compliance is not necessary. In relation to endogenous factors, Ostrom writes:

-
- 22 In the literature on game theory, the most frequently discussed punishment is the grim trigger. Here, "a participant, once he or she has detected any level of cheating, plays the Nash equilibrium strategy forever" (E. Ostrom 2003: 52). The problem with the grim trigger, however, is that it "immediately could lead to the rapid unravelling of the agreement and the loss of substantial benefits over time" (ibid.: 53). Although it is often assumed that the grim trigger is normally used in social interactions as an ultimate threat to secure rule conformity, research on game theory provides a different picture: "Few subjects use grim triggers, however, in experimental contexts." (ibid.: 52)
- 23 Elinor explains that the most common – or most famous – reaction to non-cooperation is the tit-for-tat reciprocal strategy. This mechanism can be defined as "reciprocate first, and then do whatever the others did the last round" (E. Ostrom 2003: 42). It appears that this tactic is also utilized in most field experiments to punish the rule violator for a specific negative action. Yet, in comparison to the unforgiving grim-trigger strategy, the offender receives the chance to change their strategy and return to cooperation and improved joint outcomes without further sanctions.

If only a small deviation occurs, the cooperation of most participants is already generating positive returns. By keeping one's own reaction close to the agreement, one keeps up one's own reputation for cooperation and makes it easier to restore full conformance because cooperation levels are higher. (E. Ostrom 2003: 53)

For this reason, contingent self-commitment²⁴ does not trigger a race to the bottom or a relentless process of over-use and free riding when others break with the agreement (E. Ostrom 2008a: 97-8). In turn, the exogenous variables of local mutual monitoring and graduated sanctioning can assure appropriators of the fact that the conformance of others to the rules is being supervised. This can then increase levels of trust and enables appropriators to "continue their own cooperation without constant fear that others are taking advantage of them" (E. Ostrom 2005a: 265). Furthermore, it must also be emphasized that, in comparison to external surveillance and coercion, quasi-voluntary compliance through mutual monitoring and graduated sanctioning can effectively increase trust, reciprocity and commitment at extremely low costs.

Ostrom also mentions the importance of conflict-resolution mechanisms for strengthening the reinforcing relationship between rule creation, contingent commitment and mutual monitoring (design principle 6). Conflict-resolution mechanisms generally imply that "appropriators and their officials [should] have rapid access to low-cost local arenas to resolve conflicts among appropriators or between appropriators and officials" (E. Ostrom 2008a: 90). The reason why such mechanisms are helpful is because – unlike physical constraints – "rules [...] have to be understood in order to be effective" (E. Ostrom 2005a: 267). In other words, even when appropriators have defined the rules themselves, the interpretation and administration of social rules is always ambiguous and can therefore easily lead to conflicts (E. Ostrom 2008a: 100). Due to this inherent ambiguity, there must be local arenas and simple mechanisms that enable people to discuss and resolve the precise definitions of rule violation in different cases (*ibid.*). Although Ostrom emphasizes the importance of local and sometimes quite informal techniques for dealing with conflict, she also stresses the necessity of well-developed court mechanisms above the level of the local resource. Having arenas for dispute resolution at higher institutional levels is, for example, especially important in reducing the problem of elite capture. Even though such forums do not guarantee cooperation and the maintenance of robust institutions, Ostrom considers it unlikely that robust institutions

24 Ostrom explains that contingent self-commitment implies the following type of pledge: "I commit myself to follow the set of rules we have devised in all instances except dire emergencies if the rest of those affected make a similar commitment and act accordingly." (E. Ostrom 2008a: 99-100) In this context, contingent means that the individual will adhere to the rules as long as (most) others also do. This type of contingent self-commitment resembles the tit-for-tat strategy of norm reciprocity.

can exist over long periods of time without such institutional arrangements (ibid.: 101). Generally, it can be said that the ability to deliberate on and deal with conflicts in a simple and uncostly manner can increase the levels of rule adherence and trust within a specific community (E. Ostrom 2005a: 268).

Aside from these seven design principles, Ostrom adds a final eighth principle to the list: nested enterprises. This principle is of importance for common pool resources that are either relatively large or parts of larger resource systems. We will now discuss this eighth design principle in relation to Ostrom's more general understanding of polycentric governance systems.

4.6 Institutional diversity and polycentricity

The design principles I have discussed are explications of the exogenous, institutional variables that can strengthen the endogenous variables of reciprocity, trust and reputation in order to overcome social dilemmas. It was shown that first-, second- and third-order social dilemmas can be solved in a mutually reinforcing manner (E. Ostrom 2005a: 267; E. Ostrom 2008a: 100). Now, we will turn to the broader and more general implications of these results for the understanding of institutional design, democratic theory and ecological sustainability.

Firstly, the results of Ostrom's extensive meta-analysis of various common property resources has shown that it is possible for individuals and communities who are confronted with social dilemmas to change the very institutional structure that they find themselves in and limit or even eliminate overuse and free riding. This finding is extremely significant because it demonstrates that people can solve "tragedies of the commons" without resorting to the classical – and sometimes rather problematic – models of privatization or centralized state coercion. Formulated more fundamentally, the research on social dilemmas "demonstrates [...] a world of possibility rather than one of necessity" (E. Ostrom 2003: 62). For this reason, Ostrom explains that it is not commoners but rather academics who appear to be trapped in tragedy: "Instead of the users of a commons being inexorably trapped in a tragedy, it is the scholars who have allowed their assumptions to trap them into a presumption that short-run tendencies will necessarily prevail in the long run." (E. Ostrom 1986: 26) Despite this positive finding, her research also shows that people do not always choose a better joint outcome whenever possible. As many other examples of depleted common pool resources that Ostrom discusses show that "establishing a *possibility* is not the same as establishing *necessity*" (E. Ostrom 1986, 25; original emphasis). This generally implies that trust, reciprocity and collective action are extremely delicate matters and require institutional structures that are adapted to the relevant social and material conditions.

Aside from formulating this new perspective for solving commons dilemmas, Ostrom's work has also challenged the classical dualistic concept of founding a social contract and subsequent institutional change. An important insight that Ostrom provides with her empirical case studies is that there is no "state of nature" entirely lacking in institutional structure (E. Ostrom 2008a: 140). This implies that human interaction is always embedded in institutions²⁵ and that no fundamental difference exists between an "original" social contract and the change of institutions²⁶: "Once one assumes that all recurring situations are characterized by a set of status quo rules, then it is possible to broaden the concept of institutional supply to include both what can be called the 'origin' of new institutions and the changing of existing institutions." (ibid.: 140) Contrary to most contractarian philosophers who categorically distinguish between a state of nature and civilized society, firstly, this conceptualization of human interactions and institutions enables Ostrom, as already mentioned, to understand the tendency for humans to act as egotistical utility maximizers as a product of specific institutional arrangements. Simply put, Ostrom denaturalizes the idea of the atomistic individual. Secondly, she formulates a single theory of institutional origin and reform for operational-, collective- and constitutional-choice levels of decision making, in which change is a continual "sequential and incremental process" (ibid.: 141).

A third important implication of her work is that she places the micro-situational institutions governing smaller-scale common pool resources in a broader context of nested and multi-leveled polycentric institutions. In relation to her understanding of institutional change on different levels of choice within institutions, Ostrom explains that accumulated social and "institutional capital"²⁷ can then be

25 Elinor defines institutions in the following manner: "Institutions' can be defined as the sets of working rules that are used to determine who is eligible to make decisions in some arena, what actions are allowed or constrained, what aggregation rules will be used, what procedures must be followed, what information must or must not be provided, and what payoffs will be assigned to individuals dependent on their actions. All rules contain prescriptions that forbid, permit, or require some action or outcome." (E. Ostrom 2008a: 51)

26 Elinor defines institutional change as "a change in any rule affecting the set of participants, the set of strategies available to participants, the control they have over outcomes, the information they have, or the payoffs is an institutional change" (E. Ostrom 2008a: 140).

27 Although Elinor never precisely defines the term "institutional capital," she uses it numerous times in her writing. Generally, it appears to imply the functioning of institutions that has evolved and developed through the adaptation of the system to solve certain problems – whether biophysical or social. Institutional capital also implies the developed habits and acquired knowledge of the people who build and maintain their own institutional systems. Ostrom writes: "Current theories of collective action do not stress the process of accretion of institutional capital. Thus, one problem in using them [traditional theories of collective action] as foundations for policy analysis is that they do not focus on the incremental self-transformations that frequently are involved in the process of supplying institutions. Learning is an incremental, self-transforming process." (E. Ostrom 2008a: 190) Elsewhere, she explains:

utilized for governance on higher levels of scale: “Success in starting small-scale initial institutions enables a group of individuals to build on the social capital [of trust, reputation and reciprocity] thus created to solve larger problems with larger and more complex institutional arrangements.” (ibid.: 190) In an article for the United Nations Rio+20 summit that she wrote shortly before her death in 2012, she explains the general importance of locally-governed institutions in a polycentric system for environmental sustainability:

No one knows for sure what will work, so it is important to build a system that can evolve and adapt rapidly. Decades of research demonstrate that a variety of overlapping policies at city, subnational, national, and international levels is more likely to succeed than are single, overarching binding agreements. Such an evolutionary approach to policy provides essential safety nets should one or more policies fail. [...] Sustainability at local and national levels must add up to global sustainability. This idea must form the bedrock of national economies and constitute the fabric of our societies. The goal now must be to build sustainability into the DNA of our globally interconnected society. (E. Ostrom 2012)

While we have previously mentioned that Elinor Ostrom emphasized that one single model does not fit all situations, she clearly advocates a specific direction in which political development should move: the strengthening of bottom-up initiatives and self-transformative processes to deal with global issues of sustainability.

Although some of the advantages of decentralized, participatory governance in polycentric systems have already been mentioned, I would like to briefly summarize them. Firstly, local and disaggregated knowledge of both the existing social values and norms and of the biophysical system and its changes can be used to create rules that are better adapted to local conditions. Second, the creation of suitable, legitimate rules that foster trust and reciprocity increases rates of conformity with the rules and decreases the costs of monitoring and sanctioning. Finally, the existence of parallel autonomous systems reduces the probability of immense failure spanning larger regions (E. Ostrom 2005a: 281-2). Even though it is often believed that institutions which are “complex, redundant, and nested in many layers” (Dietz et al. 2003: 1910) are inefficient, Ostrom’s research shows that such decentralized and participatory forms of governance can, in fact, be quite effective in dealing with social dilemmas and tragedies – and therefore in realizing positive joint outcomes.

For these reasons, both Elinor and Vincent Ostrom argue that commons-like institutions should be integrated in the management and provision of public goods.

“Applying models out of range can produce more harm than good. Public policies based on the notion that all CPR appropriators are helpless and must have rules imposed on them can destroy institutional capital that has been accumulated during years of experience in particular locations, as illustrated by the Nova Scotia fishery cases.” (ibid.: 184)

This is what they call “coproduction” (E. Ostrom 1996; Parks et al. 1981), which Elinor defines as “the process through which inputs used to produce a good or service are contributed by individuals who are not ‘in’ the same organization” (E. Ostrom 1996: 1073). In comparison to the more widespread public choice theory, the Ostroms do not, however, limit their understanding of coproduction to public-private partnerships in which public goods are outsourced to private corporations. Instead, they argue that coproduction should “cross the great divide” (ibid.) between the state and economy and integrate civil society. The aim of this is to create decision-making arenas that unite the possibly conflicting interests of producers, consumers and regulators. Although not explicitly stated, it can be assumed that participation in the production and governance of such goods and services depends on one’s degree of affectedness. While the importance of a clearly-defined *demos* is understood as the first design principle of durable, self-governing institutions for common resources, the fundamental problem of how to measure this affectedness and of who shall decide who is affected and can participate is, unfortunately, not dealt with in their work. Nevertheless, by “unlocking public entrepreneurship and public economies” (E. Ostrom 2005b), it is hoped that consumers will be transformed into active citizens. Instead of separating the public from the private, the Ostroms argue that bureaucratic state administration needs to be democratized (V. Ostrom 1974: 111).

However, because decentralized decision-making does have its own weaknesses, Elinor and Vincent Ostrom argue that these institutions must be located within the larger institutional context of a complex polycentric system. The importance of higher-scale institutions becomes apparent when the limits of community governance are discussed. In short, these include: (1) the lack of organization by some appropriators, (2) the failure of some self-organizing efforts, (3) local tyrannies and elite capture, (4) stagnation or the lack of institutional innovation, (5) illegitimate discrimination and exclusion, (6) communities’ limited access to scientific information, (7) serious conflict among appropriators and between common pool resource systems, and, most importantly, (8) the inability of small-scale institutions to deal with larger-scale common pool resources (E. Ostrom 2005a: 282).

Due to these limitations, Elinor emphasizes that local self-governed resources must be built into – or nested in – a larger multileveled polycentric governance system. She explains the concept of polycentricity in her book *Understanding Institutional Diversity*:

By polycentric I mean a system where citizens are able to organize not just one but multiple governing authorities at different scales. Each unit exercises considerable independence to make and enforce rules within a circumscribed domain of authority for a specified geographical area. In a polycentric system, some units

are general-purpose governments while others may be highly specialized. Self-organized resource governance systems in such a system may be special districts, private associations, or parts of the local government. These are nested in several levels of general-purpose governments that also provide civil equity, as well as criminal courts. (E. Ostrom 2005a: 283)

The advantage of such a polycentric system is that while users have the authority to define some of the local rules, serious problems such as local tyrannies, corruption and inappropriate discrimination can, in turn, be addressed. According to Elinor, polycentric systems make it possible to deal with such problems through “larger general-purpose governmental units who are responsible for protecting the rights of all citizens and for the oversight of appropriate exercises of authorities within smaller units of government” (ibid.). Another advantage of such nested enterprises is that interaction and the exchange of information over what has worked and what has not can also take place. Finally, and most importantly, a polycentric system strengthens institutional robustness and evolutionary fitness in that if small systems fail, larger systems can pitch in and help, and if larger systems are unstable or break down, the smaller systems can possibly survive and support the reconfiguration of the larger institutions (ibid.).

That being said, Elinor Ostrom acknowledges that polycentric systems are not easy to deal with – neither for affected participants themselves nor for social scientists. A central problem which she recognizes is the serious potential for conflict between different units “at multiple levels due to their interdependence” (ibid.: 286). Although not explicitly stated, this conflict can easily arise from competition between the interdependent social units. While such competition and conflict can lead to violence, according to Ostrom, the conflict can also generate more information for participants to solve the specific problems that are being fought over. For scholars, on the other hand, polycentric systems often look “terribly messy and [are] hard to understand” (ibid.). For this reason, Elinor advises scientists to resist their “love of tidiness” (ibid.) and to “develop better theories of complex adaptive systems focused on overcoming social dilemmas” (ibid.). In relation to the numerous difficulties in dealing with decentralized, participatory governance in polycentric systems, Elinor Ostrom recognizes that “coping with potential tragedies of the commons is never easy and never finished” (ibid.).

4.7 Interim conclusion

Without repeating the entire discussion of the Ostroms’ work, I now turn to a few concluding reflections on Elinor and Vincent Ostrom’s work that will be important for my discussion of the relationships between democracy, markets and commons.

In general terms, the work of Elinor and Vincent Ostrom has shown that the tragedy of unregulated commons and what I have defined as the tragedy of open and competitive commons can be overcome. As Elinor has demonstrated, these problems may be overcome by cultivating communication, reciprocity and trust on the one hand and by developing rules and regulations against overuse that are, in turn, upheld through mutual monitoring and graduated sanctioning on the other. It is important to note that their findings also emphasize that the people affected by a specific resource system should be included in the codetermination of its rules and regulations in order to provide an institutional framework that is adapted to fit the specific cultural and ecological context. Such forms of democratic governance are also understood as strategies in dealing with the limitations in the provision of public goods by the state. The Ostroms call this type of democratic collaboration with the government coproduction, which must be understood as an alternative to the otherwise widespread notion of public-private partnerships. We might call this alternative type of organization a public-civil society or possibly even a public-commons partnership. Yet, owing to the weaknesses of small-scale democratic governance of economic goods and activities, they argue that these units should be embedded in a multi-layered and polycentric system of overlapping and democratically governed units.

Despite these improvements in our understanding of how to deal with the problem of tragedy and the manner in which democratic forms of governance can be developed, there are three respects in which the Ostroms' work is nevertheless somewhat limited. Firstly and as already discussed, their work lacks both a critique of privatization and of open and competitive markets. For this reason, I would argue that while they disprove Hardin's thesis for certain cases, it is important to note that they almost entirely ignore the perpetually recurring tragedy of open and competitive markets and the power asymmetries that result from them (Mattei 2013a: 20). Secondly, Elinor Ostrom's rather positivistic description of successful and unsuccessful commons importantly lacks explicit *normative* arguments as to why societies should develop democratic common property arrangements (Levine 2011: 11-13). Elinor accentuates this problem when she emphasizes that there is no single best social arrangement and that commons are no panacea (Korten/Ostrom 2010; E. Ostrom 2005a: 258).²⁸ This is understandable considering the problems of top-down blueprint thinking and policy implementations that the Ostroms discuss. Nevertheless, the lack of explicit normative arguments is problematic because

28 After she won the Nobel Memorial Prize in Economic Sciences in 2009, Ostrom was asked, in an interview by Fran Korten for *Yes! Magazine*, what her advice to someone with a powerful influence on natural resources policy would be. Her answer was: "No panaceas!" (Korten/Ostrom 2010). In her book *Understanding Institutional Diversity* Ostrom writes, "As social scientists, we have to use one of our favorite slogans [...] – it depends!" (E. Ostrom 2005a: 258)

it provides little counterweight to the widespread and rather well articulated arguments for individual private property and open and competitive markets – despite the existing negative effects that result from them. Thirdly, their rather narrow focus on common pool resources rather than common property arrangements accentuates this problem. This leads to the false impression that commons are specific things (pastures, forests etc.) and not social arrangements that can be utilized for the organization of more or less all resources and goods. Due to this rather limited definition of commons and their lack of explicit normative arguments for commons arrangements, it can be expected that commons might simply remain charming niches in the threatening stormy seas of the existing market society.

In order to deal with these problems, I believe it necessary to develop a normative justification of commons in the name of ecological sustainability and human freedom. I will do this in relation to the institutions of property, the state and the market. But before that, I firstly develop an ecological understanding of democracy and the commons that prioritizes the shared, common reality of humans and the non-human world and their co-creation of that reality. Let us therefore now turn to a more ecological approach to the commons.

5. An ecological understanding of the commons

In this chapter, I would like to turn to a category that is of central importance to our discussion of the commons, but is almost entirely neglected in the work of Elinor Ostrom: nature. For Elinor, it appears as though nature tends to be reduced to the role of a passive resource in the “drama of the commons” (Ostrom et al. 2002). Nature is the stage on which the human drama takes place. Here, the relationship between human beings and nature is implicitly instrumental. Although such an interpretation of nature might appear to be sufficient for dealing with environmental problems and “planetary boundaries” (Steffen et al. 2015), I would argue that its underlying society–nature dualism is both conceptually false and problematic. The dualism is false, because human beings and human society are always a part of nature: there is no outside of nature. The dualism is problematic, because the external environment is primarily understood as a limit to one’s individual freedom – and not as an interdependent precondition of it. Furthermore, this instrumental and antagonistic relationship also leaves the door open for a hierarchical and exploitative relationship of man over nature. It would be absolutely wrong to say that Elinor Ostrom intended this, but I believe that her analysis critically questions neither prevailing understandings of nature nor the Malthusian-Hardinian “stage” that she found herself on. Despite her insightful solutions to the tragedy of the commons, the unregulated commons, as an ahistorical model of the place of humans in nature, continues to dominate academic debates and the social imaginary. In order to overcome this framework, it is therefore necessary to develop an understanding of nature that is more conducive to a free and sustainable society. Or in the words of Robyn Eckersley, I aim to shift our understanding of the environmental problem from a “crisis of survival” to an “opportunity for emancipation” (Eckersley 1992: 11–21).

In this chapter, I therefore proceed as follows. Firstly, I discuss the relationship between nature, language and social arrangements and argue that humans’ social practices and institutions are always interrelated with their conceptions of nature. Secondly, I then attempt to develop a more timely understanding of nature that is more conducive to the principles of freedom and ecological sustainability. Here, I will develop a notion of nature based on new insights in diverse fields of thought, in

which organisms self-organize and dynamically adapt to their changing environments. With reference to a number authors, I conceptualize nature as a web of life that is constituted by interdependent organisms and ecosystems. Thirdly, I discuss the importance of this ecological interdependence for human beings, which constitutes a shared, common reality as the backbone of their individual freedom. Next, I flesh out an ecological understanding of democracy with reference to a principle of care and the civic tradition of democracy. Finally, with reference to the work of Ugo Mattei and Fritjof Capra I develop an ecological concept of the commons, which goes beyond common pool resources and emphasizes the civic practices of commoning in, with and through nature.

5.1 Nature, language and social relations

Before I begin to elaborate my specific understanding of nature, I would like to explain why the way nature is understood is so crucially important for any discussion of commons. A more sophisticated analysis of nature aims not only to determine where the “safe operating space” within planetary boundaries may lie (Rockström et al. 2009). Instead, I argue that a society’s understanding of its natural world is central to the way humans interact with that world and with each other.

As just mentioned in the introduction to this chapter, the fundamental premise of my approach is that humans and society are always a part of nature. This apparently naïve claim receives a little more depth if understood in the light of Marx and Engels’s *German Ideology*, in which they write,

The first premise of all human history is, of course, the existence of living human individuals. Thus the first fact to be established is the physical organization of these individuals and their consequent relation to the rest of nature. [...] All historical writing must set out from these natural bases and their modification in the course of history through the action of men. (Marx/Engels 1998: 37)

While we must understand human existence as embedded in nature, we should conversely also understand our ideas of nature as a specific result of our social relations. Or again in the well-known words of Marx and Engels: “The ruling ideas are nothing more than the ideal expression of the dominant material relations, the dominant material relations grasped as ideas.”¹ (ibid.: 67) This classical “materialist” notion of ideas implies that the prevalent ideas of society and nature are largely historical results of contingent power relationships, which they legitimate. In this manner, social institutions are naturalized and our conceptions of nature reflect

¹ According to the rather well-known slogan, “it is not consciousness that determines life, but life that determines consciousness” (Marx/Engels 1998: 42).

the dominant form of social organization. In turn, the symbolic ordering of these representations also constitutes and reproduces a specific organization of nature.

In contrast to a crude deterministic interpretation of Marx's base-superstructure relationship between social relations and ideas, I contend that our ideas (of nature) are not only a result of prevailing social relations but can also transform them. Marx admits this himself in his discussion of the labor process, which makes ideas real (Marx 1982a: 284).² Elsewhere, he also claims that ideas can be used for political collective action when they influence a wider population: "Theory, too, becomes a material force once it seizes the masses." (Marx 1982b: 137) I do not want to pursue a detailed discussion of Marx's theory of historical materialism and social practice here. Nevertheless, this very short discussion of Marx aims to underline the embeddedness of language in both physical nature and its social arrangements. Furthermore, it emphasizes that ideas can, in turn, be used to transform social action and the organization of the material world. It is in this sense that language and concepts are of utmost importance in the reproduction and transformation of what we generally understand as 'life'.

In a similar manner, Vincent Ostrom discusses the relationship between language, reality and social relations in his book *The Meaning of Democracy and the Vulnerabilities of Democracies* (1997). There he writes:

The meaning associated with the triangulation of images [mental states], events and relations [the objects and states of the world referred to] and words or symbols [names assigned to events and relations] involves a shared community of understanding among language users. Tacit levels of understanding go beyond the mere use of words and of definitions stated in a more profuse use of words, as in dictionaries. In a sense, an 'organic' tie pervades intelligible communication by reference to the tacit common understandings that are fashioned by communities of language users. [...] *The essential link is language*. Language associates thoughts, ideas, and knowledgeable articulations of skill in actions to what gets done—ideas to deeds. (V. Ostrom 1997: 130; emphasis added)

It could thus be said that, for Vincent Ostrom language constitutes the relationship between ideas, things and social relations. In other words, it is not merely social relations that determine one's ideas and the distribution of power within society, but it is also language that constitutes individual action and, in turn, these

2 In Marx's words: "At the end of every labour process, a result emerges which had already been conceived by the worker at the beginning, hence already existed *ideally*. Man not only effects a change of form in the materials of nature; he also realizes [verwirklicht] his own purpose in those materials. And this is a purpose he is conscious of, it determines the mode of his activity with the rigidity of a law, and he must subordinate his will to it. This subordination is no mere momentary act." (Marx 1982a: 284)

specific arrangements. Societies use language and ideas in specific ways that are, however, not always fully transparent to the individuals using them. This tacit common understanding can be compared with Marx's notion of a consciousness that is organically and often unconsciously determined by social arrangements (Marx/Engels 1998: 42). These tacit "ruling ideas" (ibid.: 67) bring about specific patterns of action and, in turn, what Ostrom calls with reference to Searle "institutional facts" (V. Ostrom 1997: 128). For Vincent Ostrom, an institutional fact is the "social reality that is itself an artifactual construction [...] relying on norms and rule-ordered relationships" (ibid.). He utilizes the term artifactual to connote that social reality is constructed by humans and their (tacit) concepts of society.

For this reason, Elinor Ostrom also maintains in her book *Governing the Commons* that we must critically reflect on our "metaphorical use of models" due to their powerful influence on policy prescription and both individual and collective action (E. Ostrom 2008a: 8). With Elinor Ostrom we could therefore say that the reformulation of metaphors, concepts and ideas provides us with new "heuristics, strategies, norms [...] [and] rules of thumb" (E. Ostrom 2003: 40). These "focal points" (ibid.: 41) help us (re-)orient ourselves in our interactions with one another and with the world. Thus, reflecting on our use of language and concepts, in turn, opens up choices in the way we organize society and can "increasingly transform the material conditions of [our] environment" (V. Ostrom 1997: 128). Within this framework, language and ideas are thus understood as key determinants in the reproduction and transformation of social order and material reality. In line with the thoughts of Cornelius Castoriadis (1987), Michel Foucault (2002) and Bruno Latour (1993), we can therefore maintain that concepts not only provide us with abstract ideas that help us understand an objectively given reality, but rather co-constitute the symbolic-material order of things.

Along these lines, it can therefore be argued that our (tacit) common understanding of nature holds an important position in this process of reproduction and transformation. The reason for this is that our knowledge and concepts of nature are both a result of material conditions and social relations, on the one hand, and a constituting force of the political organization of the environment, on the other. As Jason W. Moore generally puts it in his book *Capitalism in the Web of Life*:

Modernity's structures of knowledge, its dominant relations of power, re/production, and wealth, its patterns of environment-making: these form an organic whole. Power, production, and perception entwine; they cannot be disentangled because they are unified, albeit unevenly and in evolving fashion. (Moore 2015: 3)

Although Moore speaks of modernity here, the point can be applied to all of human history: "humans make environments and environments make humans" (ibid.). Society and nature or "human history" and "natural evolution" are intertwined and coproduce each other both symbolically and materially. Jason Moore calls this the

“double internality” of the society-nature relationship (ibid.: 5). The reason why our knowledge and concepts of nature are of such great importance is therefore because they provide the material or, rather, organic backdrop of reality that structures our possibilities of how to act and arrange society. In his article “The Nature of Environment” (1993) David Harvey therefore argues,

If all socio-political projects are ecological projects and *vice versa*, then some conception of ‘nature’ and of ‘environment’ is omnipresent in everything we say and do. If, furthermore, concepts, discourses and theories can operate, when internalized in socio-ecological practices and actions, as ‘material forces’ that shape history, then the present battles being waged over the concepts of ‘nature’ and of ‘environment’ are of immense importance. All critical examinations of the relation to nature are simultaneously critical examinations of society. (Harvey 1993: 39)

Due to the inherent interrelation of language, nature and social relations, I would therefore contend that the different ecological, economic and political crises that contemporary societies are facing today are also a result of *specific* conceptions of nature. Following in the footsteps of John Dewey (1930) and Bruno Latour (2004, 2013), I believe that in order to deal with these problems, we therefore also have to rethink our central concepts that constitute this relationship, such as the mind-body, subject-object, individual-society and human-nature dichotomies. As I will show, this shift should move us beyond a reductionist, mechanistic and deterministic to a more systemic, processual and adaptive understanding of nature and society. Or more specifically, it is a shift from a dualistic and anthropocentric to an interrelated and ecocentric model, in which humans are conceived as interdependent, creative components of the natural world (Dewey 1929; Eckersley 1992; Stengers 2010/2011).

Before continuing, it is of utmost importance to stress that this does not imply that we can simply create another reality by describing it differently. That would be solipsistic and naïve, especially considering the interests of those who are not interested in such social change. Nevertheless, the aim is to develop a new “shared common understanding” of nature that will influence people’s patterns of (inter)action and possibly become a “material force” of social change towards a more democratic society. In order to see how this might be done, let us therefore now turn to a few preliminary reflections on this new concept of nature.

5.2 Concepts of nature and social reality

In order to develop a different interpretation of nature that is conducive to commons and commoning, I would like to focus on two pieces of writing: *The Ecology of*

Law: Toward a Legal System in Tune with Nature and Community (2015) by Fritjof Capra and Ugo Mattei and *Enlivenment: Towards a fundamental shift in the concepts of nature, culture and politics* (2013) by Andreas Weber.³ As Capra and Mattei emphasize, their critique revolves around the rise of a rationalist and mechanistic understanding of the world through the Scientific Revolution and Enlightenment constituted by scholars like Galileo, Descartes, Hobbes, Newton and Locke. For Weber, the problem lies not only in this reductionism, but also in deterministic interpretations of competition and natural selection. These interpretations of reality, in turn, provide us with a biological “metaphysics of our culture” (Weber 2013: 23) and with conceptual cornerstones of how human society can, and therefore should, be organized.

A key moment for these three authors in the development of contemporary Western worldviews is Descartes’ differentiation between *res cogitans* and *res extensa* through which the subjective human spirit is separated from – and placed above – objective, material reality. While the realm of life and freedom is accessible only to the spirit, the material world is understood as a mechanistic machine that is determined by universal laws of nature. Despite advances in evolutionary theory, Weber argues that, following Descartes, Malthusian and Social Darwinist “laws of nature” created an understanding of the economy in which subjectivity and freedom were ultimately negated (Weber 2013: 23).⁴ The biologist Richard Dawkins, for example, expresses this worldview most clearly in his book *The Selfish Gene*, as he writes: “We are survival machines – robot vehicles blindly programmed to preserve the selfish molecules known as genes.” (Dawkins 2006: xxi) Here, we are reminded of Garrett Hardin’s assumption that the default position of people’s strategy of action is to maximize one’s offspring and gains (Hardin 1968; Hardin 1993: 97). More generally put, this biologically framed understanding of human action underlies the widespread belief that humans are egotistical utility maximizers or *homo oeconomici*. Due to the law-like nature of human action and, thus, social reality, Weber therefore goes so far as to say that the “deep metaphysics of our age, is a science of the non-living” (Weber 2013: 23). Or, as Alfred North Whitehead ironically points out in his discussion of the notion “survival of the fittest”: “The art of persistence [in comparison to the art of living] is to be dead. Only inorganic things persist for great lengths of time.” (Whitehead 1958: 4)

3 Andreas Weber reformulated these thoughts in his more recent book *Enlivenment: Toward a Poetics for the Anthropocene* published by MIT Press in 2019. However, I have chosen to focus on the original essay published by the Heinrich Böll Stiftung in 2013, which was then later also published in German under the title *Enlivenment: Eine Kultur des Lebens – Versuch einer Poetik für das Anthropozän* by Matthes & Seitz in 2016.

4 Weber explains: “The [economic] process is subject-less and self-organized in the sense that eternal, external laws (that of selection and that of economic survival) punish or reward the behaviour of atomistic black boxes called ‘Homo economicus’ – economic man – or in a more modern telling, the ‘selfish gene’.” (Weber 2013: 23)

Although many intellectuals and scientists would not go so far as to deny the freedom of the individual, it is important to note that the belief that people exist in antagonistic and therefore competitive relationships is deeply rooted in Western thought, including that of Hobbes, Kant and Freud (Hobbes 1985: 183-8; Kant 2001: 6:27; Freud 1962: 58). In simple terms, the antagonistic competition between atomistic individuals is often assumed to be a universal law of nature.⁵ This is what Andreas Weber and others understand as bio-economics: the biological foundations of the open and competitive market (Arnhart 2015). Generally speaking, it can be said that the universalization of the principles of machine-like mechanisms of antagonistic competition has to some extent become a (tacit) metaphysical framework within Western society, according to which its social and natural world has been interpreted and organized. According to Capra and Mattei, this conception of laws of nature was then adopted by legal scholars to create an objective legal framework based on private ownership and state sovereignty, generally understood as “legal absolutism” (Capra/Mattei 2015: 6). Additionally, and as we have already discussed, it is this universalist institutional framework of the competitive market that has largely brought about contemporary, interrelated ecological, socio-economic and political crises.

This being said, Capra, Mattei and Weber maintain that in order to deal with these crises a paradigm shift in our fundamental understanding of the world is necessary. Andreas Weber, for example, propagates a paradigm shift from that of the Enlightenment to one of “Enlivenment”. With reference to romantic and critical responses to the rationalism of the Enlightenment, Weber argues, however, that rationality should not be abandoned, but should instead be linked with the subjectivity and sentience that exist in all living beings. For this to occur, he explains,

it is necessary to explore a new narrative for what life is, for what it is to be alive, for what living systems do, and what their goals are. We need to explore how values are created by the realization of the living, and how we, as living beings in a living biosphere, can adapt the production needed for livelihoods to that reality, the only reality we have. (Weber 2013: 21)

With Alfred North Whitehead we could thus say that the individual or *res cogitans* is not understood as a separate entity from material reality but as a creative force within the process of the living world (Whitehead 1978). For Capra and Mattei, this

5 Here it must be noted that although all three authors argue that people have a predisposition to rivalry and aggression, they are not forever caught in this form of being. All three argue that humans have the capacity to overcome these negative drives and this destructive state of affairs through reason or, in the words of Freud, through the subjugation and sublimation of the id by the super-ego. Nevertheless, while Hobbes and Freud assumed these negative impulses to be innate and natural, Kant argues that they are “vices of culture” (Kant 2001: 6:27; original emphasis).

implies a shift from thinking in terms of a “mechanism of law” toward an “ecology of law” which, in turn, is inherently associated with the concept of the commons. They explain,

In the strict scientific sense, ecology is the science of relationships between the members of an ecological community and their environment. In this sense, then, the ecology of law refers to a legal order that is consistent with and honors the basic principles of ecology. *The ecology of law implies a process of transforming legal institutions from being machines of extraction, rooted in the mechanistic functioning of private property and state authority, into institutions based on ecological communities.* The ecology of law seeks a quality of economic life aimed at nurturing and preserving nature in the interest of future generations and overall human survival. The law should mimic the natural strategies of long-term ecological survival, including the reduction of waste and consumption. [...] In other words, an ecological vision of law does not reduce law to a professionalized, preexisting, objective framework ‘out there,’ separate from the behavior it regulates and tries to determine. Instead, law is always a process of ‘*commoning*,’ a long-term collective action in which communities, sharing a common purpose and culture, institutionalize their collective will to maintain order and stability in the pursuit of social reproduction. Thus the commons – an open network of relationships – rather than the individual, is the building block of the ecology of law and what we call an ecological order. (Capra/Mattei 2015: 14-15; emphasis added)

In other words, the basic idea here is to overcome the dualism of laws. on the one hand. and individuals. on the other, by contextualizing our understanding of law historically, socially and ecologically. This would enable us to understand law as a second-order commons that is created by humans and that should thus perpetually be reformed and adapted by the communities affected by these laws. The general point to be made here is that by widening our understanding of ‘nature’, we further increase the number of ways in which we can organize social arrangements. Again, this is not to say that we can then realize any form of social organization whatsoever, irrespective of the existing conditions. Instead, it implies that we can learn from our ‘first nature’ so we can attempt to bring social arrangements (i.e. our ‘second nature’) into existence that are more or less well-adapted – and that can continuously adapt – to existing ecological conditions. This type of learning is what Capra and Mattei call eco-literacy and eco-design (Capra/Mattei 2015: 174-9). Interpreted in a less dualistic and more poetic manner, according to Weber it does not imply that we “copy nature’s objects, but rather follow [and participate in] its [...] process of creative unfolding” (Weber 2015).

Before I continue, I would like to consider a criticism that might arise here. I can assume that some people believe this general approach to be a naturalistic fallacy. Here, it could be argued that I – and authors like Capra, Mattei and Weber

– wish to transfer principles that we perceive in nature ('facts') into human society and assume that the 'is' should determine the 'ought'. It therefore might appear as though I am simply repeating the same mistake that Social Darwinists have made, yet the only difference is that I presuppose a different model of nature. This is also the argument that I have used against limiting our understanding of democracy: the mere fact that representative democracy is the most prevalent form of democracy in the world does not imply that it is the best or most desirable. However, in this case I argue that the analysis of nature precisely does *not* provide humans with fixed forms and parameters of organization that must be transposed onto human society. Instead, the conception of nature I am elaborating enables us to define a process of human freedom in and with nature. In this sense, I would agree with Andreas Weber when he says that

only if [an] organism is conceived of as a deterministic system are we trapped in the danger of the naturalistic fallacy, imposing value from the outside on something which is [supposedly] neutral. Living beings, however, exist according to embodied values. Their nature is to live according to values. The ontology proposed here is non-deterministic because of biological reasons. (Weber 2016a: 39)

The point being made here is that this new interpretation of nature does not understand its functioning as something bound by strict, neutral laws. This would be a naturalistic fallacy because we define how we should act and organize society according to rules that supposedly exist externally and in independence of human beings. In this model, human beings look onto life as if from the outside – and the laws of nature are assumed to work inside of us, independently of our observation of them. But as Bruno Latour lucidly argues in his book *The Politics of Nature* (2004), human beings are not only a part of nature, but co-create it. For this reason, I would agree with Latour that we must "get out of the [platonic metaphor of the] cave" (Latour 2004: 10), which divides reality into a realm of subjective, social opinions (in the cave) and the "unchangeable nature of inhuman laws" (*ibid.*: 17).⁶

6 According to Bruno Latour, this dichotomy is highly problematic, as he explains: "By dividing public life into two incommensurable houses, the old Constitution [i.e. the old interpretation of nature] led only to paralysis, since it achieved only premature unity for nature and endless dispersion for cultures. The old Constitution thus finally resulted in the formation of two equally illicit assemblies: the first [i.e. the existence of an independent, objective reality], brought together under the auspices of Science, was illegal, because it defined the common world without recourse to due process; the second [i.e. subjective, social opinion] was illegitimate by birth, since it lacked the reality of the things that had been given over to the other house and had to settle for 'power relations,' for a multiplicity of irreconcilable viewpoints, for Machiavellian cleverness alone. The first had reality but no politics [and thus no freedom]; the second had politics [and freedom] and mere 'social construction.'" (Latour 2004: 53-4)

According to Latour, we must in fact get rid of this reified notion of nature or, possibly, secularize our notion of nature, in order to understand the human-nature relationship as one of a “common world” of “association” (ibid.: 25, 28, 37, 53). By rejecting the simplistic dualism of realism and constructivism, Latour argues that we can hopefully “move toward the multiplicity of nature [...] something that might be called the pluriverse” (ibid.: 40; emphasis omitted). Thus, by understanding human beings as an integral part of nature and nature as a plurality of realities that are co-created with and by human beings, human nature is itself conceived as an open and creative force. Here, we open up possibilities for human action in the process of socio-ecological co-creation.

In order to understand this notion of interdependent co-creation a little better, I would also like to briefly turn to Karen Barad’s book *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (2007). Here, Barad philosophically explores Niels Bohr’s quantum model of the atom and argues that Bohr actually “rejects the atomistic metaphysics that takes ‘things’ as ontologically basic entities” (Barad 2006: 138). Furthermore, Bohr ultimately “calls into question the related Cartesian [and Newtonian] belief in the inherent distinction between subject and object, and knower and known” (ibid.). With Bohr’s empirical findings Barad develops what she understands as a relational “agential realist ontology” (ibid.). She explains,

In summary, the primary ontological units are not ‘things’ but phenomena – dynamic topological reconfigurings/entanglements/relationalities/(re)articulations of the world. And the primary semantic units are not ‘words’ but material-discursive practices through which (ontic and semantic) boundaries are constituted. This dynamism is agency. Agency is not an attribute but the ongoing reconfigurings of the world. The universe is agential intra-activity in its becoming. (Barad 2007: 141)

Here, matter – and the universe or nature – is not a thing that has a substance, but a perpetual process of development. And because no entity has an essence, it is inherently co-constituted by its interaction in and with the world, with the other. Barad therefore argues that matter – and the linguistic description of matter – is “not a thing but a doing, a congealing of agency” (ibid.: 151). Here, the material and the discursive are inherently intertwined in what she calls an “intra-active” relationship, which ultimately results in the dynamic “co-constitution of subjects along with objects” (ibid.: 145). For me, these reflections on Bohr’s quantum theory are insightful because they support a notion of nature in which entities are not subject to abstract and universal laws but ultimately co-create their reality in and through their interdependent discursive-material relationships. Here, we might even say that this very ontological openness and creative capacity lie implicitly at the heart of the Ostroms’ theory of subjectivity and the commons, in which people can learn and adapt their actions and institutions in socio-ecological systems.

Such an interpretation would provide some depth to Elinor Ostrom's proclaimed shift from necessity to a world of possibilities (E. Ostrom 2003: 62). As we have seen in our discussion of the competitive market, some institutions impede this process of socio-ecological co-creation and adaptation. And as I will now show, the notion of the commons supports adaptation because commons enable societies to perpetually alter their institutions according to changing conditions, needs and desires.

This preliminary discussion demonstrates, however, that 'nature' is a highly contested concept and that no one true understanding of nature has ever existed in human history.⁷ Although it is true that interpretations of nature have varied throughout human history, I must nevertheless again emphasize that a purely discursive or constructivist interpretation of nature is flawed. This would lead us into a solipsistic position in which we deny the existence (and resistance) of the other and assume that humans can arbitrarily shape and form reality as they please. I believe this position to be flawed because knowing and learning must itself be understood as an embodied and interactive process in and with the world. Thus, symbolic descriptions of the material world will never be grounded on one ultimate truth but will change and adapt with new empirical insights and scientific hypotheses. And with each (new) description of our natural world, we also implicitly bring a certain symbolic order of reality about. This is most obvious in reference to our understanding of 'human nature' and the self-fulfilling prophecies of the *homo oeconomicus* (Kapeller 2008: 34-40). Here, social arrangements are created on the assumption that individuals are largely self-interested (e.g. individual private property and open and competitive markets), which in turn confirm the belief that people are egotistical. As empirical studies have shown, however, people already act differently when similar social situations are simply *named* differently (Lieberman et al. 2004).⁸ That being said, our symbolic interpretation of (human) nature

-
- 7 In reference to the contested question whether nature pursues a teleological purpose, Andreas Weber and Francisco Varela, for example, explain how the interpretation of this problem has changed throughout Western history: "The Greeks experienced nature as an ever-present horizon, most clearly set in Aristotle's dictum: the final cause is a necessary precondition for the mechanical cause. But in medieval times the idea of finality radically shifted to divine will and design, the source of all meaning and purpose. The enlightenment opposed to that the even more radical position of human mind as the measure of things, where nature is only seen as mere object for the human subject. Recent times have shifted to post-modern views on nature as a purely historical locus, contingent and relative." (Weber/Varela 2002: 98)
- 8 Varda Liberman, Steven M. Samuels and Lee Ross, for example, discovered that people act differently in similar social settings, depending on how these arrangements are named. They performed two experiments, one with American college students and the other with Israeli pilots and their instructors. Each group played either an N-move Prisoner's Dilemma game called "the Community Game" or "the Wallstreet Game", each respectively connoting more cooperative or more competitive norms. The rules of the two games were, however identical.

is never simply a neutral representation of an objective fact, but always implicitly conveys certain values of society and performatively brings a certain reality about. In this sense, our question about nature turns into a more normative question: What society do we want to live in and how can it be realized given the knowledge of the conditions of our existence? This implies a shift from the merely empirical to the normative, yet without completely disregarding the former. Or, more precisely, it attempts to integrate the normative in the empirical because life itself – and therefore science as well – is not a distinct and objective entity separated from the symbolic, but also always a creative expression of the meaning we give ourselves and the world. And I would argue that it is this understanding of nature that is ultimately more conducive to commons and commoning.

5.3 Autopoiesis and the interdependent co-creation of reality

As previously mentioned, the understanding of the natural world as a machine was developed during the Early Modern period by numerous thinkers, most notably René Descartes (1596-1650) and Isaac Newton (1642-1726). Here, René Descartes' dualism of mind and matter or *res cogitans* and *res extensa* is of central importance. This Cartesian dualism assumes that the realm of freedom is limited to the mind while the sphere of material reality remains unfree and determined (Des Chene 2001). With the aid of Isaac Newton's mathematical understanding of the natural laws that underlie all of material reality, the entire universe was ultimately conceived as a clock-like machine, determined by its laws (Dolnick 2011). In this dualistic worldview, the mind receives the semi-divine position of a director who is subject to yet stands above the laws of nature and can, or, rather, should control the machine. For individuals, this implies mastery of the spirit over the desires of the body; for society, it means the rule of those with insight into the underlying

Interestingly, the results of the experiment demonstrate that the levels of cooperation and defection varied depending on the label of the game. Liberman et al. conclude, "When told they were playing the Bursa [Wallstreet] Game, participants expected defection to be the most likely response; when told they were playing the Kommuna [Community] Game, they expected cooperation to be the most likely response. [...] [T]he effect of expectations regarding other's choices on own choices depended on the name of the game, and thus on the way the participants construed the game. The result of these tendencies over successive rounds, in which defection begot defection and cooperation was sustained only when it was mutual, was inevitable; that is, first-round responses tended to dictate later-round responses, and as a consequence, overall rates of cooperation— especially mutual cooperation — were significantly higher in the Community/Kommuna Game than in the Wall Street/Bursa Game." (Liberman et al. 2004: 1182)

laws of nature and society over the ignorant and passionate masses; and for individuals' relationship to nature, it implies the imperative to subdue (and exploit) the natural world according to one's supposedly higher needs and desires. The claim I am making here is that in order to realize a democratic and sustainable society, we need to overcome this problematic dualism.

For this reason, let us now turn to a new understanding of the natural world that various philosophers and biologists have been developing at least since the beginning of the 20th century. These intellectuals include, for example, the pragmatists Charles Peirce (1839-1914) and George Herbert Mead (1863-1931), the neurophysiologist Warren S. McCulloch (1898-1969), the social scientist Gregory Bateson (1904-1980), the chemist Ilya Prigogine (1917-2003) and the biosemioticians Thure von Uexküll (1908-2004), Thomas Sebeok (1920-2001) and Jesper Hoffmeyer (1942^{*}). This new understanding of nature generally became more popular during the 1970s through the work of the Chilean biologists Humberto Maturana (1928^{*}) and Francisco Varela (1946-2001) and, since then, through the works of Fritjof Capra (1939^{*}) and Stuart Kauffman (1939^{*}). The development of this new paradigm in biology is often compared to the shift in physics from Newtonian mechanics to quantum mechanics, Einstein's general theory of relativity and thermodynamics in which the subject and the object are no longer understood as independent entities (Weber 2014: 18; Capra/Mattei 2015: 42).

Following a similar line of thought, most of the authors just mentioned, and most prominently Maturana and Varela, argue that our understanding of life must also include an understanding of how human knowledge of life (cognition) arises biologically (Maturana/Varela 1980, 1987). Although not stated in these terms, Maturana and Varela initially take two simultaneous steps towards a resolution of this problem. One, which is aligned with Maurice Merleau-Ponty's phenomenology, consists in acknowledging that the mind is an embodied part of the natural, material world (Merleau-Ponty 2001); the other, which follows the semiotics of Charles Peirce and other linguists, consists in acknowledging that all forms of knowledge are elaborated and embodied in socially constructed signs that not only interpret but also constitute or shape reality (Hoffmeyer 2008: 32). Here, knowledge of the world is regarded neither as a form of representation or correspondence of signs and their objects (signifier and signified), nor as a subjective, biological idealism (Hampe 2007: 112) in which the subject merely projects their ideas and concepts onto reality or the 'thing-in-itself'. Instead, the process of knowing is best understood as, in the terms preferred by Charles Peirce, a relational and interwoven process of differentiation, interpretation and co-creation of the world through signs. This implies that a 'thing-in-itself' does not exist independently but is created through its symbolic and material relations with other entities (Hoffmeyer 2008: 33). For Peirce, this process of interpretation consists of a dynamic, triadic relationship between a sign, an object and an interpretant (Kilstrup 2015). This

semiotic understanding thus emphasizes the two-sided character of the same reality: the social constitution of the self and the material interconnectedness of the subjective with its objective surroundings. Or, more precisely, humans are understood as biological beings that socially conceive and construct themselves through their symbolic self-referential differentiation from and interpretation of their environment. Therefore, the dualism that is often assumed in Western thought does not exist 'in reality' but is created through a process of embodied cognition based on symbols that delineate the separation between mind and matter, individual and society and, finally, between culture and nature.

Peirce's semiotics, in its generality, lays the foundations we need to broaden the concept of embodied cognition to all living beings. Similarly to human beings, all organisms actively constitute themselves as a differentiated unity, interpret the information from their environment through chemical or, in Peirce's terms, indexical and iconic signs and act accordingly in order to survive. Many philosophers and biologists recognize this sensory cognition in all other forms of life (Bak 1997; Kelso 1995; Goodwin 2001; Narby 2006). This process of sensory cognition is understood as the self-organization or dynamic self-reproduction of organisms or, in the words of Maturana and Varela, as autopoiesis. Here, the process of self-organization must be understood as a material process of self-reproduction through internal signaling. Weber and Varela explain in a co-authored article *Life after Kant: Natural purposes and the autopoietic foundations of biological individuality* (2002) that autopoiesis is

a circular process of self-production where the cellular metabolism and the surface membrane it produces are the key terms. Thus an autopoietic system – the minimal living organization – is one that continuously produces the components that specify it, while at the same time realizing it (the system) as a concrete unity in space and time, which makes the network of production of components possible. (Weber/Varela 2002: 115)

In general terms, autopoiesis or self-organization must therefore be understood as a departure from a linear and mechanic conceptualization of life in which natural laws and genes determine the actions of organisms. Instead, through signaling, internal feedback loops provide a "nonlinear interconnectedness of the system's components" (Capra 1996: 85) which can be understood as a network. As Fritjof Capra explains in his book *The Web of Life*:

Since all components of an autopoietic network are produced by other components in the network, the entire system is organizationally closed, even though it is open with regard to the flow of energy and matter. This organizational closure implies that a living system is self-organizing in the sense that its order and behavior are not imposed by the environment but are established by the system

itself. In other words, *living systems are autonomous*. This does not mean that they are isolated from their environment. On the contrary, they interact with the environment through a continual exchange of energy and matter. But this interaction does not determine their organization – they are *self-organizing*. (Capra 1996: 167-8; emphasis added)

Both their partial independence from the environment and their internal feedback loops enable organisms to create “new structures and new modes of behavior in the self-organizing process” (Capra 1996: 85).⁹ In the jargon of biosemiotics, this interdependent autonomy is called semiotic freedom (Hoffmeyer 1993: 52-67) and, in the Darwinian theory of evolution, can more generally be understood as adaptation. Yet, while adaptation in non-human beings is normally understood as a random and intergenerational phenomenon, the tradition on which I am drawing argues that change can occur in a non-random manner within the lifetime of an organism (Strohman 1997: 195). Or, in simpler terms: “Creatures change their forms without changing their genes.” (ibid.: 198)

In contrast to the widespread dichotomy in Western philosophy between material reality as the realm of unfreedom and the human mind or spirit as the realm of freedom, here, all living beings possess minimal intelligence, subjective agency and autonomy. The theory of this subjective agency is grounded on the assumption that all organisms strive to maintain themselves. The energy they direct towards self-preservation implies that not only do all organisms have interests and values (e.g. staying alive and reproducing the species) – they also have a minimal sense of self (e.g. the maintenance of one’s *own* life) (Weber/Varela 2002: 116-119). This is not to say that organisms are self-conscious, but rather that they are sentient beings with a minimal, embodied sense of self. The foundation of an organism’s autonomy therefore does not lie in self-reflexive thought, but in sentience, which enables

9 In more technical language, this can be understood as a shift in biology from genetic determinism to epigenetic open feedback networks. In the paradigm of genetic determinism, evolution occurs through random reconfiguration of genetic information. In contrast to this, Strohman argues in his 1997 article on the “coming Kuhnian revolution in biology” as follows: “Epigenetic networks have been described as cellular neural networks and, given their great complexity and *openness to environmental signals*, most probably use a (nonlinear) logic and set of rules quite different from the comparatively linear rules needed for completing the genetic sequence of events. This comparison also emphasizes feedback from epigenetic networks to the genome; feedback that includes changing the patterns of gene expression. This change in pattern of gene expression is accomplished by enzymatic changes in chromosome structure and by ‘marking’ sections of DNA chemically *without changing the genetic code in any way*. What is changed is the *accessibility of genes to expression pathways*. But the *decisions to mark or not to mark are in the epigenetic [open feedback networks] and not the genetic pathway*. The details of epigenetic biology [...] are well known and thoroughly covered in the literature.” (Strohman 1997: 197; emphasis added)

organisms to give meaning to the world through their embodied and intentional interpretations of it (Weber 2016a; Narby 2006; Hoffmeyer 1993; Kauffman 1993). For biosemiotist Jesper Hoffmeyer, this process of embodied cognition is inherently linked to the capability of living beings to anticipate the future. To explain this issue with some simple examples, I quote Hoffmeyer in full:

Quite generally, living systems have evolved a capacity for making anticipations: they must decide when to grow and when to withhold growth, when to move, when to hide, when to sing, and so on, and this way of adjusting the behaviour depends on a capacity to predict the future at least to some limited extent. For instance: is it likely the sun will shine or not, is it likely that little flies will pass by if I make my web here, will the predator be fooled away from the nest if I pretend to have a broken wing etc. Of course, in most cases it will be the instinctual system of the animal rather than the [conscious] brain that makes this kind of prediction, but the logic is the same: the animal profits from its ability (whether acquired through phylogeny or through ontogeny) to identify trustworthy regularities in the surroundings. And most – if not all – trustworthy regularities are indeed relations. For instance, the relation between length of daylight and the approaching springtime that tells the beech when to burst into leaves; or the play of sun and shadows which tells the spider where to construct its web; or the relation between clumsy movements and an easy catch that tells the predator which individual prey animal to select, and thus tells the bird how to fool the predator away from its nest. (Hoffmeyer 2008: 34-5)

Considering these basic interpretative interactions of all living beings with their environment, organisms should then not be understood as “genetic machines” but as “materially embodied processes that bring themselves forth” (Weber 2013: 30). Or, to put it somewhat tautologically: self-organization implies that living organisms are alive.

The implications of this are twofold. Firstly, not all cognitive processes in living beings are self-conscious but are, rather, based on a type of sensory and sentient cognition. For humans, this is obvious when we consider that most of our actions are not performed entirely consciously but rather through a tacit embodied knowledge (e.g. habits). This was demonstrated most clearly by the famous Libet experiment in 1979 in which a hand movement was initiated through a reaction of the nervous system while the self-conscious decision to act in this manner followed shortly afterwards (Libet 1999). While this experiment has often been interpreted as proof for the non-existence of human free will – or the free will as a type of *ex post* veto possibility –, this new interpretation of self-organization through sensory cognition would, however, imply that autonomy does not merely lie in the self-conscious determination of the movements of the body, but more fundamentally in the body’s own embodied, sentient cognition (Libet 1985). In other words, hu-

man beings' relationship with the world is, in its most fundamental form, not one based on knowledge and rationality, but is instead physical and emotional – or, in the words of the sociologist Hartmut Rosa, a relationship of resonance (Rosa 2019).

Secondly, this conception of nature provides a more general, non-dualistic understanding of reality. Here, the mind is not understood as a distinct thing in itself, but as a process that arises out of interdependent relationships. By conceiving cognition as sentient consciousness, 'mind' arises through a process of sensory interactions of the organism's components and in its interaction with the environment. The mind – and all other 'things', for that matter – are therefore constituted as separate and independent entities through their linguistic and symbolic categorization in the interactive process of communication and reflection. In this sense, it must also be noted that the environment or nature does not merely exist as a thing in itself, but as relationships between different organisms that give each other meaning and bring each other about. The pragmatist philosopher George Herbert Mead expresses this idea in his book *Mind, Self and Society from the Standpoint of a Social Behaviorist*:

It is a difficult matter to state just what we mean by dividing up a certain situation between the organism and its environment. Certain objects come to exist for us because of the character of the organism. Take the case of food. If an animal that can digest grass, such as an ox, comes into the world, then grass becomes food. That object did not exist before, that is, grass as food. The advent of the ox brings in a new object. In that sense, organisms are responsible for the appearance of whole sets of objects that did not exist before. The distribution of meaning to the organism and the environment has its expression in the organism as well as in the thing, and that expression is not a matter of psychical or mental conditions. There is an expression of the reaction of the organized response of the organism to the environment, and that reaction is not simply a determination of the organism by the environment, since the organism determines the environment as fully as the environment determines the organs [i.e. the organism]. The organic reaction is responsible for the appearance of a whole set of objects which did not exist before. [...] The organism, then, is in a sense responsible for its environment. And since organism and environment determine each other and are mutually dependent for their existence, it follows that the life-process, to be adequately understood, must be considered in terms of their interrelations. (Mead 1967: 129-30)¹⁰

10 It can be noted that while George Herbert Mead discusses the agency and meaning of animals, he nevertheless denies them a "self" which, however, is to be distinguished from our notion of (self-conscious) subjectivity based on sentient cognition. Mead explains that "we can distinguish very definitely between the self and the body. The body can be there and can operate in a very intelligent fashion without there being a self involved in the experience. The self has the characteristic that it is an object to itself, and that characteristic distinguishes it

Here, individual entities such as the ox and the blades of grass are neither fully independent nor completely dependent on each other, but rather exist in interdependent relationships in which they enable each other to be brought forth. This insight repeats the previously discussed notion that living creatures are not determined by laws of nature and their environment. Instead, living beings are integrated in a process of relational and interdependent co-creation of nature and meaning. This is a basic insight of a systemic understanding of nature that can then be applied to 'higher' or more complex forms of socio-ecological organization.

5.4 Ecosystems, abundance and natural commons

In order to apply the notions of autopoiesis and interdependent co-creation to humans, we need to scale up our understanding of these concepts from single organisms to populations, entire ecosystems and the 'web of life' in general. Although Maturana and Varela originally only developed the concept of autopoiesis as a function of cellular networks and other "minimal autopoietic systems"¹¹ (Capra/Luisi 2014: 306), there have been attempts to transfer this understanding of life to more complex organisms and living systems, including to the social domain. Here, it might be helpful to elaborate on two basic concepts: that of the organism and that of living systems. As Fritjof Capra and Pier Luigi Luisi explain in their book *The Systems View of Life*:

All living systems are networks of smaller components, and the web of life as a whole is a multilayered structure of living systems nesting within other living systems – networks within networks. *Organisms* are aggregates of autonomous but closely coupled cells; *populations* are networks of autonomous organisms belonging to a single species; and *ecosystems* are webs of organisms, both single-celled and multicellular, belonging to many different species. (Capra/Luisi 2014: 306; emphasis added)

In other words, we can differentiate between three types of multicellular living systems: Individual organisms, populations and societies and ecosystems. Because all living systems are ultimately made up of cells, Capra and Luisi are right to say that "all living systems, ultimately, are autopoietic" (Capra/Luisi 2014: 306). The understanding of populations as self-organizing basically revolves around the idea that

from other objects and from the body" (Mead 1967: 136). It is therefore self-reflexive consciousness that creates the self as an object.

11 According to Capra and Luisi, minimal autopoietic systems include "simple cells, computer simulations, and the autopoietic chemical structures, or 'minimal cells', created recently in the laboratory" (Capra/Luisi 2014: 306).

populations can reproduce themselves by continuously adjusting to and co-creating their eco-system. Here, individual organisms and specific populations are each embedded within broader ecological settings, all taking part in the reproduction of entire ecosystems. As we see, this systemic approach to understanding life provides us with a better understanding of interdependencies in nature and requires us to revise many basic concepts that we have adopted from biology and applied to economics and politics. More precisely, it becomes clear that this concept of ecosystems underlies Elinor and Vincent Ostrom's notion of commons as embedded in a multileveled and nested polycentric system of governance.

To better understand this change of conceptual frame, let us begin with one of the most fundamental assumptions in Malthusian and Neo-Darwinist interpretations of nature and economics: the competition of individuals over scarce resources necessary for their survival. This assumption can be understood as one of the core elements of "bioeconomic metaphysics" and lays the foundation for one of the core functions of markets: the efficient allocation of scarce resources through market competition (Robbins 1932). This basic concept of scarcity and the competition over these resources has been popularized by the idiom "there is no such thing as a free lunch", cited by Robert Heinlein (1966), Milton Friedman (1975) and many others.¹² As we have already seen in our discussion of the open and competitive free market, according to this logic, one's existence is secured through accumulation which, ironically, increases scarcity through the depletion of resources needed by both the one who accumulates and other beings. This antagonistic competition is not only conceived of as a struggle between individuals but also as a struggle between entire populations or nations – and against one's environment. Not only do people strive to accumulate more and more resources, populations also strive incessantly to increase their own size in order to preserve their gene pool. As we have already discussed, the underlying assumption here is that all living creatures are biological consumption machines determined by their egotistical genes. Here, the only strategy of survival is perpetual growth. It is interesting to note that not only is freedom undermined by the biologically determined egotistical drive to perpetually grow, but also by the decrease in people's chances of survival on account of the destruction of their ecosystem. If growth were the only genetic program of life, it can be assumed that living creatures would have wiped themselves out long ago simply by devouring each other and their environments.

12 In the Library of Economics and Liberty (econlib.org), economist David R. Henderson explains, for example, that he begins every class with the "Ten Pillars of Economic Wisdom", the first of which is "There ain't no such thing as a free lunch" (TANSTAAFL). He then supposedly tells students that "economic resources are scarce, and, therefore, if we get more of one, there has to be less of another. What are economic resources? It's a little circular: economic resources are defined as scarce resources. [...] There are a few non-scarce goods, which economists call 'free goods'." (Henderson 2014)

However, while this notion might be biological, it is based on the logic of atomistic entities and therefore neglects the insights of an interrelated and systemic understanding of biology that we have just discussed. The notion disregards the interactive communication that occurs within an individual organism and the processes of interdependent co-creation between organisms and their ecosystems. In this sense, it neglects the capabilities of individuals and populations to adjust their patterns of action not only to secure their own existence, but also to maintain the metabolic reproduction of the entire ecosystem. This is not to say that individual organisms or populations must have knowledge of the entire ecosystem that they exist in, but it is to be assumed that they can adjust their long-term consumption and reproductive patterns in accordance with signals that they receive from the ecosystem in order to secure their long-term existence. Obviously, this can include destructive strategies of parasitic growth but theoretically it must also include strategies of symbiogenesis and mutual symbiosis which are based on the basic fact that the long-term existence of one being depends on the long-term existence of other beings. This is clearest considering the example of the bacteria in my bowels that I provide food for and that, in turn, enable me to digest my food (Gilbert et al. 2012; Morar/Bohannon 2019); or the trees that provide oxygen for animals to breathe; or the rabbits that provide food for foxes. This is what George Herbert Mead meant when he spoke of organisms' reciprocal responsibility for the conditions of each other's existence.

To develop a better understanding of these other strategies of interdependent survival in networked systems, we must integrate the other central premise of the Neo-Darwinist narrative: scarcity. While I would agree that resources on planet Earth are limited, this does not mean that resources must also be scarce. Limited resources can nevertheless be experienced as abundant (Bennett 2001: 165). The objective limit of resources is best understood with the law of conservation that basically states that the total quantity of energy (including mass) remains constant over time in a closed physical system. Energy can therefore not be created *ex nihilo* but can only change its form (Hosch 2017). In contrast to this objective limit, scarcity is a phenomenon based on social organization and perception. As Hardin himself acknowledged, scarcity only occurs when the demand for some good exceeds the rate of its reproduction. According to Hardin, scarcity therefore increases when populations grow and when it becomes possible to accumulate resources on an ever-expanding scale. Ironically, however, by *perceiving* existing resources to be scarce, individuals may pursue accumulation strategies by which they aim to secure their own existence, but that deplete the resource and thus ultimately increase scarcity for others – and, in the long term, also for themselves. Here, we can again observe the creation of reality from the categories through which we perceive and thus comprehend nature. We will discuss the creation of scarcity in more detail later, but as we can see, the central question that we must answer is one of how to

transform limited resources into relative abundance and freedom. As I will argue later, that implies the transformation of our social arrangements from ones based on negative rights, individual private property and open and competitive markets to interdependent rights and commons property arrangements. In order to do this, however, we must shift our understanding of planetary limits from one based on scarcity to one based on sufficiency and abundance.

In order to do this, it would seem helpful to return to the work of Andreas Weber who develops a notion of abundance in nature in relation to what he calls “natural commons” or, more specifically, the process of “natural commoning”. In Weber’s words:

Nature, understood as a creative process of interacting, embodied subjects, can serve as a model for an economic concept of the commons. Basic structures and principles of ‘natural commoning’ – self-organizing, dynamic, creative – have been the basis of biospheric evolution. (Weber 2013: 37)

In contrast to the scarcity narrative, Andreas Weber argues that the concept of commons is based on the assumption of a general and relative abundance in nature. This is a central point that Weber emphasizes:

Resources in nature are not [inherently] scarce. Where they become so, they do not lead to a creative diversification, but to an impoverishment of diversity and freedom. The basic energetic resource of nature, sunlight, exists in abundance. A second crucial resource – the number of ecological relationships and new niches – has no upper limit. A high number of species and a variety of relations among them do not lead to sharper competition and dominance of a ‘fitter’ species, but rather to richer permutations of relationships among species and thus to an increase in freedom, which is at the same time also an increase of mutual dependencies. [...] In old ecosystems where solar energy is constant, as in tropical rainforests and high oceans, this brings forth more niches and thus a greater overall diversity. The result is an increase of symbioses and reduced competition. Scarcity of resources, experienced as the temporal lack of specific nutrients, leads to less diversity and the dominance of few species, as for example in temperate coastal mudflats. (Weber 2013: 27)

In contrast to the scarcity narrative, the source of all of life originates from an over-abundant resource that literally falls from heaven like manna: sunlight. As is well-known, sunlight is *the* key source of energy for life on earth that enables plants to synthesize carbon dioxide from the air and water and minerals from the soil. As Campbell and Reece state in their textbook *Biology*, this process of photosynthesis, in turn, “nourishes almost all of the living world directly or indirectly” (Campbell/Reece 2002: 176). In this sense, sunlight can be understood as a central source of energy that is provided to all living beings as an abundant gift.

Aside from sunlight, Weber also mentions another resource that exists in abundance in nature: “the openly available source code of genetic information” (Weber 2013: 39). Here, genetic code is not understood as an exclusive good that is protected and reproduced “privately” by competing individual species. Instead, it is a good that is open to all and shared by many. In this sense, genetic data is conceptualized as an open-source commons. Similar ideas have been developed in Stuart Kauffman’s concept of a biological “order for free” (Kauffman 1995: 71–92), on the one hand, and Marcello Barbieri’s notions of “code biology” (2015) and “evolution by genomic flux”¹³ (Barbieri 2003: 58), on the other. In Weber’s words:

DNA has been able to branch into so many species only because all sorts of organisms could use its code, tinker with it and derive combinations that were meaningful and useful to them. This is also the way *Homo sapiens* came about [...]. Some 20 percent of our genome alone consists of former viral genes that have been creatively recycled. (Weber 2013: 39)

According to Weber and other authors, it is therefore not the selfish gene that dominates in nature, but the existential desire to share, copy and diversify genetic information – within and beyond one’s own species. In contrast to the dogma of the survival of the fittest, Maturana and Varela understand this notion of evolution in *The Tree of Life* as “structural drift”, which merely appears *a posteriori* to the observer as being “selected” by the environment (Maturana/Varela 1987: 102–3).¹⁴

13 Marcello Barbieri explains: “Other phenomena – such as *unequal crossing-over*, *DNA slippage* and *gene conversion* – proved that the genome is actually a turbulent superstructure in which genes are in a continuous state of flux. The Mendelian behaviour of genes is only a crude approximation of the truth, good enough for many practical purposes but not for a real-life understanding of the *fluid genome*. This brings us back to the possibility of a third exception to the Hardy–Weinberg theorem, i.e. to the possible existence of a third mechanism of evolution based on non-Mendelian heredity. And since the new mechanism would be a direct result of gene turbulence, a good name for it could be *evolution by genomic flux*.” (Barbieri 2003: 58; original emphasis)

14 As Varela and Maturana write: “In fact, we have no unified picture of how the evolution of living beings occurs in all its aspects. There are many schools of thought that seriously question understanding evolution by natural selection; this view has prevailed in biology for more than sixty years. Whatever new ideas have been bruited about in terms of evolutive mechanisms, however, those ideas cannot discount the phenomenon of evolution. But these will free us from the popular view of evolution as a process in which there is an environmental world to which living beings adapt progressively, optimizing their use of it. What we propose here is that evolution occurs as a phenomenon of structural drift under ongoing phylogenetic selection. In that phenomenon there is no progress or optimization of the use of the environment, but only conservation of adaptation and autopoiesis. It is a process in which organism and environment remain in a continuous structural coupling.” (Maturana/Varela 1987: 115) Or, in more poetical and anthropomorphic terminology: “Evolution is somewhat like a sculptor with wanderlust: he goes through the world collecting a thread here, a hunk of tin there, a

Here, evolution should be understood not as a process of selection in which individual genetic codes optimize and assert themselves against others, but rather as a process of “free” exchange and recombination of genetic information. Survival is thus not secured through protection and domination, but rather through the (unconscious) collective participation in the adaptive diversity of life forms. In this sense, aside from sunlight and the genetic code, as Weber emphasizes, diversity itself must also be considered as another vital and abundant resource for life that provides ever more possibilities for other beings to secure their interdependent existence.

To understand this notion of diversity as a means for survival, we must turn to another basic concept in Weber’s theory of biology and ecology: It is not competition, but rather ‘gift-giving’ and mutually interdependent ‘networking’ that underlies the life cycles of ecosystems. In this sense, Andreas Weber argues that nature’s resources exist in relative abundance and that they are also provided to other living beings as gifts. The most obvious examples of resources being provided as gifts are those previously mentioned: sunlight, air, water, soil, genetic information and biological diversity. Here, it could be argued that the energy of these resources is given to plants ‘for free’ or as a gift whose energy they conserve and transform through photosynthesis and which can then be consumed by other beings in their turn. In the words of Andreas Weber,

as there is no property in nature – there is no waste. All waste products literally are food for some other member of the ecological community. At death every individual offers itself as a gift to be feasted upon by others, in the same way it received the gift of sunlight to sustain its existence. There remains a largely unexplored connection between giving and taking in ecosystems in which ‘loss’ is the precondition for generativity. (Weber 2013: 39)

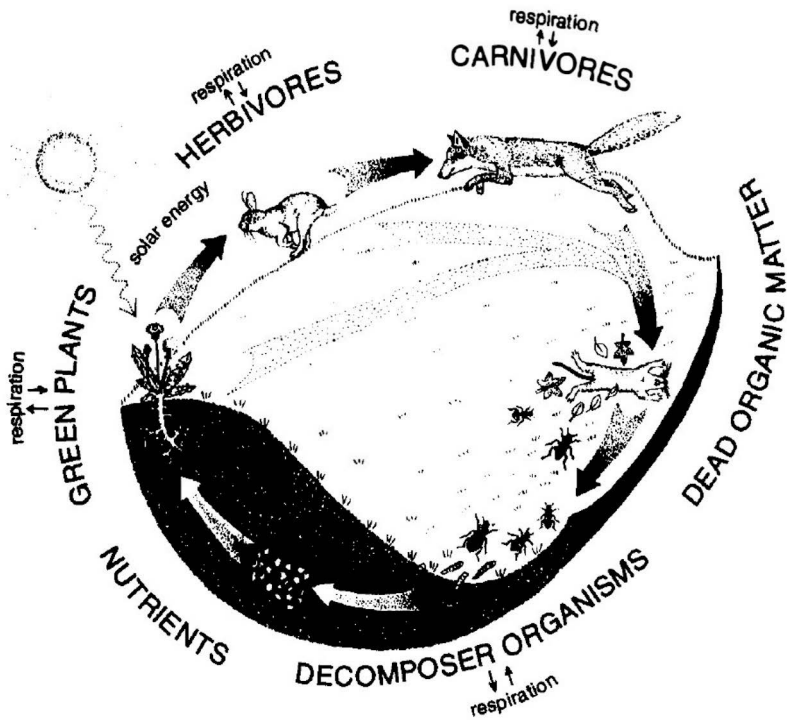
The fact that there is no property in nature is obvious because plants and animals do not exist in symbolic legal arrangements.¹⁵ Nevertheless, this is not to say that there should not be any property arrangements in society. Instead, the point that Weber is making is that the transfer of energy from one organism to another depends

piece of wood here, and he combines them in a way that their structure and circumstances allow, with no reason other than that he is able to combine them. And so, as he wanders about, intricate forms are being produced; and they are composed of harmoniously interconnected parts that are a product not of design but of natural drift. Thus, too, with no law other than the conservation of an identity and the capacity to reproduce, we all have emerged. It is what interconnected us to all things in what is fundamental to us: to the five-petal rose, to the shrimp in the bay, or to the executive in New York city.” (ibid.:117)

15 In this sense – and in relation to the abundance and accessibility of resources such as sunlight and genetic code – Weber writes, “nothing in nature can be exclusively owned or controlled; everything is open source” (Weber 2013: 39).

neither on trade nor on competition, but is simply passed on as a gift to other living beings. Put in a larger ecological context, the concept of gift-giving can thus be illustrated with the food cycle in which energy is passed on from one organism to another in a more or less reciprocal manner. Fritjof Capra, for example, portrays the food cycle in his book *The Web of Life* in such a manner.

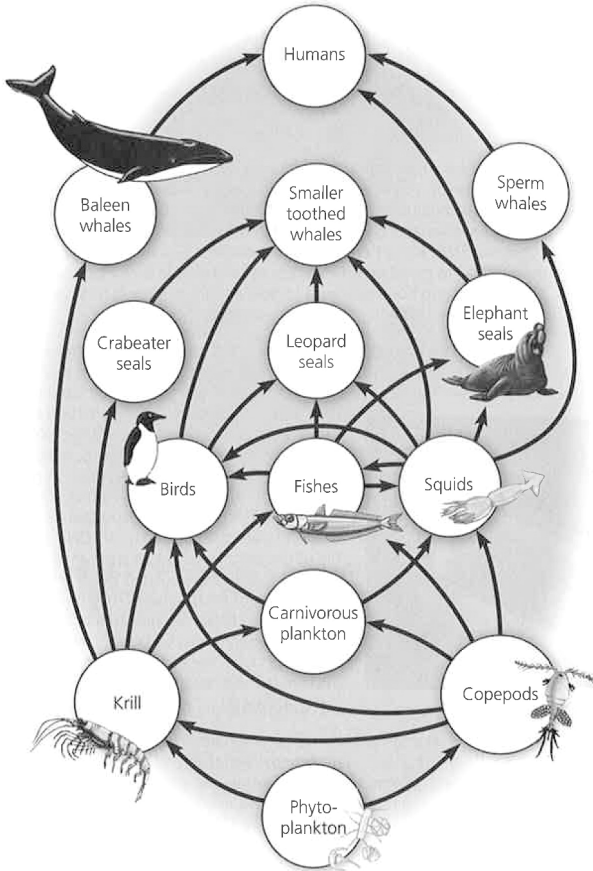
Figure 1: A cyclical portrayal of a food web (Capra 1996: 179)



This understanding should be contrasted with the linear and hierarchical understanding of food chains as it is often portrayed in schoolbooks such as, for example, in the classical textbook *Biology: A Global Approach* (2015) by Neil Campbell et al. As we see here, the food web is portrayed in a fairly hierarchical manner, in which humans see themselves at the top of the relationship. Here, it is interesting to note that Campbell et al. mention the decomposers that transform the energy of carnivores and omnivores into energy for plants in the caption, but do not include them in the figure. For this reason, the food chain with humans at the top of the hierarchy remains hierarchical and incomplete. Thus, it could be argued that these two depictions of how energy is distributed in the ecosystem tacitly convey

notions of how nature is structured: hierarchically and anthropocentrically versus reciprocally and eco-centrally.

Figure 2: Hierarchical portrayal of a food web (Campbell et al. 2015: 1290)



While it might appear that this interpretation of nature portrays the relationships between organisms as harmonious and benign, such an interpretation would obviously be too idealistic. Yet nevertheless, Darwin himself acknowledged later in life, in *The Descent of Man* from 1871, that most animals possess a “moral sense” and “social instincts”, such as “mutual love” and an “instinctive sympathy” (Darwin 2004: 133, 119-151). And as the anarchist Pjotr Kropotkin also argued in 1902, biological and social survival is not merely based on competition and warfare but also on

reciprocity, cooperation and “mutual aid” (Kropotkin 1998). The main point of this ‘other’ interpretation of nature is that animals and populations are not conceived in isolation from other organisms and their environment, but rather in mutual interdependencies. This shifts our understanding of evolution from one focused on competition to one based on communication in web-like networks and associations. The existence of a specific population is thus not conceptualized in a dualistic logic of ‘us versus them’ but as a dynamic, if sometimes stressful relationship of interdependencies. It can therefore be argued that life only comes into being through the existence of the other – through its dependency on the ecosystem that it lives in. This implies a biological primacy of reciprocal “birth-giving”, understood as a “natural gift economy” and a “natural commons” over the focus on struggle, competition and “nature, red in tooth and claw”. According to Weber,

From the standpoint of enlivenment nature is a commons economy consisting of subjects that are continuously mediating relationships among each other – relationships that have a material side, but also always embody meaning, a sense of living and the notion of belonging to a place. (Weber 2013: 36)

Here, the natural common of the gift is not a specific property arrangement, but should be understood as a mode of existence and, more importantly, as the precondition for one’s existence – including one’s ability to compete with other beings. In this sense, the existence of ‘the other’ is the precondition of an organism’s own existence. As Weber explains:

The biosphere consists of a material and meaningful *interrelation of selves*. Embodied selves come into being only through others: the biosphere critically depends on cooperation and ‘interbeing’ – the idea that a self is not possible in isolation and frenetic struggle of all against all, but is from the very beginning dependent on the ‘other’ – in the form of food, shelter, mates and parents, communication partners. *Self is only self-through-other*. In human development this is very clear, as the infant must be seen and positively valued by its caretakers to be able to grow a healthy self. (Weber 2013: 32; emphasis added)

Again, this interdependency of life does not imply that nature is one harmonious symphony but that the dynamic processes of mutual adaptation and evolution result from this interdependency. In this sense, Weber speaks of the biosphere being “paradoxically cooperative” in that symbiotic relationships emerge out of “antagonistic, incompatible processes: matter/form, genetic code/soma, individual ego/other” (Weber 2013: 32; emphasis omitted).¹⁶ Weber emphasizes that this paradoxical unity forces entities to devise precarious and provisional responses to

¹⁶ The dynamic unity of these fundamental paradoxes of life can be compared to the wave-particle paradox in quantum physics.

challenges to their way of life. Here, existence comes into being through “transitory negotiations of several incompatible layers of life” (Weber 2013: 32).

This implies that nature does not exist in a stable equilibrium but rather in a dynamic process of balancing diverse desires and needs between different organisms within an ecosystem. It does not imply that all organisms exist in a struggle of ‘all against all’ in which one species or population will ‘win’. Instead, the implication is that ecosystems have functional “dissipative structures” (Capra 1996: 168-9) or “balancing levels” according to which a change in one factor of the ecosystem will bring about other changes in the same system (Weber 2013: 38-9). Here, the dynamic balance that an ecosystem maintains can be interpreted as an inherent principle of networked or associative self-organization. Using the concepts of relative abundance and mutual interdependence in ecosystems, Weber then also reminds us that an ecosystem never grows in a material sense. Thus, he concludes that “nature is running a steady-state economy – that is, an economy where all relevant factors remain constant in relation with one another” (Weber 2013: 27). This notion of the metabolic reproduction of the ecosystem in a dynamic yet steady state economy will be relevant for our later discussion of a commons-based economy. For now, however, let us turn to the implications of these insights for human freedom and democracy based on the ecological and systemic understanding of reality I have been discussing.

5.5 Empathy, cooperation and a common(s) reality

In the context of a discussion of self-organizing organisms, populations and ecosystems, it is important to note that the degree of autonomy of organisms and networks varies greatly depending on the complexity of the specific multicellular living system. Here, the main difference between human and non-human living systems is that humans and their social systems possess the ability not merely of interpreting their environment through indexical and iconic signs, but also of interpreting through symbols.¹⁷ This capability not only enables humans to give things “names”, but also makes possible a form of self-reflection in which the “process of naming is itself nameable” (Bateson 1979: 185). In turn, these self-reflective capabilities allow human beings to exercise a greater degree of “semiotic freedom” (Hoffmeyer). George Herbert Mead discusses this increased freedom through self-reflection with reference to what is normally understood as one’s mind:

17 Despite this very general and far-reaching statement, there are experiments that demonstrate that non-human animals also use basic abstract concepts. One such experiment shows how ducklings can differentiate between “same or different” (Martinho III/Kacelnik 2016).

Mind arises in the social process only when that process as a whole enters into, or is present in, the experience of any one of the given individuals involved in that process. When this occurs the individual becomes self-conscious and has a mind; he becomes aware of his relations to that process as a whole, and to the other individuals participating in it with him. [...] It is by means of reflexivity – the turning-back of the experience of the individual upon himself – that the whole social process is thus brought into the experience of the individuals involved in it; it is by such means, which enable the individual to take the attitude of the other toward himself, that *the individual is able consciously to adjust himself to that process, and to modify the resultant of that process in any given social act in terms of his adjustment to it.* (Mead 1967: 134; emphasis added)

As Mead emphasizes, the ability to reflect on the process of thought and action is not something divine or transcendental, but emerges from the processes of the central nervous system. Importantly, this self-reflexive ability provides humans with a greater range of freedom than other living beings. For Mead, the seemingly simple ability to stop and reflect on one's cognitive processes (i.e. thinking) opens a space in one's mind for altering the interrelations between symbolic signs and intended action. Or, in Mead's own words, "when he stops, mind, we say, is freed" (ibid.: 122).

Nevertheless, Mead never tires of emphasizing that this process of reflection is not merely an individual activity, but also an inherently social one. In other words, language and, therefore, mind only occur through the interaction both with one's environment and with other human beings. Self-consciousness and the self are therefore not atomistic and independent, but created through the material and social world that it is embedded in. Mead explains,

What goes to make up the organized self is the organization of the attitudes which are common to the group. A person is a personality because he belongs to a community, because he takes over the institutions of that community into his own conduct. He takes its language as a medium by which he gets his personality, and then through a process of taking the different roles that all the others furnish he comes to get the attitude of the members of the community. Such, in a certain sense, is the structure of a man's personality. [...] *The structure, then, on which the self is built is this response which is common to all, for one has to be a member of a community to be a self.* (ibid.: 162; emphasis added)

Biologically, this primordial cooperative sociability is explained by the development of mirror neurons.¹⁸ In a general sense, mirror neurons enable the mind to grasp

18 Mirror neurons were discovered in the early 1990s in Parma, Italy, by a team of scientists led by Giacomo Rizzolatti who were analyzing the brains of macaque monkeys and their cognitive abilities to plan movements. They discovered neurons in the F5 region of the frontal cortex that not only fired before the monkey had grabbed a peanut, but also when a researcher took

another mind “as if” the emotions, thoughts and behavior of the other were one’s own (Damasio 2003: 115). According to Rizzolatti and Sinigaglia, however, this process should not be understood as reflexive but instead as immediate and empathetic:

The instantaneous understanding of the emotions of others, rendered possible by the emotional mirror neuron system, is a necessary condition for the empathy which lies at the root of most of our more complex inter-individual relationships (Rizzolatti/Sinigaglia 2008: 190-1).

Mirroring the other in a direct, first person and pre-reflexive manner enables people to empathize with other humans – and other living, sentient beings. This basic insight that humans are not simply reflexive and rational but also inherently social and empathetic beings is reflected in much recent research in other scientific fields (Waal 1996, 2009; Fehr/Schmidt 2006; Kolm/Ythier 2006; Tomasello 2009; Rifkin 2009; Bowles/Gintis 2011; Baron-Cohen 2011; Batson 2011; Jensen et al. 2014; Bregman 2020).¹⁹ The important point here, however, is that mirror neurons enable a pre-reflexive and primary sociality that promotes the development of self-reflexive individuality in and with others. In this sense, Rizzolatti and Sinigaglia write,

The clarification of the nature and reach of the mirror neuron systems then provided us with a base from which to investigate the cerebral processes responsible for the vast range of behaviour that characterizes our daily existence, and *from which we weave the web of our social and interindividual relations*. (Rizzolatti/Sinigaglia 2008: 192-3; emphasis added)

some peanuts. Soon afterwards, they studied human brains and found a similar reaction: neuronal activity was detected in an individual when they saw other humans act, even though they were not acting themselves (Rifkin 2009: 82). This discovery triggered a burst of research that would go on to support an embodied and social theory of mind in which not reason, but emotions – and, more specifically, empathy and cooperation – stand at the center of human existence.

- 19 Randall Collins, for example, confirms this insight in his book *Violence: A Micro-sociological Theory* (2008): “Humans have evolved to have particularly high sensitivities to the micro-interactional signals given off by other humans. Humans are hard-wired to get caught in a mutual focus of intersubjective attention, and to resonate emotions from one body to another in common rhythms. This is an evolved biological propensity; humans get situationally caught up in the momentary nuances of each other’s nervous and endocrinological systems in a way that makes them prone to create interaction rituals and thus to keep up face-to-face solidarity. I am making more than the banal point that humans have evolved with large brains and a capacity for learning culture. We have evolved to be hyper-attuned to each other emotionally, and hence to be especially susceptible to the dynamics of interactional situations. The evolution of human egotism, then, is far from primary; it emerges only in special circumstances, for the most part rather late in human history.” (Collins 2008: 26-7)

This understanding of mind emphasizes the ecological principle of interdependence and co-originality of the self and the other, which, in this case, must also be interpreted as the individual and society.

In a general sense, we could therefore say that mirror neurons bridge minds and weave them into a network of “common mind[s]” (Pettit 1993). In other words, mirror neurons provide humans with an elementary and underlying shared experience and a shared reality. Here, we are reminded of Elinor Ostrom’s “interdependent situations” (E. Ostrom 1998: 1) that constitute most of people’s existence and consciousness. As Rizzolatti and Sinigaglia explain:

The mirror neuron system and the selectivity of the responses of the neurons that compose it, produce a *shared space of action*, within which each act and chain of acts, whether ours or ‘theirs’, are immediately registered and understood without the need of any explicit or deliberate ‘cognitive operation.’ (Rizzolatti/Sinigaglia 2008: 131; original emphasis)

Mirror neurons generally enable individuals to develop a shared language, shared thoughts and shared, collective actions through the imitation of the other. Michael Bratman echoes this insight in his notion of shared intentions, which “consists in a public, interlocking web of appropriate intentions of the individuals” (Bratman 1999: 9). Or, as Mead explains, “the beginnings of the process of communication [are found] in the co-operative process, whether of reproduction, caring for the young, or fighting” (Mead 1967: 234). It can thus be said that cooperation lies at the beginning of all individual development and is most clearly symbolized by parents caring for their children. Nevertheless, it must also be noted that this cooperation can be conflictual or competitive. Or, conversely, the basis of a competitive or conflictual relationship implies that two parties share a *common* reality – of which they are also a result. For if a reality was not primarily interdependent and shared, conflict would not even arise.

In another sense, we could possibly say that one’s mind does not exist ‘in one’s head’, but rather ‘out there’ in one’s interactions with society and in the world. In the words of Mead, it is the “generalized other” that is incorporated and reproduced through mirror neurons and role-playing games (Mead 1967: 152–64). For this reason, we could not only argue that language, but also mind, thoughts and “reality” should be understood as an “irreducibly social good” (Taylor 1995) that people co-create and inherently share. However, this shared mind-language-reality is not merely limited to the social sphere but includes material reality as well. In this sense, Mead argues that “consciousness as stuff, as experience, from the standpoint of behavioristic or dynamic psychology, is simply *the environment* of the human individual or social group” (Mead 1967: 111; emphasis added). Subjective mind is therefore always objectified in its existing social and natural conditions.

What was previously understood as nature as a commons now flows over into a type of social commons that lays the foundation of both our social realities and our individualities. In his article *Reality as Commons*, Weber explains,

The commons of reality is a matrix of relationships through which aliveness is unfolding in ecosystems and history. It conveys the aliveness of biological and human communities from a perspective of metabolic dependency, exchanges of gifts, and the entanglement of actors within their vectors of activity. Living participants bring each other into being by establishing relationships (metabolism, predator/prey relationships, social ties), thus producing not only their environments but their very identities. Thus, the commons describes an ontology of relations that is at the same time existential, economic and ecological. It emphasizes a process of transformation and identity formation that arises out of a mutuality that is not only material, but also experienced [and symbolic]. (Weber 2015)

From this perspective, all our interactions constitute our shared, common reality. The fabric of our very existence could thus be understood as a commons – all of reality as a commons. Or in the words of Jean-Luc Nancy, all beings exist in relationships of “being-in-common”, which is not to be thought of as oneness or unity of a common substance, but is rather constituted by the singularities of diverse beings (Nancy 1993: 30, 69). This being-in-common or reality-as-a-commons would therefore obviously include acts of sharing, but also border walls, conflicts and war. Although these latter examples might be attempts to exclude, subdue or even eliminate the other, they nevertheless bring about the common reality that people inherently co-inhabit, co-create and, thus, share. In this sense, it could even be said that reality as a commons is the bedrock and horizon of the interdependent existence of humans and the non-human world.

While this concept of reality as a commons might appear to be overly abstract and vague, it is clear that we must not confuse it with Elinor Ostrom’s notion of common pool resources or common property arrangements. Instead, this understanding of commons goes beyond them and should, rather, be understood as a “way of entering into relationships with the world, both materially and conceptually” (Weber 2015). Moreover, as I shall later argue in more detail, this understanding provides us with the adequate concepts to demand that people should have the right and the opportunity to codetermine their shared common reality.

5.6 Ecological freedom, democracy and care

As might be evident by now, this notion of a shared reality-as-commons based on interdependent self-organization in ecosystems requires us to reformulate the understanding of autonomy and democratic freedom I developed above with refer-

ence to David Held and others. Recall that Held's principle of autonomy was based on the individual's capability and right to change the conditions under which it lives. Although this represents an advance in relation other notions of freedom in that it conceptualizes democracy as a form of living, I would agree with James Tully that it nevertheless conceives of autonomy as "the supreme value and [in turn] derives universal environmental rights, duties and institutions from it" (Tully 2008a: 74). On the basis of our discussion of nature, however, we can now see that it is important to invert this relationship and embed the principle of autonomy in basic principles of ecology. Fritjof Capra, for example, has identified the principles of "interdependence, recycling, partnership, flexibility, diversity, and, as a consequence of all of those, sustainability" as characteristic of ecological reality (Capra 1996: 304). Thus, in its most simple sense, an ecological reinterpretation of Held's autonomy principle can ultimately provide us with a concept of democratic freedom based on the sustainable self-organization of diverse organisms within an ecological network of interdependencies. In this section, I would therefore like to flesh this idea of ecological freedom out. I argue that the principle of interdependence that lies at the heart of this concept brings us to an ethic of care that should ultimately guide and constitute human freedom.

Let me begin this discussion of ecological freedom by returning to Andreas Weber's essay *Enlivenment*. In this essay, Weber presents a notion of autonomy that is not only biologically embodied but also interrelational. He calls this "freedom-in-and-through-relation" (Weber 2013: 40) and explains this notion of freedom with reference to interdependent ecological networks or "natural commons":

A multitude of different individuals and diverse species stand in various relationships to one another – competition and cooperation, partnership and predatory hostility, productivity and destruction. All those relations, however, follow one higher principle: only behaviour that allows for the productivity of the whole ecosystem over the long term and that does not interrupt its capacities of self-production, will survive and expand. (ibid.: 37)

If we follow Weber here, we can say that the relations of the individual in and with the entire ecosystem become central to our understanding of ecological freedom. For an organism can only flourish sustainably if its ecological conditions are intact over longer periods of time. The important point is therefore not simply the maximization of individuals' autonomy, but rather the reproduction and codetermination of the systemic socio-ecological conditions that enable individual freedom.

That being said, one might try to conceive of individual freedom – in accordance with a particular organic metaphor – as the subjugation of the individual to the whole. But this would be a mistake. There exists a familiar critique that says that holistic and organicist conceptions of life inherently lead to totalitarianism, as was the case with National Socialism (Harrington 1996). The understanding of

ecological relationships defended here, however, is fundamentally at odds with this totalitarian and hierarchical interpretation of society as an organism. Totalitarian metaphors of an organic society have often been based on notions of Social Darwinism which, in turn, is used to legitimate a hierarchical interpretation of nature and a society divided into charismatic leaders and sheep-like followers. Only by suppressing one's individuality can the existence of the whole be secured. Contrary to this interpretation, the notion of interdependent ecological systems I have been developing implies that self-organizing organisms and biological diversity are necessary for the functioning of the whole ecological network. Or, in Weber's words once more, "the individual can only exist if the whole exists and the whole can only exist if individuals are allowed to exist" (Weber 2013: 32). Although this definition goes in the right direction, I consider the notion of being "allowed to exist" to be somewhat problematic. Individual existence may be reduced to life in prison. The fundamental point in this ecological and systemic notion of freedom is, however, that the thriving of individuals depends on a 'healthy' society and the flourishing of society depends on a healthy individual. We cannot have one without the other: the whole and its parts are interdependent and co-create each other. In order for this to happen, it is necessary to see both "the forest and the trees" (Moran/Ostrom 2005) in their interwoven relationships with one another. For it is this interdependent and systemic understanding that must complement and transform Held's notion of individual autonomy and democracy in order to make it more ecologically sound and open to a more far-reaching notion of commons.

First and foremost, this implies that the networked structures of living systems are not hierarchical. In simple terms, all organisms – including all people – are assumed to possess the ability to self-organize and it is assumed that all parts contribute to the interdependent co-creation of the whole. The biological and physical realm of human reproduction and production is thus no longer conceptualized as the realm of necessity and unfreedom. Nevertheless, while human beings possess the capability to reflect, reason and self-organize, they are dependent on the self-organization and well-being of other organisms, populations and their ecosystem at large. They should therefore be understood as merely one component in a larger, complex ecosystem. According to Weber, this concept of ecological freedom is what underlies the commons:

The basic idea of the commons is therefore grounded on an intricate understanding of freedom and its relationship to the whole: the individual enjoys many options of self-realisation but the only viable ones depend upon the flourishing of the life/social systems to which she belongs. To organize a community between humans and/or non-human agents according to the principles of the commons means to increase individual freedom by enlarging the community's freedom. Both expand together – and mutually through one another. (Weber 2013: 40)

Again, this is not to say that the relationship between the individual parts and the whole are always harmonious. That would be a naïve and all-too optimistic interpretation of mutual interdependence. Freedom should rather be thought of as a process of continual communication and negotiation both over the necessities of material existence and between the individual parts and the whole. Thus, we could conclude that individual freedom is not only an in-and-through-relation, but, more precisely, must be understood as a form of being with, through and against the other.

In order to understand what this means, let us go through each term: freedom with, through and against. 'Freedom with' signifies people's inherently common reality, which they share and therefore codetermine – irrespective of whether they have the political or legal right to codetermination. It emphasizes the co-origination of self and other and one's dependence on the other. Importantly, this dependence is positively connoted here because it is only with the other that one can realize common ends and satisfy common needs. Moreover, this relation highlights the intrinsic value of social interactions, collective action and convivial modes of being. In this sense, the principle underlying 'freedom with' can be understood as the Kantian categorical imperative that all (rational) beings must each be considered as an end in themselves (Kant 2002: 45; 4:429), whereby we would replace the term rational with the term sentient, extending its sphere of relevance to all living beings and thereby possibly also ecosystems in general. In contrast, 'freedom through' denotes the utilitarian and instrumental character of relationships, in which people can use one another and their environment. We use people and things to realize certain ends that are either held in common or not. Both freedom 'with' and 'through' resemble a collective notion of positive freedom, understood as the ability to act collectively, and social freedom, understood as the ability to codetermine one's conditions of existence. Finally, 'freedom against' emphasizes that people have conflicting values and ends and therefore need to negotiate how these differences can co-exist without negating one another. While 'freedom against' appears similar to negative freedom or 'freedom from', the latter is, in fact, a means of solving the conflicts that arise in relation to differences by excluding or negating the other. Instead, 'freedom against' implies that conflicting interests and ends must be dealt with not through exclusion but, rather, through negotiation. This is not to say that all conflicting ends have a right to be realized, but rather that it must be negotiated which means and ends more adequately fulfill the flourishing of its parts and the reproduction of the whole. In this sense, 'with, through and against the other' are the fundamental criteria of freedom based on ecological interdependence.

Lastly, it should be noted that the three aspects of ecological freedom must always be acknowledged simultaneously. While it is possible that one aspect will be emphasized in certain relationships, other aspects will be accentuated in other re-

relationships. None of these aspects can entirely be subtracted from the definition of ecological freedom. As we can see, the negation of 'with' would imply a purely instrumental and conflictual relationship with others. This comes close to the notion of negative freedom in which one's atomistic and supposedly independent subjective rationality is defined as the cornerstone of society. The denial of either 'through' or 'against' would, in turn, lead to the subjugation of one's individuality to the whole and thus negate one's individual freedom. As we see, this notion of freedom aims at maintaining a dynamic tension between the parts and the whole while not falling into the traps of focusing on merely one aspect of its tripartite definition. In this sense, I would say that ecological freedom emphasizes individuality without being either totalitarian or atomistic and solipsist.

As we see, ecological freedom thus emphasizes the importance of other living beings as a precondition for one's own material existence and actual freedom. Hence, ecological freedom is always both embedded and embodied freedom. As Weber elaborates,

the enlivened idea of freedom does not do away with the classical-humanistic [and liberal-negative] account[s] of autonomy (as strictly biologicistic accounts do), but rather it limits its absoluteness to an 'embodied relativity'. There is no such thing as individual freedom detached from the living world, and any attempt to claim it inevitably will violate the necessities of embodied life, of an organic being's living needs. So from an Enlivenment viewpoint freedom (as enfram[ed] in constraint) is a natural process. (Weber 2013: 40)

Here, freedom with, through and against is simply interpreted as a process of communication with one's ecosystem and not merely with one's fellow human beings. This generally implies that people recognize that other organisms have an intrinsic right to exist and are the basis for human existence and the reproduction of the entire ecosystems which they co-inhabit (the aspect of 'freedom with'). Importantly, this would imply that humans provide organisms, other animals and wider ecosystems with legal rights that recognize their rights to life and liberty. This notion of ecological freedom would, however, also imply that humans can use these organisms and ecosystems to satisfy our needs ('freedom through'), while not negating the needs of the other (again, 'freedom with'). Finally, this notion can suggest that humans must somehow negotiate over conflicting ends and see to what extent these conflicting ends support the reproduction of the whole and the flourishing of each individual part.

But how can this negotiation process between human and non-human organisms take place? On the one hand, the notion of ecological freedom should provide people with a point of normative orientation in their everyday interactions with the non-human world. On the other hand, it should also provide people with the ability to file a suit in the name of the non-human world when the rights of cer-

tain organisms or ecosystems are violated. While this idea might sound somewhat peculiar, the discussion on the rights of nature is not new (Stone 1972, 2010) and legal systems that take the rights of the non-human world into account already exist (La Follette/Maser 2017). If we take the rights of sentient non-human organisms seriously it would, however, ultimately demand that the non-human world would not only be increasingly integrated into the legal framework as an object, but also as participants in the democratic processes of law and policy making. Considering the increasing sphere of democratic integration from white male adults who own property, to white male workers, to people of color and to women, this would be a logical conclusion of this historical development (Hilpert 1999).

Although an in-depth analysis of this important topic cannot be adequately dealt with here, I nevertheless would like to briefly sketch how we might be able to integrate the non-human world into democratic processes. Let me begin my sketch with Bruno Latour, who argues for nothing less than a new constitution that would realize a “Parliament of Things” (Latour 2004). In order to understand this somewhat fantastical notion, we need to return to Latour’s previously mentioned critique of the subject-object and human-nature dualisms that underlie our conceptions of reality and politics. Here, the nonhuman world is conceptualized as inanimate and mute (Latour 2004: 62), which denies its ability to voice its interests and opinions and, thus, inherently excludes it from the realm of politics (ibid.: 62). Yet Latour argues that “speech is no longer a specifically human property, or at least humans are no longer its sole masters” (ibid.: 65). The reason for this is that “facts” do not “speak for themselves” (ibid.: 67), but are always interpreted and voiced by scientists. As Latour explains in his book *We Have Never Been Modern*, “these facts indeed represent nature as it is. [But] [t]he facts are produced and represented in the laboratory, in scientific writings; they are recognized and vouched for by the nascent community of witnesses” (Latour 1993: 28). And as in the case of the “ecological crisis”, he emphasizes in *Politics of Nature* that “far from suspending discussion over matters of fact, every piece of scientific news, on the contrary, throws oil on the fire of public passions” (Latour 2004: 65). Simply put, supposed empirical facts and their interpretation are highly contested and, therefore, highly political. For this reason, Latour argues that “each [scientific] discipline can define itself as a complex mechanism for giving *worlds the capacity to write or to speak*, as a general way of making mute entities literate” (ibid.: 66; original emphasis). Thus, Latour contends that parliaments need not include elephants, trees and stones in their rooms and debates, but rather scientists, who will then be the “spokespersons of the nonhumans” (ibid.: 64). Ultimately, these scientists shall complement the “subjective” opinions of politicians, intertwining the supposed subjective and objective perspectives of reality into a unified “association of humans and nonhumans” (ibid.: 70-77) and in a process of co-creation. While I would agree with the basic analysis and aim of Latour’s argument, I find it problematic to assume that

only scientists in lab coats can interpret nature and provide nature with a voice. While Latour appears to defend a widening of democratic participation to include nonhuman beings, by simply opening parliament's doors to scientists, democratic rule can lopsidedly become a rule of experts. According to this interpretation of Latour's work, such a "Parliament of Things" would thus not only disempower the people who work in and with ecosystems on a daily basis (e.g. farmers, fishers, forest rangers etc.), but also factory workers and urban office workers, who support ecological issues and want to make their neighborhoods 'greener'.

For this reason, I would argue that nature is neither mute nor can its voice only be represented by scientists. Instead, because all humans are always in interaction in and with their ecosystems, 'nature' perpetually 'speaks' with us and is constantly being interpreted by humans. John Dryzek gives a rather simple example of this communication between humans and the non-human world, "If the topsoil on which my crops depend is shrinking, then clearly nature is 'telling' me something" (Dryzek 1987: 207). This example can be extended to the home-owner in a suburb, who interprets the shriveled leaves as a sign to water her tomato plants, or to the urban dweller, who wants to have more bike paths and parks in order to improve the air quality, climate and living conditions in the city. As Christopher Stone once put it in his influential paper "Should Trees Have Standing?" from 1972,

I am sure I can judge with more certainty and meaningfulness whether and when my lawn wants (needs) water, than the Attorney General can judge whether and when the United States wants (needs) to take an appeal from an adverse judgment by a lower court. The lawn tells me that it wants water by a certain dryness of the blades and soil – immediately obvious to the touch – the appearance of bald spots, yellowing, and a lack of springiness after being walked on; [but] how does 'the United States' communicate to the Attorney General? (Stone 2010: 11)

In this sense, the communication between humans and 'nature' can possibly be more concrete and straightforward than the communication between social institutions such as 'the national government' and 'the law' or 'the market'. And in contrast to Bruno Latour's limitation to scientists as the sole spokespersons of a supposedly mute nature, we must therefore concede that all people equally and perpetually partake in conscious or unconscious communication processes with the ecosystems they inhabit.

Putting human-nature relations in this perspective, I find Robert E. Goodin's argument in his article "Enfranchising the Earth and its Alternatives" (1996) to be a rather convincing strategy to integrate nature into politics. Like Latour, Goodin argues that as it is impossible to integrate future generations (i.e. the as yet unborn) into politics, so it is also impossible to integrate "birds and bees and boulders" into democratic processes (Goodin 1996: 841). According to Goodin, this practical difficulty does not, however, negate the desirability and necessity of enfranchising

nature. Because of this apparent paradox, Goodin argues that we must not hold on to the “view of democracy as necessarily entailing ‘one person, one vote’, with each person representing his or her own interests” (ibid.: 844). Instead, he contends that

it might be empirically more realistic, as well as being morally and politically preferable, to think instead of democracy as a process in which we all come to internalize the interests of each other and indeed of the larger world around us. [...] The best we can hope for is that nature’s interests will come to be internalized by a sufficient number of people with sufficient leverage in the political system for nature’s interests to secure the protection that they deserve. (ibid.)

Thus, nature’s interests should not simply be represented by scientists, but more widely by “people qua voters” (ibid.). Yet this only occurs if “people come to *take* interest in nature’s interest” (ibid.; original emphasis). According to Goodin, this leads to a twofold goal in democratic theory: firstly, the interests of nature should be internalized by more and more people and, secondly, the political system must be “maximally responsive to those expressions of interest” (ibid.). Considering these two goals – and proceeding along a line of thought similar to the Ostrom’s – Goodin defends a “direct, grass-roots, participatory democracy” (ibid.: 849), because it breaks down concentrations of power and opens up political discourse to a wider group of people. As Goodin explains:

Participatory democracy makes the political system more responsive to green values because the more others [i.e. other people] there are who have to be given an explanation, the more likely it is that there will be someone among them who internalizes the interests of nature. The larger and more diverse the electorate, the more likely is there to be some nature-lover who is going to ask, ‘What about the effects of all this on nature?’ (ibid.: 845)

Yet in contrast to Elinor Ostrom, Goodin bases this argument not on “empirical sociology”, but rather on the “analytics of participatory government and the law of large numbers”, which assume that “every proposal has to be justified to everyone” and that “at least among very large electorates, virtually every point of view is likely to be represented” (ibid.). This leads to an important consequence on an individual level, which is that “having to defend our positions publicly makes us suppress narrowly self-interested reasons for action and highlight public-spirited reasons in their place” (ibid.: 846). Simply put, if more people participate in political negotiations and decision-making procedures, the more likely public interests and the interests of nature will be represented and considered. But as Goodin notes, even if a constituency might not include ecologically minded people, assuming that these concerns might be expressed in discursive arenas can also lead to the “anticipatory internalization” of the interests of the non-human world (ibid.: 846-7). In sum, although the non-human world does not speak for itself, wider participation

in democratic deliberation increases the likelihood that nature will be integrated into and represented in politics and the voices of the non-human world ultimately become internalized into one's own consciousness. The ecological other becomes an increasingly integral part of the self and of society's organization. Here, it must be emphasized that the notion of wider participation does not simply imply a broadening of the constituency on higher political levels, such as that of the nation-state, but rather also a 'deepening' of democracy, in which political participation is increased and intensified on all political levels and in various social realms.²⁰ As we see, this ecological and normatively instrumental justification of participatory democracy complements Elinor Ostrom's theory of democratic governance, which is largely based on empirical evidence, yet also advocates a decentralized and participatory democracy in a polycentric political system.

This shift in understanding from an individualistic and entirely anthropocentric understanding of freedom to a social and ecological notion forces us to rethink our basic ethical relation to other human beings and to the non-human world. In the most general terms, the relationship to other humans and the non-human world should be interpreted as a resonant relationship of communication and negotiation. Furthermore, by recognizing the inherent interdependence of living systems, ecological freedom is neither based on the negative notion of non-interference nor on a utilitarian ethic of the maximization of utility for the greatest number. I would also argue that ecological freedom goes beyond Honneth's previously discussed concept of social freedom based on (the struggle for) mutual recognition between humans. Instead, I would argue that ecological freedom is based on a care ethic – towards one's fellow human beings and the non-human world. In this sense, I would appeal to the definition of care by Joan Tronto and Berenice Fisher and explored in Tronto's 1993 book *Moral Boundaries: A Political Argument for an Ethic of Care*:

On the most general level, we suggest that caring be viewed as a species [i.e. social] activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web. (Fisher/Tronto in Tronto 1993: 103; original emphasis)

Although care is often associated with the relationship between parents or, more specifically, mothers and their children, I would agree with Tronto that care is a more general concept that, firstly, refers to a processual activity, and, secondly, is able to describe an individual or collective relationship with social institutions, non-human beings or an inert object. Here, it is important to emphasize that the

20 See for example *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance* (2003) edited by Archon Fung and Erik Olin Wright.

care ethic implied here is not hierarchical and paternalistic; instead it is based on the recognition of others' equal capabilities and rights to self-organize. Ecological freedom based on a care ethic thus emphasizes the equal rights of all living beings to individual and interdependent action and the responsibility to support the freedom and flourishing of all other living beings. In the words of Karen Barad,

Intra-acting responsibly as part of the world means taking account of the entangled phenomena that are intrinsic to the world's vitality and being responsive to the possibilities that might help us and it flourish. Meeting each moment, being alive to the possibilities of becoming, is an ethical call, an invitation that is written into the very matter of all being and becoming. We need to meet the universe halfway, to take responsibility for the role that we play in the world's differential becoming. (Barad 2007: 396)

Interpreting this ethical call as a call to an ethics of care, we must, however, emphasize that caring does not imply an altruism that negates self-interest in the name of the other. Instead, it includes a fundamental notion of self-care that is balanced with the care for others and the interdependent processes of becoming (Tronto 2013: 32). In other words, self-interest need not be in conflict with the interests of others. Nevertheless, care does not realize a harmonic unity, whether through self-negation or the invisible hand of the market; rather, it is a form of "differential becoming". Conflict can arise precisely from diverging values of care. Hence, practices of care require the negotiation of diverging interests and values, accompanied by a basic recognition of and interest taken in the other. Grounding our notion of freedom on an ethic of care therefore implies that we break with the tacit 'ethic' of atomistic self-interest that the notion of negative freedom assumes. We would therefore shift our focus from the right of non-interference and the unlimited accumulation of wealth to the care for reproduction and flourishing of the constituent parts of the whole. By placing a care ethic at the foundation of our notion of freedom, I believe that we would ultimately be bringing life and freedom into alignment.

Here, someone might ask if we truly need a specific ethos for a specific legal framework. My short and simple answer to this is yes. The reason for this is that social institutions can only be maintained if they are also morally justified and upheld. A moral justification implies not only the approval of the existence of certain institutions, but also patterns of both individual and collective practices that uphold and reproduce these institutions (Jaeggi 2018a, 2018b). Following Hegel, I would argue that social institutions are not merely created through reason and contracts, but are brought about through unconscious, incorporated and habitual patterns of action which are, in turn, structured according to normative values of right and wrong. This is what Hegel generally refers to as "*Sittlichkeit*". We may found new institutions, but if we do not uphold them through ethical conviction

and repeated actions, they will most likely disappear again. In this sense, we could also say that (democratic) institutions of society are no better than the people (and their actions) in that specific society. From this perspective, it is our norms, our ethics and our corresponding actions that must bring about the social institutions we want.

By placing care at the center of our relationship to ourselves, other humans and the non-human world, we not only change our notion of freedom, but also transform our understanding of politics and the legal framework that structures society – and the distribution of care work. In general terms, this shifts our understanding of politics from a relationship that is primarily struggle and conflict to a one of mutual, reciprocal care. Furthermore, the emphasis on care complements a focus on individual rights with one's responsibilities towards others. While the right to self-organize is a necessary pre-requisite of the right to care and flourish, Tronto emphasizes the importance of responsibilities in what she calls a "caring democracy":

Most importantly, rather than being a set of principles from which one deduces proper action, a feminist democratic ethic of care begins by envisioning a series of caring practices, nested within one another. The broadest of these nested practices are those that pertain to society as a whole [...]. The goal of such practices is to ensure that all of the members of the society can live as well as possible by making the society as democratic as possible. This is the essence of 'caring with.' While living in a democratic manner is not the only goal of care, or of human life, in a democratic society it is the goal of democratic caring practices. Thus, *democratic politics should center upon assigning responsibilities for care, and for ensuring that democratic citizens are as capable as possible of participating in this assignment of responsibilities.* The task of a democratic politics is to affix responsibility, and as we come to recognize the centrality of care for living a decent human life, then the task of democratic politics needs to be much more fully focused upon care responsibilities: their nature, their allocation, and their fulfillment. (Tronto 2013: 30; original emphasis)

By interpreting freedom and democracy in this manner, we could say that democracies that clearly separate the private from the public and that are coupled with self-regulating markets limit the possibilities for individuals to care for the socio-ecological problems that determine their common reality. As we have already seen, the self-limitation of politics to the realm of the state has created a democratic deficit that can also be interpreted as a structural caring deficit in contemporary societies. These legal institutions stop people from taking responsibility and caring for social and ecological problems because the root of these problems is ultimately situated in the private realm which is largely shielded from democratic interference – be that by the state, civil society or communities.

Furthermore, the existing politics of care imply that the responsibilities of care are unequally distributed; while some people are overburdened with classical ‘private’ and often unpaid care work (e.g. childrearing, caring for the sick and elderly, housework), few people have the resources to care for common affairs (e.g. politicians, philanthropists, environmentalists) and others are largely freed from both these kinds of care work (e.g. people pursuing accumulative ‘economic’ activities). So while some people have a “free pass” to extract and accumulate wealth – in the name of caring for themselves and society –, the rest of society must do the care work that repairs the socio-ecological organism(s) and keeps it (or them) alive. Thus, legal arrangements define and distribute care work and the corresponding responsibilities within society (Tronto 2013: 32–3). In this sense, it is not simply of central importance to define and demand rights for humans and the non-human world (e.g. the right to clean water, to education etc.), but also to demand a fair distribution of caring possibilities and obligations that enables the maintenance and reproduction of these freedoms for all beings (Held 1995: 203).

That being said, I would like to further develop an understanding of democracy that is based on the notion of ecological freedom I have elaborated so far. In order to do this, I now turn to Fritjof and Capra’s notion of eco-law, developing it with reference to James Tully’s work on the “civic tradition” of democracy, which provides us with an important stepping-stone for an ecological democratic theory of the commons.

5.7 The civic tradition of ecological democracy and commoning

In his book *On Global Citizenship* (2014), James Tully distinguishes between civil and civic traditions of democracy. Similarly to Fritjof Capra and Ugo Mattei, he recognizes that the civil tradition is problematic because it limits people in their capabilities to change their legal frameworks to adequately deal with and care for social and ecological problems. To understand the civic tradition of democracy fully, it may, therefore, be helpful to briefly discuss what Tully understands by the civil tradition of democracy.

The civil tradition of democracy

According to James Tully, the civil tradition is based on a dualistic conception of society that differentiates between individuals and their representatives, on the one hand, and citizens (*demos*) and their legal framework – understood as the constitutional rule of law (*nomos*) – on the other (Tully 2014: 11). This conception is similar to the conceptions outlined above of both protective, legal (minimal) and formal, positive (medium-range) democracy. Here, the “constitutional rule of law

is the first condition of citizenship”, which is “defined as a status (state or condition)” (ibid.). Rights and obligations are *granted* to the individual by the hierarchical authority of the state. Society is divided into the state-individual, state-market or state-civil society dichotomies that are found in the writings of Hobbes, Locke and Kant. Tully lists four tiers of citizenship rights and duties within this civil tradition: (1) civil liberties, understood as private autonomy or, with reference to Benjamin Constant, the liberty of the moderns; (2) representative government and the liberty of the ancients, understood as the opportunity to participate in public autonomy; (3) social and economic rights, understood as substantive yet rather weak rights to education, housing and health; and finally, (4) modern minority rights (ibid.: 12–17). As Tully emphasizes, the “modern liberty to participate in the private economic sphere and not to be interfered within it; the right to own property and enter into contracts” (ibid.: 13) lies at the center of the first tier civil liberties. In this sense, the state exists primarily to pacify our supposedly antagonistic and conflicting, egotistical interests. Again, we confront the state-individual dichotomy which must also be interpreted as a dichotomy of subjective, egotistical or, in Christian terminology, ‘fallen’ individuals and objective, robust and ‘universal’ laws. Or, in Kantian terms, it is a rational and universal legal order that can be realized even by a “nation of devils” (Kant 2006: 90).²¹ As becomes clear, this concept of civil liberty turns the social and ecological ontology I develop in this chapter on its head by assuming independent and conflicting individuals as primary, the interference of others as

21 In the words of Immanuel Kant: “Establishing a state, as difficult as it may sound, is a problem that can be solved even for a nation of devils (if only they possess understanding). The problem is as follows: ‘To form a group of rational beings, which, as a group, require universal laws for their preservation, of which each member is, however, secretly inclined to make an exception of himself, and to organize them and arrange a constitution for them in such a way that, although they strive against each other in their private intentions, the latter check each other in such a way that the result in their public conduct is just as if they had no such evil intentions.’ It must be possible to solve such a problem. For it is not precisely how to attain the moral improvement of the human being that we must know, but rather only how to use the mechanism of nature on human beings in order to direct the conflict between their hostile intentions in a people in such a way that they compel each other to submit themselves to coercive laws and thereby bring about the condition of peace in which laws are in force. In the case of actually existing, however imperfectly organized states one can also observe this, in that in their external conduct they already closely approximate what the idea of right prescribes, although an inner morality is certainly not the cause of this conduct (and it should not be expected that a good state constitution would arise from an inner morality, but rather conversely that the good moral education of a people would follow the former). Hence reason can use the mechanism of nature, in the form of selfish inclinations, which by their nature oppose one another even externally, as a means to make room for reason’s own end, legal regulation, and to thereby promote and secure, insofar as it is within the power of the state to do so, both internal and external peace.—This is the essence of the matter: Nature wills irresistibly that right ultimately attains supreme authority.” (Kant 2006: 90–91)

cumbersome and participation in social activities and common affairs as optional. Here, democracy and processes of democratization are “equated with tier-one civil liberties (neoliberal marketization) and a short list of democratic rights (primary elections)” (Tully 2014: 29). In this dualistic model, self-organization is not understood as an activity of self-governance but rather as a “spontaneous” function of the self-regulating market as described by Hayek. As we have previously discussed in reference to the self-regulation of the market, the primacy of individual negative freedom and market competition lays heavy constraints on democratic freedom. The problem is that the civil tradition does not recognize the ecological, democratic freedom that would enable all people to participate in this process of multilayered, institutional self-organization and adaptation. Tully discusses this problem:

The civil tradition makes a fundamental distinction between the institutional rule of law and the citizen activities that take place within the boundaries of these institutional settings. The institutionalized rule of law exhibits a systemic or functional quality of formality and independence from the agents who are subject to it and act within its boundaries. This picture is encapsulated in the mantra, ‘rule of law not of men’. The features of institutionalization and rationalization that establish the independence of the rule of law from the rule of men and women consist in the definite rules, procedures and training of the institutional offices, the hierarchical, command–obedience relationships among the members, the specialized division of labour, the separation of knowledge from use, reflexive monitoring and the systematic application of coercion to align behaviour with rules. That is, it is the non-democratic and procedural character of the relationships within an institution that give it its formality and independence from the informal rule of men. The language of governance is replaced by that of administration, management, control, discipline, procedure, direction and monitoring. [...] *The roles of humans seem to disappear.* (Tully 2014: 55; emphasis added)

Here, we are reminded of Vincent Ostrom’s critique of the monocentric order. Yet, in contrast to Ostrom, Tully sees similar problems in representative democracies based on the civil tradition that uphold an abstract, formal and independent rule of law. Aside from the hierarchical and technocratic character of these social arrangements, it is important to note Tully’s conclusion that “humans seem to disappear” within such a framework. I find this point to be central because it is precisely in the name of individual negative freedom that the civil tradition is often so fiercely defended. Yet, from Tully’s perspective, the universal and abstract rules of property that are supposed to defend individual freedom simultaneously suggest its disappearance. How can this be? Much as in Hayek’s understanding of a dethroned democracy, political issues are delegated to experts who uphold the rule of law and implement adequate policies to maintain the functioning of the social body. As Capra and Mattei note, “since its foundation by Hugo Grotius, international law

has remained based on individualized Cartesian building blocks – legal persons in competition with each other within a mechanistic, depoliticized vision of law” (Capra/Mattei 2015: 117–118). As in Hermann Heller’s notion of authoritarian liberalism, Capra and Mattei describe this institutional arrangement as a type of legal absolutism. The individual is subjugated to the forces of the self-regulating open and competitive market and is unable to participate in the democratic self-organization of its common, institutional political-economic reality. Active and conscious participation in and care for the self-organization of society is thus constrained. Due to this democratic deficit, we can interpret the civil tradition to be politically disempowering – and antihumanistic. Furthermore, the apathy that results from it can turn into both hatred of established elites and hope for strong (authoritarian) leaders who will ‘set things straight’. The tragic irony, however, is that these new charismatic leaders are themselves subject to the structural constraints of the market and must often adhere to the ‘objective’ market forces under a new political banner.

The civic tradition of democracy

In contrast to this civil model of democracy, Tully develops an alternative understanding of citizenship that overcomes these dualistic problems and that can be interpreted as a democratic theory of our ecological concept of freedom. Tully calls this form of citizenship “civic”, in which the liberty of the ancients is prioritized over the liberty of the moderns. According to Tully, a fundamental difference between these two traditions is that while civil citizenship defines “a status within an institutional framework backed up by world-historical processes and universal norms, the [civic] tradition looks on citizenship as *negotiated practices*, as praxis – as actors and activities in contexts” (Tully 2014: 35). As we see, the civic tradition of democracy is very similar to Axel Honneth’s notion of social freedom and is based on the recognition that institutions must be upheld and reproduced by social practices. Similarly to our social and ecological interpretation of the individual, Tully also assumes an embodied subject that brings about institutions through its interactive relationships with others:

The [civic] tradition reverses this modernist, institutional orientation and takes the orientation of citizens in civic activities in the habitats they are enacted and carried on. Institutionalization is seen and analyzed as coming into being in unpredictable and open-ended ways out of, and in interaction with, the praxis of citizens – sometimes furthering, strengthening and formalizing these activities while at other times dispossessing, channeling, dominating, cancelling, downsizing, constraining and limiting. (Tully 2014: 35–6)

Here, citizenship is not granted and guaranteed by states but, instead, brought about through collective action and social freedom. In contrast to first and second-tier freedoms in the civil tradition,

the crucial kind of freedom is thus neither the freedom from relationships of interdependency (negative freedom) nor the freedom of acting in conformity with allegedly ideal and universal legal relationships that 'we' impose on ourselves (positive freedom). It is the proto-civic and civic freedom of negotiating and democratizing in/over the always less-than-ideal relationships in which we live and breathe and become who we are. The only guarantee of freedom and democracy is, not surprisingly, the daily cooperative practices of democratic freedom in webs of relationships and on the fields of possibilities they disclose. (Tully 2014: 52-3)

As we see, civic freedom is thus neither merely understood as negative or positive freedom but as action in, with and against others. Furthermore, political participation is not simply a right and possibility, but rather an act and a perpetual praxis of being free. As Tully explains:

The civic citizen manifests the freedom of participation. The free citizen is free in engaging in civic activities and, *eo ipso*, making these activities free. Civic freedom is not an opportunity but a manifestation; neither freedom *from* nor freedom *to* (which are often absent or suppressed), but freedoms *of* and *in* participation, and *with* fellow citizens. The civic citizen is not the citizen of an institution (a nation state or international law) but the free citizen of the 'free city': that is, *any* kind of civic world or democratic 'sphere' that comes into being and is reciprocally held aloft by the civic freedom of its citizens, from the smallest *deme* or commune to glocal federations. (Tully 2014: 39; original emphasis)

Translated back into our terminology, civic activities are a manifestation of ecological freedom with, through and against the other. In this sense, Tully's civic theory of democracy must obviously be understood as inherently participatory. We must, however, be precise in defining participation. Firstly, participation is neither to be limited to the realm of the state nor to be understood as something extraordinary, as if political engagement occurs after work and in our free time. Instead, participation must be understood as basic and constitutive of our interactions with the other. All activities are manifestations of participation in life, and it thus depends on everyday patterns of action that bring about different relationships and institutions. Or in other words: we cannot *not* participate in life and politics; the apolitical citizen is also inherently political. Political participation in everyday life can thus be more or less free. And by consciously acting in a self-organized manner, we make ourselves *even freer*.

Second, and as previously mentioned, participation is not something granted, but rather something realized through (collective) action and thus literally 'en-

acted'. Participation is thus not to be limited to actions *within* existing institutions (e.g. voting). Here, Tully defines four general types of civic activities, depending on the precise field of action one finds oneself in: (1) the range of activities available in and recognized by an existing government; (2) a certain range or "Spielraum" of "playing the civic game differently"; (3) the negotiation of governance relationships themselves; and (4) confrontation with the unjustified structural limits of the specific field (Tully 2014: 48-9). In this sense, Tully understands the processes of civic action as the participation in and transformation of existing relationships and institutions. As Tully explains:

The civic tradition simply does not have this disenfranchising disjuncture problem. By starting from the premise that any community subject to and affected by a relationship of governance that harms a public good is for that very reason a citizenry with the civic right to hold the responsible party accountable through civic negotiations, it links democratic organization, networkization and civitized institutionalization directly to the specific power relationship at issue and at the most effective sites. (Tully 2014: 82)

The right to participate in the democratic codetermination of one's common reality is therefore not something that is provided for by institutions, but instead something that is acted upon when people feel negatively affected by existing circumstances. Through this collective action, they – hopefully or ideally – alter and codetermine the social arrangements in which they live. In this sense, Tully concludes that "to *civitize* governance relationships is – eo ipso – to '*democratize*' them" (Tully 2014: 49; emphasis added).

With this differentiation of the fields of action, we can ask ourselves to what extent this civic tradition of democracy is to be equated with direct democracy. Firstly, it must be clarified that this model of democratic law-making is not to be confused with a Marxist model of direct democracy in which there is no separation of powers (Held 1987: 116). Although the separation of powers is rarely discussed in Tully's civic model of democracy, he does emphasize that the existence of institutionalized procedures is of fundamental importance for the existence, stability and reproduction of democracies. Tully clarifies,

This is not to deny the importance of institutionalized procedures. It is rather to observe that the way a person 'grasps' a procedural rule is not itself a procedure but a negotiated practice. [...] Both our understanding of the rule and the actual rule itself are immanent in [...] negotiated practices that cannot be circumscribed. *The living rule of law is the pattern of interplay and interaction of the negotiated practices.* This is the immanent or manifestation thesis of the civic rule of law. The unfolding of the rule of law, no matter how institutionalized and rationalized, is

internally related to the indeterminate negotiated practices of the law. In a word, civic citizens are 'constructivists'. (Tully 2014: 56-7; emphasis added)

The point Tully is making here is that the separation of powers and the enforcement of procedures is not something that societies can simply rely on, because they, too, are created through practice and subject to conflicting interpretations and negotiations.

According to this interpretation, I would argue that Tully's understanding of an institution is very similar to the one George Herbert Mead defines, in his social behaviorist terminology, as "developments within, or particular and formalized manifestations of, the social life-process at its human evolutionary level" (Mead 1967: 262). This interpretation of social arrangements supports the idea that the cultivation of a specific ethic manifests itself in specific social patterns of action (e.g. utility maximization or an ecological care ethic). In turn, the negotiated conflict over patterns of action and social arrangements can support or impede the realization of certain norms and values that are consolidated in existing institutions. As we can see, this notion clearly contradicts the aforementioned Kantian notion of legal institutions which should be constructed for a "nation of devils".

Let me illustrate this with a few examples. If, for example, a large majority of people believes slavery to be legitimate, it is difficult if not impossible to legally abolish slavery. If people desire to eat large amounts of cheap meat, it is probably very difficult to prohibit intensive factory farming. If a large percentage of a people demands unlimited freedom to accumulate wealth, then it will be impossible to limit accumulation. If a society believes that competition brings out the best in us, it is highly improbable that one will be able to create a legal structure that fosters cooperation. It is irrelevant here, however, whether the majority of society actually owns slaves or has the ability to accumulate large amounts of wealth. It might be the case that only a small minority actually participates in such practices. Yet if the belief that these practices are morally legitimate, ethically commendable and socially valuable, they will most likely be broadly accepted and difficult – if not impossible – to alter.

Conversely, however, this does not imply that an altruistic morality of all individuals is necessary to create just and democratic institutions. Rules are created precisely in order to place limits on those actions of individuals that limit the freedom of others, on the one hand, and on conflict with socially accepted values, on the other. If everyone acted altruistically, rules would not be necessary. At the same time, if no one abided to the law, specific laws could not be enforced and would most likely not exist in the first place. Civic activity thus creates institutions, which, in turn, determine the structure of social patterns of action and the possibilities for future civic activity. As we can see, this concept of civic action echoes the principles of co-creation previously discussed in our non-dualistic, ecological understanding

of the relationship between human beings and nature. Here, human beings are responsible for the co-creation of their material and social reality. Or, in the words of Harry Boyte, Elinor Ostrom et al.: “a citizen is the co-creator of the worlds to which she or he belongs” (Boyte et al. 2014: 207). This is what Tully means by the inherent constructivism of the civic rule of law (Tully 2014: 57).

Eco-law, commons and commoning

Interestingly, Tully’s notion of the civic activity of law-making is very close to what Fritjof Capra and Ugo Mattei describe as an ecological paradigm of law that is manifested in the commons. For them, a shift to an ecological understanding of law can only be realized through a “culture and genuine civic engagement” that “overcome both hierarchy and competition as ‘correct’ narratives of the legal order” (Capra/Mattei 2015: 134). This implies, on the one hand, that we must critically reflect and alter the normative values and mental frameworks that guide our everyday practices and constitute our institutional arrangements. On the other hand, an ecological conception of law also has the task of overcoming the state-market or state-individual dualisms and basing itself on a different conception of nature: the networked system. Much as in Tully’s conception of civic democratic rule as a “network of relationships of negotiated practices” (Tully 2014: 56), Capra and Mattei argue that an ecological understanding of law “seeks to capture the complex relationships among the parts and the whole – between individual entitlements, duties, rights, power, and the law – by using the metaphor of the network and of the open community sharing a purpose” (Capra/Mattei 2015: 134). All three authors argue that law is not to be understood as a neutral and objective science that is merely constructed and implemented by experts and specialists, but should, instead, be understood as a craft or practical art (Tully 2014: 56) amounting to a “*non-professional* exercise in the sharing of collective meaning” (Capra/Mattei 2015: 135; emphasis added). The interpretation of law as a nonprofessional practice implies that everyone has the opportunity and the capabilities to partake in the definition – and possibly implementation – of the law. Thus, the nonprofessional character of law-making makes it democratic. That being said, Capra and Mattei go so far as to argue that in an ecological order, “the community [or network], not the individual or the state, is sovereign” (ibid.: 140). According to them, however, this does not imply that the state should wither away, but, instead, that local and global communities and networks should have the power to perpetually change and adapt their legal structures according to changing circumstances and needs. In this sense, Capra and Mattei argue that

the new ecolegal order must allow collective agency to emerge [...], reclaiming the law as a collective tool of political transformation. Such participatory decision

making, both political and economic, is a crucial aspect of the need to put the legal system at the center of, not the individual physical or legal person, but the ‘whole’ – communities, networks, qualitative dimensions of relationships, with direct access to and stewardship of knowledge, law, and resources. (ibid.: 164)

The state and its monopoly of power to enforce laws does not disappear, therefore, but is ‘reclaimed’ and democratized through civic activities.

While Capra and Mattei place the term “community” at the center of their theory, the concept is not to be read as referring only to local geographical units. Due to this misunderstanding, Elinor Ostrom’s cases have often been criticized for requiring too much homogeneity and for therefore being very limited in scale. In contrast to a close-knit notion of community, the concept of community developed here should rather be understood as networks of people pursuing common (or conflicting) interests on local, regional or global levels. Nevertheless, it must be emphasized that all communities are situated in local contexts – and in natural ones (ibid.: 164). The concept of a networked community thus rejects the nature-culture divide and always understands itself as a form of collective action within specific socially co-constructed landscapes and environments. This contextualization, however, does not prevent people connecting with others on the other side of the world. The main point is the negotiation of needs and desires, the pursuit of similar yet conflicting goals and the exchange of information and resources, be that local farmers developing an international seed bank or the international effort to protect local water resources from privatization. For this reason, James Tully calls this local-global networking “‘glocalization’ and the networkers ‘glocal citizens’ because they are grounded in and hyperextend the civic features of local citizenship” (Tully 2014: 73). The “glocal” community is thus not simply to be understood as a ‘higher’ cosmopolitan order but as a network of people that are engaged in concrete practices and conflicts that take place on the ground of and within specific social systems – even if they are dispersed across geographical locations (Tully 2008b: 84). These networks would then be the arenas of negotiation and would provide the “foundations for an international legal order based on independent, legally organized commons” (Capra/Mattei 2015: 144).²²

That being said, Capra and Mattei acknowledge that communities can either be “giving, hospitable, and open to guests” or can be “selfish, closed and bigoted” (ibid.: 164).²³ However, the recognition of the interdependence of living beings underlying

22 For a more detailed discussion of how such a legal framework for commons would look like, see Weston and Bollier’s *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons* (2013).

23 Jeremy Waldron, for example, argues similarly in his article “Community and Property – For Those Who Have Neither” (2009): “Although ‘community’ can sound like a warm, inclusive word, real-world communities (be they nations, municipalities, neighborhoods, or clusters

this ecological legal paradigm should – at least theoretically – provide a basis for a care ethic which cultivate inclusive values. For this reason, Capra and Mattei argue that such ecological communities are “never closed” (ibid.: 164). With reference to the self-organizing principles of organisms, they also state that communities “depend on energy and nutrients from their environment, and on occasional disturbances for their evolution” (ibid.: 164). The question whether such communities and commons are inherently open or closed is a complex and often ethically delicate issue. Immaterial goods such as genetic code and information can be open-access, whether in a regulated or unregulated manner. The community of farmers that share their seeds is not threatened if someone else participates in their exchange practices. On the contrary, the community can benefit from this external influence. Such a community might, however, regulate this open-access commons by excluding people and corporations who wish to privatize the genetic-code of seeds, which would diminish the quality of their seed commons. With reference to Elinor Ostrom I would also argue that complete openness is also problematic in the case of limited, material goods such as land, if people aim to effectively deal with free riding and the overuse of resources. Here, I would maintain that material, common goods should remain closed to people pursuing maximization strategies that lead to the depletion of these resources. This could, for example, place the rights of indigenous people to use resources over those of corporations (Weis 2015). Conversely and in line with Elinor Ostrom’s third design principle,²⁴ I would, however, also argue that the inclusion of ‘others’ is based on the general right of affected people to access vital resources and to codetermine the institutions that govern those resources. In reference to access and participation rights, this should theoretically also include, for example, refugees, immigrants or homeless people who are in need of resources for their survival (Waldron 2009).²⁵

While the principle of affectedness is one way to determine inclusion in a specific networked community, another – and possibly more straightforward – means

of condominiums) characteristically define themselves by reference to an array of excluded ‘others’ and erect fences and patrol borders to keep these others out.” (Waldron 2009: 189) Although I would agree with Waldron that real-world communities are often exclusionary, I would deny the claim that they always are or that the principle of exclusion is inherent in communities as such. The arrangement of a community depends on a shared ethic, whether inclusionary or exclusionary, and, in more formal cases, on a specific constitution that structures its openness and closedness.

24 Elinor Ostrom defines the third design principle in her book *Governing the Commons* in the following manner: “Most individuals affected by the operational rules can participate in modifying the operational rules.” (Ostrom 2008a: 90)

25 This is, for example, in contrast to ‘expats’, who are not in such a destitute situation. Obviously, ‘affectedness’, ‘vital resources’ and thus ‘inclusion’ are highly contested concepts and can therefore not be determined in abstraction or in advance, but are defined in the practices of civic collective action and negotiation.

of community formation is the pursuit of common interests and realization of common goods. For Tully, this provides a people with both a common purpose for their civic activities and an ethos of caring. In his words:

A civic activity also has another important aspect, the *telos* or good towards which the activity is oriented and which the activity upholds and manifests. It gives the activity its civic character or ethos. A civic *telos* is thus a 'civic good'. Modern citizenship is 'egocentric', oriented towards the protection of the liberty of individuals to be free from interference and to be free to exercise their autonomy in the private sphere (tier-one rights) or in the official public sphere (tier-two rights). In contrast, diverse citizenship in both citizen and governance/citizen relationships is ecocentric and human-centric (or relationship-centric in both cases). Civic activities are oriented towards *caring for* the public or 'civic goods' of the correlative 'city': namely, the community and its members bound together by citizen/governance and citizen relationships in interdependency relationships with nonhuman animals and the environment they bear as inhabitants of the natural habitat. (Tully 2014: 64; original emphasis)

While Tully speaks of civic common goods, Capra and Mattei explicitly speak of commons. Nevertheless, by placing common purposes and commons at the center of their theories of civic democracy and eco-law, the authors break with the tradition of "deontological liberalism" (Sandel 1986) as propagated by Immanuel Kant and John Rawls (1988). According to Michael Sandel, deontological liberalism assumes a plurality of conflicting individual conceptions of the good and therefore places the right (the law) over the good (a specific notion of the good life).²⁶ While Kant argues that the right should be attained through the use of one's transcendental reasoning and finally through contract, Rawls maintains that the right can be defined by means of a thought experiment envisaging a veil of ignorance and by means of an overlapping consensus. In the civic tradition and eco-legal paradigm, by contrast, the civic good is understood as an inherent part of all institutions, communities – and a constitutive part of the ontological fabric of a common reality. Norms and justice are brought about not merely through reason and contract, but, first and foremost, through pre-contractual social practices.

According to Tully, these common goods are "multiplex" and "subject to ongoing democratic negotiation" (Tully 2014: 64). For him, they include diverse democratic

26 As Sandel explains, "society, being composed of a plurality of persons, each with his own aims, interests, and conceptions of the good, is best arranged when it is governed by principles that do not themselves presuppose any particular conception of the good; what justifies these regulative principles above all is not that they maximize the social welfare or otherwise promote the good, but rather that they conform to the concept of right, a moral category given prior to the good and independent of it" (Sandel 1986: 1).

goods such as “civicizing” relationships, character development and conviviality and more substantive goods such as “caring for the environment, economic self-reliance, mutual aid, fair trade, equality among citizens and so on” (ibid.). While Tully’s list of these goods remains somewhat general and vague, Capra and Mattei step back and claim that law itself must be understood as a commons that results from collective action or “commoning” (Capra/Mattei 2015: 14, 160). They explain that “law is always a process of ‘*commoning*,’ a long-term collective action in which communities, sharing a common purpose and culture, institutionalize their collective will to maintain order and stability in the pursuit of social reproduction” (ibid.: 14; original emphasis). Here, the civicizing activities that Tully describes can be equated with what Capra and Mattei refer to as commoning. According to Capra and Mattei, the “fundamental organizational principle of commoning everywhere is that of caring, duty, reciprocity, and participation” (ibid.: 156). Commoning thus implies the process of collectively using and bringing about common goods in a manner that ensures the future reproduction of the good. This is ensured when people who are affected by the resource are included in both the definition and adaptation of its institutional framework and the fair use and enjoyment of its benefits.

So, what precisely *are* commons, if we base our thinking on the notion of civic collective action? It should be clear that this dynamic and process-oriented interpretation of commons goes beyond the definition presented by the Ostroms and other political economists. Recall that according to the classical, politico-economic definition commons are limited to common-pool resources, meaning goods that are rival and where the exclusion of others is difficult (i.e. costly). As we have already argued, these resources could, however, be organized as national, private or common property – each with their corresponding institutional arrangements. An important insight we derived from that discussion was that whether something should be held in common cannot be derived from the objective descriptive characteristics of that something. The question whether something should be held in common or not is not merely a question of an entity’s phenomenological characteristics but largely depends on whether people want to hold a specific good in common – and the relevant social institutions that realize this. Whether something is considered to be a commons, thus, depends on the desires, values and norms of a community. In this sense, commons can be understood as a triadic relationship between resources, communities and norms/rules (Helfrich et al. 2010: 10). Nevertheless, this shift from the objective description of a good to social relationships and institutions remains somewhat dualistic and neglects the dynamic process of co-creation of reality through commoning. The existence of a common is thus not merely a descriptive or normative *question*, but, more importantly, a question of social *practice*. Capra and Mattei therefore emphasize that common resources and goods can therefore not be separated from the activity of *making* them common

(Capra/Mattei 2015: 153). Or, as historian Peter Linebaugh explains in this often-quoted passage:

To speak of the commons as if it were a [pre-existing] natural resource is misleading at best and dangerous at worst – the commons is an activity and, if anything, it expresses relationships in society that are inseparable from relations to nature. It might be better to keep the word as a verb, an activity, rather than as a noun, a substantive. (Linebaugh 2008: 255)

We must thus conclude that our previous question is somewhat misleading. We cannot simply say what commons *are*. That would assume that commons are objective things that exist independently from people. Such an understanding of commons would substantivize the concept and neglect both the normative and performative characters of commoning as a “vital determinant” of commons (Euler 2018). In this sense, commons scholar and activist Silke Helfrich states that “common goods don’t simply exist – they are created” (Helfrich 2012a). Hence, commons cannot be limited to what is traditionally known as common pool resources, but must be understood as a civic activity of self-organizing or ‘commoning’ that both brings common goods about and democratizes their institutional frameworks. Giving attention to practices of commoning enables us to recognize our shared reality as a commons. It also enables people to care for their own well-being and the well-being of others according to the ecological principles of freedom.

6. Towards a commons theory of property

After having laid the foundations for an ecological understanding of freedom and some preliminary remarks on a more profound notion of commons, I believe it is necessary to turn to a central question that I have not yet discussed in this book: the question of what a commons theory of property could look like. Generally put, this is of central importance because it would enable us to develop an understanding of property rights that is not based on exclusion, dominion and scarcity, but rather on access, democratic guardianship and relative, convivial abundance.

In order to develop such a theory, I proceed as follows. Firstly, I critically examine the normative language of goods with reference to the categorization of goods in the work of the Ostroms. In a second step, I present a general argument for common property arrangements, based on the acknowledgement of common needs and the interdependent yet conflictual satisfaction of these needs in shared resources. After these two introductory sections, I turn to John Locke's famous labor theory of individual private property and critically reinterpret it from a commons perspective. Here, I argue that we must shift our justification of property in three respects: firstly, we must replace property arrangements based on (self-)ownership with those structured according to guardianship. Secondly, I argue that the negative rights of non-interference must be replaced by the notion of non-domination. Lastly, I demonstrate that a commons theory of property must be based not on the special rights granted to individual laborers but more importantly on general rights that arise from the needs of interdependent beings. With this groundwork in place, I then turn to John Rawls' influential theory of a property-owning democracy. Here, I will argue that Rawls' notion of predistribution provides us with a good understanding of positive access rights to resources, but that we must shift the focus from productive capital to the care we need to bestow on material resources held in common. In a final step, I shift my focus from so-called productive resources to consumption goods and maintain that certain consumptive goods should also be organized in the form of common property. Here, I will show that shared consumptive goods both decrease detrimental ecological impacts and simultaneously make it possible to provide more people access to goods than are able to have under non-commons arrangements. With this critical reworking of Locke's and Rawls'

theories, I hope to sketch a commons theory of property that increases individual freedom, relative abundance and democratic, convivial ways of life.

6.1 The normative language of goods

In order to explore and develop a commons theory of property, I would like to take the previous argument on commoning a step further by focusing on the civic activity of self-organization from a linguistic perspective. As we have already discussed in relation to our understanding of nature, the way we describe and categorize things constitutes or co-creates reality. In this sense, language is never neutral and should therefore also be understood as a political act. This implies that the praxeological turn that consists in understanding commons as commoning must also be understood as a linguistic turn, whereby speaking constitutes merely one form of social praxis (Austin 2009; Searle 2005). With reference to our discussion of commons, this implies that the way we describe goods also frames their constitution and normative desirability in the symbolic order of things. The etymological roots and equivocal meaning of the word ‘good’ are an obvious demonstration of the normative structure of words and language: here, goods (i.e. *certain* things) are generally perceived as something good (i.e. valuable and desirable) (Milgate 2008). The question that arises is, however, whether commons are also perceived in this light – and how this might be changed. In my analysis of the Ostroms’ work, I noted that common-pool resources are defined according to their rival quality and their relatively high costs of exclusion. Yet my discussion of nature and ecological freedom led us to the conclusion that commons are never simply given, but are always created through civic activities of self-organization or commoning. In line with this questioning of the assumed facticity of commons, I would now also like to critically examine the normative categorization of goods according to the terms ‘exclusion’ and ‘rivalry’.

Generally put, it can be said that the mainstream political and economic discourse on goods and property revolves around the categories of exclusion, rivalry and, to a certain extent, subtractivity (Buchanan 1965; Corners/Sanders 1999; E. Ostrom 2002). As already mentioned, Elinor and Vincent Ostrom did use the term “exclusion”, yet replaced the word “rivalry” with “joint use” and “non-rivalry” with “alternative use” (Ostrom/Ostom 1999). rom 1977, 1999). The reason for this lies most likely in the normative way that the classical terminology is framed; what the words do with us and the world. If we consider the mainstream terminology, it must be recognized that all three terms have a certain negative connotation that assume and emphasize the conflictual aspects of goods, implying that one person’s enjoyment of a good is often interrupted or threatened by other people. This negative connotation, in turn, provides a more general normative and political framework

for thinking about and dealing with goods: where exclusion ‘unfortunately’ is not possible, people must either arduously organize these goods in complex common property arrangements, or – even worse – let the centralized state manage them. Thus, implicit in this categorization is the assumption that we would actually prefer to possess these goods privately and enjoy them without being bothered by other people. Or put somewhat more radically, the underlying principle of this categorization is – in the words of Sartre – that “hell is other people” (Sartre 1989: 45).

This is not to say that everyone with private property hates his or her neighbors, but rather that a deep fear of other people is an axiomatic basis of individual private property and our understanding of goods in general. As we see, by framing goods in this manner, people are assumed to be related to one another in inherently antagonistic ways. Yet in this case, the fact that humans are each other’s enemies lies not merely in people’s ‘nature’ but is also reproduced in the way we perceive and organize goods. By framing goods in this manner, the antagonistic relation between people is naturalized – and the supposedly best answer to this problem is, apparently, the exclusion of others through negative rights and individual private property. By shutting the other out (and oneself in), the individual is supposedly freed from unwanted interferences, burdensome responsibilities and conflict. Only from this ‘original position’ of negative freedom based on a supposed material independence can positive social freedom then be attained by entering into voluntary relationships according to the needs and desires that spring entirely from the independent self. As we can see, this deeply rooted understanding of independent antagonistic individuals and highly contested goods goes against the understanding of ecological freedom that I have outlined, which is based on the mutual *interdependence* of self-organizing living beings that inherently share a common reality. Thus, in order to create a system of democratic eco-law based on commons, we must also reformulate our categorization of goods, which, in turn, should transform our normative framework of social arrangements.

For this reason, I would argue that we must shift our focus when discussing goods from exclusion to inclusion, from subtraction to sustainability or addition and, finally, from rivalry to (negotiated) cooperation. If we revise the categorization of goods in this manner, the normative question that implicitly underlies the social organization of goods is then no longer how to limit the consumption of goods through exclusion. Instead, the normative question regarding a good would be: which goods produce better joint outcomes when shared, and which can be sustainably reproduced or, if possible, increased in number through (negotiated) cooperation? It can be assumed that such a recategorization would flip the supposed tragedy of the commons on its head by defining not the (unregulated) commons but privatization as the main problem we face. In turn, this might provide us with a normative linguistic framework that would value inclusive, sustainable and additive social arrangements over those based on unlimited individual appropriation.

We need to ask ourselves, however, if this replacement of categories is merely a sleight of hand that ignores the ‘intrinsic’ characteristics of goods. In order to answer this question, let me provide some examples that illustrate what I am trying to get at. As I have already discussed, the question of exclusion is not necessarily dependent on the ontological characteristics of a good, but rather on the economic, technological and institutional context that makes exclusion possible or not. Thus, the ability to exclude people from a good is not inscribed in the good itself, but is determined by social conditions and norms. With subtraction and rivalry, the issue appears a little less straightforward. The standard argument assumes that a good is rival or non-rival depending on whether its future use is decreased, i.e. subtracted, when utilized or consumed. The classical examples here are food and information. If I eat an apple, the other person cannot eat the same apple because it is gone. If I use a piece of information (e.g. a recipe, a book from a library or an article from a newspaper or on the Internet), the quality of the good is not diminished and thus can be used by another person. In more abstract terms, while food is normally understood as subtractive and thus rival and scarce, information is generally understood as non-subtractive and therefore non-rival. Due to this categorization, food is then classified as a private good and information as a public good, or it is assumed, at least, that these goods *should* be classified in this manner (e.g. Stiglitz 1999).

As was the case with excludability in relation to common-pool resources, we can also think of other ways of perceiving and organizing the goods that have been classified as rival and non-rival. With respect to information, several examples quickly come to mind where information is not always structured as an open-access public good. For example, scientific information arising from research that was, at least in many cases, funded out of the public purse is often stored in expensive, privately owned academic journals. We will discuss this problem in relation to the education commons in the next chapter. Printed newspaper articles can also often only be accessed if the newspaper is paid for and therefore privately appropriated. By socially organizing this information as private goods, it is made scarce and rival, despite its supposedly inherently non-rival character.

However, the case with apples is a little more complicated. Obviously, it is true that my consumption of an apple would prevent another person from consuming it. In this sense it could be argued that apples are subtractive and rival goods. But to then assume, as John Locke did (2008: II, §26), that the apple *must* be a private good is not necessarily given. We will return to Locke later, but the focus on subtraction merely emphasizes one way of using a specific good. There are, for instance, other ways of using an apple that enable or even increase its usefulness to others: this is the case, for example, if I merely take a photo of it (neutral use) or share it with someone else (inclusive, non-additive use) or use its seeds to plant other apple trees (inclusive, sustainable/additive use) (Euler 2020). The last two examples

show how a group of people can have their shared cake or, rather, apples and eat them too. In other words, all three uses demonstrate how an apple can be used in non-exclusive and non-subtractive ways that support relationships of inclusion and conjoint flourishing. Furthermore, by focusing on the individual subtraction of an apple through consumption, two central questions are ignored: (a) whether other people have access to other apples and (b) how the apples came into existence in the first place. If, for example, there are piles of fresh and juicy apples for a group of people to eat, the fact that I consume one or even a few apples does not make apples *per se* scarce and rival. Alternatively, if apple trees were cultivated by a group of people who then divided them up fairly¹ between themselves year after year, the quantity of apples might be limited, but not necessarily rival and scarce. In this case, we might even consider a relative abundance of apples to exist because the group is satisfied with the number of apples available to it and the consumption of apples by one person does not threaten another's access to apples, since everyone acknowledges a limitation on individual appropriation. Philosopher Jeff Noonan discusses this notion of relative abundance in relation to the conflict of use and appropriation rights between Native and white fishers in New Brunswick, Canada:

Conflict [over the lobster fishery] is only likely to be resolved if both sides to the dispute interpret 'abundance' in such a way that they can agree that there is enough of the resource to share without any group feeling deprived. This conclusion cannot be reached if either side looks at the logic of resource appropriation as governed by the value of profit maximization, since by definition the growth of profit has no 'natural' limit and anyone driven by that value will see any restriction upon that logic as a personal or group deprivation. (Noonan 2004: 191-2)

Here, we are reminded of Elinor Ostrom's work on the democratic management of commons, where Ostrom says that the limitation of appropriation can enable the sustainable use and reproduction of resources over long periods of time. Yet as Noonan makes clear, such a regime also requires, in turn, a normative shift from unlimited wants and the desire for endless profits to a mindset based on basic needs satisfaction and sufficiency. With Erich Fromm, we might be able to think of this as a shift from having to being (Fromm 1997). Considered in this manner, relative abundance and non-rivalry would theoretically be possible for subtractive goods under the condition of a materially limited reality (Sahlins 1972: 1-39; G. A. Cohen 1995: 128). In this sense, we can agree with Hardin that scarcity and rivalry are not given, but arise through an unregulated, unlimited and, ultimately, unfair increase of use or appropriation of a certain good. Consequently, scarcity is not an

1 The fair distribution of these goods needs not imply that they are distributed equally; they could fairly be distributed, for example, according to effort, need or whatever other values people define as important.

intrinsic condition of nature and rivalry is not an inherent characteristic of subtractive goods, but rather depends on the way we perceive and thereby institutionally organize their use.

In coming to appreciate this important insight, we can avoid confusion if we differentiate between goods, their production and their institutional arrangements. In the case of the apple, we have the apple, the apple tree and many other factors that are necessary for the growth of the apple, such as a plot of land, air and water, to name just a few. With Elinor Ostrom and Charlotte Hess, we can therefore differentiate between the flow of resources (e.g. apples) and the resource unit (e.g. the apple tree, the orchard and the ecosystem) (Ostrom/Hess 2007: 10). Along those same lines, we can also differentiate between goods used for production (e.g. the apple tree, a fishery, machines, capital) and goods used for consumption (the apple, fish, pasta, clothes or wages) (Held 1995: 263). In general, we could therefore say that while the consumption of a good (e.g. chewing and digesting an apple) is often individual (i.e. private), neither the (re)production, the appropriation nor the allocation of that good must necessarily be organized privately. The following question then arises: which type of social organization of which goods is more conducive to the values of inclusion, sustainability and addition? Since it can be assumed that a fair distribution of goods will create a sustainable, relative abundance of limited goods, it is of the utmost importance that the individuals dependent on specific resources have the opportunity to negotiate and codetermine the social arrangements for dealing with them (Knight/Johnson 2007). In line with the insights gained from the Ostroms' work, we may thus conclude that democratic negotiated cooperation and self-organization are the key counterparts to scarcity, rivalry and, ultimately, tragedy. And because the ability to codetermine the institutional framework would imply rights to access, inclusion and democratic participation, it can be argued that a property regime based on commons, understood as a variety of forms of common property arrangements, may well fulfill this purpose best.

6.2 Common needs, common resources and common property

Similarly, Capra and Mattei argue in favor of a shift in our legal framework from extractive to more sustainable and "generative" property rights based on commons and commoning (Capra/Mattei 2015: 145-6; Kelly 2012). In a nutshell, they contend that for most of human history resources were held in common, while only during the recent history of humankind has a legal system based on universal, individual private property rights emerged that enables the unlimited accumulation of wealth. Although this legal transformation has provided a part of the world's population with increased living standards and technological advances, it has also

brought with it numerous grave ecological, social and political problems. For this reason, Capra and Mattei write that “harmonizing human laws with the principles of ecology requires, at a minimum, the development of a healthy and legally protected commons sector and associated institutions” (Capra/Mattei 2015: 152). In order to do this, they argue that it is necessary to transform existing forms of property structured around the individual into forms structured around interdependent situations and the shared reality of the community. In their words:

A radical revision of property and of its relationship with state sovereignty is thus necessary if we wish to transform capital back into commons and build an ecological order. Such an alternative begins with the understanding that a community lives and unfolds in a common space where the actions of one member affect the well-being of all others. Such a space is the venue of life and death for a community and it must serve the interest of every one of its members, regenerating life in it. (ibid.: 139)

This shared, common reality thus provides the backdrop for the understanding that humans – and most, if not all, living beings – possess common needs and desires, such as the desire to be loved and respected, the need to eat, the desire to live well and the desire to develop one’s capabilities and to codetermine (i.e. self-organize) one’s reality. Obviously, this is not an exhaustive list of human needs, but it does assume that certain needs and desires are common to all sentient beings. This is not to say, however, that the specific form of need satisfaction is the same for all beings; these vary according to species, culture and technological development. Nevertheless, instead of assuming conflicting interests and goals as the axiomatic foundation of social arrangements, the ecological commons approach to property emphasizes interdependencies and the similarity of fundamental needs and desires. From this perspective, it is the similar needs that come first and ultimately lead to conflicts of interest. Jeff Noonan aptly expresses this idea:

Beneath differences in the content of cultures, there is, I will argue, a shared – indeed universal – human need for a ‘social habitat,’ that is, a resource base through the use of which goods are produced that in turn sustain the practical and symbolic particularities of the culture. [...] The uniqueness of a culture is a content that is produced by universal forms of human activity. The evidence for the position is provided precisely by the struggles between *different* [individuals and] cultures for the *same* resources. If [individuals and] cultures were radically distinct and discrete wholes they would never come into conflict because there would be no common needs between them, and there would therefore be nothing to struggle about. (Noonan 2004: 186; original emphasis)

As we can see, beneath the conflicts between people lie not completely diverging interests, but rather common needs that are, in turn, codependent on the use of

these resources. However, because all living beings exist in webs of interdependent relationships, the satisfaction of one person's needs is significantly affected by the manner in which other people satisfy their needs. Due to these existential interdependencies, it is crucial to hold those resources for the satisfaction of such common needs in common.

Conversely, behind this reasoning lies the assumption that, if individuals can privately appropriate these limited vital resources, then the ability of others to satisfy their basic needs will also be limited. To put it briefly, the abilities of the have-nots to survive, self-organize and flourish will be undermined. Here, it is worth pointing out that the word 'private' etymologically comes from the Latin word *privare*, to deprive, bereave or rob (Onions 1966: 711; Glare 2012: 1607-8). This root meaning of the word private thus supports the interpretation that private individual property is something that is taken from the shared reality-as-commons. The individual appropriation of vital resources thus implies that possible uses of these resources by other people are blocked – and, simultaneously, the relationship of responsibility and obligation between the one who appropriates and other beings is dissolved.² Private property turns the relationship of duties on its head: the responsibility no longer lies with the owner towards the community, but rather in the duty of those excluded from the resource to respect the rights of the owner. In the words of Jeremy Waldron:

Material resources are crucial to our survival and elementary aspects of our well-being. In the circumstances of moderate scarcity that we must assume, it is per-

2 Although some might argue that private property entails duties owed by proprietors to the rest of society (e.g. I cannot drive my car on the sidewalk or faster than 120 km/h on the highway), I agree with Jeremy Waldron that we must understand these restrictions not as duties but rather as "general background constraints". He writes: "The rule that knives are not to be used murderously nor cars driven at a certain speed are not to be seen as property rules. They are part of the general background constraints on action which place limits on what anyone can do with any object whether it is his property – or something he has some sort of entitlement to use – or not. Once we have settled what the background rules of action are, we can then turn to the property rules. If a particular action, say, riding bicycles, is permitted by law, it does not follow that the law permits me to ride any bicycle I please. The specific function of property rules is to determine, once we have established that bicycles may be ridden, who is entitled to ride which bicycle and when." (Waldron 1988: 32-33) Aside from these background constraints, the institution of private property requires that individuals fulfill one central duty regarding others: to respect their private property and, in turn, to fulfil contractual obligations. This reciprocity might be understood as a form of mutual obligation and, thus, care. Yet due to the central principle of exclusion from and non-interference in private property, the duty to respect private property ultimately and, at least in principle, liberates the individual from further obligations in relation to the need, satisfaction and wellbeing of other beings. I believe this to be one of Robert Nozick's central arguments in *Anarchy, State, and Utopia* (1999).

fectly possible that the uses that are blocked by the duties correlative to property rights are uses that relate to human need, not just covetous desire. (Waldron 2009: 165)

Despite the existence of common needs in a shared reality, private property in material resources enables people to exclude others from its use, ultimately placing the burden of duty on the community to respect the ownership rights of the individual – and not on the individual to care for the wellbeing of the community. With this inversion, the notion of care and responsibility, as I elaborated earlier, is individualized, implying that each individual is responsible for the satisfaction of his or her own needs. Although we cannot deny the importance of individual responsibility for one's own wellbeing, this entirely individualized notion of care based on private property brings about an atomistic and competitive arrangement that reminds us of Hardin's tragedy of the unmanaged commons. Tragedy results because no one feels responsible for the sustainable satisfaction of the needs of the community as a whole and, as an individual, no one is institutionally capable of caring for shared, common resources.

A widespread argument against this rather critical interpretation of individual private property is that ownership is not a unified concept, but rather consists of a "bundle of rights" (Grey 1980; Glackin 2014). This bundles-theory interpretation of property must be understood as a critique of the standard interpretation of William Blackstone's (1723-1780) famous definition according to which private property is "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe" (Blackstone 2016: 1).³ Contrary to this Blackstonian notion of private property as "individualistic, exclusive and absolute dominion" (Schorr 2009: 104), the bundles of rights theories, as, for example, presented by Wesley N. Hohfeld (1913) and A.M. Honoré (2015), define ownership rights as a diverse collection of independent rights (Penner 1996; Glackin 2014: 3). Importantly, and as Shane N. Glackin states, "the bundle theory regards these individual and separable rights, or 'sticks,' as having no substantive, essential connection to each other" (2014: 4). In this sense, the notion of private property is not constituted by any *intrinsic* characteristics of the relationship between individuals and things, but rather through *contingent* ways of bringing rights together into combinations that are ultimately assigned to people. This basically implies that prevalent notions of private property are not based on transcendental or natural laws, but that they are historical products of existing societies. At this point it must be admitted that a deconstruction of individual private property into its diverse components is remarkably helpful in

3 As recent work has shown, however, even Blackstone himself did not support this rather monolithic notion of individual private property (Schorr 2009).

“demystify[ing]” (ibid.: 3) widespread notions of property and understanding the complex relationships of access, management, use, exclusion and alienation of resources. Elinor Ostrom and Edella Schlager, for example, use the bundle-of-rights theory in order to analyze various arrangements for dealing with “common-property resources” (Schlager/Ostrom 1992). This strategy can open the field to a less ideologically charged debate over the pros and cons of different property arrangements, whether individual, common or public.

Nevertheless, with Henry E. Smith I would argue that the bundle theory is problematic because it can cover up normative questions of property arrangements by focusing on the *how* instead of on the *why* (Smith 2011: 281). That is, on *how* individual property is structured, rather than on *why* certain resources are allowed to be owned privately. Furthermore, the analytic ‘realism’ of the bundle-of-rights theories conceals the fact that individual private property does have a dominant, central meaning in modern Western societies that is employed either as a cognitive shortcut in order to simplify complex legal relationships or, and more importantly, as a normative justification of existing social arrangements. As I have already mentioned, following the arguments of Henry Smith, Jeremy Waldron and Richard Epstein, a central function of individual private property is defined as exclusion or non-interference.⁴ Although Jeremy Waldron also defines exclusion as the “key to private property” (Waldron 2009: 164), he elaborates “in Hohfeldian terms” on a few other important aspects of private ownership:

To justify private property is to justify conferring, recognizing, and enforcing certain individual rights over material resources. An individual X’s rights of ownership in relation to some land, Lx, usually are comprised of such elements as (R1) the right to use Lx, (R2) the right to exclude others from the use of Lx, and (R3) the power to transfer some or all of these rights to others by way of gift, sale, lease or bequest. (ibid.)

Here, we see two additional key aspects of individual private property that result from exclusion: the right to use and to alienate (i.e. trade) resources. Implicit in this definition is also the right to accumulate, underuse or destroy resources. The exclusion of the other provides the owner with the freedom to do what they please

4 Henry Smith writes, for example: “The architecture of property emerges from solving the problem of serving use-interests in a roughly cost-effective way. [...] At the core of this architecture is exclusion because it is a default, a convenient starting point.” (Smith 2011: 282) In Richard Epstein’s book *Design for Liberty*, he writes: “The choice of a sound property ‘baseline’ in the original position is not random. [...] The central proposition is this: the *only* set of substantive rules that achieves that goal is one that requires all persons to forbear from interfering with the property rights of any other person, where ‘interfering’ is narrowly defined to involve taking, using, handling, or breaking the property of another.” (Epstein 2011a: 74)

with a good within certain “general background constraints” (Waldron 1988: 32).⁵ Along these lines, in his book *The Right to Private Property* (1988), Jeremy Waldron further defines ownership as

the abstract idea of an object being correlated with the name of some individual, in relation to a rule which says that society will uphold that individual's decision as final when there is any dispute about how the object should be used. The owner of an object is the person who has been put in that privileged position. (ibid.: 47)

As we see, individual private property implies the right to exclude others from the determination of how resources will be used and allocated. Here, the *individual* owner has the right to determine the access and use of material resources for the satisfaction of their *shared* individual needs. Thus, a central aspect of individual private property over goods is to place the owner's decision-making power and the satisfaction of their needs over that of other members of the community.

As I have already mentioned with reference to the tragedy of privatization, the emphasis on exclusion and non-interference in individual private property rights makes it difficult to alter property arrangements in order to align them with the shared yet conflicting needs of other human and non-human beings. Thus, I agree with Capra and Mattei that only by holding these vital resources in common is it possible to negotiate the terms of their use and, hopefully, to satisfy the needs of everybody. Put in these terms, the central justification of commons must be understood as an ecological (re)interpretation of the basic right to life and liberty or, in my terminology, to an interdependent, sustainable, self-organized and flourishing existence (Alexander/Penalver 2009). According to Capra and Mattei, it is this ecological reasoning that has brought commons into existence throughout human history:

Ancient institutions of the commons that provide communities with water, wood, agricultural products, education, and housing construction are still alive in ecological niches in Europe and are still very important in much of Africa, South Asia, and Latin America. [...] Even today, when a common need emerges, people tend to organize in common to run recuperated spaces, factories, theaters, gardens, farmers markets, or institutions such as Time Banks. [...] These emerging alternatives, based on the recognition of common needs, material or spiritual, make us understand that *the resources necessary to satisfy a need must themselves be understood as a common and governed according to the principles of solidarity necessary for all to satisfy their needs and for the community to prosper*. (Capra/Mattei 2015: 142-4; emphasis added).

5 For an elaboration on the notion of these “general background constraints”, see footnote 2 above.

Simply put, if we recognize that humans share both a common reality and common needs, we should also recognize that the resources that enable everyone to satisfy these needs should also be held in common. In the words of Capra and Mattei, a legal order that is based on generative ownership “serves the needs of life by having the tendencies to be socially just and ecologically sustainable built into the very fabric of its organizational structures” (Capra/Mattei 2015: 146).

The ideal type of commons can thus generally be defined as goods created, reproduced and held in common by a group of people, a network or a community that is affected by and dependent on a specific material or immaterial resource. As we see, this definition closely resembles the notion of common property as defined by Jeremy Waldron:

In a system of common property, rules governing access to and control of material resources are organized on the basis that each resource is in principle available for the use of every member alike. In principle, the needs and wants of every person are considered, and when allocation decisions are made they are made on a basis that is in some sense fair to all. (Waldron 1988: 41)

In contrast to individual private property, which defines exclusion as its structuring principle, common property arrangements emphasize access and inclusion. Although commons often have – or even require – boundaries, they can nevertheless be considered inclusive because they enable those in need and those affected to define and adapt their institutional framework. In this sense, commons are based on networked democratic governance systems that ensure the inclusion and participation of the affected people. Simultaneously, commons demand that the users of a resource are responsible for its sustainable reproduction. Commons are thus structured according to the individual satisfaction of common yet conflicting needs and desires through the sustainable and interdependent co(re)production of these goods. It is again important to underline here that commons must not necessarily assume an extremely high level of harmony or unity, but instead provide people with the ability to collectively solve conflicts and shared practical problems through democratically negotiated cooperation. This aspect of common property arrangements emphasizes the ‘freedom-against’ characteristic of ecological freedom. In this sense, common property arrangements support and enable democratic problem solving in all spheres of life. Last but not least, the (re)production and maintenance of commons is not merely a means to an end (freedom through, i.e. individual needs satisfaction), but must itself be understood as an end in itself (freedom with). This is best understood through the concept of conviviality, in which people’s satisfaction of needs occurs not in isolation, but in acting with others.

6.3 Reinterpreting John Locke's theory of property from a commons perspective

In order to fully understand this central argument for holding resources needed for the satisfaction of individual needs in common, it might be helpful if we compare the argument to John Locke's (1632-1704) justification of the private appropriation of resources in his *Second Treatise of Government* (1689). The reason why I choose to reinterpret Locke's labor theory of property is that its importance for our contemporary understanding of individual private property and our existing social arrangements cannot be underestimated. It lies at the heart of the concept of a self-regulating market, Robert Nozick's libertarianism and, also, Garrett Hardin's tragedy of the commons. I will thus present a short sketch of Locke's argument and then revise his theory according to the conception of ecological freedom and the commons I have already outlined. This will revolve around three conceptual and normative shifts: from (self-)ownership to guardianship, from non-interference to non-domination and, finally, from access through individual labor to the interdependent satisfaction of needs.

Locke's justification of individual private property

Framed in the Christian theology of his time, Locke believed that "God has given us all things richly" (Locke 2008: II, §31; emphasis omitted). More precisely, God "has given the Earth to the Children of Men, given to Mankind in common" (ibid.: II, §25; emphasis omitted). According to these notions, the abundant resources of nature originally belonged to everyone and thus to no one. This is what Simmons and Waldron call a "negative community" (Simmons 1992: 238; Waldron 1988: 153). Locke understands this type of social arrangement as a commons (Locke 2008: II, §28), which reminds us of Garrett Hardin's notion of an unregulated open-access commons. Furthermore, in this fictional state of nature, all humans are "equal and independent" (ibid.: II, §6) and each has the right to or, rather, the freedom to preserve themselves (ibid.: II, §17, 19). Yet, in order to survive, human beings are required to labor, be this through hunting and gathering or, as God supposedly preferred, through "subduing or cultivating the Earth, and having Dominion" (ibid.: II, §35). According to Locke, this, however, puts humans in a problematic situation: how can they appropriate and consume goods that belong to everyone? (ibid.: II, §25-6) In order to solve this problem, Locke argues that one's self, including one's body and the labor of one's body, must originally be understood as one's individual private property (ibid.: II, §27). From this premise of self-ownership, he argues that individuals then have the right to transform the resources originally held in common into private property through the "mixing" of their labor with the common resources (ibid.), be it through picking an apple, killing a deer or cultivating

wheat. In Locke's words: "So that God, by commanding to [labor and] subdue, gave Authority so far to *appropriate*. And the Condition of Human Life, which requires Labour and Materials to work on, necessarily introduces *private Possessions*" (ibid.: II, §35; original emphasis). According to Locke, only the private appropriation of goods through labor can secure the survival and liberty of human beings (ibid.: II, §26). Although Locke understands property as a means to life and liberty, he then collapses the three values under the term of property (ibid.: II, §123), ultimately defining the protection of property as the "chief end" of society and government (ibid.: II, §124).

It must be noted, however, that in his labor theory of property Locke does not clearly differentiate between the right to the fruits of one's labor (e.g. the apple, the deer or the wheat) and the resources that brought this fruit forth (e.g. the apple tree, the land on which the wheat is grown and, possibly, the territory where the deer live). In Elinor Ostrom and Charlotte Hess's terminology, this implies the right not only over the resource unit, but also over the resource system itself. This is important, because it ultimately legitimates the exclusion of others not only from the fruit of one's labor, but also from the means of subsistence (e.g. water, land etc.) and the means of production (e.g. machines, factories, capital). This ambiguity implies that the labor theory of property can easily support the right not only to the outcome of the labor process, but also to the resource systems involved in the labor process itself. Nevertheless, it must be acknowledged that Locke originally limits the right to appropriate these common resources by two provisos: (a) the resources should not be left to spoil (ibid.: II, §31) and (b) there must remain "enough and as good" for others (ibid.: II, §33). While the "spoilage limitation" (Macpherson 2011: 204-11) aims at limiting the under-use of goods and ensuring respect for God's gifts to humankind, the "sufficiency limitation" (ibid.: 211-14) is apparently meant to ensure that all human beings retain access to sufficient natural resources in order to be able to secure their existence.

Nevertheless, Locke goes on to describe how these original limitations on one's appropriation rights were annulled with the "invention" of money (Locke 2008: II, §36). Because it is possible to hoard money without it spoiling, Locke contends that the first proviso is no longer applicable and people may accumulate money without limit (ibid.: II, §50). The fact that money can buy large amounts of natural resources is, according to Locke, no longer a problem because the owner will not leave the land to spoil, but will use this land productively in order to increase profits (ibid.: II, §48, 50). As Adam Smith argued almost 100 years later, the use of resources for profit is, thus, not interpreted as extraction and depletion, but rather as an increase in the wealth of mankind and the conveniences of life (ibid.: II, §37). In contrast to Hardin's tragedy of the open access commons, according to Locke, the private appropriation of common resources supposedly greatly increases the value of the resources involved (ibid.: II, §40, 43, 45).

Interestingly, the second sufficiency limitation also becomes invalid with the introduction of money. Here, Locke provides two reasons for the annihilation of the right to access resources in order to secure one's existence. Firstly, the introduction of money is based on a "tacit and voluntary consent" (ibid.: II, §50), which then legitimates the inequality that results through the private accumulation of wealth. And secondly, although Locke admits that the accumulation of wealth in the hands of a few creates scarcity for those without property (ibid.: II, §45), he nevertheless believes this to occur "without injury to any one" (ibid.: II, §50). On the one hand, this is due to the increases in productivity that result from the unbound right to accumulate. These increases in productivity supposedly create an abundance of conveniences for the wider population and therefore compensate for the scarcity that was brought about through privatization (ibid.: II, §41). On the other hand, it is implicitly assumed that those individuals without direct access to the means of subsistence in the form of natural resources still possess their own bodies and can therefore sell their labor power in exchange for a wage (ibid.: II, §28). Now it is no longer direct access to natural resources that secures one's existence, but rather access to money through wage labor, which in turn enables the laborer to survive by buying food and a place to live on the market. As becomes apparent, the original, equal right to self-preservation and liberty through access to resources held in common has been transformed into the protection of the existing, unequal distribution of property, on the one hand, and the necessity that the propertyless enter into wage labor relationships in order to secure their life, on the other hand. This is the basic argument of John Locke's labor theory of private property.

Although this story may initially appear rather straightforward and convincing, there are numerous premises in Locke's theory of property that are highly problematic. To name just a few: the existence of the independent individual in a state of nature; the open-access commons (*res/terra nullius*) as a state of nature; the concept of self-ownership; the suspension of the provisos through the introduction of money; and the necessity to declare something as one's own private property in order to use or consume it. I hope to deal with each of these issues by arguing that a commons theory of property requires a shift from (self-)ownership to guardianship, from non-interference to non-domination and, finally, from labor to needs.

From (self-)ownership to guardianship

As our discussion of nature has demonstrated, all living organisms, including humans, are autonomous or self-organizing yet always exist in webs of interdependent relationships. For this reason, it can be assumed that the more appropriate original state of nature is not to be understood as one where individuals roamed around alone, but where people – as they still do today – lived and worked together in groups – in, with and against other humans and the non-human world. As most

historical and ethnological research shows, resources were never conceived as *res nullius*, but were always subject to various informal and formal rules concerning rights and obligations. Often enough, so-called 'primitive' economies were based on communalistic economies with central resources held in common (Weston/Bollier 2013: 133-5; Diamond 2007: 131-3; Scott 2017).⁶ As was the case with Thomas Hobbes, the concept of the independent individual and the common world as *res nullius* is thus a historical and legal construct of Locke's day projected back into the past and onto nature.

This raises several questions. Would the concept of interdependent living beings shed a different light on the notion of (self-)ownership? If ownership is founded on 'labor' can I truly be considered to be my own property? Would I not, in fact, be the property of the people who raised me and the environment that provided me with sunlight, air and things to eat? As we can readily appreciate, although human beings have a sense of self and the power to self-organize, this does not mean that one's existence has been brought forth merely through oneself and through one's own labor. With reference to Andreas Weber's concept of the gift economy of the open-source "natural commons", I would therefore argue that the self should also be understood as a gift – not necessarily from God, but from the infinitely complex processes of co-creation that result from the mutually interdependent relationships in the web of life. Or, phrased somewhat differently, the individual should be conceived of as a product of nature and society – and, in relation to each of these, as an active and semi-autonomous agent. Here, the focus shifts from the supposedly independent 'Man' who forms the world, to the world that brings each individual being about. The individual does not independently determine, but takes part in this process of interdependent co-creation. Such an understanding of the self-world relationship may sound somewhat peculiar in the

6 The anthropologist Stanley Diamond, for example, explains: "Primitive societies rest on a communalistic economic base. This is not to say that everything in such societies is owned in common, which is clearly not the case, but rather that those material means essential to the survival of the individual or the group are either actively held in common or, what is equivalent, constitute readily accessible economic goods. [...] Exceptions to this communal condition dissolve under close scrutiny. For example, it is claimed that members of Hottentot joint families 'own' particular cows in the family herd, but we find that they cannot privately dispose of them. It is similarly assumed that individuals 'own' particular watering places, but we discover that access is never denied to other people in need of it. On the other hand, true private property does exist among primitives, in the form of tools made by the individual, breechclouts, back scratchers and similar 'extensions of the personality.' However, private property of this type does not constitute primitive capitalism; this does not exist, at least among primitives. The private property that can be identified is either not essential for group survival, is readily duplicated by any individual in the society and therefore need not be owned communally, or is of so personal a nature that it cannot be owned communally." (Diamond 2007: 131)

ears of people brought up and trained in the Western mode of thinking based on methodological individualism. Despite the danger of ethno-romanticism (Latour 2004: 42–49), I believe that it can be argued that such a notion is more prevalent in the Buddhist notion of dependent co-arising (Macy 1979; Garfield 1994; Loy 1997) and in a number of indigenous traditions (Santos 2008, 2016). A famous portrayal of this notion has been expressed in the phrase attributed to Chief Seattle, in which he apparently said that “the earth does not belong to man, man belongs to the earth.”⁷ This understanding is also echoed in Aldo Leopold’s *Land Ethic*, in which he writes: “In short, a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the [socio-ecological] community as such.” (Leopold 1987: 204)

A central implication of this understanding of the self as a member in a network of reciprocal gift giving is that it ultimately transforms a central category of property rights: ownership becomes guardianship. The resources that one uses, be it the land, the water or one’s own body, are not something that one owns, but rather a gift of nature and of society. Although the notion of the gift and guardianship is often associated with “archaic” societies (Mauss 2002), it is also marginally discussed in contemporary debates on property arrangements. Karl Marx, for example, refers to the concept of stewardship in this rather well-known passage in volume three of *Capital*:

From the standpoint of a higher socioeconomic formation, the private property of particular individuals in the earth will appear just as absurd as the private property of one man in other men. Even an entire society, a nation, or all simultaneously existing societies taken together, are not the owners of the earth. They are simply its possessors, its beneficiaries, and have to bequeath it in an improved state to succeeding generations, as *boni patres familias* [good heads of the household]. (Marx 1991: 911)

Although Marx equates ownership and property here, his critique tends in a similar direction to the argument I have been developing: that humans are not owners of the earth, but have received this earth and their selves from others and therefore have a duty to care for their own well-being and that of their society and ecosystem

7 As is generally well known, the authenticity of this phrase and of Chief Seattle’s speech is contested. Although the speech was supposedly held in 1854 or 1855, it was only published by Dr. Henry A. Smith in the *Seattle Sunday Star* on October 29, 1887. Since then, numerous versions of the speech have been published (Low 1995; Krupat 2011; Rothenberg 1999). Importantly, the cited famous phrase is actually not part of the original speech published in 1887, but only appears in later versions. Despite this historical inaccuracy, I nevertheless believe it justified to refer to this quotation, because it reflects the notion of another type relationship with world – irrespective whether it was expressed by Chief Seattle or someone else.

for the benefit of future generations. Yet in contrast to Marx, I would argue that it is not property per se but property arrangements based specifically on the notion of exclusive, individual private ownership that are problematic. In this sense, a commons can or, rather, should be understood as an institutional property arrangement in which not only is exclusion replaced by inclusion, but ownership is also replaced by guardianship.

While this change in labels may appear to be a rather simple task, effecting it would in fact require us to revise not only our conception of ownership over things, but also our deeply rooted notion of self-ownership. According to Locke, it is the notion of self-ownership that provides individuals with the right to exclusive ownership of the world. Here I agree with G. A. Cohen and Michael Sandel that the concept of self-ownership is in itself highly problematic because it lays the foundation for an individualistic and absolute understanding of property rights. With reference to Nozick's interpretation of Locke's concept of self-ownership, G. A. Cohen gets at the crux of the problem when he explains that the "polemically crucial right of self-ownership is the right not to (be forced to) supply product or service to anyone" (G. A. Cohen 1995: 215). Similar to the abstract and absolute right of ownership over things, the right to self-ownership implies that each person has "no non-contractual enforceable obligations to anyone else with respect to the use of your powers" (ibid.: 240). In turn, the premise of self-ownership enables the rejection of any claims the community might make on the fruits of the other person's labor. For this reason, Cohen understands self-ownership to be a central pillar for open and competitive markets in which each individual is free to own, exchange and accumulate goods in the absence of either limitations or obligations to other individuals. Along these lines, I would also argue that the affirmation of self-ownership and the right to the fruits of one's labor ultimately denies other people and society in general the right to a share of these fruits – let alone the right to access and share the underlying resource systems. Along with Cohen, I would conclude that the answer to this grave problem is the "rejection of the thesis of self-ownership" itself (ibid.: 230). However, while Cohen then vaguely propagates the "affirmation of non-contractual obligations to serve other people" (ibid.), I would argue that we must develop the previously discussed care ethic into more robust property arrangements that enable the codetermination of socio-ecological rights and duties.

For this reason, I turn to Michael Sandel who, to my knowledge, is one of the few contemporary Western philosophers who has not only criticized the notion of self-ownership but has also developed an alternative notion of property based on guardianship. In his book *Liberalism and the Limits of Justice* (1986), Sandel discusses Rawls' *Theory of Justice* (1971) and the general notion of self-ownership. Here, Sandel agrees with Rawls that we should understand the self as made up of a purely contingent and arbitrary distribution or, in our terminology, gift of our natural endow-

ments. For this reason, Sandel argues that we should not interpret our relationship to these gifts as something that we own. Instead, he argues,

To be sure, the various natural assets with which I am born may be said to 'belong' to me in the weak, contingent sense that they reside accidentally within me, but this sense of ownership or possession cannot establish that I have any special rights with respect to these assets or any privileged claim to the fruits of their exercise. In this attenuated sense of possession, I am not really the owner but merely the guardian or repository of the assorted assets and attributes located 'here'. (Sandel 1986: 82)

The fact that a person is born with – or without – certain arbitrary qualities and capabilities implies that this person then has no justification to consider its self and the fruits of its labor as entirely its own. But how, then, are we to conceptualize the relationship to our bodies and the world? In order to answer this question, Sandel differentiates the concepts of the owner, the guardian and the repository. According to Sandel, ownership, in its strongest version, implies "that I have absolute, unqualified, exclusive rights with respect to my endowments" (ibid.: 96). In its more moderate version, this implies that "I have certain privileged claims with respect to them, a bundle of rights, while not unlimited, at least more extensive with respect to my assets than any bundle of rights anyone else may have with respect to them" (ibid.). In contrast, the repository of assets assumes the complete arbitrariness of the relationship between the self and one's natural endowments and provides little basis for the recognition of the subject. The notion of guardianship, however, assumes a relationship between one's self and its endowments and assets, yet embeds it in an intersubjective, communitarian framework:

To say that I am the guardian of the endowments I bear is to imply that they are owned by some other subject, on whose behalf, or in whose name, or by whose grace I cultivate and exercise them. This is a notion of possession reminiscent of the early Christian notion of property, in which man had what he had as the guardian of assets belonging truly to God, and it is a notion that fits with various communitarian notions of property as well. (ibid.: 97)

The basic reason why Sandel defends such a notion of property rights is that it enables us to understand property as a social phenomenon that has been created not only for the satisfaction of one's individual needs and desires, but also for the needs and desires of the wider community. For this reason, I would agree with Sandel that the notion of guardianship enables us to conceptualize a form of property that breaks with the classical concept of independence and absolute dominion. Yet, instead of falling back into hierarchical dependencies characteristic of the feudal system, a democratic notion of guardianship embeds resources in a contextual framework of property based on interdependencies, mutual care and codetermi-

nation. And in contrast to both the Christian and communitarian interpretation of guardianship, I would understand the stewardship not toward God and not only toward one's fellow human beings, but equally to all living and non-living beings – as a type of socio-ecological stewardship. Thus, by defining an individual's relationship to its self and to the world as a form of guardianship within this ecological web, I would argue that we have laid the cornerstone of the “structural [eco-]communal-ity of the commons” (Meretz 2012), for property arrangements that include those without a voice: the wider community, humankind ‘in general’, nature and, possibly also, future generations. In view of these inclusory advantages of guardianship over ownership, scientists Will Steffen et al. (2011) propagate stewardship as a crucial means to solve the serious threats that humanity faces in the epoch of the Anthropocene.

From non-interference to non-domination

Although this argument might sound reasonable, it may be feared that the shift from ownership to guardianship will open the door to the arbitrary oppression of the individual by the community. In order to deal with this legitimate criticism and potential danger, I argue in the following section that not guardianship, but rather non-interference leads to new forms of domination and, thus, paradoxically enough, to *arbitrary* interference. This insight brings us to the conclusion that a revision of Locke's theory of property from a commons perspective also requires a shift in focus from non-interference to non-domination.

Put in a historical perspective, John Locke's concept of natural property rights was developed as a critique of the existing feudal social order and the absolute powers of the monarchy over property rights. With the rise of the bourgeoisie, this feudal property regime was problematized, not only because it limited the individual appropriation of property but also because the absolute monarch ultimately had the power to arbitrarily confiscate the property of his subjects. Locke's theory of property was thus a means of dealing with both of these problems. On the one hand, it justified an original appropriation of property through labor and unlimited accumulation through money; on the other hand, it protected individual private property from the arbitrary powers of the state. By grounding these basic property rights in God, nature and reason – all of which were understood to be one and the same (Laslett 2008: 94-6) –, Locke provided a new theological interpretation of the divine property arrangements that lies prior to existing social institutions. This is what is generally understood as natural law. Thus, individual private ownership became a means to prevent arbitrary political powers from interfering with a person's freedom to act. For this reason, the non-interference engrained in individual private property has become a fundamental cornerstone for all other forms of freedom and a liberal society in general.

Considering the power asymmetries of the feudal social order, the right to non-interference is in itself an important and legitimate claim. However, since Locke's times, the freedom of individual ownership has expanded to such an extent that it has shifted the balance of power from the absolute monarch to wealthy individuals and large multinational corporations whose existence often lies beyond the grasp of nation states and social control. In this sense, the relationship between sovereignty and private power has been reversed (Bailey/Mattei 2013: 973-4). And while state sovereignty has partially been democratized since Locke's times, property arrangements have remained – often in the name of individual negative freedom and constitutional democracy (e.g. Epstein 2011b) – largely immune to the processes of democratization.⁸ With James Tully we can say that this is a result of the prioritization of individual negative rights over democratic rights of code-termination. It therefore appears as though Locke's property rights, which were originally developed as a critique of the power of the monarchy have, in turn, enabled new power asymmetries to develop.⁹

In his *Second Treatise on Government*, Locke already recognized that private property and the introduction of money lead to inequalities. According to Locke, however, people must accept these asymmetries on account of their “tacit and voluntary consent” to this social arrangement and the supposed fact that monetary wealth “may be hoarded up *without injury* to any one” (Locke 2008: II, §50; emphasis added). As we see, the accumulation of wealth by some individuals has, according to Locke, no negative effects on or ‘externalities’ affecting those with less property or no direct access to the means of subsistence. As has already been mentioned, Locke's answer to this problem of scarcity-through-privatization is the ability to ‘freely’ exchange one's labor for wages and the increases in productivity that result from private ownership. The person without direct access to the means of subsistence can sell his or her labor power to someone who owns productive resources. Furthermore and as Adam Smith later argued, the unfettered profit motive, market competition and the increased productivity that results from privatization will supposedly benefit propertyless individuals in providing them not only with jobs but also cheaper and more luxurious goods. In this sense, Locke and Smith assume

8 It must be noted here, however, that nationalization cannot be equated with democratization. A well-known (failed) example of the democratization of private property is the Meidner Plan in Sweden (Blackburn 2007; Pontusson 1992). This is not to say that a number of small-scale cases do not exist in which resources have been socialized and democratized, such as reclaiming water rights in Cochobamba, Bolivia, and Italy (Assies 2003; Mattei 2013b) and the recuperation of companies by workers in Latin America and Europe (Azzellini 2016).

9 Saki Bailey and Ugo Mattei describe this as a “return to a sort of neo-medievalism, where state sovereignty is weak and constitutional law is reduced to a Leviathan that uses an iron fist with the weak – the people – and the velvet glove with the strong – corporate powers” (Bailey/Mattei 2013: 973).

that scarcity-induced conflicts can be solved through increased productivity. Today, this is generally understood as economic growth and the 'trickle down' effect – and is still a frequently invoked justification of socio-economic inequalities (Pinker 2018: 97–120). That being said, it is important to note that this dualistic depiction of reality as divided between the haves and the have-nots may appear to some as highly simplified, especially considering the development of the middle-class and other positive effects of economic growth over history. But while there have been great increases in the absolute amount of wealth since the times of Locke and Smith (Maddison 2007; Acemoglu/Robinson 2012; Pinker 2018), the asymmetrical relation between those with and those without productive property (e.g. capital) still remains relevant (Piketty 2014; Oxfam 2017).

But do the inequalities and power asymmetries resulting from the private appropriation of the original commons truly have *no* negative effects on the propertyless? And are all people still equally free if no one is interfered with by the arbitrary power of the state? The important point to make here is that, in contrast to Locke's assumption, the unlimited accumulation of resources by *some* individuals may well expand *their* sphere of non-interference, but this accumulation also limits and therefore interferes with the freedom of *others*. Jeremy Waldron lucidly explains this problem in his book *The Right to Private Property*:

If private property serves negative liberty, it does so because owning something just is a matter of being free to use it and of its being the case that one is not to be opposed in that use by the interference of others. But then the distribution of property has a direct impact on the distribution of negative liberty. A person who owns nothing in a society (where everything is privately owned) is not at liberty, in a negative sense, to make use of anything – indeed for everything that he might use, someone else has a right that he should refrain from using it, and it is a right which they are entitled to enforce. If it is true that all (or most) human actions require a material component over and above the use of one's own body – a location, for example, or an implement – then the unfreedom in a negative sense of the propertyless man is more or less comprehensive. There is literally nothing or next to nothing that he is free to do. This point is mitigated by the existence of some common property even in the most comprehensively capitalist societies: tramps have the streets to walk on and the bridges to sleep under. But that is all they have and all they can do, without falling foul of the prohibitions enforced by the property system of the society in which they have to make a life for themselves. (Waldron 1988: 410–11; original emphasis)

As we can see, the unlimited appropriation of resources by some individuals makes these resources scarce and ultimately undermines the freedom of others, thereby substantially interfering with the freedom of others. While it is often assumed that the point of negative freedom is to free the individual from undesired interference

and involuntary obligations, as I have mentioned already it nevertheless “generates a duty [...] on everyone to refrain from using [the thing or resource] without my permission” (ibid.: 109). People without property are thus placed under the duty to recognize the property rights of the other – even if they themselves are property-less and need these resources to survive. Similarly, G. A. Cohen vividly illustrates this relationship between one’s duty to respect the property of others and the interference with the freedom of those without property:

The banal truth is that, if the state prevents me from doing something that I want to do, then it places a restriction on my freedom. Suppose, then, that I want to perform an action which involves a legally prohibited use of your property. I want, let us say, to pitch a tent in your large back garden, perhaps just in order to annoy you, or perhaps for the more substantial reason that I have nowhere to live and no land of my own, but I have got hold of a tent, legitimately or otherwise. If I now try to do this thing that I want to do, the chances are that the state will intervene on your behalf. If it does, I shall suffer a constraint on my freedom. The same goes, of course, for all unpermitted uses of a piece of private property by those who do not own it, and there are always those who do not own it, since ‘private ownership by one person presupposes non-ownership on the part of other persons’ (Marx 1991: 948). (G. A. Cohen 1995: 55-6)

The general point that Waldron and Cohen are making is that, given the interdependence of individuals on resources that people need for their life and liberty, no neutral or positive sum property arrangements exist. The accumulation of some resources inherently leads to scarcity for others. While the concept of non-interference might have made sense in its historical setting against the powers of an absolute monarch, the un-interfered-with and thus unlimited appropriation of resources can substantially undermine the life and freedom of others. As becomes clear, the interdependence of living beings implies that the existence and freedom of one being is inherently intertwined with the existence and freedom of another being and therefore always ‘interferes’ with others – whether we like it or not.

As previously mentioned, Locke’s answer to the problem of exclusion from direct access to resources is wage labor. But is there not a fundamental difference between direct access to resources and engaging in wage labor? On the one hand, it could be argued that there is no difference between working on the original commons and wage labor because both are a means to secure one’s existence through labor. Whether I cultivate my vegetables or earn a wage to buy vegetables makes no significant difference. On the other hand, it must be acknowledged that the two are significantly different. The difference between the two is rather simple: when people do not have direct access to the means of subsistence or production, they have no other choice than to enter wage labor relationships. They either go hungry

or perform work for another – that is, if they can find a job.¹⁰ In this sense, we may speak of a socially determined existential necessity that forces people without access to the means of subsistence to enter wage labor relationships. Although the coercion is not exerted by individuals but through society's property arrangements, it is neither less real than personally exercised coercion, nor is it natural, nor entirely accidental.¹¹ We can therefore say that property arrangements that do not provide people with direct access to the means of subsistence and production deny those people the right to life and liberty.

Because this structural coercion is non-accidental, the inability to directly access the means of subsistence also means that an individual's ability to survive and freedom to choose how they will survive is interfered with in an *arbitrary* manner. While Philipp Pettit presents us with a less profound critique of wage labor relationships (Pettit 2006),¹² I would nevertheless like to draw on his notion of domina-

10 Starting one's own business is rather unlikely for most people without property, understood either as means of subsistence (land), means of production (machines) or accumulated wealth (capital), because in order to start a business, resources are required. The ability to borrow money (credit) to start a business might possibly be an option, but also requires an 'accumulation' of either social or symbolic capital (e.g. knowing the right people, having the right education, a good reputation or social status) that is not always given. This is not to say that starting a business for people without property is entirely impossible, but it is nevertheless less likely – or simply less successful – than for people with more capital.

11 While people like Townsend and Malthus aimed at naturalizing social arrangements that cause scarcity and poverty (Polanyi 2001: 116–21), Friedrich von Hayek argues that such occurrences cannot be considered unjust because they arise accidentally from the unintended interaction of individual agents. Hayek writes: "Though we are in this case [of injustice] less ready to admit it, our complaints about the outcome of the market [a property regime based on individual private property] as unjust do not really assert that somebody has been unjust; and there is no answer to the question of who has been unjust. Society has simply become the new deity to which we complain and clamour for redress if it does not fulfil the expectations it has created. [...] For in such a system in which each is allowed to use his knowledge for his own purposes the concept of 'social justice' is necessarily empty and meaningless, because in it nobody's will can determine the relative incomes of the different people, or prevent that they be partly dependent on accident. 'Social justice' can be given a meaning only in a directed or 'command' economy (such as an army) in which the individuals are ordered what to do; and any particular conception of 'social justice' could be realized only in such a centrally directed system." (Hayek 2013: 233) In contrast to this view, I argue that social arrangements can be considered unjust because they are always created by individuals with a specific purpose. The history of individual private property shows that it has always aimed at excluding other people from its use – and forcing people into wage-labor relationships (Neeson 1996: 27–34; Castel 2003). This coercion was therefore, in the eyes of some, not unintended. Yet even if this structural coercion was not intended, this should in no way deny people the right to criticize and counteract the negative effects that result from it.

12 In *Freedom in the market* (2006), Pettit argues with reference to Adam Smith that wage labor can – in an ideal or well-functioning labor market – provide people with the ability to escape

tion as arbitrary interference in order to make sense of its various problems. With Pettit, we can say that arbitrary interference occurs when one person can arbitrarily interfere with the choices and plans of another person. Here, the action of one person is “chosen or rejected without reference to the interests, or the opinions, of those affected” (Pettit 1997: 55). In this sense, one person’s exclusion from the means of subsistence or production makes them dependent on the arbitrary will of the proprietor and his or her desire to employ them. As Waldron explains:

Appropriation [...] wreaks a drastic change in the position of non-appropriators. From being tenants-in-common of God’s largesse, they are now placed in the position of moral [and economic] dependence, for everything but bare survival, on the say-so of individual property-owners. (Waldron 1988: 175-6)

Put in a historical perspective, this is what Karl Marx calls “so-called primitive accumulation” and what is more generally understood as the enclosure or privatiza-

domination. Most importantly, this occurs through the possibility of exiting relationships of domination (Smith refers here to master-servant relationships characteristic of the feudal apprenticeship system) (Smith 1994: 117, 136-42) and entering more favorable ones (Pettit 2006: 142-4). In *Republicanism: A Theory of Freedom and Government* (1997), Pettit discusses, however, the problem of domination in what socialists have otherwise called “wage slavery” during the rise of capitalism and argues that his theory of non-domination supports this critique of wage slavery (Pettit 1997: 141-2). In this sense, Pettit criticizes property arrangements that lead to asymmetrical power relations and domination, which in turn legitimize state regulation and a fairer distribution of property: “The distribution of property may tend toward inegalitarian extremes, and it may be necessary to regulate against the effects of those extremes on people’s overall enjoyment of freedom as non-domination.” (Pettit 2006: 147) Despite this conclusion, he argues that the domination or, rather, arbitrary interference must be “more or less intentional in character” (Pettit 1997: 52). For this reason, he limits the notion of domination in property arrangements to particular relationships and intentional actions. In *Freedom in the market* he writes: “The property regime can have the aspect of an environment akin to the natural environment. Like the natural environment, it will certainly affect the range or the ease with which people enjoy their status as undominated agents, and it may warrant complaint on that account, but it will not itself be a source of domination. It will not be a source of domination so far as it is the *cumulative, unintended effect* of people’s mutual adjustments, where that history of adjustment may or may not have begun in government initiatives.” (Pettit 2006: 139; emphasis added) As we can see, this is a similar argument to the one presented by Hayek (see footnote 11 above) because Pettit brackets out the “unintended” domination that arises from the social structure or property arrangements themselves. As I already argued *a propos* Hayek, it is extremely questionable whether the domination that arises out of such property arrangements is entirely unintended, because the legal framework has been intentionally implemented and maintained (Gourevitch 2013: 606). And even if these effects of a specific property regime were unintended, I would agree with Alex Gourevitch that a republican theory of non-domination must include not only intentional domination in a particular employer-employee relationship, but also the structural domination that arises in wage labor relationships out of asymmetrical property arrangements (ibid.: 598-601).

tion commons, and the dispossession of those who have depended on commons, that began in the 12th century, if not earlier, and has continued until today (Marx 1982a: 873-940; Neeson 1996; Zückert 2003; Boyle 2003; Harvey 2004; Linebaugh 2008; Federici 2009). Although this process of enclosure might have freed peasants from the feudal relationships of serfdom, it also 'freed' peasants from their means of subsistence – ultimately making them vulnerable to the arbitrary interference of proprietors.

In contrast to the notion of socio-ecological interdependence I developed above, economic dependence on wage labor is therefore problematic because of the asymmetrical power relationship between the employer and the employee. This relationship places the one without property in a situation of vulnerability and powerlessness vis-à-vis the proprietor/employer. In turn, this relationship leaves the door open to domination. Here, we can also refer to Pettit's notion of domination, which he defines as follows:

Both [the employee and the employer] will share an awareness that the powerless can do nothing except by the leave of the powerful: that the powerless are at the mercy of the powerful and not on equal terms. The master-slave scenario will materialize, and the asymmetry between the two sides will be a communicative as well as an objective reality. (Pettit 1997: 61)

The fact that wage labor relationships have been entered into by contract does not, however, alter the existence of this power asymmetry (*ibid.*: 62). Although the ability to exit wage labor relationships slightly increases one's freedom, it does not protect or immunize the propertyless against future relationships of domination. In turn, within the hierarchical wage relationship, domination is often experienced as the necessity of carrying out certain tasks that are determined by the employer, thereby denying the employee his or her freedom to self-organize and codetermine their activities with others. As a result, we find two potential types of domination in wage labor: one in the asymmetrical distribution of access to productive resources and the other in hierarchical employee-employer relationships (Gourevitch 2013: 598).

This is not to say that all wage relationships are experienced as hierarchical and oppressive. Contemporary forms of wage labor relationships in a modern knowledge-based economy, for example, often support individual creativity, self-management and team collaboration. Yet despite these gains in the individual freedom for employees, the range of freedom is often limited by the employer's demands that employees increase productivity and outputs (Boltanski/Chiapello 2007). Furthermore, the relationship of domination remains, because it is not necessary that the person in power (e.g. the employer) actively interfere with the freedom of the propertyless (e.g. the employee). Instead, we can argue with Pettit that "what constitutes domination is the fact that in some respect the power-bearer has the *ca-*

capacity to interfere arbitrarily, even if they are never going to do so" (Pettit 1997: 63; emphasis added). The mere capacity of property owners and employers to deny an individual their wage labor and thus a means to survival, on the one hand, and the mere capacity to subjugate the employee to the will of the employer within a wage labor relationship, on the other, provides the basis for domination, even if it is not actively exercised. In this sense, we can argue with Pettit that the propertyless "are in a position where fear [of unemployment] and deference [to the employer] will be the normal order of the day, not the frankness that goes with *intersubjective equality*" (ibid.: 64; emphasis added). By creating asymmetrical positions of power and domination, property arrangements that enable the unlimited private accumulation of resources can therefore arbitrarily interfere with and undermine the equal right of all people to life and liberty. Ironically, the arbitrary interference caused by asymmetrical property relationships as described above reminds us of the domination of the sovereign, which Locke originally aimed to limit and avert. The arbitrary interference and domination that arises from negative freedom rights ultimately undermine not only the equal negative freedom rights of the propertyless, but also the principle of self-organization that underlies my notion of ecological democracy. In order to grasp and deal with the problem of negative freedom, I argue with Pettit that we must shift our focus from non-interference to non-domination, thereby providing each member of a community with protection from arbitrary interference and, in turn, the possibility of participating in the codetermination of their activities.

Following this line of thought, one answer to the problem of domination is limiting the accumulation of resources by individuals and corporations. If we link this to the concept of guardianship, we can see that a limitation on accumulation should not merely be framed as a cap on wealth, but rather as basic responsibilities towards other individuals, affected communities and the environment that are inscribed in property relations themselves. To put it briefly, the limiting of accumulation reciprocally enables the freedom of others. John Rawls' *Theory of Justice* provided this with a now-classical definition in the form of the maximin principle: socio-economic inequalities must be limited in order to maximally benefit the least advantaged (Rawls 1999). With a more socio-ecological focus, Capra and Mattei briefly discuss the implications of such a limitation of accumulation in their discussion of ecolaw. In relation to corporations they suggest:

Ecolaw will not consider corporations, which are the current face of accumulated capital, as people, because unlike every other creature they are immortal. In the United States, for example, the idea that economic interests can be incorporated no matter what their purpose is quite recent and dates back to the late nineteenth century. Before then the legal benefits of incorporation were granted only for specific purposes and were limited in time. Once the purpose of a corporation had

been achieved, such as when the Charles River Bridge was completed, the corporation would dissolve, as naturally as individuals die. In ecolaw, the benefits of incorporations are restricted, with conditions to care for the environment and respect communities. (Capra/Mattei 2015: 185-6)

In this sense, the purpose, activities and existence of corporations will always be bound to their meaning and value for the affected people and environment. In turn, this socio-ecological embedding should limit corporations' ability to dominate others. This can theoretically imply either the limitation of resource extraction from socio-ecological systems or the redistribution of wealth back to those affected by an economic enterprise.

Despite the importance of limiting accumulation and, thus, limiting power asymmetries, the notion of non-domination also requires people to be protected from potential domination. According to what I have argued, this would require people not to be forced into asymmetrical wage labor relationships by existential necessity. Within the republican tradition, this has often been understood as freedom from economic dependence. Thinkers such as James Harrington, Jean-Jacques Rousseau and Thomas Jefferson argued that freedom and democracy can only be realized through the widespread distribution of property in resources and, more specifically, in land (Jackson 2012: 34-5). Generally put, all three propagated an agrarian republicanism that was assumed to secure the independence of individuals through a broad distribution of land and, thus, the direct access to their means of subsistence. Such a property arrangement would protect individuals from economic dependence and, in turn, produce independent, responsible, diligent and austere citizens. With the rise of the open access market and commercial society the focus slowly shifted from land to the access to public goods such as universal education, health care and old age pensions. This age-old argument that property in resources is a necessary precondition for life and liberty has more recently taken on different forms, as for example: John Rawls' concept of a property-owning democracy (Rawls 2001), Bruce Ackerman and Anne Alstott's notion of *The Stakeholder Society* (Ackerman/Alstott 1999), the idea of the unconditional basic income, which is, for example, advocated for by Philippe Van Parijs (Van Parijs 2003; Widerquist 2013; Pettit 2007). At the center of all these schemes is the basic idea that property is a necessary precondition for life and independence, generally understood as the freedom from arbitrary interference and domination.

I will discuss Rawls' notion of property-owning democracy shortly, but for the time being, it is crucial to note the importance of commons for freedom from arbitrary interference and domination. Similar to the just-mentioned schemes, commons have historically provided people with direct access to their means of subsistence and therefore "offered some independence of wages and markets" (Neeson 1996: 12). Similarly, Stuart White argues,

In the same way that the historic enclosure of the commons helped to create a proletariat, reliant on wage-labour, the emergence of the commons today can conceivably help limit this reliance. To the extent that capital- and commons-based predistribution reduce reliance on wage-labour, they thereby also help reduce the risk of domination from this source. They will tend to make workers less desperate to find jobs and so help protect them against situations where, because of the urgent need for a job, they are vulnerable to domination by employers. (White, unpublished: 10)

The direct access to resources in the form of commons can therefore limit the arbitrary interference that arises through asymmetrical distribution of individual private property and the dependence on hierarchical wage labor. Furthermore, by defining non-domination as a central pillar of property arrangements, “no single individual can arbitrarily make the decisions affecting” all the others (Gourevitch 2013: 609). In turn, this enables Pettit’s “intersubjective equality” (Pettit 1997: 64) to come about, in which people can organize economic activities, including wage labor relationships, in a more democratic manner. The important point, however, is that the notion of commons developed here emphasizes non-dominated socio-ecological *interdependence* and not economic *independence*. Put in this light, the advantage of commons over more individualistic property arrangements, such as Rawls’ property-owning democracy or a basic income, is that interdependence is inscribed in the property arrangements themselves. While criticizing the dependence from asymmetrical power relations, a commons theory of property would not fall into the illusions of individual independence, as many republican theories do, but would instead critically reflect how interdependence can be organized in a manner that hinders arbitrary interference and domination on the one hand, and enables the negotiated self-organization of economic activities on the other. The fundamental question is not, therefore, whether interference takes place or not, but rather how commons arrangements can be organized in order to distribute freedoms and duties in a manner that supports the interdependent and sustainable self-organization of all living beings.

From individual labor to interdependent needs

Up until now, I have reinterpreted John Locke’s theory of property by replacing ownership and non-interference, as constituents of our understanding of property with guardianship and non-domination. The justification of these shifts was largely based on the socio-ecological interdependence of living beings and the problems of arbitrary interference and domination that arose out of a purely negative definition of freedom. The connection between interdependence and non-domination led me, in turn, to the justification of a commons property arrangement. Now, how-

ever, a central question relevant to the reinterpretation of Locke's theory of property arises: how should we understand the legitimacy of appropriating from commons? According to Locke, the ability to individually appropriate resources held in common is based on what is often referred to as the labor theory of property. By working on the resource, I have a right to declare it as mine. In turn, Locke also declares that a thing must be one's individual private property in order to use or consume it. In order to critically reinterpret these frequently invoked justifications of individual private property, let us begin with Locke's labor theory of property and, more precisely, Carol Gould's critique of that theory in her book *Rethinking Democracy: Freedom and Social Cooperation in Politics, Economy, and Society* (1990).

Much like my own defense of an ecological and interdependent interpretation of reality, Gould argues that in order to overcome the problems of domination and exploitation we must base our property arrangements not on an individualistic, but on a social ontology. As a critique of Locke's individual labor theory of property, she argues that most forms of production occur not individually but through social cooperation and collaboration. Conceptualizing labor activities in this manner, she maintains that the labor theory of property "gives rise to a different conception of property right, namely, social property" (Gould 1990: 177). Yet, in order to protect a minimal realm of negative freedom and non-interference for the individual, Gould distinguishes between personal and social property. In this postulate, Gould differentiates between personal property that is "required for the individual's own subsistence and self-development" and social property, which is "required by individuals in common in order to realize their joint purposes" (ibid.: 180). Furthermore, she develops arguments for two fundamental rights to social property. Firstly, she explains the "right of all of those engaged in a common activity to control the products of that activity, or to enjoy in common the benefits of their labor", which provides the "condition for the development of the sociality of individuals as individuals-in-relations" (ibid.: 183). Secondly, she argues in favor of the "equal right to control the conditions of social activity" (ibid.), which sounds very similar to my definition of democratic freedom. But Gould says that this implies not only the "right to participate in decisions concerning the uses of the conditions or means of social production in which one is engaged" but also "the right to participate in decisions concerning the purposes and plans of the activity" (ibid.: 183-4). Simply put, the right to codetermination is based on one's participation in a joint, social activity. I agree with Gould that such a social right to democratic codetermination and the individual right to the fruits of one's social activities provides an important cornerstone for a more social and democratic interpretation of Locke's labor theory of property. It provides a radical shift from the right of the individual proprietor to exclude others to the right of others to be included in the common use and benefits of the specific resources. Furthermore, her understanding of labor is broad enough to include not only people in wage-labor relationships, but

also people who participate in unpaid social activities. Finally, her notion of social property is not conceptualized as state property but rather as “the property of the associated individuals engaged in a given common activity, whether in an industry or a social organization” (ibid.: 189).

In a similar way, this principle is expressed by legal scholar Burns H. Weston and commons intellectual David Bollier in their book *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons* (2013). In relation to the “principles of internal [commons] governance” they write that “commoners shall have collective control over the surplus value they create through the collective management of their shared wealth and resources” (Weston/Bollier 2013: 275, 277). While Gould emphasizes the recognition of the individual equal right to positive freedom in relation to others, I would interpret this from my commons perspective as the equal right to individual and interdependent self-organization. Despite the gains that come with a social and democratic reinterpretation of Locke, I would nevertheless argue that a labor theory of property is not adequate for a commons theory of property because, firstly, it remains rather exclusive and, secondly, it falsely prioritizes labor activities over the general right to existence through a right to the satisfaction of primal needs.

In order to understand these limitations, let us begin with the basic argument for a (social) labor theory of property. Since we have already discussed the problems of a labor theory of property in relation to the notion of ownership, we will now focus on the more general problem of grounding a theory of property on labor. Put in more general terms, it must be admitted that a labor theory of property does have an intuitive appeal. If I (or we) change an object that is not owned by anyone, it seems that I (or we) should have the right to declare that thing as mine (or ours). With Gould, we could say that if a group of people kills a mammoth, then the group would have the right to the mammoth meat. Or, with a more contemporary example, if a group of people build cars in a factory then they have a right to codetermine how the activities are organized and how the profits of the company are distributed between the employees. Although Gould argues that her concept of social property refers to the broad notion of “social activity” (Gould 1990: 183) and is thus not limited to wage-labor relationships, the principle of a *labor* theory of property inherently limits the questions of codetermination to those performing the specific labor activities. Other people who are not engaged in these activities but are nevertheless significantly affected by them are thus excluded from the rights to codetermination. Thus, by focusing on labor activities, people outside of the hunting, farming or industrial activities (in both cases often women and the wider community) are excluded from the decisions concerning how activities are to be organized and, more importantly, what is to be done with their fruits. According to the principle of non-interference, it would be assumed that people outside of these activities should have no say in the codetermination of these affairs. Considering, however,

the division of labor in society and the interdependent self-organization of living beings (i.e. the dependence of the person engaging in wage-labor on the person at home taking care of the children and the household and on the city as it takes care of education, pollution, unemployment, etc.), it becomes less clear why people at home or in the community should be *completely* excluded from the important decisions that are made in businesses that *significantly* affect and determine their lives.

In order to understand this problem better, let us turn to an example that lies closer to home: the ability to democratically participate in political affairs. In contrast to the fundamental right to democratic codetermination of one's life conditions, the argument for political participation based on negative liberty and individual private property, as presented by Locke and others, is grounded on the right to non-interference as against the state authority. People are allowed to vote in matters concerning the state because they are subjugated to the state monopoly on the use of force. Furthermore, people (are obliged to) pay taxes so that the state will be able to provide certain public goods such as law and order, roads or education. For this reason, because of the coercive force that stands behind the obligation to be a member of this specific association and the requirement to pool private resources through taxation, people should ultimately also have a say in how the state is organized or, as is most often the case, they should be able to elect who shall rule and determine the organization of the state and its activities. So the main justification of the democratic right to participate in public affairs of the state is the fact that citizens are involuntarily and significantly affected by the state's overarching authority. Political participation is therefore a means to limit arbitrary interference of the state (i.e. domination) and to collectively define its legitimate forms of interference (e.g. taxation). In more general terms, participation is a means to legitimize the basic rules governing our common reality. Here, the more fundamental right to democratic self-organization shines through the negative right to non-interference. According to the classical argument from negative freedom, however, one would have no right to codetermine either the organization of the firm one works in or the use of the surplus value that it appropriates, because one has the free choice to exit this wage labor relationship and work elsewhere (where one will most likely not have the right to democratic participation either). Finally, if a person is not happy with the undemocratic company they work for, they theoretically have the right to start a democratic enterprise together with others. According to this logic, the exit option provides people with the ability to escape involuntary domination in "private" associations, but does not provide them with the right to codetermine either the activities that they perform with others or those by which they are otherwise affected.

On the one hand, I agree that we must distinguish between different types of associations in which people are involved (e.g. the state versus private firms).

On the other hand, if we understand freedom as non-dominated freedom with, through and against the other in the codetermination of the socio-ecosystems that one inhabits, the strict separation between the in- and out-group becomes less clear. Put rather simply, although I do have a choice between different partners, products or jobs, owing to the existential necessity to engage in wage-labor (even in its non-dominated and democratic form) the people of a community are significantly affected by and interfered with by the way that firms conduct their business. In this sense, how low (or high) wages are in a given society, for example, or what type of products it produces and sells (e.g. chemical or organic fertilizers), or what type of technology its firms used (e.g. whether very little labor or more craft and skill is necessary) – these things make a big difference to the people who live in that society. Even though these issues are often understood as private matters concerning, first and foremost, the official owners of the firm (e.g. the shareholders), they do have large effects not only on the workers of the firm, but also on the surrounding community and the wider public because they share a *common reality* and are dependent on this reality for their life and liberty. Parallel to the dependence of an individual's life and liberty on wage labor relationships, we must admit that communities are also deeply affected by, dependent on and, thus, potentially dominated by the economic activities of 'private' associations. While Gould's social labor theory of property aims to widen this range of codetermination to those performing collective activities, other affected communities nevertheless remain excluded from the process of democratically negotiated self-organization. Thus as we can see, the social interpretation of a labor theory of property is limited owing to its focus on the performance of labor, which then excludes those human and non-human beings who are significantly affected by the activities yet not actively participating in them. For this reason, I argue that it is necessary to include not only shareholders and those performing specific labor activities, but also significantly affected stakeholders in the democratic codetermination of enterprises, ultimately transforming an economic enterprise and association into a type of commons (Tortia 2011). Put slightly differently, the *arbitrary* interference in and potential domination of enterprises in one's private life plans legitimizes the *non-arbitrary* 'interference' in or, rather, the codetermination of social activities of (re)production in economic organizations that effect one's interdependent common reality. We will discuss the notion of economic commons associations in greater detail later, but let us now turn to the second fundamental problem in the labor theory of property: the priority of labor over life.

The question that arises from our previous discussion of economic activities, the division of labor and affected communities is therefore whether *labor* itself is truly the ideal justification for the appropriation of resources and the appointment of authority to determine the allocation and use of resources. I will not discuss the intricate details of the difficulties in the labor theory of property (Waldron 1988:

137-252). Instead, I would like to begin with Hume and Kant's general critique of Locke's labor theory of property, according to which a minimal form of possession of external resources must precede any form of labor. According to Hume and Kant, this prior possession does not arise from labor, but instead from simple occupation (ibid.: 173-4).¹³ It is the prior occupation of land and space that, in turn, enables people to access, labor on and use these resources. Or, more simply put, property in the world is a precondition of labor – and therefore also for life and liberty. Only if I can *access* resources (whether directly or through contract) can I then work on them in order to survive and, hopefully, live freely. This insight figuratively turns Locke's labor theory of value on its head – or, as will become clear, restores its original meaning. Although I would not necessarily agree with the manner in which Hume and Kant frame the problem as a warlike state of nature in which each *individual* must protect his or her goods from the threatening dispossession by others, I nevertheless agree with their general insight. Yet, in a somewhat less individualistic and belligerent rhetoric, we could also say that the original appropriation of external resources does not occur through labor, but through people simply *being in the world*.

If this argument is correct, it would also require us to reinterpret the notion of the "right to property". To do this, it may be helpful to use Jeremy Waldron's distinction between a special-right-based and a general-right-based argument for property.¹⁴ Waldron defines the concept of "rights" and the different arguments in the following way:

A right-based argument for private property is, as we have said, an argument which takes an individual interest to be sufficiently important in itself to justify holding others (especially the government) to be under duties to create, secure, maintain, or respect an institution of private property. A *special-right-based argument* (or SR-based argument, for short) is an argument which takes an interest to have this importance not in itself but on account of the occurrence of some contingent event or transaction. A *general-right-based argument* (or GR-based argument, for short) is one which does not take the importance of such an interest to depend on the occurrence of some contingent event or transaction, but attributes that importance to the interest itself, in virtue of its qualitative character. (Waldron 1988: 115-6)

13 In the words of Jeremy Waldron: "Before a man can cultivate a piece of ground, he must take it into his possession and exclude others from its use; otherwise their exercise of common rights might make his cultivation impossible." (Waldron 1988: 173)

14 It should be noted, however, that Jeremy Waldron adopted this distinction from H.L.A. Hart (Waldron 1988: 106).

This distinction enables us to pinpoint a central problem in the labor theory of property. Put in general terms, Locke transforms the primary and original general right to access resources in the original state of nature into a special and contingent right to appropriate resources through labor. Furthermore, Locke's justification of private property was based not only on the right to the fruits of one's labor, but also on the increased productivity that was brought about through labor and private ownership. Simply put, those who produced *more* possessed the ultimate right to resources. For example, it was the increase of "comforts" and "conveniences" (Locke 2008: II, §41) through productivity gains in farming that, according to Locke, justified the taking of the "wild woods and uncultivated waste of America" from the "needy and wretched inhabitants" of the New World (ibid.: II, §37). Although Locke did not actually argue for the privatization of common lands in England (ibid.: II, §35), the reasons that justified the violent expropriation and enclosure of commons were based on similar arguments (Neeson 1996). As Locke explains, "God gave the world to men in Common; but since he gave it them for their benefit, and the *greatest Conveniencies of Life* they were capable to draw from it, *it cannot be supposed he meant it should always remain common and uncultivated*" (Locke 2008: II, §34; emphasis added). This special-right-based argument for individual private property has major implications: on the one hand, Locke assumes that productivity and resources held in common are mutually exclusive; on the other hand, it implies that an increase in productivity provides people with the right to own resources over those who are less productive (i.e. farming over hunting and gathering, industrial production over craft work etc.). Both of these assumptions and arguments are still widespread today (Demsetz 2002). Moreover, the priority of productivity leads to a linear, growth-oriented justification of property arrangements and economic activities instead of, for example, arrangements based on care for the sustainable reproduction of resources. That being said, we may conclude that Locke's special-right-based argument of resource appropriation through productive labor does not secure the general right to life, liberty and property for all, but instead leads to the privilege of those with greater strength and skill to extract more common resources from nature and society.

It must be admitted that Gould's labor theory of social property attempts to mitigate this problem by arguing that everyone participating in a specific activity should likewise control the means of subsistence and production and have a share in the fruits of labor. Nevertheless, a very large asymmetry between those who can produce more and those who cannot or do not produce much has often been the result of this asymmetry. This is precisely the problem that Karl Marx describes in his *Critique of the Gotha Programme*, in which he criticizes the principle of the equal right to the fruits of one's (social) labor:

The right of the producers is *proportional* to the labor they supply; the equality consists in the fact that measurement is made with an *equal standard*, labor. But one man is superior to another physically, or mentally, and supplies more labor in the same time, or can labor for a longer time; and labor, to serve as a measure, must be defined by its duration or intensity, otherwise it ceases to be a standard of measurement. This *equal* right is an unequal right for unequal labor. It recognizes no class differences, because everyone is only a worker like everyone else; but it tacitly recognizes unequal individual endowment, and thus productive capacity, as a natural privilege. (Marx 2009: 9-10; original emphasis)

As Marx emphasizes, while the focus on labor may be correct according to certain standards of justice and equality, it nevertheless remains an abstraction that negates the differences between individuals' productive capabilities and activities, ultimately creating and legitimizing material inequality between people. In turn, this inequality can lead to power asymmetries and relationships of domination between people. In Waldron's terminology, we could say that even a *social* labor theory of property is a special right and thus remains contingent and somewhat arbitrary. According to Marx, this is due to the focus on the distribution of goods in the 'sphere of circulation' after the goods have been produced – instead of the distribution of the means of subsistence and production themselves.

With Waldron, I therefore argue that in order to deal with this problem we must shift our reconstruction of the legitimacy of property from a specific-right-based to a general-right-based argument. In Lockean terms, this implies a shift from the labor theory of property "back" to the primary general right of all people to access resources that originally belonged to all of humanity. But then what would the justification of the right to use and appropriate goods be based on, if not labor? The answer to this question is quite simple and has already been mentioned: needs. As Waldron explains,

A GR-based argument for private property is not satisfied by the assignment of one or two trivial or useless resources to each individual; it requires the assignment to individuals of resources that they take seriously as the basis of their individual economic well-being. Thus the universal distribution of private property, required by a GR-based argument is likely, as a matter of fact, to *satisfy the demands of the principle of need*, for in seeing to it that everyone has private property, the proponents of that argument will also in effect be seeing to it *that everyone has the wherewithal to satisfy his basic needs*. (Waldron 1988: 440; emphasis added).

According to Waldron, the shift from a special-right-based labor theory of property to a general-rights-based needs theory of property places the principle of occupation or rather being, life and self-preservation at the heart of our property arrangements. It can therefore be said that a labor theory of property reverses the

fundamental relationship with the world from one based on embodied being in relationships with the world to one based on the unequal opportunity to pursue productive activities. One's relationship to the socio-ecosystem is therefore dependent on one's arbitrary natural endowments and one's ability to work and accumulate. The labor theory of property assumes that humans should first work and then eat and have shelter, even though they require shelter, food and most likely many more resources (e.g. education) before they can work. Simply put, basic needs must be fulfilled before work can be performed. Anyone who has brought up children knows this to be a general fact. For this reason, a more just theory of property must place needs satisfaction over labor. In Lockean terminology, we must therefore conclude that a property regime that fulfills these criteria of life, liberty and property for all is not one based on labor, but on the more general right to existence through the access to resources that enables one to satisfy one's needs. Yet, to be precise we must admit that Waldron is not arguing for a general right to common property or commons. However, although he focuses on individual private property, the argument also holds true for common property. And as we have already argued, the justification for the access to commons instead of individual private property is the fact that commons provide people with a more adequate institutional arrangement for dealing with conflict in the satisfaction of people's common and interdependent needs.

In conclusion, it can therefore be said that the development of a commons theory of property demands that we critically revise Locke's well-known labor theory of property. As I have demonstrated, this demands a threefold shift in our understanding of property: firstly, the shift from (self-)ownership to (self-)guardianship integrates the wider socio-ecological web of life in institutional property arrangements. Secondly, the shift from non-interference to non-domination requires that people have direct access to resources held in common in order to avert arbitrary interference and, in turn, enable the codetermination of their activities and life conditions. Lastly, my critique of a (social) labor theory of property has demonstrated the necessity of prioritizing the more basic and general right to resources according to interdependent needs satisfaction (i.e. 'being', life or self-preservation) over the special right to resources through labor appropriation.

After having worked through these elements of a theory of property, the question arises how such a right to property should be spelled out. To gain an idea of what such a property arrangement might look like, let us now turn to the work of John Rawls, who also argues for the direct access to resources or, in his terminology, an *ex ante* or *predistribution* of property in the name of individual freedom and democracy. Parallel to my revision of Locke's theory of property, I now critically examine Rawls' notion of predistribution and property-owning democracy and reinterpret it from a commons perspective.

6.4 Predistribution: commons in a property-owning democracy

It can generally be said that John Rawls is one of the most important political philosophers of the 20th century. His magnum opus *A Theory of Justice* (1999)¹⁵ remains a central reference for the conceptualization and defense of a free and just society. In this work, and somewhat more explicitly in his later book *Justice as Fairness: A Restatement* (2001), Rawls discusses the property arrangements of such a society. Rawls develops and defends the notion of predistribution, in which property in resources is understood as a precondition of a person's life and liberty. The principle of predistribution allows him to develop a model of property-owning democracy, which I analyze here. The question that arises is whether this notion of predistribution and property-owning democracy can aid in the development of a commons theory of property and if not, how we must reinterpret Rawls' model. In order to answer this question I firstly sketch Rawls' theory of justice and his concept of a property-owning democracy. Next, I discuss the relation between the individual and society and critically analyze the role of the competitive market in Rawls' model. Finally, I argue that an ecologically sound predistribution scheme must shift its focus from productive assets and productivity to shared resources and their care. Thus, I claim that common property arrangements would provide a better background structure for a sustainable property-owning democracy.

John Rawls' property-owning democracy

In order to grasp Rawls' understanding of predistribution and a property-owning democracy, I first summarize and discuss his theory of justice, largely with reference to his book *Justice as Fairness: A Restatement* (2001). Rawls formulates the fundamental idea of justice as "a fair system of social cooperation over time from one generation to the next" (JF: 5). He breaks this concept down into his two principles of justice:

- (a) Each person has the same inalienable claim to a fully adequate scheme of equal basic liberties, which scheme is compatible with the same scheme of liberties for all; and
- (b) Social and economic inequalities are to satisfy two conditions: first, they are to be attached to offices and positions open to all under conditions of fair equality of opportunity; and second, they are to be to the greatest benefit of the least-advantaged members of society (the difference principle). (JF: 42-3)

15 In my discussion of Rawls' theory of justice, I will refer to the second edition of the book *A Theory of Justice* published in 1999 with the abbreviation "TJ". The book *Justice as Fairness* will be mentioned as "JF".

The first principle should enable the “fair equality of opportunity,” which is more generally understood as “liberal equality” (JF: 44). The second principle, on the one hand, refers to the “fair value of political liberties,” which should ensure the “equal chance of influencing the government’s policy and of attaining positions of authority irrespective of their economic and social class” (JF: 46). On the other hand, the second principle also includes Rawls’ famous “difference principle” which radically binds or limits the individual accumulation of wealth to the benefit of those least well-off in society. Within the ecological understanding of social reality I have elaborated, the difference principle could be understood as a means of expressing the principle of social interdependence and the requirement that a society can only flourish when all individuals can also flourish. As mentioned previously, this principle provides a way to limit arbitrary interference and domination.

Rawls understood his theory of justice to lay the foundations for the “basic structure” of a just and free society. According to Rawls, the basic structure of a society¹⁶ is the “primary subject of political justice” (JF: 10) and should secure just “background institutions” that “remain fair over time, from one generation to the next” (JF: 51). The reason these institutions are in the “background” is because they are supposedly founded on a general overlapping consensus of the members of a society and should thus not be put into question or attacked anew in each period of legislation. These institutions should make justice and freedom socially sustainable.

For a long time after his first formulation of a just basic structure, Rawls’ theory of justice was believed to amount to a legitimation and defense of welfare-state capitalism. He corrected this common misunderstanding briefly in the preface to the second edition of *A Theory of Justice* in 1999 (TJ: xiv-xvi) and then more extensively in his later book *Justice as Fairness* in 2001. Since this reformulation, there has been a growing interest in the interpretation and further implications of his theory of justice (O’Neill/Williamson 2012; Cheneval/Laszlo 2013).

In his discussion of the specific institutions of a just basic structure, Rawls distinguishes five different regime types: state socialism with a command economy, laissez-faire capitalism, welfare-state capitalism, property-owning democracy and liberal (democratic) socialism. Not very surprisingly, Rawls rejects state socialism because it is controlled by a single political party and “violates the equal basic rights and liberties, not to mention the fair value of these liberties” (JF: 138). In this regime

16 Rawls elaborates on the concept of this basic structure: “The basic structure of a society is the way in which the main political and social institutions of society fit together into one system of social cooperation, and the way they assign basic rights and duties and regulate the division of advantages that arises from social cooperation over time. [...] The basic structure is the background social framework within which the activities of associations and individuals take place. A just basic structure secures what we may call background justice.” (JF: 10)

type, the economy is structured according to a general plan that negates both democratic participation and free markets. Yet, Rawls also criticizes *laissez-faire* capitalism, which he calls “the system of natural liberty” (JF: 137) because it “secures only formal equality” and rejects both principles of justice (JF: 137).¹⁷ To the surprise of some, however, Rawls also argues that welfare-state capitalism (WSC) fails to live up to the standards of his theory of justice. Although WSC does express “some concern for equality of opportunity, the policies necessary to achieve that are not followed” (JF: 138). Furthermore, WSC also rejects the second principle of justice, the fair value of political liberties. Owing to these underlying values, WSC “permits very large inequalities in the ownership of real property (productive assets and natural resources) so that the control of the economy and much of political life rests in a few hands” (JF: 138). While WSC generally provides those in need with a social minimum, the inequalities that bring such needs forth are themselves not regulated, limited or eradicated.

The only answer to the failings of state socialism, *laissez-faire* capitalism and welfare-state capitalism is what Rawls calls property-owning democracy (POD) or liberal (democratic) socialism. While he only briefly discusses liberal socialism, Rawls develops the differences between WSC and POD in more detail. Liberal socialism consists, according to Rawls, of a regime in which the means of production are owned “by society” (JF: 138). Yet, in comparison to state socialism, a plurality of parties competes and is therefore forced to share political power. Furthermore, economic power is not centralized but “dispersed among [democratically organized] firms” (JF: 138). And, just as importantly, economic activities are structured not by a centralized plan but through “a system of free and workably competitive markets” (JF: 138). Despite the paucity of Rawls’ comments on liberal socialism, it appears safe to say that this regime is what many other intellectuals understand as market socialism: an economy organized by worker-owned firms and a ‘free’ market economy (Miller 1990).

17 In a letter to Philippe Van Parijs, Rawls elaborates on his critique of *laissez-faire* capitalism. Here, Rawls argues that the “large open market including all of Europe is aim of the large banks and the capitalist business class whose main goal is simply larger profit” (Rawls/Van Parijs 2003). This economic class justifies their interests with the “idea of economic growth, onwards and upwards, with no specific end in sight” (ibid.). He goes on to say that in *laissez-faire* capitalism distribution is almost exclusively referred to “in terms of trickle down” (ibid.) and without any mention of welfare-state redistribution. The problem with such an unregulated market economy is that the “long-term result of this [...] is a civil society awash in a meaningless consumerism of some kind” (ibid.). With reference to this trenchant critique, it can be said that Rawls rejects large, open markets in general because they are often used by economic (and political) elites to accumulate capital without having to redistribute their gains to other members of society. Furthermore, such a market economy creates individuals that are merely consumers and not understood – or do not understand themselves – as political citizens.

According to Rawls, the only other social arrangement that realizes his principles of justice is what he calls property-owning democracy (POD).¹⁸ Like liberal socialism, POD must, he thinks, be understood as “an alternative to capitalism” (JF: 135–6). However, while liberal socialism is like laissez-faire capitalism and WSC in that it emphasizes social ownership, POD allows for individual private property in productive assets. The major difference between WSC and POD is, nonetheless, that while WSC allows “a small class to have a near monopoly of the means of production,” POD ensures a “wide and far more equal dispersion of real property and productive assets” (JF: 161). Importantly, this also includes human capital, “that is, education and trained skills” (JF: 139). Rawls is, however, rather vague in defining what these primary goods could be. Besides education and training, the focus is often on what Rawls calls “productive assets”, which are interpreted by most of those developing his notion of POD as “productive capital” (O’Neill 2012: 80; Hsieh 2012: 156; Freeman 2013: 23; Thomas 2017: 307). Furthermore, in a POD the distribution of capital and wealth occurs not at the “end of each period” (ibid.) after the process of production and the distribution of assets through market exchange have taken their course but rather “at the beginning of each period” (JF: 139). The shift from WSC to POD is thus a shift from *ex post* to *ex ante* distribution. The shift in perspective is important because it intends “not simply to assist those who lose out through accident or misfortune (although that must be done), but rather to put all citizens in a position to manage their own affairs on a footing of a suitable degree of social and economic equality” (JF: 139).

Put somewhat differently, POD attempts to realize the substantive equality in which the right to life, liberty and property is not merely understood negatively as the *protection* of already existing property relations but also positively as a general right to *access* the means of production. This shift from redistribution to predistribution should transform individuals *dependent* on welfare into *independent* individuals capable of equally and freely participating in social cooperation. While inequalities and dependencies often lead to class antagonisms and political apathy, material independence should, in turn, provide recognition and self-confidence to all members of society, ultimately empowering them to participate in democratic politics (JF: 140).

Rawls’ notion of the individual and society

Having now laid out Rawls’ general understanding of his theory of justice and a property-owning democracy, the question arises why he focused on a wide dis-

18 The concept of POD was adopted from the English economist James E. Meade (1907–1995), who explicitly discussed the term in his book *Efficiency, Equality and the Ownership of Property* (1964).

persion of individual private property. Generally, Rawls grounds the priority of individual freedom and, therefore, individual private property on the “reasonable pluralism” of individual conceptions of the good. Due to the plurality of ends individuals pursue, Rawls argues for the priority of the right over the good, which ought, he thinks, to be the result we arrive at if we think through the “original position” thought experiment and the concept of an overlapping consensus.

To delineate Rawls’ position more clearly, it may be helpful here to briefly compare Rawls’ concept of justice with Elinor and Vincent Ostrom’s concept of the commons. On the most general level, there appears to exist quite an overlap in the conceptualization of Rawls’ well-ordered, just and democratic society and the Ostroms’ design principles for the sustainable and democratic management of resources and institutions held in common. Both the Ostroms and Rawls emphasize the importance of a shared understanding of justice, the significance of shared knowledge of the constitution of society’s basic structure and the necessity of effective self-organization. That being said, while the Ostroms develop their under-theorized concepts of justice and sustainability from empirical examples of pre-contractual social cooperation and democratic participation, Rawls grounds his normative position in the thought experiment of the “veil of ignorance” and the “original position” and in the contractual agreement of an “overlapping consensus”.

According to Rawls, the veil of ignorance and the original position enable people to “be removed from and not distorted by the particular features and circumstances of the existing basic structure” (JF: 15). This thought experiment enables people to grasp the equality of persons despite opposing interests and unequal bargaining advantages (JF: 16). The aim of the hypothetical and ahistorical original position (JF: 16-7) is to provide a just procedure in order to arrive at an “overlapping consensus” or social agreement on the “fair terms of social cooperation between citizens regarded as such” (JF: 16). While the Ostroms define symmetrical (or more or less equal) relationships as a central prerequisite for fair and sustainable democratic government, Rawls formulates a just procedure that makes it possible to conceive of a hypothetical symmetry of each party despite the actual lack of symmetry. In relation to the tragedy of the commons, it could be said that Rawls’ original position enables human beings to overcome tragedy by creating just and stable social arrangements through contractual agreements based on insights arrived at by stepping behind the veil of ignorance. The tragedy is overcome when all participants recognize both the equality of all and the mutual advantage resulting from social cooperation.

That being said, the contrast between the Ostroms and Rawls should not be overemphasized, because more overlap exists than is apparent at first glance. Here, I do not wish to focus on the communitarianism-liberalism debate in this short discussion of Rawls. As Sibyl Schwarzenbach persuasively argues in her article “Rawls, Hegel, and Communitarianism”, this debate is a “red herring” (Schwarzen-

bach 1991: 564), because Rawls himself does not advocate the “abstract”, “denuded” and “asocial” individualism that many communitarians such as Michael Sandel (1986), Charles Taylor (1994) and Michael Walzer (1989: 185) see in his writing. On the contrary, in the third part of *A Theory of Justice* Rawls strongly emphasizes the importance of complementary cooperation for the “social union” and the realization of a “well-ordered society”.¹⁹ For example, Rawls explains that

the social nature of mankind is best seen *by contrast with the conception of private society*. Thus human beings have in fact shared final ends and they value their common institutions and activities as good in themselves. We need one another as partners in ways of life that are engaged in for their own sake, and *the successes and enjoyments of others are necessary for and complimentary to our own good*. [...] Thus we may say following Humboldt that it is *through social union founded upon the needs and potentialities of its members that each person can participate in the total sum of the realized natural assets of the others*. We are led to the notion of the community of humankind the members of which enjoy one another’s excellences and individuality elicited by free institutions, and they recognize the good of *each as an element in the complete activity the whole scheme of which is consented to and gives pleasure to all*. (TJ: 458-9; emphasis added)

As we see, Rawls’ concept of a just society reaffirms our insight of the interdependent self-organization and convivial flourishing of the individual for the whole and the whole for the individual. The provision of access to property enables people to satisfy their needs in a self-organizing manner that is in accordance with their natural endowments and capabilities – and those of others. Furthermore, this provision does not simply occur ‘magically’ through the public institutions of the state, but through the “collective activity of justice [which] is the preeminent form of human flourishing” (ibid.: 463). This concept of justice as the basic structure could thus be understood as the shared norms and values of a community brought about by and reproduced through civic social actions, interactions and institutions.

The competitive market and the problem of endless growth

So the problem in Rawls’ concept of justice does not lie in the discrepancy between the individual and society, despite what parties to the communitarianism-liberalism debate have often assumed. Instead, I would argue that the problem lies in two tensions: on the one hand, in a tension between the ‘private’ economic reproduction of society and the ‘public’ reproduction of a society’s basic structure; and on the other, in a tension between the reality of justice and its ideal concept. In other words, the problem in Rawls’ theory of justice is not the individual-society-state

¹⁹ See especially chapter 79 “The Idea of the Social Union” in Rawls’ *A Theory of Social Justice*.

relationship, but rather the market-state dichotomy. Since I discuss the concept of non-ideal theory in more depth later, let me turn briefly to Rawls' understanding of the market.

Interestingly, in both property-owning democracy and liberal socialism, Rawls defends a wide distribution of property against the backdrop of a competitive market economy. The combination of a wide distribution of productive assets and a system of "(workably) competitive markets" (TJ: xiv) is meant to "prevent a small part of society from controlling the economy and indirectly political life itself" (ibid.: xiv-xv). The assumption is that competitive markets "properly regulated secure free choice of occupation and lead to an efficient use of resources and allocation of commodities to households" (TJ: 244). In their ideal form, regulated competitive markets – coupled with a widespread distribution of productive assets – should ensure not merely freedom of association, but also an efficient use of society's resources. Finally, it must also be noted that Rawls' just and well-ordered society does not necessarily require perpetual economic growth; *ex ante* distribution in line with the two principles of justice should also, theoretically, be realizable in a stationary state (JF: 63-4).²⁰

Although this might be assumed, I question whether a wide dispersal of individually owned productive assets combined with highly competitive markets can actually be realized and maintained over generations. Here, I would argue that the economic 'virtues' (pursuit of self-interest, competitiveness etc.) that are cultivated through individual private property and open and competitive market arrangements would undermine the social cooperation necessary for the stable or sustainable reproduction of a just basic structure of society "over time from one generation to the next" (JF: 5). This is a common criticism of Rawls' theory of justice and property-owning democracy (Krouse/McPherson 1988: 102-3; Wesche 2013: 106-9; Hussain 2009; Roemer 2013). Aside from this ethical argument, highly competitive markets inherently lead to the accumulation and overuse of socio-ecological resources, as we have already discussed. This is what we understood as the tragedy of privatization and open and competitive markets. In this sense, I would agree with Sibyl Schwarzenbach that the provision of "productive capital" is highly conducive to "exclusive and acquisitive" ownership (Schwarzenbach 1987: 144) and ultimately to an economy geared towards perpetual monetary growth.

20 In *Justice as Fairness*, Rawls writes, "A further feature of the difference principle is that it *does not require continual economic growth* over generations to maximize upward indefinitely the expectations of the least advantaged (assessed in terms of income and wealth). That would *not* be a reasonable conception of justice. We should not rule out Mill's idea of a society in a just *stationary state* where (real) capital accumulation may cease. A well-ordered society is specified so as to allow for this possibility." (JF: 63-4; emphasis added)

The reasons for this are twofold. Firstly, for capital to be productive, it needs to be invested in a specific enterprise at a rate of interest. This implies that the firm has to produce and sell goods, which, in turn, enables it to earn a profit and pay the interest back. But the augmented capital is then lent again with the aim of receiving interest. In turn, more goods are produced and consumers (hopefully) buy more things. It is important to note that each time capital is lent its amount *must* be increased, for that is the reason why it was lent in the first place. If the expected rate of interest cannot be paid back, capital is withheld and the economy slumps or breaks down. This is what Streeck refers to as an “investment strike” on the part of capital (Streeck 2013: 50). In this sense, the inherent logic of an economy based on interest and productive capital is one of perpetual and exponential growth (Binswanger 2013; Hardin 1993: 61–68). Given this dynamic, the amount of productive assets made available to each citizen at every round of *ex ante* predistribution must, in turn, also be increased. Secondly, the reproduction and predistribution of capital separates the monetary mediation of needs satisfaction from the socio-ecological basis of wealth production. This separation often enables people to ignore and forget where monetary wealth originates and allows them to believe that material wealth can increase without limits – despite the limits to economic growth in a world of finite resources. In other words, the predistribution of productive capital not only neglects the question of *how* capital is produced and reproduced, but also transforms the *means* of satisfying one’s needs (through money) into an *end in itself* (wealth accumulation and the potential to satisfy ever more, and ever increasing needs). Yet, as I just mentioned, it is not only capital’s “veil of ignorance” that allows us to forget the socio-ecological foundation of wealth and to develop unlimited material needs and desires, but it is rather a central and inherent function of productive capital to perpetually and exponentially grow. In this sense, the supposed stability that results from an economy based on productive capital and competitive markets is, from a socio-ecological point of view, highly unsustainable (Schweickart 2012: 213).

Although Rawls does argue that we *could* have a steady-state economy, for the reasons mentioned I believe that the predistribution of “productive capital” would nevertheless result in an ecologically unstable growth-oriented economic system – even if the *ex ante* distribution of these assets were extremely fair and just. The usual answer to this problem would be that robust laws and a “just background structure” could protect socio-ecological resources from overuse. However, if unlimited growth is a central feature of the economy, then both the people demanding their return on investment and those required to repay interest will always attempt to undermine and challenge the rules. Put more generally, and as I have already observed in relation to the state-market dichotomy, the separation of individual and ‘private’ economic interests from general, ‘public’ interests ultimately leads to the limitation of political regulation and democratic organization of socio-ecological

systems. Consequently, a property arrangement based on exclusive and acquisitive ownership of productive capital will ultimately be unable to sustainably reproduce the socio-ecological just basic structure of society.

From productivity to care

For this reason, I would defend Rawls' argument for predistribution and a property-owning democracy, but I would argue that an *ex ante* distribution must be based on something other than productive capital if domination is to be overcome and the self-organized satisfaction of needs enabled. As might be expected, my answer to this problem lies in access to commons and the practice of commoning in the form of democratic negotiation over the use of economic resources that are held in common. Yet, because it is also possible that democratically organized activities be directed towards perpetual growth, I would argue that it is also necessary to shift the core normative value underlying economic activities from productivity to care. To do this, I would like to take a step back and analyze the concept of productivity and ecological limits in relation to the work of Locke and Adam Smith. Although this jump back in time might appear somewhat anachronistic, I would argue that Rawls' notion of productive assets echoes Locke and Smith's focus on productivity as a central feature of a legitimate socio-economic arrangement. After examining their arguments, I then relate them back to Rawls' notion of productive assets in a property-owning democracy.

As I have already discussed, for Locke it is not only labor, but, more specifically, productive labor that lays the foundations for the right to appropriate resources. For example, the cultivation of land is, he thinks, more productive than hunting and gathering because it produces greater yields per unit of labor and land (Locke 2008: II, §41-3). In this respect, Locke understands labor activities that increase the number of material goods in the world as productive. Adam Smith also adopts this normative notion of productive labor and clearly distinguishes unproductive from productive labor. Unproductive labor includes, for example, services performed by "churchmen, lawyers, physicians, men of letters of all kinds; players, buffoons, musicians, opera-singers, opera-dancers" (Smith 1994: 361) – and, presumably, also the activities of people who care for children, the sick and the elderly. The notion of productivity is therefore limited only to very specific activities, which, in turn, provide supposedly 'unproductive' people with food, clothes, homes, computers and cars. In contrast to Locke, however, Smith argues that it is not merely an increase in material goods (use value) that should be described as productive, but also the increase in profits that result from the sales of these goods on the market (exchange value). The emphasis on productivity is understandable considering the socio-economic realities prior to the industrial revolution. The focus on productivity has brought about an immense increase in the output of material goods and monetary

wealth over the last two hundred years (Pinker 2018: 81). The main reasons given for these developments are, firstly, individual private property, which enables the individual to use a resource in a way that will increase its yields and then sell the goods for profit. Secondly, the competition between individual producers that results from open markets drives market participants to perpetually increase levels of productivity in order to produce more goods for a cheaper price and thus maintain a competitive advantage. We have already discussed this issue in detail. According to Smith, however, another main reason for increases in productivity is the division of labor which can more generally be understood as the rationalization of production processes. This is the opening argument of *The Wealth of Nations*.

So that we can better understand where the increase in productivity in modern economies comes from, I would like to analyze Smith's argument for the division of labor in more detail and, more specifically, his famous example of the pin maker (Smith 1994: 4-5). Smith argues that the output of pin production could increase greatly if it were not one person who performed all the tasks involved in producing a pin, but if, instead, the process of pin-making were divided into numerous steps, each of which was then executed by a different person. By dividing up the labor between a number of people, each laborer becomes a specialist for a particular activity, increasing the efficiency of the work process for making a single pin and ultimately increasing the number of pins that can be produced in the same amount of labor time (e.g. one day). Lastly, Smith notes that further efficiency gains can then also be achieved through the use of machines. This is the usual story that is told when discussing increases in productivity through rationalization processes and specialization. What is noteworthy is that the story being told is linear and progressive: there is a beginning and an end, and the in the end we have more than in the beginning. So where does this 'more' come from?

To understand productivity from a socio-ecological perspective, we must shift our focus from the linear process of production to the reproduction of life in ecosystems. Here, we must also note that the amount of matter and energy on earth remains more or less constant over time. From this perspective, the creation of wealth merely implies the reconfiguration of existing matter and energy into goods that we then, in turn, define as wealth. For example, the amount of metal in the world before and after the production process has remained the same. The increase in the production of pins simply means that more metal has been extracted from the earth and transformed into pins within a shorter period of time. Let us call this the "nature side" of the equation. In this equation, however, we must also include the wood or coal that is burnt in order to change the form of the metal. It can generally be assumed that the increase in pin production would require an increase in the use of wood or coal. Today, the source of energy would be oil, gas, nuclear energy, solar energy or wind energy. On a side note, all these energy sources have a material base and effect the environment in specific ways, such as, for example,

the materials used to build solar panels and wind turbines. But for the moment let us leave the question of new 'green' sources of energy out of the picture. In Smith's case, the accumulated energy in the wood or coal is released into the air in the form of carbon dioxide, which is then transformed back into oxygen by plants through the process of photosynthesis. While trees can grow back, the cycle of coal (or oil) formation occurs over hundreds of thousands, if not millions, of years. The point I wish to make here is that what is often understood as increases in productivity is not only the transformation of specific resources into use or exchange values, but also the release of accumulated energy into the atmosphere. More specifically, the increases in productivity are not only based on the rationalization of labor processes, but also dependent on the ability to release stored energy from coal and oil (Wrigley 2004: 68-86). Expressed in somewhat different terms, it is not only labor, but also the exploitation of large amounts of the gifts of ancient "buried sunshine" (Mitchell 2011: 12) that allows human beings to increase their productivity and make the economy 'grow'.

There is also, however, the 'social side' of the equation. In a first step, this requires us to look at the type of labor that is involved in this production process. Because Adam Smith is discussing a market economy, we may generally assume that he is talking about wage labor. From a Marxist perspective, the important point here is that the wage laborer had to sell his or her labor at a price lower than the amount of money that is realized through the sale of the goods produced. One central reason for low wages is the competition between the large numbers of people dependent on wage labor for their survival. This forces wage-dependent people to accept incomes that (barely) cover their costs of living, even though the labor power that the employee exerts exceeds this value. The difference between the exchange value of the laborer's wages and the exchange value realized through the sale of the goods produced during, for example, one day of labor by the employee is, generally speaking, what Marx understands as surplus value (Marx 1982a: 293-306). According to Marx, this surplus value explains where the "more" is derived from at the end of the production cycle, which he symbolizes as M-C-M' (money-commodity-more money) (ibid.: 247-256). From this perspective, it is not necessarily the division of labor, but more precisely the wage contract that enables the employer to legally appropriate and accumulate the surplus value of productive wage labor. It can therefore be said that the rate of rationalization will be intensely pursued, not by the laborers, but rather by the employers, who will then profit (at least initially) from the increases in productivity.²¹ Interestingly, much later in his work *The*

21 I say 'initially' because the gains only occur when a producer rationalizes his or her production process before the competitors follow suit. In that time, it can generally be assumed that consumers will buy the cheaper products from this more efficient producer. Marx calls this "extra profit" (Marx 1991: 142) and compares it to the average surplus value generated through

Wealth of Nations, Smith admits that there are negative social consequences which result from too much specialization, in which “the [specialized] laborer becomes as stupid and ignorant as it is possible for a human creature to become” (Smith 1994: 840). Understood within our socio-ecological framework, this implies that productivity gains should be conceived of as the time and energy that are extracted from the employee by the employer and make the employee exhausted and “stupid”. Hence, aside from the extraction from nature, it is also the exploitation of people that enables labor activities to be more productive and, ultimately, transforms this increase in productivity into increases in accumulated wealth.

It might be argued, however, that in a property-owning democracy this problem would not occur, because people have access to resources in the form of productive assets. Here, it can be argued that this fact would free individuals from entering wage labor relationships involuntarily. Thus, we could say that in such an arrangement asymmetrical wage labor relationships would not exist. Furthermore, it could also be contended that because the individual possesses productive assets, she could become a co-owner of the enterprise. This would provide the individual with rights to the surplus value that otherwise would have been appropriated by the employer. It is often assumed that such a democratic enterprise would hinder or even eliminate exploitation. Although this is partially true, if the enterprise sells onto a competitive market the necessity to perpetually increase productivity will remain, since the enterprise will be forced to keep up with changes in “socially necessary labor time” (G. A. Cohen 1979). Thus, the necessity to perpetually rationalize one’s labor processes through new technology and increased specialization would also persist. If this is not achieved, it can be assumed that the enterprise would not be able survive on the competitive market. This would then imply that the workers would be obliged to exploit themselves. We can understand self-exploitation here as the exertion of more energy than is required for the regeneration of the mind and body. The problem of specialization can be interpreted here as the self-inflicted one-sided development of one’s capacities, which demands the suppression of other activities and the degeneration of the capacities they involve. We already touched on these problems in our discussion of the tragedy of the market in relation to burnout. To be fair, a recurring and just predistribution of property would slow down the pace of this process, but it would nevertheless still occur. The only difference would be that there is no employer to blame. Instead, the exploitation would be self-inflicted and enforced through market dynamics that induce accelerating productivity gains. Here, we are reminded of Smith’s disciplining mechanism of the open and competitive market.

society’s average rate of productivity, otherwise also defined as the socially necessary labor time that is required to maintain in order to survive on the competitive market.

Another aspect of this 'social side' of the productivity equation is the specialization of people towards performing reproductive care work outside of wage labor relationships, be this in the household, the community (e.g. care for the unemployed) or for the environment (e.g. against pollution). Although we have already discussed this, it is important to note again that the 'free pass' given to 'productive people' puts more care work obligations on the people who perform supposedly 'unproductive' activities. The amazing gains in efficiency through the division of labor have therefore also divided the social world into those who are rational and productive and those who are emotional (or, from a purely economic perspective 'irrational') and caring. From the linear perspective of output gains, the former is obviously the more valuable; from the systemic perspective of reproduction, the latter is essential for survival. But the point is not to say which of the two is 'better' – both are valuable in their own way and satisfy different needs and desires that individuals, communities and ecosystems have. The point, however, is to emphasize that gains in productivity always have social and ecological costs that, in turn, need to be tended to and taken care of. Or, put somewhat more critically, gains in productivity do not merely result from the activity of productive individuals, but rather from the extraction of matter and energy from entire socio-ecological systems, which then crystallizes in the form of individual private property while it increases in output. Here, we are reminded again of Garrett Hardin's "double C–double P game", in which costs are communalized and profits are privatized (Hardin 1993: 237–8). What some people interpret as productive increases in the "wealth of nations", others experience as the depletion of their energy reserves.

That being said, the point is not to get rid of the division of labor or all forms of growth. I merely present these few examples in order to demonstrate that all increases in productivity have a specific 'material' base (matter, energy, time) that cannot be eliminated from the equation. Increases in productivity *ex nihilo* do not exist (ibid.: 70–76). This is not to say that all increases in productivity are based on exploitation. Nor should this insight imply in any way that Rawls (implicitly) supports exploitation. That would obviously be false. But his emphasis on productive assets and capital leaves the question of where productivity gains are supposed to come from unanswered (Schweickart 2012; Alperovitz 2012; Williamson 2012: 303). I believe this to be a serious problem in Rawls' theory of property-owning democracy that must be dealt with. This short discussion of the origins of productivity gains has merely attempted to make the point that productivity cannot perpetually rise without having serious (negative) effects on society and the environment. In relation to our discussion of labor and productivity, this implies that we must shift our understanding of economic activities and property arrangements from one based on productivity to one revolving around cultivation and care.

This emphasis on care in economic activities might initially appear problematic, because care is often interpreted as an unproductive activity. But this does not

imply that labor would then be *unproductive*, but rather that productive activities would not be based solely on a linear logic of the maximization of material wealth. Instead, its central normative characteristic would be concern for the sustainable creation and reproduction of goods for the satisfaction of common needs. Along these lines, Sibyl Schwarzenbach also argues in her discussion of Rawls that we should reinterpret labor and ownership according to the concept of care. She explains that “by care is meant that specifically intelligent activity which appropriately responds to the concrete legitimate needs of others with the end of encouraging their autonomous capacities” (Schwarzenbach 1987: 157). Here, the shift is not only from the linear increase in production outputs to cyclical reproduction, but also to the concern and responsibility for the satisfaction of the concrete needs of *others* – be they other humans, other living beings more generally, or entire ecosystems. Lastly, concern for others is not abstract – mediated through monetary values such as ‘capital’ – but becomes visible through the concrete activities of caring for the satisfaction of concrete needs in the form of food, housing, education, health, culture or a clean environment. Conversely, it could be said that needs decoupled from the activities of care fall into the illusion of unlimited material growth, which inherently leads to tragedy. In this sense, caring is not an individual and private activity, as it is often understood to be, but rather a social and ecological activity of cultivation, maintenance, reproduction and regulation that dissolves the boundaries between the private, the economic and the political, on the one hand, and those between culture and nature, on the other.

As can be expected, placing care at the heart of economic activities implies a transformation of property arrangements. Here, I would argue with Schwarzenbach that care requires a shift from “exclusive and acquisitive” ownership to what she calls shared “joint guardianship”, which is what we have defined as the commons (ibid.: 147, 156-7). As I have already said in relation to guardianship, such a commons property arrangement would integrate those who are significantly affected into the management of the economic activities of the specific resource system. This integration would provide individuals with opportunities to voice their concrete needs and collectively negotiate if and how such needs can be satisfied in relation to the needs of others. As is to be expected, such systems for managing resources will often be criticized as inefficient and unproductive. This is the very widespread assumption that was already voiced by Locke when he spoke of “common and uncultivated” resources. The fear that an economy based on democratic care would be inefficient and unproductive is, however, partially true. In contrast to Locke, the problem we face today – at least in the north-western hemisphere – is not a lack of productivity but a productivity that is not compatible with the socio-ecological reality. Or, in other words, an economic system based on perpetual material growth is utopian in a world of limited resources. For this reason, it is necessary to develop some reasonable alternative to such a highly problematic and

self-destructive property arrangement geared toward perpetual increases in productivity. By placing democratically organized caring activities at the center of our background structure, the short-term efficiency in *quantitative* output productivity would decrease. That, however, is precisely the point of such a property arrangement. Moreover, such a system could increase the *quality* of the resource system, the labor activities themselves and the goods being consumed. The shift from productivity to care would therefore connote a shift from quantitative to qualitative growth – a shift from owning more things to leading a more self-determined and fulfilling life. In this respect, the creation of the qualitative good life will become *more efficient* in a commons arrangement. A central reason for this is that people will have the opportunity to codetermine the (re)production process *ex ante* through democratic negotiation instead of through an *ex post* consumer choice that occurs after the products have been produced and put on the shelf. Democratic negotiation in commons property arrangements thereby also replaces the expensive advertising industry that attempts to convince people that they should buy the specific goods that are being produced. In this sense, we must interpret my critique of productivity and growth not as a renunciation of either productivity or growth *per se*, but rather as the opening up of the possibility for people to democratically codeetermine the criteria, organization and direction of the sustainable reproduction of their resources and social activities. Simply put, we should put institutions that support democratic deliberation and care at the heart of ‘productive’ economic activities. This, I believe, would be an adequate socio-ecological reinterpretation of Rawls’ property-owning democracy. Accordingly, the most just basic structure of society is a commons-creating democracy.

6.5. Consumption goods: individual or common property?

Up until now, I have argued that the right to access to resources is a precondition for life and liberty. More precisely, I have argued that a commons theory of property is justified due to the necessity of satisfying needs through access to the resources on which people co depend. A common property arrangement provides people with the institutional framework to solve conflicts over these shared vital resources and collectively care for the reproduction of the specific socio-ecological resource systems. This then leads to a central question that we have not properly dealt with yet: would all goods be considered to be common property in such a property arrangement? And if not, where would the line be drawn between private and common property? In order to answer these rather broad questions, I begin by discussing the differences between individual and social activities and productive and consumption goods. With reference to the negative ecological effects of consumption patterns, I then argue that we must also conceptualize consumption

goods as commons. Thirdly, I demonstrate that collaborative forms of consumption can enable relative material abundance in a world of limited resources.

Different types of goods (part II)

The question of which goods and resources should ultimately be held, governed and reproduced in common is both a simple and a difficult question. One simple answer could be that I, as a philosopher, do not have the right to determine such things, but rather that people themselves have to decide which goods they want to organize as commons. I do, in fact, believe this to be true because commons are not something that can simply be implemented by philosopher kings or technocrats but require the civic activity of commoning to bring them forth. However, this would be an easy way out of dealing with the problem. Another rather simple approach to the problem would be to declare that all resources necessary for people's existence should be held as commons. But would this include not only the field of wheat, but also the bread that I eat? As we can see, this generalization is very vague and not very helpful because, theoretically, everything could be declared as necessary for someone's existence. Thus, the argument I provide below is not to be understood as a list of things that should be held privately or in common, but rather as an attempt to deal with the issue in a somewhat more dynamic and differentiated manner.

To begin, let us recall Carol Gould's differentiation between personal and social property. According to Gould, personal property is that which is "required for the individual's own subsistence and self-development" (Gould 1990: 180). In contrast, social property is supposedly that which is "required by individuals in common in order to realize their joint purposes" (*ibid.*). This appears to be somewhat helpful, but one central problem here lies in the fact that subsistence activities (i.e. farming, food processing, cooking) are often not performed individually, but rather in groups. In such cases, subsistence resources should actually be understood as social or, rather, common property. Yet, when these activities do occur individually, as they do, for example, in the case of cultivating a small garden lot, it is obviously adequate to understand this resource as an individual one. For this reason, we should not only focus on the differentiation between individual and social activities, but also, as David Held suggests, on the distinction between consumptive and productive property (Held 1995: 263).²² As I have already mentioned, and along the same line of thought, Elinor Ostrom and Charlotte Hess distinguish between the flow of resource units and the resource systems themselves (E. Ostrom/Hess

22 David Held also mentions financial property (i.e. capital) as a third type of property. In order to simplify the argument, I focus on the distinction between consumptive and productive goods and define financial property as a unit of productive property.

2010: 58–9). Consumptive property and the flow of resource units could be, for example, toothbrushes, apples, bread, underpants, bicycles, coal, personal computers or cash. Production goods and resource systems, on the other hand, would be things such as apple trees or orchards, coal mines, bakeries, factories for toothbrushes, underpants or computers, central processor units or capital. However, here we must also examine whether the specific entity is being used individually or together with others in order to determine whether it should be conceptualized as personal or social property. I could, for example, use my bicycle or my computer as a source of income and thus transform a consumption good into one utilized for production (e.g. as a bike messenger or a computer programmer). But this would not transform it into social property, because the activity is performed individually. In this sense, things are not productive *per se*, but become productive through their specific use. According to my argumentation, the social coordination of these individual activities in an organization (e.g. the delivery or programming services) should, however, be organized in a social and democratic manner, for example as a cooperative, enabling the participants in this specific organization to fairly distribute their individually and collectively generated wealth and to democratically codetermine the organization of their labor.

Nevertheless, another problem exists in the juxtaposition of individual consumption and social production. A good that is individually consumed can also be – and, in some cases, *should* be – organized as common property. According to Locke, individual private property enables people to use and enjoy a specific good without the arbitrary interference of others. This enables them to exclude others from the use of that property. In cases of individual consumptive and productive property, this often makes sense. I would, for example, prefer not to share my toothbrush, my underpants, and my shoes with other people. I would also prefer to cultivate *my* small garden lot by myself, ride *my* bicycle and use *my* computer. By declaring these goods as individual private property the negative freedom of the individual is secured and the freedom of other people is not necessarily threatened, assuming the goods are not used in bothersome or harmful ways (i.e. riding over old people on the street with my bike or planning terrorist bombings with my computer). These are the usual examples that are often brought up in arguments *against* common property arrangements. The general point here is that individuals don't want to have to ask the community if they can brush their teeth with the communal toothbrush twice or three times a day or if they can put on a pair of communal shoes every morning in order to go and get the communal newspaper. The problem with this argument is, however, that it leads to the assumption that everything would be held in common because, theoretically, everything has an effect on someone else (i.e. the color of someone's T-shirt might not match the color of my pants, for example). Obviously, these examples are absurd. No one would want such property arrangements. And, yes, such property arrangements would be highly inefficient

in dealing with our everyday lives. But no one in favor of commons is per se against individual private property in such personal consumption goods. When we focus on these issues, we get distracted from a more fundamental one that is at stake: the problems of exclusion from or overuse of resources that are central for one's life and liberty. From this perspective, there are strong ecological or functionalist and normative arguments for the sharing of certain consumption goods. Let us now turn to these arguments.

Maximizing consumption and the population myth

Up until this point, I have generally argued that resources that affect the larger community and that are necessary for the satisfaction of common needs should be held in common. As previously mentioned, this basically implies that (re)productive activities in resource systems should be organized as commons while the flow of consumption units should be organized as individual private property. Yet let me introduce an example that reveals problems for this dichotomy. Let us assume that a person has acquired a relative amount of wealth (for the sake of the argument, we could say within the limits of Rawls' difference principle). The person wants to use this money for consumption goods because the reinvestment of the money would transform it into productive property (capital). This would, in turn, require that the broader community also have a voice in the use of this capital. But because the person does not want the community telling them what to do with this money, they decide to spend most of their money on consumption goods such as, for example, numerous large houses, expensive cars, yachts, private jets and so on. And, to be fair, let us also assume that this person is not attempting to (according to our commons property arrangement) 'illegally' use these goods as objects of speculation and thus as 'productive goods'. According to the distinction between individual consumptive and social productive property, this would be legitimate and no one would have the right to interfere with this person's freedom.

Nevertheless, I would argue that problems arise here. Firstly, the logic of this conception of negative freedom implies that individual freedom is increased if the scope of one's non-interfered-with reach over the material world is increased. This basically implies that the *more* private consumption goods one has, the better. Although we have shifted from productive to consumptive goods, our focus on the increases in material goods and quantitative growth remains. But this leads us to the question whether such a notion of maximization is compatible with the limits of the earth system not only in the sphere of production but also in the sphere of individual consumption. If there was only one such privileged person in the entire world, we could say that it might not necessarily matter, because the environment would not be too badly affected. The reality is, however, different: more and more people strive to acquire more and more goods because they interpret the increase

in consumptive goods as an increase in freedom and well-being (Rosa 2016: 45). It can thus be assumed that this widespread aspiration has very serious negative effects on the environment.

If we remember Garrett Hardin's argument in the *Tragedy of the Commons*, this ecological problem lies not necessarily in the number of goods people accumulate and consume, but rather in the number of people in the world. As he explains in his book *Living Within Limits* (1993), if we limited population growth, the smaller number of people in the world would then be able to enjoy more goods. Quoting Malthus this would include, for example, a "daily [...] glass of wine and a piece of beef for [one's] dinner" (Hardin 1993: 213, 306). Or, formulated more technically: "at a sustainable size of population, the quality of life and the quantity of it are inversely related" (ibid.: 213; emphasis omitted). This is the main thesis of Hardin's *Tragedy of the Commons*, and it is expressed by numerous other ecologists such as Paul Ehrlich in his book *The Population Bomb* (1968) and more recently by the earth systems scientist James Lovelock, who is a patron of the Optimum Population Trust. Lovelock has said, for example, that

those who fail to see that population growth and climate change are two sides of the same coin are either ignorant or hiding from the truth. These two huge environmental problems are inseparable and to discuss one while ignoring the other is irrational. (Lovelock quoted in populationmatters.org 2009)

This conclusion can easily be drawn by looking at the correlation between population growth and the increase in greenhouse gas (GHG) emissions over the last 200 hundred years (Steffen et al. 2011: 742, 745). Here, the total amount of GHG emissions is mathematically distributed over the whole of the world's population. According to this calculation, the countries with the largest (increases in their) populations are responsible for the overuse of the carrying capacity of their resource systems. Hardin portrays this in his lifeboat ethics metaphor:

Metaphorically, each rich nation amounts to a lifeboat full of comparatively rich people. The poor of the world are in other, much more crowded lifeboats. Continuously, so to speak, the poor fall out of their lifeboats and swim for a while in the water outside, hoping to be admitted to a rich lifeboat, or in some other way to benefit from the 'goodies' on board. (Hardin 1974: 561)

The rather simple moral of this story is that the "rapidly-breeding poor" (ibid.: 565) are the cause of the overuse of ecological resources and climate change. In order to save planet earth, we must therefore exclude the poor from the wealth that northern countries possess, let poor people die and, thereby, hopefully limit their ability

to reproduce (ibid.: 565).²³ According to this argumentation, sharing goods with those who have less simply pours more oil into the fire of population growth and ecological destruction.

I do not want to say that population sizes have no effects at all on socio-ecological systems. It can generally be assumed that correlations between the two exist. Nevertheless, the problem with the emphasis on the correlation between population size and GHG emissions is that it neglects and conceals the *distribution* of the specific 'goods' (wealth) and 'bads' (depletion and pollution) within a specific group and between groups of people. By looking at the precise distribution of GHG emissions, we encounter, however, a rather different picture. Viewed in this manner, increases in GHG emissions do not necessarily correlate with population growth, but rather with the increase in wealth and, thus, in consumption goods available to individuals. For this reason, environmental scientist David Satterthwaite argues that we should stop using the often-used equation "total impact equals population times affluence times technology" ($I = PAT$). Instead, he argues that we must use the correct equation "impact equals consumers times affluence times technology" ($I = CAT$). As Satterthwaite explains:

It is not correct to suggest that it is the increase in population that drives the growth in GHG emissions, when the lifetime contribution to GHG emissions of a person added to the world's population varies by a factor of more than 1,000 depending on the circumstances into which they are born and their life possibilities and choices. *So it is not the growth in the number of people, but rather the growth in the number of consumers and the GHG implications of their consumption patterns that are the issue.* In theory (leaving aside the difficulties in measurement), responsibility for GHG emissions should be with individuals and households and based on the GHG implications of their consumption, and not with nations (or cities) based on GHG inventories from the production perspective. *From the consumption perspective, globally, the 20 per cent of the population with the highest consumption levels is likely to account for more than 80 per cent of all human-induced GHG emissions and an even higher proportion of historical contributions.* In considering how to reduce emissions globally, far more attention should be directed to reducing this group's GHG emissions. And as responsibilities for addressing this are allocated to national and local governments (with city governments having particularly important roles), consider how this 20 per cent of the world's population is distributed between

23 In Hardin's own words: "Every life saved this year in a poor country diminishes the quality of life for subsequent generations." (Hardin 1974: 565; emphasis omitted) He therefore argues that we must "admit no more to the boat and preserve the small safety factor. Survival of the people in the lifeboat is then possible (though we shall have to be on our guard against boarding parties)." (ibid.: 562)

nations (obviously most, but certainly not all, are in high-income nations). (Satterthwaite 2009: 564; emphasis added)

As the journalist George Monbiot puts it, “While there’s a weak correlation between global warming and population growth, there’s a strong correlation between global warming and wealth.” (Monbiot 2016: 104-5) As we see, the problem is not necessarily large populations, but the great increase of wealth belonging to a small group of people. Their ability to accumulate without limit enables them to consume most of the world’s resources and to consequently produce most of the existing greenhouse gases. For this reason, the political scientists Ulrich Brand and Markus Wissen call this an “imperial mode of living” (2018) of the wealthy Northern countries, which the sociologist Stephan Lessenich interprets as an “externalizing society” (2019). To translate these insights back into Hardin’s “lifeboat ethics” metaphor: the reason why the boats are sinking does not, first and foremost, lie in population sizes. Instead, the boats of the affluent are sinking due to the heavy load of consumption goods that they have collected. In turn, the boats of the poor are also sinking because of the weight of the bads (pollution, deforestation, rising water levels, oil spills etc.) that the wealthy have externalized. Yet, while the affluent can build better and larger boats to carry the load, the others are left to sink.

If this is correct, it should have rather important implications for our discussion of property arrangements for enabling life and liberty for all living beings. Firstly, we cannot simply separate production goods from consumption goods. Simply organizing productive resource units as commons and leaving the sphere of consumption intact as a sphere of individual negative freedom does not solve the ecological problems societies are currently trying to deal with. Such a strategy might protect the environment from a supply-side perspective, but it does not answer the problem from a demand-side perspective that results from ecologically destructive patterns of individual consumption. If people continuously demand more goods for the satisfaction of their needs and desires, it is not clear that the production of these goods will also change.

Secondly, although I have said that it should not necessarily be a problem if only a few individuals own and use large amounts of resources, we have just seen that only a small portion of the world’s population (20 percent) produces a large portion of the world’s GHG emissions (80 percent). It is to be expected that if we delved deeper into the statistics, we could find that an even smaller group of people is proportionally consuming even more resources than the rest of the world’s population (Monbiot 2016: 105-6; Oxfam 2017). From this perspective, it would therefore be false to say that the individual ownership of a bicycle by each person in the world is just as problematic as the private ownership of jeeps, yachts, jets and numerous houses by a few. In this sense, we can say that the *unlimited* consumption of *specific*

goods is not simply a 'private' matter, but has far-reaching and serious effects on other people and the non-human world.

Third, it is also important to note that not only does a small portion of the world's population produce most of the world's GHG emissions, but also that the very poor people of the world produce very small amounts of GHG emissions (Satterthwaite 2009: 547). This might sound like good news for Mother Nature – and, to a certain extent, also for the wealthy inhabitants of the earth, because they can simply reduce their consumption levels to a slight degree in order to get 'in tune with nature', while simultaneously hoping that the poor will remain poor. But this cynical answer is not only unjust towards those in need, but also largely unfeasible because those in poverty obviously want to improve their living standards and increase their freedom. It can generally be assumed that they also want to realize their rights to life and liberty just as Western societies have done. So how is this fundamental contradiction between consumption patterns based on ever-increasing needs and desires and the limitation of the ecosystems' resources to be solved?²⁴

Collaborative consumption and relative abundance

Since this is a rather grand question, it might be helpful to return to our previous discussion of individual private property in consumption goods in order to answer it. As I mentioned then, the underlying principle is that individuals should be free to enjoy their consumption goods without interference. Personal consumption goods should remain as the last bastion of negative freedom. This negative freedom is often understood as one of the fundamental types of individual freedom that lie at the heart of a liberal society.

Within this understanding of freedom, it is then often assumed that the larger the sphere of one's negative freedom in consumption goods, the more opportunities one has to satisfy different needs and desires. Although this might be true, we must also, however, recognize that different goods produce different effects on

24 In this short discussion of levels of consumption, GHG emissions and ecological degradation, I have neglected one important aspect of the complex situation: the ability of ecosystems to *absorb* GHG emissions. If, for example, we had enough trees on earth, our consumption levels could theoretically remain at a certain level or even increase because the plants would absorb the emitted gases. I would, however, argue that it can generally be assumed that high levels of individual consumption are dependent on the deterioration of ecological systems and their ability to reabsorb GHG emissions. The most straightforward example of this is the production of meat with soya feed in large areas where rainforest used to exist. Here, again, we are confronted with the fundamental contradiction between an endless increase in needs and desires and the limits of ecological resources.

the environment. Importantly, different *patterns* of individual consumption in relation to different goods produce different ecological effects. The increase in my collection of jogging shoes in order to go running more often is, for example, completely different than the increase in the number of flights I take in order to attend more academic conferences. Yet despite these differences, the maximization pattern nevertheless assumes that the more goods, the better. It is important to note here that it does not matter if these goods are bought with money that I earned through wage-labor on the market or if I have received the means to buy these goods from a state-orchestrated predistribution scheme available to all citizens. Depending on the type of good and the pattern of consumption, the ecological effects are the same. As we see, it appears as though we have come across a certain ecological paradox in the relationship between life, liberty and property – irrespective of whether we side with Locke or Rawls. On the one hand, we can enhance material wealth and individual freedom in the form of consumption goods at the cost of the environment. On the other hand, we could maintain life on earth at the cost of poverty and lack of freedom. Within this framework, it appears as though the needs and desires of humans oppose and contradict the needs of nature.

Where then is the way out of this dilemma? Is humanity simply going to fall into a Hobbesian war of ‘all against all’? Or will a global state and the managers of production resource systems rigorously limit and equally distribute the consumption goods that each individual is allowed to have in the name of a just dictatorship? Or is each individual required to achieve mastery over their endless needs and desires in the form of self-imposed sacrifice and asceticism? As we see, all these options appear not only unattractive, but also highly unrealistic – except for the possibility of war, that is. What other options do we have then? In order to answer this question, let us return to the basic question of what property rights are actually for. Informal or formal property arrangements intend to regulate the use of resources so that people can live in relative peace and liberty. These arrangements are meant to provide people with enough security so that they do not have to be afraid that their dearly held goods will be taken from them. This enables individuals to plan their daily affairs, reproduce their existence and, possibly, lead a good life. As we see, property arrangements are a means to an end, such as security, peace, realizing life-plans and, hopefully, a good life. Furthermore, the freedom involved in this definition is also not an end in itself. Freedom is valuable because it provides people with choices and capabilities; it is a means for people to be able to define and realize their *own* conception of the good life.

Locke’s interpretation of this was to define these property rights individually and exclusively: only if an object is individual private property can the individual consume it. This is the same logic reproduced in the economic categorization of goods I discussed in relation to Elinor and Vincent Ostrom: private goods are subtractive and rival and can exclude the use and consumption of others. As we already

mentioned above, almost all goods could fall into this category. As the term *connotes*, rival goods imply that the other person is a threat to one's freedom and liberty. But as we have seen, this logic would imply that the increase in life and liberty for all people would then necessitate that everyone had individual private property over an immense amount of goods and resources. Each piece of individual private property provides people with a larger range of freedom to satisfy their needs and desires and to realize the good life. The question remains, however, whether the effort of producing and accumulating these goods in the end provides people with enough time and peace of mind to enjoy a good life.

But we might base an alternative interpretation of the right to life, liberty and property in consumption goods not on individual and exclusive rights, but instead on collectively shared access rights to consumption goods that are held in common. As I have already suggested in relation to the classification of goods, an alternative to the categorization of goods as exclusion, subtraction and rivalry could be inclusion, addition and cooperation. Here, 'rival' goods are used and consumed individually but nevertheless held in common, thereby transforming their subtractive characteristic into an additive feature of the good. G. A. Cohen discusses this principle in reference to an often-used example of tools:

A homespun example shows how communal property offers a differently shaped liberty, in no different sense of that term, and, in certain circumstances, more liberty than the private property alternative. Neighbors A and B own sets of household tools. Each has some tools which the other lacks. If A needs a tool of a kind which only B has, then, private property being what it is, he is not free to take B's one for a while, even if B does not need it during that while. Now imagine that the following rule is imposed, bringing the tools into partly common ownership: each may take and use a tool belonging to the other without permission provided that the other is not using it and that he returns it when he no longer needs it, or when the other needs it, whichever comes first. Things being what they are (a substantive qualification: we are talking, as often we should, about the real world, not about remote possibilities) the communizing rule would, I contend, increase tool-using freedom, on any reasonable view. To be sure, some freedoms are removed by the new rule. Neither neighbor is as assured of the same easy access as before to the tools that were wholly his. Sometimes he has to go next door to retrieve one of them. Nor can either now charge the other for use of a tool he himself does not then require. But these restrictions probably count for less than the increase in the range of tools available. No one is as sovereign as before over any tool, so the privateness of the property is reduced. But freedom is probably expanded. (G. A. Cohen 2011: 155)

Although there might be a decrease in freedom for certain individuals from one perspective, the principle of a tool commons or tool library would clearly increase the freedom of those without the wealth to own all the tools. Cohen continues,

It is true that each would have more freedom still if he were the sovereign owner of *all* the tools. But that is not the relevant comparison. I do not deny that full ownership of a thing gives greater freedom than shared ownership of that thing. But no one did own all the tools before the modest measure of communism was introduced. *The kind of comparison we need to make is between, for example, sharing ownership with ninety-nine others in a hundred things and fully owning just one of them.* I submit that which arrangement nets more freedom is a matter of cases. There is little sense in one hundred people sharing control over one hundred toothbrushes. There is [however] an overwhelming case, from the point of view of freedom, in favor of our actual practice of public ownership of street pavements. Denationalizing the pavements in favor of private ownership of each piece by the residents adjacent to it would be bad for freedom of movement. (ibid.:155-6; emphasis added)

As we see, the question of which goods should be held in common cannot be answered in advance, but must be decided through weighing different pros and cons and, most importantly, through practical experiments that deal with different goods. And, as Cohen mentioned, we are not talking about the collectivization of a person's toothbrush. Nevertheless, the principle can be applied to the use of bicycles, cars, computers, musical instruments, games, gardens, holiday houses, or even one's own living space. The point is that in a world in which not *everyone* can have *everything*, sharing goods in the form of commons provides the greatest freedom for the greatest number of people. Here we can see that the normative argument for an increase in access to more shared goods is closely intertwined with the ecological or functionalist argument for the stability of commons-based socio-ecosystems. By sharing access to these goods, people can increase their freedom without necessarily having to increase the number of goods that exist. Common property in consumption goods thus provides people with a key strategy that enables them to increase relative material abundance in a world of limited resources.

But is this the answer to the destruction of the environment: public sidewalks and a library for tools? No, these are obviously simply some examples of how consumption goods can be held in common. Nevertheless, the basic principle remains rather simple and significant: by sharing goods with others, people can increase their freedom to access and use *various* goods while decreasing the overall quantity of goods being produced and consumed. The point, however, is not merely to pool preexisting goods, but also to actively create these common goods with others through the civic activity of commoning. Thus, by pooling these resources, people not only access more goods, but they can also overcome the consumption-production divide by using these goods, in turn, to satisfy their own specific needs

and desires. This is what is propagated with repair workshops, 3-D printers and the notion of open hardware (Rifkin 2015; Baier et al. 2016; Siefkes 2008). It is a transformation of individual consumers into coproducers or peer-to-peer producers (Benkler/Nissenbaum 2006) through the equal access to pooled goods, which not only frees people from the need to satisfy their needs via the market, but also provides people with numerous opportunities to engage in collective productive or 'commoning' activities.

6.6 Interim conclusion

After this rather long investigation of a commons theory of property, let me briefly summarize my findings. In this chapter, I have generally argued that in contrast to exclusory private property, a commons theory of property is based on access and democratic control. Instead of dominion, non-interference and labor, common property arrangements uphold the principles of guardianship, non-domination and needs-satisfaction. Common property arrangements can thus increase people's individual freedom, by both expanding their access to resources and giving them the ability to democratically codetermine their institutional arrangements. They provide people with the institutions to deal with conflicts over shared resources that are necessary for the interdependent satisfaction of people's common needs. This can be interpreted as an institutional means of caring for the sustainable maintenance, reproduction and flourishing of socio-ecological systems.

Put differently, common property arrangements provide people with a way of organizing life in a world of limited resources without resorting to domination and without suffering from either scarcity or the tragedies of the unregulated commons or the market. Instead, they enable people to create a relative abundance through a convivial mode of interdependent existence. Relative abundance is, however, not merely created through contracts that pool the limited *quantity* of goods being consumed, but rather through the *qualitative* transformation of the relationships in the web of life. In economic terminology we might say that commons create surplus *social* value, instead of merely a monetary surplus. Thus, the other is not primarily constituted as an existential threat, but rather as a peer with whom to jointly realize better outcomes through an ongoing process of negotiation and co-creation.

We can expect that some will find that a society based on common property arrangements imposes too specific and narrow a concept of the good life. Accordingly, it is often argued that in a liberal society political institutions should be neutral and impartial in relation to notions of the good life (Dworkin 1991: 127; Gaus 2003; North et al. 2009: 114; Hayek 2013: 169-196). This is often understood as the prioritization of the right over the good (Rawls 1988). As Rawls himself acknowledges, however, no political arrangements are completely neutral in relation to di-

verging concepts of the good life (ibid.: 251). As he explains in *A Theory of Justice*, “the basic structure of society is bound to encourage and support *certain kinds of plans more than others* by rewarding its members for contributing to the common good in ways consistent with justice” (TJ: 373; emphasis added). As we have seen, individual negative rights in private property provide people with the formal freedom to pursue their economic interests without arbitrary interference. The antagonistic structure of these property arrangements, however, inherently leads to maximization strategies and its associated tragedies. In turn, individual positive rights attempt to secure life and liberty by providing equal access to “productive assets”. Yet as we have seen, these arrangements also induce similar maximization strategies. Thus, we can say that the notion of the good life that unintentionally arises in both of these property arrangements is caught in the “straitjacket” (E. Ostrom 2003: 25) of maximization strategies and perpetual economic growth.

That being said, the problem we face, especially in relation to the problems of scarcity, domination and tragedy, is not necessarily one of absolute neutrality, but rather the question of the compatibility of different concepts of the good life. In this sense, the concept of interdependent freedom in common property arrangements obviously limits the scope of all possible life plans that can be pursued. Its underlying principles of inclusion, negotiated cooperation and care therefore inherently limit life plans that aim to realize exclusion, competition and domination. This much I must concede. But I also argue that these principles of common property are the foundations of a just, free and sustainable social order. Despite these supposed limitations of the range of choices within such a property regime, the specific plans and choices within the arrangement are not predetermined. On the contrary, common property arrangements increase individual freedom both by expanding access to resources and by bringing them under democratic control. In this sense, it must be emphasized that in contrast to other property regimes, the freedom to alter and codetermine one’s social conditions is not merely limited to the public sphere and affairs of the state. Instead, it is extended to the ‘private’ realms of production, consumption and social reproduction. Furthermore, the cultivation of democratic freedom in these everyday civic activities should hopefully open up a “world of possibility” (E. Ostrom 2003: 62) and enable people to collectively organize their lives according to their *own* conceptions of the good life. For it is these everyday civic practices in common property arrangements that are the seeds for a flourishing democratic society and the sustainable reproduction of a just basic structure.

7. The role of the state in a commons-creating society

After having developed a commons theory of property, it is now necessary to turn to the question of the relationship between commons and the state, on the one hand, and the market, on the other. These questions are of great importance because the notion of commons is often interpreted as a form of social organization “beyond markets and states” (Ostrom 2010; Bollier et al. 2012). As I will demonstrate in the next two chapters, I believe this interpretation to be rather misleading. To my mind, commons are not so much a radical alternative to the market and the state, but rather as a strategy for democratizing these two social arrangements. In general, the aim of my analysis is therefore to shift our framework of societal organization from one based on the state-market dichotomy to one conceptualized as a commons-creating society. In order to flesh out this idea, I will sketch how the state and the market can be transformed through commons institutions and civic practices of commoning. Let us begin this analysis with the state-commons relationship.

My examination of the state-commons relationship begins with some general, preliminary reflections on this relationship. In a second step, I discuss the specific role commons can play in relation to various forms of the state, including the monocentric, the minimal and welfare state. I then develop a better understanding of the notion of the state in a commons creating society with reference to the public goods housing, health care and education. In a final step, I discuss the role of the state in developing commons in a non-ideal world. Here, I touch on a number of issues: the ‘urgency’ of climate change, the role of commons in ‘developing’ countries, the threat of state oppression and opportunities to reclaim and cultivate commons both within and against the state.

7.1 Preliminary reflections on the state-commons relationship

In order to clarify my intentions here, I would like to begin my discussion of the state-commons relationship with some preliminary remarks on the subject. While

it might be argued that commons exist as a form of social organization ‘beyond’ and thus independent of the state, I would, contrarily, argue that the state is a central institution for the realization and maintenance of commons. This claim might appear surprising and fundamentally wrong by those who interpret and experience the state as a hierarchical and oppressive institution and, in contrast, commons as a form of self-governance. Here, the notion of *self*-governance appears to contradict the necessity of an external authority manifested in the state. Yet, the problem with such an antithetical presentation of the state and commons is that it remains caught up in the dualistic Hobbesian model of the state: the monopoly on the use of coercion can only be held by a Leviathan that rules autocratically over society. Here, we must distinguish between the monopoly on the use of coercion, on the one hand, and the form of organization that exercises this power, on the other. As I have argued above, the self-governance of a commons provides us with an alternative means to overcome the Hobbesian belligerent state of nature. From this perspective, a monopoly on the use of force is created through trust, reciprocity and the democratically determined rules and regulations of the commoners. In the words of Anna Stilz: “The democratic state is a joint practice in which we act together to secure a common end, and its unity can be explained on lines similar to the unity of other practices in which we commonly act together.” (Stilz 2009: 192) Here, the state’s monopoly on power needs to be understood as a form of reciprocal and public coercion. Only through this democratically legitimized monopoly on power can affected people limit appropriation and free riding and, in turn, realize fair and sustainable social arrangements. While the enforcement of laws by the state can limit the harm afflicted on others and the overuse of resources, the state’s ability to collect taxes is also a central means of alleviating power asymmetries and opportunities for unequal appropriation. We might therefore say that, in its ideal form, a democratic state can be interpreted as a self-governed commons.

In turn, this notion of the state provides us with a point of reference for thinking about how the state can provide access to resources in the form of a commons predistribution. This is indeed a very difficult question because it is sometimes assumed that state provision and commons are opposed to one another. In this case, state provision is normally conceived as a ‘top-down’ activity, while commons are understood as goods that are created, reproduced and managed ‘bottom-up’ by those affected. Furthermore, the notion of state provision of common property is closely associated with the communism of the Soviet Union and its practices of dispossession, coercion and uniformity. For this reason, the legal scholar Richard Epstein, for example, firmly criticizes the provision of common property by the state:

Any insistence, however, on mandatory common ownership is a recipe for disaster: co-owners are not chosen but imposed, so the level of mutual distrust is likely to

be high. Disagreement over the common plan of development, or over the division of benefits and burdens, is virtually certain to *produce massive forms of paralysis* from which there is *no escape*. A division of the property is ruled out by the *inflexible requirement of common ownership*; and a sale of the property, or of any interest therein, is not likely to succeed if a sustainable purchaser cannot be found – and who wants to buy into a lawsuit or a family dispute? Boundary disputes are the price paid in order to avoid the governance problems that arise from *forced associations*. (Epstein 1994: 36-7; emphasis added)

Although this portrayal of commons is obviously crude, Epstein's criticism nevertheless remains partly valid: the forced, top-down implementation of a commons regime would most likely be problematic. The necessary state coercion involved in such a transformation of social order would contradict the notion of free association and democratic self-governance inherent in the idea of a commons based society. Therefore, the question arises how the state can provide common goods without 'forcing' people to collectivize their property.

Furthermore, the general assumption that a commons provided by the state would be uniform must also be considered. This is, in general terms, a widespread critique of the satisfaction of individual needs through the paternalistic state provision of material equality: people are different and do not want to be provided with the same goods – irrespective if these goods are individually owned (e.g. clothes, a home etc.) or collectively (e.g. education, public swimming pools etc.). The diversity that exists between people requires that they be allowed to choose how they will satisfy their needs. Therefore, while economic liberals defend negative liberty and the freedom to choose products on the market, political liberals argue that non-dominated positive liberty and the predistribution of productive assets can overcome these problems of coercion and uniformity. Both, however, fall into a dualistic understanding of the state and the individual that is typical of the civil tradition in democratic thought: on the one side, there is the state and its background institutions; on the other side, we find the individuals who act within this preexisting framework. What both camps fail to consider, however, is a different and more democratic understanding of the state and public services, which can include the creation of commons through collective action. That will be the focus of the second section of this chapter. In order to reinterpret public goods as commons, however, let us now review the relationships between commons and the different forms of the state that I have already touched upon in order to then develop a notion of a state-commons.

7.1. Varieties of the state and the role of the commons

Commons in a hierarchical and monocentric state

As we have seen, a central figure in thinking about notions of the state is the monocentric and hierarchical Leviathan that rules over society. In this model, we will begin with the thought experiment of a Hobbesian, warlike state of nature which can be interpreted as the tragedy of an unregulated commons. Hardin's response to this problem was a social contract of "mutual coercion, mutually agreed upon" (Hardin 1968: 1247) and, more precisely, a Hobbesian Leviathan. Yet, while Hobbes' Leviathan was created to protect individual property rights, Hardin revived the Leviathan in order to regulate the use of common resources. This form of government is what Vincent Ostrom called the "monocentric order". We can conceive of this model either in a negative light, as a form of eco-dictatorship or, more positively, as a type of enlightened despotism that rules in the name of the good of the people. Although Hardin does not endorse a Leviathan that supports any form of redistribution, we can nevertheless imagine how such a political order could provide commons in the form of public goods. Here, the supposedly neutral and benevolent bureaucracy of the state provides commons in a top-down manner. Examples of such commons could range from education to transport, television, clothing, food and housing. To decrease the costs and increase the efficiency of the provision of these goods, they would, at least theoretically, be created in a uniform manner and administered according to uniform rules. These goods would be defined according to the average statistical values of all individuals combined with the ecological conditions that limit these values. Individual needs and desires could be marginally considered (e.g. in the case of having a mental or physical handicap), but would be largely ignored (e.g. in the case of preferring a freestanding home with a garden instead of an apartment).

I do not need to discuss the problems of such a political regime in detail once more. Nevertheless, let me summarize them in five points. Firstly, as I observed in relation to the Ostroms, without any means of democratic control and accountability, government functionaries are no less prone to corruption than any other human beings. Secondly, regarding the regulation of common pool resources, under the scenario I have envisaged unitary rules would be defined that do not always fit diverse contexts. Thirdly, the monitoring and enforcement of the regulations would entail relatively high costs, making their implementation rather fragmented and weak and ultimately turning them back into quasi-open-access resources. Fourthly, the uniformity of goods cannot take individual needs and desires into account. Equality is understood here as material equality which tends towards material uniformity. And finally, the provision occurs in a paternalistic and technocratic manner, disempowering citizens by transforming them into consumers. Although such

state provision might be experienced as comfortable because it frees the individual from many existential problems, it remains questionable how stable such a regime would be if based on this undemocratic and hierarchical relationship. To be clear, this critique is not to be misunderstood as a critique of the state, its monopoly on the power of coercion and public goods per se, but rather as a critique of the highly undemocratic manner in which such goods would be produced and provided. The general implication of these criticisms is that people are not truly free if they are simply materially provided for.

Commons in a minimal, market-based state

These problems of the state regulation and provision of commons have been strongly emphasized by economic (neo-)liberals and libertarians (Friedman/Friedman 1980; Nozick 1999). For this reason, they often argue that the state should be minimized and the provision of the goods I have mentioned occur through the market. Let us therefore now turn to the relations between commons and the state in a market-based society. In order to understand this issue, I will focus on the work of Adam Smith and John Locke and attempt to shed some further light on their work. Given the importance of the market in their models, it is not surprising that it takes a while for the state to appear on the stage.

If we begin with the classical understanding of the commons, we must note that Locke was not confronted with Hardin's problem of the overuse, but rather with the problem of the *underuse* of resources held in common. Although Locke perceived there to be an abundance of unowned, common resources in the world (especially, for example, land in North America), he nevertheless believed that the goods necessary for a comfortable, convenient and good life were rather scarce because they were rare and not very widespread. Furthermore, Locke understood the total surface area of land on earth to be limited and, due to the increase in people and the use of money, able to become scarce. Nevertheless, it appears that the limitation of surface area could be compensated by 'depth'. In this sense, I would argue that Locke understood natural resources as a well that could be drawn from without limit. The ability to draw more from nature would have depended, however, on access to land and on the amount of labor exerted. Hardin, in contrast, explicitly – and, in my opinion, correctly – describes all natural resources to be limited. The reasons for this shift in perspective are rather simple: while Locke lived in a preindustrial era, Hardin lived in a world that had experienced around 150 to 200 years of high levels of unprecedented industrial productivity.

As we have seen, for Locke, each person is originally allowed to appropriate from the unregulated commons as much as he or she can use as long as resources are not allowed to go to waste and there are enough resources left over for others. As Locke argues, however, with the introduction of money, individuals can appro-

priate and accumulate larger amounts of resources and use these “productively” by selling the surplus products for profit on the market. For others, direct access to the commons has become scarce if not entirely annulled. In turn, productivity gains are provided as a compensation for the loss of access to existential resources through private appropriation. However, because these others no longer have direct access to the means of subsistence, they are required to enter wage-labor relationships in order to earn money to then buy the goods on the market needed to secure their existence. If, in turn, we add Adam Smith’s concept of the open market to this narrative, the allocation of goods and services would then, according to the story, occur in a self-regulating manner in which supply and demand would, over time, exist in a balanced equilibrium. Even if an absolute scarcity of resources should arise, market exchange and the prices of goods would theoretically provide the best mechanism for their efficient distribution in society, given the market’s abilities to self-regulate and to reduce highly complex information (e.g. the limited availability of goods and resources) into simple, comprehensible data (prices).¹ Thus, in a minimal, market-based state it can generally be said that the commons have been privatized while direct access to resources has been replaced by market mechanisms.

According to this general description – and much as in Hobbes’s work (though not Hardin) – the state was originally created through a (hypothetical) social contract in order to protect individual property rights. Here, the state can be interpreted as a type of second order legal commons generated through the pooling of people’s individual coercive power. Yet in this story, in contrast to Hardin, the authority of the state is not supposed to limit the appropriation of the first order commons, but rather simply to ensure the protection of individual private property. Along these lines, Locke, Smith and many others have argued that the state should not interfere in the private accumulation of wealth or the self-regulation of the market. The protection or provision of commons is thus limited to a minimum, including the protection of private property rights and the enforcement of contracts by the police, or the protection of peace and national security by the military. For some, such as Adam Smith, the provision of basic common services is extended to those goods where “market failure” occurs. So aside from the commons of law and security, basic common services often include goods such as education or roads. Both the state and these goods are financed through pooled resources (taxes) that are collected by the state. The responsiveness of the state to the demands of the people is supposedly maintained through two central means: through the freedom to move property (i.e. capital) freely, on the one hand, and, on the other, through

1 To be precise, the reduction of complex information through the price mechanism is not, to my knowledge, an argument advanced by Adam Smith, but one especially emphasized around 200 years later by Friedrich August von Hayek.

the ability of the enfranchised population to periodically elect representatives from competing parties. In general terms, this is a minimalist, legalist notion of democracy based on the state-individual or public-private dichotomy of the civil tradition.

As I said in my discussions of Locke and Adam Smith, there are a few fundamental problems with such social arrangements. Firstly, although life and liberty are secured *de jure* through the protection of property rights, because access to resources is asymmetrical, life and liberty are not necessarily guaranteed *de facto* to all people. Secondly, and in addition to this socio-economic injustice, even if the propertyless have the right to vote and elect representatives and thus ultimately change their social conditions, the dependence of the propertyless on wage-labor relationships makes them highly susceptible to having to subordinate their interests to the interests of their employers and the flow of capital. Historically, this dependence on wage labor was a central reason why the propertyless were not allowed to vote. The dependence on the movement of capital is what I previously described as a structural constraint on democratic freedom. Third, the priority of negative individual rights also radically constrains the abilities and powers of the state to interfere in and influence economic matters in order to alter these property arrangements (J. Cohen 1989: 28). While this argument was originally used by Montesquieu and Adam Smith to defend the freedom of a rising bourgeoisie against the power of absolute monarchs and warring feudal lords, the freedom of property in the form of capital is used by a small elite against the realization of life and liberty for large populations today. Fourth, an extremely asymmetrical distribution of property inherently leads to the possibility of capture – and thus corruption – of the state by wealthy individuals. More correctly, we must note that the foundation of the modern state has always been an imperative to fulfill the purpose of the equal protection of the existing (unequal) distribution of private property. In this sense, the state has never been a neutral mediator between conflicting interests that has then been captured by the wealthy, but has rather been a strong protector of property rights and laissez-faire capitalism for those with property in productive resources from the outset. Here, we are reminded not only of Herman Heller's term "authoritarian liberalism" (Heller 2015), but also of the dialectical relationship underlying the state-market dichotomy. While universal individual property rights and the market were presented as alternatives to the absolute power of the state, the Leviathan is now revealed to be, not an alternative to, but more specifically a key component of the self-regulating market.

Commons in the welfare state and a property-owning democracy

One historical and theoretical answer to the problems of a minimal, market-based state is that of the welfare state and, more recently, Rawls' notion of a property-owning democracy. In very general terms, both models aim to mitigate those prob-

lems by providing individuals access to resources. These resources can include public goods such as housing, health care and education or more individualized resources such as pension plans and productive capital. But while the welfare state emphasizes *ex post* distribution schemes, the state in a property-owning democracy supports the *ex ante* predistribution of resources. Here, I discuss the state-commons relationship firstly with reference to the welfare state and then turn to the concept of a property-owning democracy.

In order to grasp the concept of the welfare state, it is important to also understand its historical origins. Importantly, the welfare state did not develop from individual property rights and self-regulating markets. Instead, these socio-economic rights were often realized through the struggles of propertyless wage laborers against the negative rights of those with property in productive resources (Lavalette/Mooney 2000). Furthermore, welfare rights were largely answers to the chaos and destruction brought about by a laissez-faire capitalism that led to the Great Depression of the 1930s and the Second World War (Flora/Heidenheimer 2009). After the Second World War various types of welfare state were developed in countries throughout Europe and North America (Esping-Andersen 1990). The aim of these efforts was for the state to provide its citizens with a minimal level of resources in order for them to secure a minimum standard of living and, thereby, to ward off many of the negative effects or ‘externalities’ of an open and competitive market.

Let us now compare the welfare state to the notion of commons I have thus far developed. From the perspective of the commons, the ideal-typical welfare state socializes responsibility for the risks of “ill health, old age, disability or unemployment” on the basis “shared savings [...] [often] financed by levies on employees and employers and supplemented by revenue from taxes” (Weale 2013: 45). Additionally, taxation enables the state to pool and redistribute wealth in the form of public goods such as education and housing, if necessary. In this sense, the principles of reciprocity and mutuality that underlie the commons are also fundamental to the welfare system (ibid.: 47).

Nevertheless, there are a few important differences between the welfare state and our notion of the commons. Firstly, while some goods are provided for based on a basic right of access to resources (e.g. education), other welfare goods are sometimes provided for according to the contributions principle and, thus, according to proportional, distributive justice (e.g. old age pensions, unemployment compensation) (ibid.: 46). Here, the ability to receive support is relative to the amount paid and not according to one’s needs. While this might be considered fair in a rather egalitarian society, the principle is problematic when substantial inequalities limit one’s ability to contribute to the pooled resources. Secondly, it must be recognized that the welfare state limits socio-economic asymmetries through redistribution schemes. Nevertheless Albert Weale is right to argue that the welfare

state is a “device of horizontal rather than vertical redistribution”, because it redistributes income “across the life-cycle rather than between income classes” (ibid.: 46). Despite the important measures in redistribution, the welfare state appears to leave the underlying asymmetrical distribution within society relatively untouched (Esping-Andersen 1990: 23-6).² This implies that welfare rights can be interpreted as a compromise that provides access to basic goods “as compensation for exclusion” (Brettschneider 2012) from the productive resource systems that were once – or could be – held in common. Thus, the satisfaction of people’s everyday needs is not based on democratically negotiated self-organization by the affected, but is, rather, largely subject both to the arbitrary powers of proprietors and to growth mechanisms inherent to market competition.

Third, owing to underlying asymmetries in property ownership, the distribution of the resources and capabilities that enable people to participate in the democratic codetermination of the welfare state is also highly asymmetrical. In Rawls’ terminology, “welfare-state capitalism [...] rejects the fair value of political liberties” (JF: 138-9). Although the welfare state jumps in to assist and support those in need, people are not provided with the resources needed to be able to partake in the democratic definition and organization of these common goods. In this sense, welfare can be seen as a type of charity that supports dependencies rather than a basic right that enables self-determination. Furthermore, the lack of democratic participation in the provision of these common goods leaves welfare open to the previously mentioned criticism that state-provided goods are quite uniform. Ironically, however, this critique is often voiced not by those demanding the democratization of common goods, but rather by politicians who codetermine the welfare provision itself. Their answer to this problem is, however, not a greater democratization of wealth, but rather a limitation of state welfare and a provision of these goods through the market.

In contrast to this move, Rawls attempts to deal with these problems of the welfare state not through market mechanisms, but rather through an increase in *ex ante* distribution of resources as part of the property-owning democracy he proposes (Rawls 2001). Yet, in contrast to the distinction he wishes to make between these ideal models, I would agree with several authors that Rawls’ attempted contrast does not hold (Jackson 2012: 47-8; O’Neill 2012: 91-2; Weale 2013; Krouse/McPherson 1988). On the one hand, the classical welfare state, for example, also provides for a predistribution of education and skills training; on the other, one-off predistribution schemes also require continuing redistribution in order

2 Gosta Esping-Andersen even goes so far to say that “the welfare state is not just a mechanism that intervenes in, and possibly corrects, the structure of inequality; it is, in its own right, a system of stratification. It is an active force in the ordering of social relations.” (Esping-Andersen 1990: 23)

to mitigate unforeseen misfortunes. As these authors argue, the promotion of a property-owning democracy should not weaken the achievements of the welfare state, but rather supplement it with an increase in direct access to resources that are provided to individuals early on in their lives. In the welfare state as well as in a property-owning democracy, society's resources are continuously pooled, divided up and distributed again. Yet, in a property-owning democracy, the basic right to life and liberty is understood as a basic right to access resources at the beginning of one's life, and not only when one is in need. Ideally, this should enable people to determine their life plans and transform wage laborers and consumers into active producers, entrepreneurs and investors. Furthermore, it should also provide people with the ability to participate in the democratic organization of the state and its background structures.

Despite these major advantages that result from combining the welfare state with a property-owning democracy, a serious problem, which I have already discussed in my analysis of Rawls, remains: the competitive market's tendency to propagate perpetual economic growth. I have already discussed this problem in detail in the last chapter. Simply put, both the WSC and POD distribution schemes nevertheless encourage people to overuse society's common, socio-ecological resources. For this reason, I would argue that the organization of common resources through a welfare state or a property-owning democracy is inherently unsustainable. We must therefore shift our notion of predistribution from individual ownership of productive assets to access to basic common goods that are held and cared for in common. This implies that we not only need to rethink public goods as commons but also the role of the state in their provision. For this reason, let us now investigate the difference between public goods and commons, which I illustrate with reference to the examples of housing, health care and education.

7.2 Public goods versus state-supported commons: housing, health care and education

From ideal theory to non-ideal, civic co-creation of public goods

In order to understand the role of the state in a commons based society, I will briefly discuss the role of philosophy and philosophical methodology in such matters. Although I do greatly appreciate Rawls' extraordinary and quite radical theory of justice and his notion of a property-owning democracy, he himself emphasizes that his theory of justice is an *ideal* theory (TJ: 216). In a similar manner, I could draft an ideal theory of commons and make a list of numerous common goods that people must have access to in order for them to enjoy life and liberty. The most obvious goods would be clean air and a healthy environment, education, health care, hous-

ing, food and a basic transportation system. A more ambitious list might include, for example, clothes, culture, childcare services, basic banking services (including credit), travel opportunities and the like. As with any ideal theory, the activity of defining and defending a specific list of necessary (common) goods is a fine and noble task because it provides orientation amidst a rather confusing reality. I believe, however, that there are certain problems with this procedure.

Firstly, a central limitation of an ideal theory is voiced by Rawls himself. In *A Theory of Justice* Rawls discusses the two principles of justice and the guidance that these principles provide for people in non-ideal situations. Nevertheless, he admits that “in the more extreme and tangled instances of nonideal theory this priority of rules will no doubt fail; and indeed, we may be able to find no satisfactory answer at all” (TJ: 267). This concession concerning the large gap between an ideal and non-ideal theory leads us to the second problem of ideal theories. So long as people do not perceive there to be any connection between their highly complicated “tangled” reality and ideal theory, the focus on ideal theories may possibly disempower individuals, because they only see the great discrepancy between the two. Third, by defining a list of goods that people *should* have, one is automatically making oneself vulnerable to the criticism of being paternalistic. Rawls’ strategy for this problem is twofold. On the one hand, he resorts to his original position, which provides him with the legitimation that everyone should come to a similar conclusion. On the other hand, he merely develops a “rough” (TJ: 216) notion of justice and remains somewhat vague by speaking of “productive assets”, while those who have further developed his ideas have focused on “productive capital” or, rather, money (O’Neill 2012: 80; Hsieh 2012: 156; Freeman 2013: 23; Thomas 2017: 307). Money is handy in this regard because it is supposedly neutral and provides individuals with the freedom to choose how to use it. Yet, as we have already discussed, in the form of invested capital it also conceals an immanent logic of growth.

Fourth, I admit that by defining an ideal theory one also makes oneself vulnerable to the grave criticism of wanting to implement a utopian social design in a top-down and technocratic manner against the will of the people. Obviously, I am not saying that this is Rawls’ intention. But the focus on the rational, the right and the ideal from an original position leads to the formulation of a somewhat static political order. For this reason, Amartya Sen describes Rawls’ ideal theory as “transcendental institutionalism” (Sen 2009: 7), which appears, at least to me, to sidestep non-ideal historical contingencies, democratic deliberation and political resistance. Again, we are reminded of the civil tradition of democracy in which there is a dichotomy between transcendental background institutions of a society and the individual who acts within these institutions. Although Rawls deals with the tension between the state and society in his detailed discussion of the social preconditions for a just society, ideal theory nevertheless demands of individuals “strict compliance” with the just background institutions (TJ: 216). This focus

therefore neglects not only the question of how just institutions are created and reproduced, but also the non-ideal realities of social inequalities, concentrations of power and the destruction of socio-ecological livelihoods that impede the realization of such arrangements.

For these reasons, I believe it to be necessary to change our perspective when discussing the state-commons relationship and the provision of resources by the state from ideal-theory to what Amartya Sen has described as a “realization-focused” (Sen 2009: 7) approach, which aims at overcoming injustices, domination and exploitation. Sen describes this approach as comparative because it compares various existing and emerging institutional arrangements in different contexts and analyzes how specific injustices can be overcome given present possibilities. Here, freedom, justice and commons are not implemented from without or above, but rather grow out of the “crooked timber of humanity” (Berlin 2013; Kant 2006: 8:23). In order to overcome injustice, Sen argues that we should focus on democratic deliberation and the arguments exchanged by affected people via both local and global public spheres of contemporary societies. In line with Habermas and many others, Sen defines this deliberative understanding of democracy as “public reasoning” and his understanding of the state as “government by discussion” (Sen 2009: 321-337). Sen argues that the organization of state and social arrangements is thus not merely dealt with through periodic elections of competing elites, but rather through the perpetual expression of concerns and the exchange of ideas. Through participation in this process of democratic deliberation, people develop their capacities to define the legal framework of the state and the goods that best satisfy their needs. In short, people develop capacities for democratic self-governance and are thus able to overcome injustice and improve their security and social welfare (Sen 2009: 345-54).

I would argue that to systematically realize this, broad public deliberation must be institutionally secured through the inclusion of different groups of people in both the legislature and executive functions of government. The integration of citizens in such functions could occur through the inclusion of representatives of different affected groups (ethnic groups, socio-economic classes, consumer associations, neighborhoods, environmental groups etc.), for example by volunteering or sortition. In contrast to free association, the latter is an age-old form of political selection in which people from a population are semi-randomly nominated to take office in different political functions (Buchstein 2009; Dowlen 2008). One serious drawback of such a mechanism is the lack of accountability to the public due to the inability of those selected to be reelected. Despite this drawback, sortition and other forms of political inclusion can undermine the capture and corruption of the state by politico-economic elites (Lockard 2003). More importantly, it can enable a broader population to codetermine and participate in the coproduction of the goods and services provided by the state. Here, top-down provision of public

goods through experts is replaced by or, rather, supplemented with, local knowledge of needs, desires and the contexts of ‘common’ people. Classical examples of such forms of codetermination and coproduction are habitat conservation planning, participatory budgeting and functionally specific neighborhood councils for education, policing or health care (Fung/Wright 2003). With reference to Michael Walzer’s work, we might see this as the socialization of the welfare state (Walzer 1988). Within democratic theory, this kind of inclusion is often referred to as participatory democracy (Pateman 1970; Barber 1984; Roussopoulos/Benello 2005) and is seen as an important means of “deepening democracy” (Fung/Wright 2003). Although many theories of participatory democracy go beyond the state, we can argue here that such political inclusion can transform the state provision of public goods into state supported commons through commoning. Last but not least, these practices of commoning enable people to develop the necessary civic virtues that help uphold and reproduce the democratic institutions of the state and of a commons-creating society (Benkler/Nissenbaum 2006).

In summary, the implementation of a democratic, commons-based society requires us to shift our understanding of the state from ideal theory to a realization-focused approach that deals with injustices and other non-ideal realities through public deliberation and broad political participation. I argue that a “realization approach” would ultimately transform the provision of public goods by the state into commons. In order to better understand this difference between public goods and commons, I will now analyze and discuss concrete examples of housing, health care and education. I choose these three goods because there is a widespread consensus in many Western countries and across numerous political camps that they are necessary resources for people to lead a life in liberty.³ By analyzing these three basic goods, I hope to flesh out the concept of commons and their relationship to the state. Let us begin with the example of housing.

From public housing to housing commons

In general, public housing is provided for by the state for people in need, which is often interpreted to mean people with low incomes. To understand the problems of public housing, let us begin with the more commonplace criticisms of this kind of state provision.

3 Along these lines, articles 25.1. and 26.1. of the Universal Declaration of Human Rights state that access to housing, health care and education are considered to be basic human rights (UDHR 1948). Article 25.1. of the Universal Declaration of Human Rights states that “everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services [...]”. Article 26.1. affirms that “every one has the right to education. Education shall be free, at least in the elementary and fundamental stages” (ibid.).

Proponents of economic liberalism often criticize the provision of public housing because it supposedly distorts the self-regulating mechanism of the market. While this might be true, it is also the intention of public housing to provide housing to people who, owing the discrepancy between their low wages and the high rents of a home, could otherwise not afford a home on the 'free' market. If we value the satisfaction of needs over the functioning of unregulated market processes, then we can rather easily discard this criticism. Another more relevant criticism of public housing for our discussion here lies in an assumption I have mentioned several times already: that state services are uniform and unresponsive to individual needs and particular contexts. Although this may be true, one can say, conversely, that unregulated market processes are also unresponsive to individuals in need. While markets cater to those with more purchasing power, the state caters to those with less – the market as well as the state each being uniform and unresponsive in their own profit-oriented or bureaucratic manner. Aside from this common criticism, we must also acknowledge the concentration of poverty and, in turn, criminality, that results from both housing markets and more generally, misguided urban planning (Goering et al. 1997; Hui et al. 2015; Freedman/McGavock 2015).

I would say that the answer to these problems characteristic of property-owning democracy would be to provide people with housing capital so as to enable people to buy and design their own homes wherever they want. All citizens would thus become independent homeowners. Yet some problems arise from this independent housing model, such as suburban sprawl, long travel distances from home to work and the increased dependency on automobiles, to name just a few (Williamson 2010). Another problem is, however, the explosion of the cost of housing through real-estate speculation, which would be increased due to the provision of capital for all citizens. The 'neoliberal' and anti-egalitarian interpretation of a homeowner property-owning democracy has been realized since the 1980s in the USA, Britain and many other European countries by deregulating the banking sector and systematically keeping interest rates low, thereby enticing people with low wages to buy houses that they could not afford in the long run. This "privatized Keynesianism" (Crouch 2009) led to a run on real estate, which created a property bubble and, ultimately, the financial crisis of 2007/8 (Howell 1984; Streeck 2013; Levitin/Wachter 2012; Jackson 2012: 47).

What, then, are alternatives to the problems of uniformity, urban sprawl, poverty and speculation? These problems are obviously very complex and cannot be settled with simple solutions. Yet I believe that the systemic and process-oriented approach of commons could provide us with insights to fix at least some of these problems. So, what would a commons approach to the housing question look like? As I have emphasized, commons should not be understood as particular entities (e.g. public housing), but as a systemic and process-oriented approach

to creating common goods. In the case of public housing, this implies, first and foremost, the integration of potentially affected people into the development and design of a housing complex, a residential area or an entire neighborhood. Certain housing cooperatives are already developed in this way. The future inhabitants apply for an apartment, for example, *before* the complex is built instead of after. They are – or should be – able to express their various needs and negotiate how these can be accommodated within the existing financial and ecological budget. In some cases of public housing, lack of funding is a major problem, and one that leads to uniformity and ‘ghettoization’. I do not believe, however, that a lack of funds per se must necessarily lead to these problems. The problem of ‘ghettoization’ could, for example, be rather easily alleviated by building in the centers of cities, which would mean that city planning would not be left to the planning of real estate speculators and unregulated market forces.

In turn, while it is often assumed that a lack of funds necessarily leads to uniform administration and provision, the integration of prospective dwellers into the development and design of such a complex enables people to explore the existing possibilities within whatever ecological and financial limits are agreed upon. And where money is lacking, it should be possible for people to literally determine and shape their living conditions with their own hands. Moreover, given a systemic approach, the layout of a housing commons would also provide various spaces for people to come into contact with each other and develop their living spaces not just before the building process, but also while they live there. This could include shared spaces for shared goods (shared tools and household appliances, a repair workshop, shared cars etc.), but also shared gardens, playgrounds and wild green areas, or possibly even a weekly local market and a café. These examples might sound trivial, but my main point is that the environment would never be entirely brought to completion but always open to the continual and evolutionary process of co-creation that can be adapted and developed by the different people that live in such environments.

The belief that the management of such a diverse and creatively assembled habitat would be impossible for the state to manage is, to a certain extent, correct. It would be difficult and costly for state authorities to administer such self-organized groups. That is one reason why governments often realize uniform goods with uniform rules. But this is where Elinor Ostrom’s ideas about commons management come in: the costs of management can be significantly reduced while increasing the robustness of the institutional structure of an ecologically diverse resource system by enabling (and requiring) the dwellers to democratically manage their own commons, in this case their housing. This would necessitate that both institutional and physical space for public deliberation are provided for and maintained. Responsibilities would be devolved and delegated to different subgroups for different resources, goods and services. More importantly, these groups would

provide the institutional space needed so that problems can be voiced and conflicts resolved: such groups would maintain the mutual monitoring and graduated sanctioning necessary to reproduce commons on different levels. They would also provide the state with information for the background administration and support of housing commons. But would everyone have to participate in these deliberations and administrative processes? The right to dwell in such a housing commons could be made contingent on the inhabitant's committing to fulfill certain basic duties that would go beyond the mere compliance with basic rules. These could include minimal participation in the comanagement and reproduction of the housing commons. But the precise nature of these commitments would have to be defined by the inhabitants themselves.

Another question that arises in this discussion is whether housing would be provided free of charge and whether the state or the residents would be the proprietors of the housing commons. This is a central question that distinguishes housing commons from public housing. Simply put, a central feature of commons is that the people who use the resource system also manage it. Ideally, the people who use the common also collectively own it in the form of common property or a trust. I suggest that a housing commons could be arranged in the following manner: the land could be owned by the state in the form of a Community Land Trust. The Community Land Trust manages the land on behalf of the people of the village or the city and leases the land to the residence of the housing complex at affordable prices. The Community Land Trust would be comprised of politicians, experts, residents and other people from the broader community. The housing complex would then be owned as a cooperative by the people who live there (Conaty/Bollier 2014: 14-16; Lewis/Conaty 2012: 85-110). They would have to buy themselves into the cooperative. Yet, as numerous examples of housing cooperatives and other cooperative enterprises demonstrate, this amount will not be extremely high because the prices for real estate will not be driven up by speculation, and because the costs of housing will be shared by the many residents. For those who lack the necessary funds, there could be other means of accessing this capital – hopefully without falling into debt traps. To avoid this problem of debt, it is also imaginable that citizens would be provided with housing commons coupons of a certain value (e.g. \$20,000) at the age of 18 years in order for them to become a member of a housing commons project. If the cooperative share exceeds this amount, the individual would have to pay the difference. But these are only some ideas of what the specific arrangement might look like. The important point, then, is that people have actual stakes in the housing commons that they live in. This not only cultivates responsibility for the management and maintenance of the commons, but also frees the inhabitants from the arbitrary interference of external owners such as the state or private investors.

Now, let us analyze the role of the state in such a housing commons scheme. According to my sketch above, its role should be conceptualized as providing housing commons with administrative and institutional support. The function of the state is to 'be there' for the commoners: to initiate and, in certain cases, to support the processes of self-governance, to aid the realization of certain large-scale projects and, most importantly, to democratically develop urban and regional planning policies that provide adequate land for housing commons. The state would, therefore, not manage people and their habitats, but would rather provide people with the opportunity to democratically manage their own lives and habitats. Coercive power would not be exercised by the state itself in the form of a monopoly, but would provide citizens with the necessary opportunities and powers with which to democratically govern their own habitats. Here, the state is not understood as an authoritarian leviathan, but rather as a partner in realizing the democratic and interdependent freedom of its citizens.

Having discussed the idea of a housing commons, let us now turn to the question of how the public provision of health care can be conceptualized as and transformed into a common.

From public health care to health commons

The right to health care is generally based on the right to life and well-being. More technically it can be expressed as a "positive right to basic human functional capabilities" (Ram-Tiktin 2012). While this might sound rather reasonable for some, the public provision of health care is highly contested (Epstein 1997). After discussing the problems of both market and state provision of health care, I will develop the notion of a health commons in relation to medical research and development, on the one hand, and in relation to the idea of community health center commons, on the other.

One central problem of the public provision of health care in many, if not most, Western countries is its increasing costs (Qidwai 2013). A common reason given for these substantial costs is the increase in demand for medical services. Garrett Hardin, for example, describes this problem as the "laissez-faire" provision of state services according to the Marxist principle "each according to his need" (Hardin 1977b; Hardin 1993: 242-3). In Hardin's words, "it takes no great insight to realize that hypochondriacs, as a class, will victimize the healthy in such a system" (Hardin 1993: 243).⁴ Without testing the empirical validity of this rather cynical explanation,

4 To be precise, Hardin actually sees the problem in rising expenditure on health care in the in lawsuits of people against their doctors, on the one hand, and in expensive insurance and diagnostic tests as a means to protect doctors against these lawsuits on the other (Hardin 1993: 242-3).

I would argue that the reasons for the rises in costs in health care are not merely due to “hypochondriacs”. Other important factors include, for example, the increase in population size, longer life expectancy and higher standards of health. Yet, some academics see the problem not merely on the demand side, but rather in a feedback loop of supply and demand in which greater investments in health care lead to improved health (and longer lives, larger populations and higher expectations) and thus require even greater expenditure in medical care. This is what some call the “Sisyphus Syndrome in Health” (Zweifel et al. 2005; Zweifel 2007). Zweifel et al. explain this feedback loop in the following way:

Initially, politicians decide to allocate more resources to health. If effective this intervention causes people that would have otherwise died to survive. With more survivors around, there will be additional demand for health care services. *To the extent that this is financed out of private resources, there is not too much of a problem.* Individuals will adjust their health insurance policies accordingly and allocate a greater share of their income to health care. However, most of these services are covered by public health insurance. Rather than accepting to pay themselves, especially older voters have an incentive to get politicians to reallocate the public budget in favor of health. The increase in health care expenditure (HCE) again creates survivors. Thus, the Sisyphus syndrome can go into its next turn. (Zweifel et al. 2005, 127; emphasis added)

Despite the plausibility of this hypothesis, their conclusion seems somewhat peculiar: the central problem does not necessarily lie in rising medical costs, but more specifically in the increasing *public* expenditure on health care. According to Zweifel et al., one solution to this problem is, therefore, the privatization of health care. Expenditure on health care then depends on one's purchasing power and the ‘free’ choice to spend one's money on one's health. Here, it is assumed that through privatization, supply and demand will eventually balance each other out. Generally speaking, this belief that privatization will yield better outcomes in health care has become increasingly popular since the 1980s in many Western and non-Western countries (Collyer/White 2011).

The problem is, however, that agents competing on an open market must pursue profit-maximizing strategies in order to survive economically. It can therefore be assumed that the profit maximization strategy would not lead to a decrease in health-care costs, but rather to an increase in costs. The reason for this is that private firms who are in the medical and pharmaceutical industries are not necessarily interested in lowering private expenditure on health services and products but, instead, in a perpetual increase in expenditure. Aside from using their monopoly power in patents to raise the prices of drugs, this is also achieved by developing highly specialized and exclusive treatments for those with greater purchasing power. Similar to the housing market, this implies that medical and pharmaceu-

tical companies are not interested in the needs of those in need, that is, of those with ill health and little money. The necessary care for these people will be – and is being – left to charity organizations or, as is mostly the case, to untrained and often already overworked family members of the less well-off. However, in other cases, these people in need will not receive any care services or medicinal treatment. A privatized health-care system thus cannot fulfill its proper function of providing all people with adequate health-care services. Instead, it will turn – and has turned – good health into a means of social distinction and possibly even a luxury good for the affluent.

However, and more fundamentally, a health-care system that is structured according to profit maximization is, ironically, not necessarily interested in a long-term and sustainably healthy society. This is not to say that general levels of health in Western countries have not increased over the last two hundred years or that pharmaceutical and biomedical corporations produce malfunctioning or harmful drugs. The point being made here is another. The reason for this underlying disinterest of businesses in a substantially healthy society lies in the problem that if everyone were healthy, people wouldn't go to a doctor or need drugs. Sales would sink and profits would plummet – and people would lose their jobs. The underlying and long term interest of a profit-oriented health industry is therefore not healthy citizens, but, rather, sickness and a perpetual increase in desire for more medicine and more health-care services (Brownlee 2007). Put somewhat bluntly, profits feed off the sick.

However, the problem I am describing is not limited to entirely privatized systems of health-care provision. If profit-oriented corporations provide the drugs, machines and material infrastructure for a public health-care system, the supply-side problem of perpetually rising health-care expenditure remains. This problem is otherwise known as the medical-industrial complex (Relman 1980; Wohl 1984; Geyman 2004; Moskowitz/Nash 2008; Ehrenreich 2016: 39-77). Here, we are reminded again of Hardin's "double C–double P game" in which the profits of the health industry are privatized while the costs are communalized. As we see, with a background arrangement based on profit maximization, both private and public systems are unsatisfactory and lead to rising costs in health – either at the cost of increasing public expenditure or at the cost of an unhealthy and run-down lower-class population. Contrary to Zweifel et al., we can therefore conclude that it is not simply public spending that leads to the "Sisyphus Syndrome", but also a profit-oriented health-care system that leads to ever-rising costs for society.

Parallel to the problem of housing, a possible answer to this conundrum could be the conceptualization of health care as a commons. But what would such a health-care commons look like? I cannot provide a blueprint for how a health-care commons should look. Nevertheless, I can provide a few ideas that might be helpful in understanding how a health-care commons could be organized. For this, how-

ever, let us take a step back: the more general problem we are faced with is how to create a healthy society that cultivates well-being instead of a society that values efficiency gains and economic growth. From a systemic perspective, a health-care commons implies a general and fundamental right to a clean and healthy environment (Weston/Bollier 2013). As Smith-Nonino notes, “certainly, a *de facto* public health commons exists in every municipality that provides clean water, sewage disposal, or subsidized inoculations for communicable disease – services often taken for granted by most citizens” (Smith-Nonini 2006: 233). In this sense, we must emphasize that health care is not something that is realized simply through the provision of medication or an operation, but that it is, rather, an ongoing process and interaction of individuals with their socio-ecological environment. While not denying individual responsibility for one’s health, a commons approach recognizes that individuals live in a complex webs of interdependent relationships that influence their well-being and the well-being of others. From this perspective, good health is not merely an individual effort, but is also achieved through social interactions and arrangements. To gain a more detailed understanding of what this might mean, let us analyze two facets of a health-care commons: medical research and development and community provision of health-care services.

As just discussed, a central problem of profit-oriented health-care systems is that they cater to the needs and desires of those clients with greater purchasing power rather than focusing on widespread diseases that primarily affect poorer people. This problem is accentuated by another related issue: the privatization of research and development or, more specifically, complex and overlapping patent rights in the medical sector. Intellectual property rights are often understood as important incentives because they secure property rights in one’s labor, or rather one’s discovery, and enable those who invest in research and development to reap greater benefits from it. The flip side of these patents is, however, that they simultaneously prevent other researchers and organizations from accessing and using the knowledge that has been gained. This is one case of what Michael Heller has described as the “tragedy of the anticommons” (Heller 1998; Heller/Eisenberg 1998) or the “gridlock economy” (Heller 2008: 49-78). In contrast to the tragedy of the unregulated commons which leads to the *overuse* of resources, the tragedy of the anti-commons leads to the *underuse* of resources. Here, highly fragmented exclusive ownership rights impede innovation that could enable researchers to develop cheaper or possibly even better drugs. It is in this sense that Heller argues that fragmented patents can literally cost lives (*ibid.*: 55).

One commons-based answer to this would be – parallel to the open-source software movement – to organize medical R&D as an open-source health commons where information is shared freely among researchers and health organizations (Tenenbaum/Wilbanks 2008). Marty Tenenbaum and John Wilbank explain this idea in their white paper on health commons:

We envision a Commons where a researcher will be able to order everything needed to replicate a published experiment as easily as ordering DVDs from Amazon. A Commons where one can create a workflow to exploit replicated results on an industrial scale – searching the world's biological repositories for relevant materials; routing them to the best labs for molecular profiling; forwarding the data to a team of bioinformaticians for collaborative analysis of potential drug targets; and finally hiring top service providers to run drug screens against those targets; with everything – knowledge, data, and materials – moving smoothly from one provider to the next, monitored and tracked with Fed-Ex precision; where the workflow scripts themselves can become part of the Commons, for others to reuse and improve. Health Commons' marketplace will slash the time, cost, and risk of developing treatments for diseases. (Tenenbaum/Wilbanks 2008: 3-4)

However, the point of such open-source health commons would not only be to cut costs or to produce more, but also to democratize the medical industry. Here, it can be assumed that the open-source structure of a health commons in research and development would enable more people to participate and collaborate in the 'peer production' of more innovative medical knowledge and needs-oriented treatments.

From a more systemic perspective, the democratization of health care can also more generally be encouraged by empowering people to take control of individual and social causes of illnesses. On a very basic level, this can begin with preventative health education in schools. With reference to medical training, this could imply the development of a profession of community doctors,⁵ who would combine the knowledge of the family doctor, the care worker, the pharmacist and the therapist. The community provisioning of health care services could, for example, be organized in community health care centers. Here, a community doctor and other care workers would provide basic and accessible health-care services to the public. Furthermore, the people seeking help in such community health commons would not simply be consumers, but would be integrated in empowering processes involving the diffusion of knowledge and practices of self-help. This could include, for example, groups like Alcoholics Anonymous, in which people with common, widespread, complex problems such as chronic back pain, migraines, burnout, (minor) depression and obesity can discuss their problems and how they deal with them. An important advantage would be that people would learn to listen to themselves and their peers instead of having to entirely depend on expensive experts. Such a community health commons could also provide simple health activities led by volunteers that aim to increase people's individual well-being. Because care work is very

5 As an example of such community doctors see, for example, the "barefoot doctors" that used to exist in China (Zhang/Unschuld 2008; WHO 2008).

time-consuming and care workers are rather limited in number, a time bank or exchange circle could be organized in which people could offer their help in simple care services in exchange for other goods or services. But these are merely some fairly concrete ideas of how such a community health commons could be organized. On a more general level, the principles of democratic planning and self-organization would lie at the heart of community health commons. This would, in turn, enable affected people to define for themselves how they would like to organize their local health-care services.

As we see, the cultivation of health and well-being requires, if not a lot of money, then still a lot of time for caring activities. This leads us to the more political side of the idea of a health commons and the necessity of an institutional framework that supports the creation of a healthy society. Although the notion of a 'healthy society' is, at present, often associated with awareness campaigns, a systemic approach to the notion of good health would go beyond the focus on single, isolated problems and would avoid the top-down implementation of certain ideas of the good. Instead it would, for example, aim towards opening up more space for people to care for themselves and for others. First and foremost, this needs to include the limitation of the working day, which would provide people with the time for these activities. Other elements of such health policies could include, for example, walking and bike paths and parks for people to exercise and relax in. In more general terms, city and regional planning is also an important aspect of the creation of a healthy and ecologically sustainable environment. All of this might sound quite self-evident and mundane, but a commons twist to these policies would entail the democratic inclusion of the people who actually live in these environments. Furthermore, a commons approach to health, well-being and public space would involve a transformation of our understanding of public space. From the commons perspective, public space is not understood as a neutral space for everyone and no one, but rather as a common space that is shaped by the people who use it. How these different aspects of democratic participation, common space, community building and health issues are integrated can be illustrated with the example of urban gardening, which has gained a certain popularity (Lewellen 2016; Baier et al. 2013; Seitz 2009). As we see, we have moved from the question of health via that of community organizations to that of city planning, which would normally appear to have little to do with one another. The point of the commons is, however, to see the systemic relationships between its individual components. More generally, the democratic inclusion of affected people in such processes of community-health commoning implies that people can define and develop their own understanding of health and wellbeing. But beyond this, it implies that individuals' health and well-being is not only an interdependent component of a healthy society, but also of a healthy and sustainable environment.

To sum up: the notion of a democratic health commons clearly goes beyond state provision of basic health-care services. Nevertheless, its emphasis on open-access medical research and development, on the one hand, and community provisioning, on the other, could provide strategies to improve the health of citizens without perpetually increasing health-care costs.

From public education to an education commons

Having analyzed housing and health care as potential commons, now let me turn to my final example: education. In contrast to housing and health, however, it can generally be said that education is one of the most acknowledged public goods in Western countries. In this section I compare the notion of public education to an education commons. In order to do this, I firstly discuss arguments for and against education as a public good. Secondly, I argue that access to knowledge is a central aspect of public education. Here, I focus on the problem of the privatization of scientific knowledge in academic journals and argue that scientific knowledge must be organized as an open-access commons. In a third step, I discuss how public schooling can be organized as a commons.

The defense and critique of public education

The general conception of education as a universal public good is based on the critique of earlier social arrangements, most importantly of feudalism, in which only aristocrats could afford to educate their children, and the children of peasants and lower social classes learned only those skills necessary to fulfill their occupations. This conception is expressed quite clearly by Adam Smith, not so much because as in spite of his defense of private enterprise and a free and competitive market. As I have already pointed out, Smith argues that an increase in the division of labor leads to the problem that laborers become “as stupid and ignorant as it is possible for a human to become” (Smith 1994: 840). A Smith appreciates, the tragedy of an unregulated education commons makes state provision of mandatory public education necessary in order to overcome the problem of an entirely private education that leads to the exploitation of lower classes. We will come across this problem again when discussing vocational education and the competitive market in the next chapter on markets. According to Smith, a “civilized and commercial society” therefore requires the “education of the common people [...] more than that of people with rank and fortune” (ibid.: 841). He continues,

But though the common people cannot, in any civilized society, be so well instructed as people of some rank and fortune, the most essential parts of education, however, to read, write, and account, can be acquired at so early a period of life,

that the greater part even of those who are to be bred to the lowest occupations, have time to acquire them before they can be employed in those occupations. For a very small expense the public can facilitate, can encourage, and can even impose upon almost the whole body of the people, the necessity of acquiring those most essential parts of education. The public can facilitate this acquisition by establishing in every parish or district a little school, where children may be taught for a reward so moderate, that even a common laborer may afford it [...]. (ibid.: 842-3)

The aims of a public education are therefore, according to Smith, to educate people in order to make them “more decent and orderly”, “more respectable” and “therefore more disposed to respect [...] superiors” (ibid.: 846). Although Smith concedes that the state “derives no advantage” from public education, these qualities do, however, provide for a more stable and orderly society. More generally, educated people are “less liable [...] to the delusions of enthusiasm and superstition” and “more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition” (ibid.). In turn, public education enables people of lower social classes to be “less apt to be misled into any wanton or unnecessary opposition to the measures of government” (ibid.). Here, we see the enlightened impetus that has continued until today in which education is believed to create more reflective, more critical citizens who, in turn, uphold an orderly and civilized society.

While this basic defense of public education has become widespread since the 18th century, its concept has been greatly expanded since then. Today, public education is not simply limited to the basics of reading, writing and arithmetic, but includes general knowledge of history, politics and society and sometimes extends to vocational training, university education and further, adult education. Here, education is not only provided to increase social stability or, in Rawls’ terminology, a “well-ordered society”, but, more importantly, in order to provide people with “fair equality of opportunity” (JF: 139). Put somewhat more generally, public education should provide people with necessary intellectual resources in the form of the knowledge and the cognitive skills needed to enable them to develop and realize their capacities and to freely choose their occupation (TJ: 243, 374). Like Smith, Rawls argues that resources in education should be allocated so “as to improve the long-term expectation of the least favored” (TJ: 87). Here, educational and vocational training are defined as central aspects of a property-owning democracy that should be dispersed widely throughout society by the state (JF: 139). As Rawls explains:

I assume [...] that there is fair (as opposed to formal) equality of opportunity. This means that in addition to maintaining the usual kinds of social overhead capital, the government tries to insure equal chances of education and culture for persons similarly endowed and motivated either by subsidizing private schools or by

establishing a public school system. It also enforces and underwrites equality of opportunity in economic activities and in the free choice of occupation. (T): 243)

Not only should access to educational resources create a just background structure for a free society, but it should also support the reproduction of the system over time. As Rawls explains:

Their education should also prepare them to be fully cooperating members of society and enable them to be self-supporting; it should also encourage the political virtues so that they want to honor the fair terms of social cooperation in their relations with the rest of society. (JF: 156)

The role of public education is therefore both an institutional and a moral one: institutional access to educational resources should support the social cooperation necessary to uphold a just system. This is, at least, Rawls' ideal theory of a public education provided by the state. Although not always realized in this ideal form, the widespread provision of public education by the state in many Western countries can be understood as an extraordinary achievement.

Despite "the great aspiration" (Oelkers 1989) embodied in these ideals, which developed during the 19th and 20th centuries, public education has been accompanied by its critics since its beginning. As with most public institutions and services, a common 'progressive' criticism has always been that state education is bureaucratic, uniform and unresponsive to the needs of the children and the community (Oelkers 2010; Hayes 2007). Often, these criticisms focus on the disciplining techniques of educational practices and the overall aims of educational policies that produce subservient and diligent workers in the name of economic utility, productivity and growth, but not critical, creative, and free citizens for a democratic society (Illich 1972; Dewey 2008; Freire 2012). Furthermore, and in spite of the widespread expansion of public education since the Second World War, state provision of education has appeared unable to counter social inequalities. In contrast, numerous studies have demonstrated how public schools merely reproduce the inequalities that already exist in society (Bernstein 1973; Willis 1981; Bourdieu/Passeron 1990; Lareau 2003).

Increasingly in Anglo-Saxon countries since the 1980s, this critique of public education has, however, been used by 'conservatives' to support an economic liberalization of the provision of education (House 1998; Apple 1996, 2000, 2006). Caught in the state-market dichotomy, the only alternative to the top-down state provision of education is therefore thought to be 'free choice', which is interpreted as the introduction of competitive market mechanisms and the privatization of public education (Friedman 1955, 2002; Murray 1984; Walberg/Bast 2003). With David Bollier, we can understand this process as an enclosure of state-provided educational commons (Bollier 2013; Björk 2017). At elementary and high school levels,

this can occur through the influence of corporations on educational policy (including curricula and textbooks) and school campuses (Neumann 2014; House 1998). More generally, a market-oriented public school system focuses on the output and comparison of grades (e.g. PISA), the competition between schools and, most importantly, the free choice of schools through voucher systems. At a higher level, this can be seen in decreases in public funding of college and university education, and higher tuition fees and student debt in Anglo-Saxon countries (Mortenson 2012; Goodnight/Hingstman 2013). Further effects include a general increase in the competitive acquisition of external, third-party funds for scientific research in Europe (Boer et al. 2007; Bolli/Somogyi 2010) and a boom in expensive, private academic journals (Tenopir/King 2000; Guédon 2001; Kranich 2007). We will discuss the problem of these journals shortly. Although not all of these reforms and developments can be declared to be simply wrong, the general tendency towards privatization of education brings us back to the problem we initially attempted to overcome through a widespread provision of public education: the inequality of access to educational resources. By declaring that the “government has not solved the problem[s] of education because government is the problem” (MacLaury 1990: ix), we end up in the same position we originally found ourselves in: a private provision of education is not interested in the needs and desires of those less well-off. As Adam Smith already argued from a utilitarian standpoint, this is problematic because it decreases society’s productive or, for us from a commons perspective, caring capabilities and threatens the social order. From Rawls’ normative perspective, this inequality denies the less well-off the opportunity to develop their capacities. Thus, the privatization of education appears to be something like an attempt to put out a fire with burning sticks.

What, then, is the alternative to a top-down provision of education by the state and a more private provision based on competitive market mechanisms? Here, we must again bring in the notion of commons as an alternative to the state-market dichotomy. For education, this generally implies a democratization of governance processes, institutions, and educational practices and resources. A commons interpretation of education builds on some of these critiques, yet places democracy at the core of its arrangements. To understand what this could mean in more concrete terms, let us begin with higher education and the informational resources on which it depends, and then turn to the governance, institutions and contents of elementary and high school education. We will discuss vocational education in the following chapter.

Open-access information commons: scientific knowledge and academic journals

Higher education can generally be understood as one of the key ways that a society creates experts and intellectuals in diverse fields of knowledge. In the tradition of the Enlightenment, a central aim of universities is to produce scientific knowledge that will hopefully advance people in their understanding of the world. It is assumed that this knowledge will make people freer in both the sense that it will free them from false beliefs and increase the range of possibilities for action. This occurs through the broad dissemination of information and knowledge to the wider public – and the ability of non-experts to access this information. Scientific information is thus a vital resource for political participation, critical deliberation and effective policy-making in democratic societies (Dewey 1946: 208-9). In this sense, we can say that universities and scientific information have a public function: to educate society.

If we look at the state of higher education and scientific information in many countries around the world today, it is unclear whether universities currently fulfill this purpose. Here however, we will not focus on the well-known problems of soaring university fees and student debt. My focus will, instead, be on what some might consider a sideshow: academic journals. Simply put, the problem of academic journals is that they enclose and privatize scientific information. The costs of access to individual scientific articles for people who are not affiliated with academic institutions (which is the greater part of the world's population) are generally very high.⁶ One reason for these high costs is, largely, the concentration of ownership of academic journals in the hands of a few corporations (Larivière et al. 2015). As can be expected, profits in this field are therefore also very high.⁷ But the more fundamental reason for these large profits is that the knowledge is provided to these corporations for free. Importantly, and in contrast to newspapers, for example, the information is not created, reviewed or edited by the journals themselves, but instead provided for free by academics (Bergstrom 2001; McGuigan/Russel 2008). Additionally, copyright in articles is usually handed over to the journals (Hilty 2007). Academics, universities and the public are therefore obliged to buy their own research back from corporations that merely package the publicly funded

6 The price for a single article can reach up to \$35 a piece (Monbiot 2016: 194). In 2011, British university libraries spent up to 65 per cent of their budgets on academic journals (Economist 2011) which can range in prices from \$500 to over \$20,000 a year (McGuigan/Russel 2008; Monbiot 2016: 194).

7 Some estimates speak of a *turnover* of \$10 billion worldwide (Björk 2017: 101), while in 2008 others estimated the *revenue* of these companies in North America alone to be \$11.5 billion (McGuigan/Russel 2008). In 2010 Elsevier, the largest publisher of academic journals worldwide, had an operating-profit margin of 36 per cent (Economist 2011).

information. It appears, therefore, that private journal publishers extract profit from research communities by enclosing and restricting access to publicly funded scientific knowledge commons (Berg 2012). From a socio-economic perspective, and analogously to the problem of research and development in the field of health and medicine, I would argue that the privatization of information can limit collaboration and innovation and lead to the tragedy of an anti-commons – not necessarily between researchers, who often have access to the journals, but rather between the scientific community and the broader non-academic public. From a socio-political perspective, expensive, private academic journals ultimately undermine the educational function of universities and research in an informed and self-reflective democratic society.

The widespread privatization of scientific information in academic journals is unique in two respects. Not only are the infrastructure and the labor that go into research often funded by the public. Furthermore, digital information – and knowledge in general – is often considered to be *the* exemplary non-exclusory and non-rival good (Stiglitz 1999; Hess/Ostrom 2007). In our terminology, we could say that digital information and knowledge are highly inclusive and additive. The fact that one person can consume information and simultaneously enable other people to benefit from it makes it an ideal resource to provide in an open-access manner (Verschraegen/Schiltz 2006). The best contemporary examples of this are the free online encyclopedia Wikipedia and Project Gutenberg, which can be understood as an open-access information or knowledge commons (Safner 2016). The philosopher Peter Suber defines open access in the following manner:

Open access (OA) is free online access. OA literature is not only free of charge to everyone with an Internet connection, but free of most copyright and licensing restrictions. OA literature is barrier-free literature produced by removing the price barriers and permission barriers that block access and limit usage of most conventionally published literature, whether in print or online. (Suber 2007: 171)

If we thus understand open access information in this manner, what would differentiate its organization as a public good from a commons? According to Suber, one main difference lies in the author's rights. When work is put in the public domain, no rights are retained: there are authors, but no legal owners of the text. In contrast, a commons is constituted when the author consents to all legitimate scholarly uses. The author thereby voluntarily gives up certain rights (which they also do when publishing in private journals), but retains the right to block the distribution of falsified or misattributed copies and block the commercial reuse of such copies (ibid.: 171, 179). From this perspective, the intellectual commons is possibly more attractive for authors because they remain the owners of the text, while still being able to provide the information to a wider public.

Aside from the question of the ownership of texts, public provision of open-access information differs from commons provision with respect to ownership and management of its infrastructure. One form of public provision of access to scientific information would require the state to set up and manage open-access internet platforms for the general public. This is often done with in-house government research that is funded by taxpayers. It is questionable, however, whether governments should also do this for academic journals. If we look at other OA projects, Project Gutenberg is, for example, a private non-profit corporation that is financed through donations and managed by its CEO and Board of Directors. Wikipedia, also a non-profit organization funded by donations, is administered by a seven-member board of trustees. For academic journals, it is evident that the academic community itself ought to provide and manage the infrastructure for open access to scientific information. Managing boards can also include members of public libraries and the wider public in order to ensure relevance and accessibility of the information. The existing expenses could be covered by public funds (e.g. in the form of salaries of university and library employees), publication grants and donations. Importantly, open access implies *free* access to information, which means that there would be no subscription fees – for readers or libraries. Yet, because much of this publishing work is already done for free by academics, we can assume that the remaining costs will be rather low. But as Suber says, “there is not just one way to cover the expenses of a peer-reviewed OA journal” (ibid.: 174). While the contents, in all of these cases, are provided for in an open-access manner, the management is conducted either through government officials, entrepreneurs, civil society or professional societies. While all this information should be understood as an information commons, I would argue that open access created through peer production and managed by those largely responsible for and affected by this content should, more generally, be considered commons in their institutional sense. In relation to our four examples, it appears that Wikipedia and open access scientific journals would come closest to this notion of a commons.

Lastly, however, it must be noted that from the perspective of access to educational resources, the value of open access to information stands above its organizational provision. The question of how this intellectual resource should be managed is therefore secondary. Despite the risks of tragedy inherent in creating intellectual commons (Wenzler 2017; Suber 2007: 183–7), the advantages of a commons over public provision are also based on the innovation that results from the inclusion of citizens in research, also known as public science or participatory action research (Kindon et al. 2007; Lawson et al. 2015). In this sense, an information commons can ideally decrease the knowledge gap between scientific experts and the wider population, not simply by educating the public but also by providing people with the means to participate in and use science for the democratic co-creation of their shared, common reality.

Schools and schooling in an education commons

Having discussed information commons in higher education, let us now turn to the more general question of how public schooling can be organized as a commons. On the institutional level, this implies, first and foremost, that the people affected by public education should have the right to codetermine its arrangements. Democratic participation must be understood as the answer to top-down uniform state provision of education and as an alternative to market mechanisms and privatization that cater to the well-off. By understanding public education as a common, welfare recipients and market consumers are, ideally, transformed into active, participating citizens or, in my vocabulary, commoners. This principle of democratic codetermination can be applied to numerous levels of decision-making: educational policy at national, state and municipal levels, the administration of schooling districts and the management of individual schools. Because it is often believed that political participation is more difficult on the national level, political participation in educational affairs is most commonly achieved through organizational bodies such as local school councils, parent-teacher associations and inter-school student councils. Another type of organizational body could be a Local Education Forum as discussed by Richard Hatcher, which “would be a body open to all with an interest in education, including of course teachers and other school workers, school governors, parents and school students”, enabling these people to “discuss and take positions on all key policy issues” (Hatcher 2012: 37). The general aims of these organizations and instruments are to increase the effectiveness and accountability in the provision of education according to the needs and desires of the affected people. Despite the importance of this idea for the provision of education by the state, I will not focus on these issues because the ideas are not new and there is already a rather large body of international literature on this topic (Golarz/Golarz 1995; Brehony/Deem 1995; Fung 2003a; Lewis/Naidoo 2006; Arvind 2009; Smit/Oosthuizen 2011; Long 2014; Jung et al. 2016). However, it is important to note that despite this emphasis on local, democratic control of education, a national government is necessary to mitigate substantial inequalities between different school districts. Decentralized democratic bodies are incapable of dealing with this problem, which arises at a higher level between districts. The question, then, is how democratic participation can be strengthened not only on the local level, but also on the national or even at supranational levels of educational politics and policy-making. In general terms, democratic participation should hopefully transform a top-down provision of public education into an education commons structured as a multilayered and polycentric governance system.

Aside from policymaking and the management of schools, it is also necessary to discuss the notion of an education commons in relation to schooling. In very general terms, I would like to emphasize the importance of democratic and eco-

logical knowledge and values for schooling in an education commons. The reason for this should hopefully be rather clear from the preceding discussions. Nevertheless, let me briefly summarize my reasons again. In general terms, democracy should enable people to co-create and codetermine their socio-ecological conditions. The importance of democracy in educational matters lies not only in its instrumental value for overcoming social dilemmas and tragedies, but also in the intrinsic value of collective action and convivial modes of living. When school education focuses on democracy, it should emphasize the importance of individual freedom in relation to the freedom of others. This is what I have defined as ecological freedom: the freedom in, through and against others. The underlying value that a democracy should cultivate is thus the recognition of and respect for oneself and the other. This reciprocity lays the foundation for the deliberation and negotiation over other social values and the organization of interdependent individual lives in a shared reality. As I mentioned in my discussion of democracy, the principle of autonomy should, however, be integrated in a larger framework that includes not only the human world but also the non-human world. This, in turn, leads us to the importance of ecology in educational matters. Essentially, ecology is a principle that should enable people to recognize environmental limits, understand the relational functioning of eco-systems and negotiate the intrinsic and instrumental value of other interdependent living beings. In terms of norms, ecology should cultivate the values of diversity, reciprocal interdependence, care and sustainability. This is what Capra, Mattei and others have called eco-literacy (Capra/Mattei 2015: 174-8; Kahn 2010; Peacock 2004). As we see, however, ecology and democracy should not be seen as two separate entities, but rather as complementary means to realize a just and sustainable evolution of life. Thus, the principles of ecology should be combined with those of democracy, ultimately fostering an understanding for ecological democracy in education (Houser 2009).

Let us briefly discuss what that implies for schools and teaching. On the one hand, it would imply that democracy and ecology would be taught at schools as subjects. In many schools, this is already the case: democracy is a theme in what is called civic or citizenship education, which is sometimes subsumed into history or some other subject; ecology, in turn, is normally taught in geography or biology class. Here, democracy and ecology are treated solely as educational contents or as objects that exist 'out there' in the world. I believe this to be the traditional approach to these topics. Although sometimes pedagogically necessary, this approach is somewhat problematic since it reproduces the Cartesian divide between *res cogitans* and *res extensa* or subject and object that underlies the false dichotomy that divides our common ecological reality into human being on the one side and nature on the other. For this reason, an education commons would interpret democracy and ecology not merely as educational contents, but also as educational forms, as ways of learning. This would imply, on the other hand, that learners not only ac-

quire knowledge of democracy and ecology, but also experience and practice these principles in an interactive and systemic manner. As John Dewey already argued over 100 years ago, this means that democracy is not simply taught, but that it is also a way of learning and, more generally, a way of life (Dewey 2008). Similarly, we could say that ecology is not merely something to be learned about, but also a way of learning.

A democratic and ecological education would thus attempt to recognize the necessity and importance of each person in collaborative learning processes. Learning would not simply occur as independent *self*-organization, but rather as an interactive and interdependent cooperative process that is negotiated between the pupils and teachers in a way that recognizes their real diversity. Admittedly, this notion of cooperative learning is not new (Slavin 1996; Gillies 2007; Johnson/Johnson 2009). An ecological twist to this approach, however, would integrate one's environment into these interactive processes. For elementary school children, this could imply co-designing and helping to build a playground that fulfills their needs and desires – and, possibly, integrates ecological niches for plants and animals (Lozanovska/Xu 2013). For high school students, cooperative, ecological learning could involve projects in which the school itself is altered to become more sustainable. Pupils could, for example, plan and organize the installation of solar panels on the school's roof – possibly they could even learn how to assemble solar panels themselves.⁸ In this sense, the aim of a democratic and ecological approach to educational praxis would be to foster engaged citizens who can collaborate with others and develop skills in order to actively co-create and transform their common reality in a sustainable manner.

In sum, an education commons would differ from public education in two significant ways. As we saw in the discussion of information and knowledge, an open access information commons would provide the wider public with access to academic research that is, in turn, managed by the researchers and institutions that generate this information. Secondly, I have argued that an education commons would imply the democratization of educational policymaking and the management of schools. This would expand the opportunities given to the wider public to organize their education according to their needs and desires. Furthermore, I have contended that democratic and ecological knowledge and values should be integrated into schooling. This should provide children and young adults the chance to learn in an individualized yet cooperative manner in interaction with their environment. At all levels, the aim of education in an education commons is thus to empower people to become commoners for a commons-creating society.

8 While this might appear to some as too complex and thus unrealistic, the construction of solar panels is learnt and practiced at the "Barefoot College" in Tilinia, India (O'Brien 1997; Roy/Hartigan 2008).

7.4 Creating commons in a non-ideal world – in and against the state

I must admit that my ‘realization-approach’ portrayal of a state-supported commons-creating society might appear rather rosy and utopian. Returning to our preliminary discussion of ideal and non-ideal theory, it might seem as though I have slipped back into a ‘transcendental institutionalism’ in my comparison of public and common goods. Nevertheless, I hope that this discussion has provided us with a better understanding of the relationship between the state, public goods and commons. The question that now arises is, however, what the relationship between the state and the commons looks like in non-ideal world. Or more concretely: How can such a social arrangement be realized when democratic participation is not given? Does global warming force us to give up our notion of democratic participation in a commons state? And does this focus on local, nation-state answers not forget the large, global picture of immense poverty and ecological degradation in other countries? In this last section on the state-commons relationship I will therefore touch on these issues: the ‘urgency’ of climate change, the role of commons for ‘developing’ nations, the threat of state oppression and opportunities to reclaim and cultivate commons.

The urgency of climate change

Let us begin with the problem of climate change. As I have already mentioned, there exists an unequal distribution of ‘goods’ and ‘bads’ in the world: 20 percent of the world’s population produce 80 percent of the world’s GHG emissions (Satterthwaite 2009). A part of this 20 percent belongs to the middle class in Western countries, while the rest belongs to the affluent people who reside throughout the world. While there might be a growing population that longs for socio-ecological change in the direction that has been portrayed in this book, there are, nevertheless, many people who prefer to cling to their habits, privileges and power. If this is true, the small difference a few experiments in tool sharing, repair workshops, co-housing and democratic city planning might make can appear somewhat laughable. We are confronted here with a few concrete and serious questions regarding non-ideal political theory: how can the socio-ecological injustices that result from this relatively affluent global population be overcome? What if a large portion of this population – including many of its political representatives – is not interested in such a democratic socio-ecological transformation? And finally, do we have enough time considering the urgency of climate change? In this section we will focus on the last question.

In the eyes of some, these interrelated socio-ecological problems – and especially climate change – are so urgent that we do not have the time to deal with them through democratic means. Ivo Wallimann-Helmer, for example, explains in his ar-

ticle “The Republican Tragedy of the Commons – The Inefficiency of Democracy in the Light of Climate Change”:

Although the normative ideal of republican democracy provides resources to overcome the risk of such tragedy, *it is inefficient all along the line*. It is potentially inefficient both in guaranteeing adequate decisions concerning international agreements for mitigating GHG emissions and with regard to the discussed possible redesign of its institutions to overcome its inefficiency. On a global level, where negotiations on international agreements to mitigate GHG emissions are concerned, respecting the relevance of democratic legitimization in republican democracies makes it very plausible that not all nation-states (democracies) will subscribe. This shows why [...] the intragenerational dimension of climate change should be treated as if it were a tragedy of the commons even though under optimal circumstances it could become a simple coordination problem. It should be treated this way because there is a risk that in republican democracies necessary political decisions are not reached in due time. (Wallimann-Helmer 2013: 14; emphasis added)

Interestingly, Wallimann-Helmer does not, however, provide us with an answer to this very serious problem. He leaves us hanging at the end of his article with the passage quoted above.

Considering the urgency of the problem and the supposed inefficiency of democratic change, what can be done? One option could be, at least theoretically, a type of eco-dictatorship, as discussed at the beginning of this chapter, though achieved either through a single democratic vote or a revolution. This is obviously not very attractive; we would sacrifice our liberty for ecological sustainability, yet without being assured that the dictator will be wise and benevolent. Another apparently more pleasant option might be what John R. Hibbing and Elizabeth Theiss-Morse call “Stealth Democracy” (2004). In a nutshell, their thesis is that people are fundamentally uninterested in politics and simply want to be left alone (ibid.: 129). According to Hibbing and Theiss-Morse, the only reason why people would nevertheless choose to participate in politics is to limit corrupt and rent-seeking behavior on the part of politicians. But if these people had the illusory option of “government by non-self-interested elites” (ibid.: 130), a majority would choose it. In such an arrangement, we could simply allow scientific experts who were neutral, yet of good will, and who were familiar with the facts of climate change and the importance of equality for our individual and social well-being to govern. Here it is believed – or hoped for – that intelligent scientists would not be dictators, but friendly experts, who would slowly but surely implement the correct evidence-based policies that would turn us into a good and sustainable society in no time. And their benevolent and subtle art of “nudging” (Thaler/Sunstein 2008) would make it *seem* as if we wouldn’t even have to seriously change our way of life or have lost our privileges

and power on the way. Such a political arrangement would free people from the time-consuming and dirty conflicts involved in democratic debates and negotiations – providing us with more time for self-development and convivial activities. Ideally, these experts would also implement a robust firewall that would forever shield politics from big money and private interests. This is at least how I envision a stealth democracy.

The obvious problem with such a political model, however, is the same one that we confronted with the eco-dictator and as Vincent Ostrom already made clear with reference to the monocentric and hierarchical state: elites who are neutral and ‘of good will’ do not exist. Such an arrangement is only attractive if the experts’ opinions correspond with one’s own opinion. If this is not the case, I have no possibility of influencing policy-making processes. Furthermore, it is highly unlikely that such experts could ‘peacefully’ implement rules and regulations that would fundamentally change people’s lifestyles, privileges and powers without them noticing or resisting. A few examples of such rules and regulations that come to mind could be: a strict limitation of wealth accumulation in the name of equality; the prohibition of real estate speculation in order to provide access to affordable housing for all citizens; the definition of decent minimal living wages and the limitation of working hours so that people have more free time for caring activities and commoning; the prohibition of specific things that are ecologically detrimental (i.e. plastic bags, throw-away coffee-cups, eating too much meat, the creation of new fashion every season, unjustified use of SUVs or flying by airplane etc.); and, lastly, the communalization of individual property in certain consumer goods and in the means of subsistence and production more generally. Overcoming social and ecological injustices would require at least some, if not all, of these rules and regulations. Nevertheless it is highly unlikely that people would accept these changes implemented from above without much resistance. As we see, even if people deeply desire to be freed from political responsibilities, conflicts, and burdens, stealth democracy is an illusion.

To the reader, the trajectory of the argumentation so far will have appeared to be quite circular: the urgency of the issues involved makes us desire strong national and, even better, international laws that would simply prohibit socio-ecologically unjust activities, while we can generally assume that a large portion of the population in affluent Western countries would vehemently oppose such radical changes. So where is the way out of this conundrum? Assuming that neither an eco-dictatorship nor stealth democracy is either desirable or realistic, the options we have appear to be rather limited. It seems there are no quick answers to these problems. But how should social change occur if more affluent and powerful people resist the loss of their privileges, despite their negative effects on many other people and ecosystems around the globe? I will attempt to answer this question shortly, but before that let us now turn to another problem in the non-ideal world that is in-

terrelated with this problem: the global socio-ecological inequalities and the role of the commons for 'developing' countries.

Commons-oriented strategies in 'developing' countries

As I have just said, the lion's share of the world's resources is consumed by a small but affluent section of its population. This is not to say that the more affluent Western countries are at fault for *all* the problems that occur in the rest of the world. Nevertheless, an analysis of the global flows of commodities, capital and greenhouse gas emissions create a fairly clear picture of this global disparity: while the goods (cheap products, capital etc.) flow to the wealthy populations and most often to Western countries in the northern hemisphere, the 'bads' such as pollution and poverty are often externalized to the South. Obviously, there are no simple answers to such complex and historically entrenched problems. Nevertheless, I assume that the commons perspective may possibly provide some basic insights into how some of these problems can be alleviated.

In principle, the concept of commons remains the same, whether we are speaking of countries in the North or the South: the commons approach generally entails that the local people dependent on and affected by a specific resource system should have the collective rights in property and the ability to democratically manage these resources (Wenar 2008; Hendrix 2008). In order to minimize rent-seeking corruption, these resources should be held under democratic stewardship in the interests of the larger community and the eco-system (Weis 2015; Westra 2011). This might, however, imply that a community could nevertheless have the right to exploit their resources within certain ecological limits if the entire community desires to do so. The difference between such exploitation and the existing system of "plunder" (Mattei/Nader 2008) would be that the financial returns from this exploitation would not flow to those who are already wealthy, but go directly to those who are overusing – and therefore losing – their material means of existence.

Thus, the general policy that is proposed here to alleviate poverty in the global South is by "realizing property rights" (Soto/Cheneval 2006). A good point of reference, here, is the report *Empowering the Poor Through Property Rights* (Cheneval 2008), which was produced by the working group of the United Nations Development Programme and the Commission on Legal Empowerment of the Poor. As the report acknowledges, a major problem in developing countries is that "the absolute majority of the people in developing countries are not [legally] protected in theory or practice" (Cheneval 2008: 64). This makes people economically and politically vulnerable, most notably women, indigenous people and urban slum dwellers (ibid.: 65). One main feature of this report is its recommendation that states recognize informal or "extralegal property systems" (Cheneval 2008: 66) based on customary tenure and "vernacular law" (Weston/Bollier 2013: 104). This principle is basically

a reformulation of Elinor Ostrom's seventh design principle, which supports the recognition of people's rights to devise their own institutions (E. Ostrom 2008a: 101). Importantly, the report emphasizes the necessity of a wide "range of possibilities of ownership by individuals, members of collectives, and by collectives" (Cheneval 2008: 87). Simultaneously, the report repeatedly emphasizes the importance of common property arrangements (ibid.: 71, 73, 83-4, 87-9, 105). These can be realized through the recognition of existing, collective, "indigenous tenure systems" (ibid.: 79). Echoing the work of Elinor Ostrom, the political philosopher and rapporteur of the report, Francis Cheneval, writes:

The majority of the rural poor depend to a large extent on non-arable resources such as forests, pastures, swamplands, and fishing grounds. These resources require careful management to avoid rent-seeking and corrupt practices that result in environmental degradation and economic inefficiencies. The state should enhance the asset base of the poor by enabling community-based ownership and management of private commons, but it will have to play the role of conflict manager among the communities and among individuals. (ibid.: 71)

While these examples focus on the rural poor, in the case of slum dwellers and the urban poor the report supports the promotion of "associative property structures" (ibid.: 87). Such arrangements can be created not simply through the formal recognition of their property rights, but also through "leverage by pooling assets" (ibid.).

As the report mentions, however, the process of realizing such arrangements is not easy. The report mentions a few problems, of which I would like to focus on one specifically: "protecting customary or indigenous rights while enacting the ability of communities and individual households to explore new economic opportunities"⁹ (ibid.: 90). This can also be understood as a reference to the opportunity for individuals to opt-out of common property arrangements. I believe this to be of central importance, because support for common property arrangements cannot be understood as a top-down matter. Hence, while I emphasize the importance of commons in order to *enable* ongoing democratic self-governance, it is also necessary to underline the *prior* democratic deliberation over the desired mix of individual and common property. Accordingly, Cheneval writes, "For implementation at all levels, reforms must be based on deliberation and inputs from those that they are intended to affect." (ibid.: 70) The emphasis on democratic deliberation in the realization of property arrangements is central if we are to avoid the implementation of institutions that do not correspond with people's needs and environments. Here,

9 The other difficulties include: "identifying communities and evolving practices"; "balancing respect for local decision-making with human rights and accountability"; and the "challenge of capacity and conflict" (Cheneval 2008: 90).

we are reminded of Elinor Ostrom's second and third design principles (E. Ostrom 2008a: 92-3). The report understands the legal reforms it recommends as "context-based" (Cheneval 2008: 69). In my view, such an approach should be considered as essential in all attempts to alter property arrangements and realize commons.

Related to the question of the mix between individual and communal property is also the question of the role of the market in such policies. While the UNDP report emphasizes the importance of common property arrangements, it also underlines the importance of markets for entrepreneurial activities and "value addition" (ibid.: 74). That being said, the rapporteur also admits that there existed "conflicting views" on the "role of the state [and] the market" (ibid.: 75). While some argued that the market provides opportunities for the poor, others emphasized the "fact that market forces marginalize the poor and drive them into misery" (ibid.). In this sense, this ambivalent approach contrasts somewhat with the approach propagated by Hernando de Soto, who largely focuses on the legal recognition of individual private property in order to provide those in poverty with security and access to markets (Soto 2001). Considering the problematic effects of individual private property coupled with market access that we have already extensively discussed, I would argue that it is more desirable to support the livelihoods of individuals from a "subsistence perspective" (Mies/Bennholdt-Thomsen 1999) and the structural interdependence of individuals through communal property rights and community wealth building. As in the report *Empowering the Poor*, "through sustainable ownership and/or security of tenure individuals and communities becomes more autonomous" (Cheneval 2008: 73). Here, autonomy can be understood to mean both independence from market mechanisms and democratic codetermination. This would not prohibit individuals and communities from producing goods that they also sell on the market. Instead, the focus on democratic rights, community-building and economic self-sufficiency intends to make people less vulnerable to the negative effects of the open-access, competitive market. Or, again with reference to the UNDP report: "The idea [of associative property structures] is to provide a form of ownership to balance the interests of the individual or family with those of a broader community." (ibid.: 87)

While the notion of subsistence might sound somewhat backward-looking here, I in no way intend to imply that the poor should remain poor. Instead, it aims to conceptualize an alternative understanding of sustainable development based on ecological democracy (Kothari 2014; Kothari/Demaria 2017; Kothari 2018). Strengthening democratic practices and institutions within local communities empowers people, giving them the ability to determine how they desire to develop and grow as a community. Coupled with economic subsistence through common property arrangements this can potentially free people from the necessity of *perpetual* monetary growth. Importantly, however, these strategies of democratically

codetermined development do not simply apply to countries of the South but can and should also be developed in more affluent Northern societies.

While this process of recognition might sound grand for people with informal tenure rights and small resources that can be pooled, this is not the case for those without any property in external resources. As Cheneval writes, “increasing security of property rights will have limited direct benefits for those who do not have any real assets at all” (Cheneval 2008: 105). In order to mitigate this problem of no direct access to material resources, the commission supports not only rental markets and the recognition of informal settlements, but also a community-based land reform (ibid.: 105-6). The aim of such a reform would be to provide people with access to material resources, more specifically “real property” (ibid.: 105), i.e. property in real estate. In order to do this, they suggest that people be provided with funds in order to then access resources. Recognizing the potential negative side-effects of a “market-based” strategy, the report argues that the solution is “legally less complicated and politically less sensitive than in compulsory acquisition programmes” (ibid.: 106). Although I would absolutely agree with this insight, it nevertheless remains questionable where these funds will come from and if the state will have the ability and the will to provide these citizens with such funds. The question then arises how substantial property rights can be realized for those without much political and economic power. This problem brings us to the next topic in my discussion of the state-commons relationship: the problems of elite resistance and state oppression in attempts to realize common property arrangements.

Reclaiming the commons

As Francis Cheneval recognizes in the UNDP report on *Empowering the Poor*, a central difficulty in realizing property rights for the poor is the “resistance of powerful social actors” (ibid.: 80). In relation to the realization of commons arrangements, it can be argued that this problem is accentuated, because it conflicts with the prioritization of individual private property and the principles of free trade (McCarthy 2004; Mattei/Nader 2008; Driessen 2008). Moreover, it can be said that this problem of resistance ‘from above’ exists not only in developing countries but also in more developed countries (Heyn et al. 2007; Gerbasi/Warner 2007). Generally put, the reasons for elite resistance are that the realization of commons arrangements not only limit their appropriation of more wealth but also often require the expropriation of their existing individual private property. Put somewhat differently, elite resistance is a reaction against the transformation of appropriated resources back into commons. In general, I see two methods of dealing with this problem of resistance and oppression from politico-economic elites and state authorities: confrontational and ‘interstitial’ commoning. In this section we will focus on the

strategy of confrontation. But before that let us discuss the role of the state in elite resistance in a little more detail.

It is noteworthy that in comparison to 'bottom-up' resistance in the form of social movements, elite resistance appears to be much less documented. I believe the difficulty in conceptually grasping elite resistance lies in its interwoven structure with the state. While bottom up resistance is often visible because it occurs in public spaces, top-down resistance is much more 'civilized' and invisible because it takes the form of "investment strikes" (Streeck 2013: 50) and (supra)national governing bodies. This might be a reason why there is significantly less explicit reference in academic literature to elite resistance to commoning than to social resistance to privatization. That being said, the two can be interpreted as two sides of the same coin. Interestingly, however, the widespread focus on bottom-up resistance implicitly naturalizes privatization tendencies and normatively connotes social protest as a resistance to this natural development. I would argue that this naturalization occurs due to the interwoven interests of powerful economic and political actors. Because individuals with more resources can use their greater power to influence politicians and politics through non-democratic means, the state and supranational governing bodies are sometimes discretely and illegitimately used as a means to defend individual property arrangements and competitive markets. I have already discussed this problem of 'capture' in relation to the minimal, market-based state. Here, powerful social actors use state authority to uphold the often invisible and seemingly natural background of social arrangements. Attempts to realize common property arrangements are therefore sometimes confronted not only with elite resistance but also with state oppression.

In such cases, bottom-up confrontation can provide a means to protest against illegitimate social arrangements and grave injustices that are often neglected by politicians, the media and the public. Such confrontation can occur either through the work of NGOs who spread information on such injustices or, more classically, through protest and demonstrations on the street. This latter form of confrontation is a performative and collective means of expressing one's opinion, yet without reverting to the exchange of arguments. While protest is often understood as undemocratic because it is performative and not based on reciprocal deliberation, it must nevertheless be understood as a democratic means of bringing suppressed issues and conflicts to the fore. More importantly, it is also a means to force powerful actors who free-ride and resist democratic deliberation to the negotiation table (Tully 2014: 70). In our discussion of socio-ecological justice, protest can thus be understood as a strategy to shame and blame people, corporations or institutions for their destruction of livelihoods and the environment. Confrontation could therefore, more generally, be a means of creating public awareness of socio-ecological injustices and possibly alter the legal framework to limit appropriation and transform individual into common property.

Although confrontation is often necessary to create public pressure on political representatives to act in a certain manner, the question still remains whether this will suffice for broader social-ecological transformation in general and the development of a commons-creating society more specifically. In order to deal with this problem, I would suggest that it is necessary to widen our traditional understanding of confrontation to include the practice of “reclaiming the commons” (Klein 2001). Reclaiming the commons is generally a practice of legal or illegal occupation and re-appropriation of goods, services and institutions that are considered to be originally held in common yet have been ‘enclosed’ through privatization or nationalization – and, in most cases, a mixture of both, as in public-private partnerships. Historically, this process of reclaiming the commons is a phenomenon that has, most likely, existed since time immemorial in struggles waged by people (‘commoners’) against the expropriation of their basic resources by elites. One well-known example of reclaiming the commons are the activities and demands of the Diggers – and, to a certain extent, also the Levellers – during the enclosures of common lands during the English Civil War (1642–1651) (Hessayon 2008; Macpherson 2011: 107–159). A less well-known but possibly more significant historical example is the re-establishment of subsistence rights to enter and use forests for commoners in the Charter of the Forest of 1217, which was a central yet forgotten sub-article of the Magna Carta (Linebaugh 2008; Babie 2016). These activities of reclaiming the commons are not to be written off as a thing of the past, but must be understood as struggles that are presently occurring all over the world in relation to numerous private and public goods and services such as water, land, seeds, information, public space, education and health care (Łapniewska 2015; Shiva 2005; Harvey 2013; Assies 2003; Wolford 2010; Karaliotas 2016).

In the case of public goods, we might assume that they are already a form of commons, but as our discussion has shown, public goods are often not to be equated with commons, either because the goods are simply not provided by the state or because the provision is not oriented to the needs of those affected or subject to their democratic administration. In cases where the state and government officials do not grant citizens the right and the ability to democratically manage resources, the activity of reclaiming the commons becomes a central aspect of commoning in which people take (back) democratic control over the socio-ecological conditions of their lives. This sheds new light on collective civic activities, which James Tully also calls “cooperative democracy”. Here, democracy is not limited to deliberation, but is based on the activity of “joining hands and working together” (Tully 2014: 97). The strength of this activity is that it empowers people to take matters into their own hands without having to wait for benevolent government officials to kindly provide citizens with the opportunity to participate in democratic management orchestrated by governmental officials and kept within predefined boundaries. Here, commoning must be understood as a constituent power of so-

cial movements (Bailey/Mattei 2013) that opens the political field for the democratic redefinition of the boundaries between the private, public and common, ultimately reconfiguring the organization of social reality.

Interstitial Commoning

Because confrontational ways of reclaiming commons can, in some cases, be challenged with severe opposition by the state and politico-economic elites, it is important to support these activities with more subtle, yet just as important 'interstitial' commoning. In his book *Envisioning Real Utopias* (2010), Erik Olin Wright describes interstitial strategies and activities as "various kinds of processes that occur in the spaces and cracks within some dominant social structure of power" (Wright 2010: 322). The aim of these activities is to "build [...] alternative institutions and deliberately foster [...] new forms of social relations that embody emancipatory ideals and that are primarily created through direct action of one sort or another rather than through the state" (ibid.: 324). From a historical perspective, traders and entrepreneurs have used this strategy to open markets in highly regulated feudal social arrangements (Braudel 1986). Considering the pressing socio-ecological injustices we face today, I would argue that it is therefore of the utmost importance to not only focus on confronting and transforming the state, but also on independent and interstitial forms of commoning. With reference both to the inability of our limited political options to deal with the problems we face within the existing political and legal frameworks and to the injustices that result, I agree with James Tully that

the remedy to this injustice is not only to exchange public reasons in hopes of influencing governments, for this has its limits. For cooperative democrats, the response is to non-cooperate with this undemocratic mode of production and consumption, to withdraw one's producing and consuming capabilities from commodification and to exercise productive and consumptive capabilities 'in common' in democratically run cooperatives and community-based organizations that are re-embedded in social relationships. Such grass roots democracies then produce and distribute the basic public goods that are privatized under the dominant form of democracy: food, shelter, clothing, health care, clean water, security and so on. (Tully 2014: 91)

As in my discussion of Amartya Sen, Tully argues that "this tradition [of civic cooperative democracy] is also practice based and 'realization focused', yet in a more immediate way, and it works around, rather than within, the basic structure" (Tully 2013b: 223). Obviously, such activities must also be understood as ways of reclaiming commons, yet the focus has shifted from confrontative re-appropriation to the

collective creation of commons – irrespective of state support and the existing legal structure.

Here, the goods that we have generally understood up until now as objects of a basic right to satisfy one's needs and that originally should, in some form or another, be provided for by the state are now provided as commons by the people themselves through collective civic activities. Again, in the words of Tully:

This is the tradition of democracy as non-violent cooperative self-government: of the people exercising the capabilities of self-government together in their social and economic activities on the commons. This is the classic meaning of democracy: of the *demos* exercising *kratos* (political capacities) in public reasoning *and acting together* for the sake of public goods. (ibid.; original emphasis)

Here, Tully interprets public goods as commons because these goods are created through democratic, collective action. As he emphasizes, this activity is non-violent because the cooperation necessary for democratic self-governance can only occur through non-violent means of communication and interaction. It is clear that one should, however, not over-romanticize these commoning activities, since they often arise when people are in distress and misery due to the breakdown of older forms of provision, whether through communal ties, the market or the state (Karaliotas 2016). Yet, whatever the motivation for these activities may be, they still must be understood as a central answer to the unresponsiveness of the state and politico-economic elites to the basic needs of people. But as I have already said, the goal is not for the state or economic elites to paternalistically provide goods and services for people, but for citizens to be able to democratically provide for themselves – ideally with the support of a democratized state and the aid of what we have previously called eco-law.

In this sense, I must reaffirm more generally that democratic and socio-economic rights themselves were rarely, if ever, simply granted to people by those in power, but were often developed by people in need and finally realized through non-cooperative confrontation with state authorities. For example, the development of the welfare state since the times of Otto von Bismarck should be understood not as a well-intentioned and benign gesture, but as a bribe that was intended to pacify the masses by increasing their loyalty to the state and by simultaneously undermining workers' demands for more democratic self-management over their living conditions (Palier 2010: 36-7). Put in this perspective, although the satisfaction of basic needs could be understood as a basic right that should be provided for by the state, state provision can, ironically, if not organized in a democratic manner, easily undermine the democratic skills and institutions necessary for a commons-creating society. For this reason, interstitial commoning activities are of fundamental importance not only for people to be able to satisfy their own needs, but also to cultivate the experiences, skills and institutional examples necessary for the

widespread development of commoning and commons – both in and against the state.

8. Commons and the market

Having discussed the relationship between commons and the state, let us now turn to a central question that has been touched upon repeatedly yet incompletely so far: the relationship between commons and the market. Since I have already discussed both justifications of the open and competitive market and some of the problems it engenders, let me be brief in recapitulating the arguments. Most importantly, the open and competitive market has been justified as a way to bring peace and unleash productivity. It has been assumed that wealth is generated through the protection of individual negative rights in private property and through the self-regulation of supply and demand on the market. Yet, while this negative freedom has increased the freedom of individuals with direct access to property in external resources, other individuals have become increasingly dependent on hierarchical wage labor relationships to secure their existence. Furthermore, the competitive dynamic of the open market forces firms to perpetually grow in order to survive. This requires that ever more resources are extracted and appropriated from the store of common goods that other people depend on, ultimately reproducing the original discrepancy between haves and the have-nots and increasing the deterioration of peoples' socio-ecological habitats. As we have seen, the priority of individual negative rights and the self-regulation of the market also undermine and severely limit people's abilities and opportunities to collectively solve these problems and to democratically co-create and codetermine their shared living conditions.

Therefore, the questions that we face now are, firstly, whether these problems are a result of the market per se or of the specific social arrangements of the open and competitive market. Secondly, we must ask how the concept of commons can provide us with insights that enable us to transform our understanding and organization of markets. To answer these questions, I will begin by analyzing the role of the market in commons literature. After this, I will discuss the relationship between commons and the market from a historical perspective. In a third step, I will develop the notion of a market commons that will, hopefully, provide us with an alternative and democratic concept of economic relationships.

8.1 The market in commons literature

Generally speaking, there is no single understanding either of markets or the relationship between markets and commons within the literature on commons. After discussing the various interpretations in the literature, I nevertheless hope to develop a more general notion of the relationship in the analysis that follows.

As the reader will recall, the Ostroms make only marginal references to market arrangements. Elinor Ostrom rarely discusses the market, although in one passage she does describe the open and competitive market as a “straightjacket” that leads to “maximization strategies” (E. Ostrom 2003: 25). In contrast, Vincent Ostrom defends competitive market arrangements for a polycentric order (V. Ostrom 1991: 229–231), while elsewhere he advocates the notion of a “moral economy” and the democratic self-management of economic activities (V. Ostrom 1997: 106, 145). As we see, the Ostroms’ views on the market are mixed and rather vague.

From Capra and Mattei’s point of view, the legal system underlying the open and competitive market enables people to “exploit and plunder the web of life” (Capra/Mattei 2015: 29). Yet elsewhere, they also mention local farmer’s markets as examples of institutions that exist for the satisfaction of common needs (ibid.: 143). In relation to economic activities in general, they espouse a notion of economic democracy or “democratic oversight of the economy” (ibid.: 162). Here, it appears that they understand economic democracy as a type of commons. Furthermore, they clearly state that a commons “may be anything a community recognizes as capable of satisfying some real, fundamental need *outside of market exchange*” (ibid.: 150; emphasis added). So it can generally be said that their stance is highly critical of open and competitive markets or “global capitalism” (ibid.: 115–117) – and the legal institutions that uphold these – while defending local markets and the democratization of economic activities.

If we turn to other scholars who work on commons, a similar mixture of views and positions can be found. In his influential book *The Wealth of Networks* (2006), Yochai Benkler, for example, defines individual private property and commons arrangements as opposites (ibid.: 60). At the same time, he argues that open commons (i.e. information and material infrastructure such as roads and the internet) play an essential role for economic growth in market societies (Benkler 2013). Another influential commons activist and scholar, Peter Barnes, criticizes the detrimental ecological impacts of unregulated markets while maintaining that “private corporations and organized commons [should] enhance and constrain each other” (Barnes 2006: 77). He understands this type of market as “capitalism 3.0” (also the title of his book), which enables trade within limits (ibid.). The public intellectual Jeremy Rifkin argues that inherent contradictions within capitalism will help the spread of commons lead to an “eclipse of capitalism” (Rifkin 2015: 3). In his book *The Zero Marginal Cost Society*, Rifkin writes, “While the capitalist market is not likely to

disappear, it will no longer exclusively define the economic agenda for civilization.” (ibid.: 27) Rifkin thinks that the realm of the commons will expand, yet exist side-by-side with the “capitalist market”. In their book *Green Governance: Ecological Survival, Human Rights and the Law of the Commons* (2013), Burns H. Weston and David Bollier are quite critical of the market and also develop the notion of the “tragedy of the market” (Weston/Bollier 2013: 6-15). Accordingly, they argue for democratic control over economic institutions within commons arrangements. They explain:

Commoners shall have collective control over the surplus value they create through the collective management of their shared wealth and resources. To this end, commons- and rights-based ecological governance *shall not be cash-driven or market-mediated except with the explicit consent of commoners* and clear rules for personal use and resource alienability. The freedom of commoners to limit or ban the monetization of their shared assets shall not be compromised. (Weston/Bollier 2013: 277; emphasis added)

According to Weston and Bollier, then, the question whether commons are to be monetized or market-mediated is left up to the commoners. Meanwhile, however, the role of the market outside of the commons remains undefined.

Other scholars emphasize the antagonistic relationship between markets and commons and openly call for an end to capitalist market arrangements. As with other authors, commons are understood here as “beyond” or “outside” the market (De Angelis 2007: 240; Bollier et al. 2012). The emphasis is, however, on the idea that commons are interpreted as a new “cellular” mode of production that will eventually lead us beyond capitalist markets (Euler 2016). In line with this argument, Paul Mason titled his book on commons “Postcapitalism” (2015). Similarly, Nick Dyer-Witheford argues in his article “Commonism”, for example:

If the cell form of capitalism is the commodity, the cellular form of a society beyond capital is the common. A commodity is a good produced for sale, a common is a good produced, or conserved, to be shared. The notion of a commodity, a good produced for sale, presupposes private owners between whom this exchange occurs. The notion of the common presupposes collectivities – associations and assemblies – within which sharing is organized. If capitalism presents itself as an immense heap of commodities, ‘commonism’ is a multiplication of commons. The forces of the common and the commodity – of the movement and the market – are currently in collision across the three spheres we mentioned before: the ecological, the social and the networked. (Dryer-Witherford 2007: 82)

As we see, the literature seems to assume that there is a strict, categorical contradiction between markets and commons. The antitheses it presents oppose scarcity to abundance, exclusion to inclusion, subtraction to addition, the ‘commodity form’ to the ‘commons form’, atomism to relational systems, competition to cooperation,

productivity to care, exchange to reciprocity, hierarchical market monopolies to decentralized peer-to-peer relationships, profit to needs orientation and many more (Euler 2016; Helfrich 2012b). In commons scholar and activist Stefan Meretz's unequivocal formulation, "markets are not commons – and vice versa" (Meretz 2012). He justifies this point in the following manner: "The fundamental principle of the commons is that the people who create the commons also create the rules for themselves." (ibid.) While commons are institutions that can be democratically adapted by those affected by them, market arrangements are understood as institutions that are abstract and unalterable. As has become clear in my argument so far, I would generally agree with these ideal juxtapositions. Nevertheless, I ask myself whether these dichotomies can be upheld for all economic activities and, more generally, whether markets can be entirely replaced by commons.

Simply put, it seems unlikely to me that the existing problems of competition, inequality, exploitation and perpetual growth can be overcome by replacing *all* market relations with commons arrangements. I find this highly unlikely because, if we assume that life in commons is not entirely autarchic and self-sufficient, there must be interactions with other organizations or commons that produce other goods. It is then often argued with reference to people like Andre Gorz that the dependency on markets – and especially wage labor – could be minimized if people were provided with an unconditional basic income and people could participate in multiple forms of production (Gorz 1989; 2005). Obviously, the concept of a basic income is very attractive because it can balance the asymmetrical bargaining positions in wage-labor relationships or even free people from wage labor entirely (Van Parijs 2003; Widerquist 2013). For a commons-creating society, a basic income would be ideal because it would enable people to engage in volunteer care activities and commons-based peer production. While a basic income might lessen the dependency on hierarchical wage-labor relationships, it would not, however, free us entirely from (re)production processes and the exchange of goods and services.

The question also remains of who will produce the tools such as sewing machines, fishing boats, pasta machines, computers and cars for these (re)production processes. Here, some people argue that these "convivial tools" (Illich 1973) could be built with 3-D printers (Rifkin 2015) or open hardware (Siefkes 2008), ultimately making a market for such tools and machines superfluous. Although I support these aspirations and endeavors, I nevertheless believe social arrangements without *any* form of monetary exchange between people and groups to be somewhat unrealistic. The answers to this problem of necessary exchange could be time banks (Amanatidou et al. 2015), local exchange trading systems (also known by the initialism "LETS") (Pacione 1997) or overarching "commons associations" that unite individual commons and largely replace money exchange with "contributions" (Siefkes

et al. 2016). Again, I must repeat that my argument here is not against the development of these non-monetary exchange systems.

The point I wish to make is simply that, despite all my criticism, I do actually believe money and the market to be quite useful instruments and institutions that enable people with different skills and goods to interact with each other without having to exist in compact social relations (Demsetz 2002). I must concede this much to market advocates such as Adam Smith and Friedrich Hayek. Yet, despite this concession, the question then arises of how to shape the social institutions of money and the market to satisfy people's needs without leading to tragedy.¹ Or, in other words, the question arises whether markets can be organized as commons and what this would imply.

Interestingly, it appears that this fundamental question is often grossly under-theorized and neglected in commons literature. I believe that this may have something to do with the actual predominance of market relations in our everyday lives. The neglect of the market in commons literature might be due to a desire to change the symbolic framework through which we see and constitute reality. As is well known, it is 'the norm' today to perceive reality not as a common, but rather through the prism of market relationships. We often interpret reality as scarce, hostile and competitive and value the world according to monetary costs-benefit analyses. The commons critique of this worldview is often expressed in pejorative terms such as privatization, commodification, exploitation, valorization, marketization and, more generally, economization. In opposition to these negatively connoted processes, the focus on commons is an attempt to enable us not only to "see the commons" (Mattei 2012b) but also to "think like a commoner" (Bollier 2014). More generally speaking, this focus is an attempt to bring about an epistemological revolution that constitutes a commons-oriented reality (Mattei 2013a: 17). Although I agree with all of these critical analyses and intellectual efforts, I nevertheless believe that if we disregard the question of the precise role and organization of markets in a commons-creating society, we might be disregarding the elephant in the room. I believe it necessary, therefore, to not only 'reclaim the commons', but also to 'reclaim the market'. My point is that by understanding the market as a commons we can, in turn, justify the re-appropriation, democratization and transformation of this dominant social institution.

To understand this relationship between markets and commons and how markets could be interpreted as commons, I would like to back up a little and discuss the historical development of open-access competitive markets.

1 Because a discussion of money would exceed the scope of this analysis, I will not discuss money, but focus solely on markets instead.

8.2 Enclosing commons and opening markets

A widely-quoted account of the development of a competitive market economy has already been discussed: John Locke's somewhat idyllic portrayal of the individual appropriation of commons. Locke understands the commons as a *res nullius* which belongs to everyone and no one. By conceptualizing the commons as a *res nullius* in a state of nature, Locke legitimizes the individual appropriation of communal resources through labor. In a second step, he describes money as an answer to the problems of barter, introduced through "tacit consent", which then led to the spread of markets. Despite the increasing scarcity of access to natural resources for many people, the Lockean narrative supposes that an increase in productivity will lead, or has led to an overwhelming abundance that can, in turn, be accessed with money derived from wage-labor relationships. This is the prevalent narrative that supposedly explains and legitimizes our contemporary market-based social arrangements.

In contrast to this rather mythical tale, a more historical account of the development of open and competitive markets in Western societies tells us a slightly different story. I have already discussed this historical process in my critical discussion of Locke, so there is no need to repeat it here in detail. As I mentioned, this historical development is most famously described by Karl Marx as "so-called primitive accumulation" and by Karl Polanyi, more generally, as the enclosure of commons which has been occurring at least since the 12th century in England, and later on the Continent and in European colonies (Marx 1982a: 871-940; Polanyi 2001; Neeson 1996; Linebaugh 2008). Here, peasants were violently dispossessed of their rights to use commons, which primarily took the form of fields and forests. Marx argues that although this process freed numerous people from feudal bonds, it also separated them from their means of subsistence. Polanyi, in turn, describes this development as a process in which land, labor and money were dis-embedded from their webs of interdependent social and ecological relationships and transformed into commodities, ultimately re-embedding them in "abstract, competitive and non-democratic global market relationships" (Tully 2013b: 227).

While this enclosure movement is sometimes understood as the "dirty prehistory" of capitalism (G. A. Cohen 1995: 121), other scholars argue that dispossession is an ongoing process that enables the creation of profits and their accumulation. More contemporary forms of enclosure occur, for instance, through land grabbing, gentrification, patents on genes, seeds and medical knowledge and the privatization of water, scientific research and public services. The general point being made in this literature is that the vast amount of wealth that is accumulated by certain people is not simply due to labor, but is more precisely, gained through perpetual, systematic and sometimes violent enclosure, privatization and commodification of common resources. According to this narrative, as I have already discussed, the

answer to this problem then lies in ‘reclaiming the commons’ and the ‘decommodification’ of our resources and relationships by organizing the reproduction of life so that it does not depend on market relationships.

What this commons-oriented narrative partly neglects, however, is the question of the role of markets in both pre-capitalist societies and a future commons-creating society. Let us therefore analyze this historical development not from a commons but, rather, from a market perspective. Generally, the creation of an abstract, competitive market was not only possible due to the enclosure of commons, but also through the opening up of highly regulated local markets. Karl Polanyi and Fernand Braudel are right to argue that, although most of human history has been based on subsistence and gift economies, exchange, trade and certain types of local markets are not necessarily a new phenomenon (Polanyi 2001: 66; Polanyi et al. 1957: 257-70; Braudel 1986: 32-5, 41). Nevertheless, we should not equate all forms of money and markets with an open and competitive market economy that is structured according to a self-regulating “supply-demand-price mechanism” (Polanyi 1977, 124). As both authors demonstrate, local markets simply bring production and consumption together and enable the acquisition of “goods that are not available on the spot” (Polanyi et al. 1957: 257, Braudel 1986: 42). To be more precise, the local market is a place that enables people to exchange goods that they do not produce themselves either through barter or with money. For most of human history, the exchange of goods was socially embedded and highly regulated by customs and social institutions.

One such example of an exchange-based market is the guild system that developed during the process of urbanization in western Europe between 900 and 1300 CE (Schulz 2010). In her highly insightful article “The Silent Revolution: A New Perspective on the Emergence of Commons, Guilds, and Other Forms of Corporate Collective Action in Western Europe” (2008), Tine De Moor argues that in the Netherlands the development of guilds on the one hand and commons on the other exhibited similar institutional forms of regulation of common resources through collective action. De Moor understands commons as highly regulated natural and agricultural resources such as water, pastures and forests (i.e. common-pool resources). In contrast, craft guilds are urban institutions that regulate common resources such as labor, skills, technology, prices, information and, ultimately, the market itself. With reference to Dutch historians Lourens and Lucassen, she generally defines craft guilds as

organizations that – with the agreement of the local authority – unite members of the same occupational group, with as their most important goal the furthering of their economic interests, but not without taking into account the general well-being of their group as well. (Lourens/Lucassen in De Moor 2008: 187)

Although de Moor admits that it is difficult to prove whether guilds always fulfilled this function, the principles she locates in guild practices nevertheless fit into our understanding of relational and interdependent freedom in which the thriving of the individual depends on the flourishing of the community – and vice versa. According to De Moor, despite the differences, the goals and regulative mechanisms of guilds were rather similar to those of commons:

To make their collective projects work, guilds and commons relied heavily for enforcement mechanisms on group norms, as opposed to formal legal enactments. They designed most of the rules themselves, with or without the involvement of the local powers [...]. With a large set of rules, commoners and guild members tried to regulate the behaviour of their fellows – to prevent them from free riding – and to control the effect their surroundings could have on the behaviour of the members. They developed a system of market regulation in order to protect their 'own little world'. Measures were taken by both guilds and commons to achieve a reasonable income for their members and to eliminate the disruptive effects of the market, which was still at an early stage of development when commons and guilds were set up in Europe. Institutions such as guilds could make functioning within those settings less risky, though without losing too many of the advantages the market offered. (De Moor 2008: 197)

These similarities between guilds and commons are noteworthy because they provide us with an historical example of social organization that utilized the market for the exchange of goods in order to satisfy basic needs. Here, the market was not regulated 'from without' by the state, but rather by the producers themselves to protect them from the negative dynamics of free riding and competition such as poaching, hoarding and price and income instability. At the same time, collective action aimed at generating positive effects through pooling resources in order to share risks and create advantages of scale (De Moor 2008: 202-5).

If we understand a commons, in the general sense, as a resource system that is democratically self-governed by those significantly affected by it, we could also define medieval guilds as a type of labor commons.² Parallel to fisheries in which the individual fishermen own their own boats and equipment, the craftspeople in the guilds also own their own workshops, yet share and regulate the specific knowledge, technologies and skills of a specific craft. Although this skilled labor is used to produce things that are sold on the market, it could nevertheless be argued that a guild limits the commodification of labor power through its self-defined rules and regulations.

2 For a more recent example of labor commons, see Dario Azzellini's analysis of worker-recuperated companies in Latin America and Europe (Azzellini 2016).

Aside from the regulation of labor *within* the market, however, we can also understand pre-capitalist markets *themselves* as second-order commons institutions. In contrast to the concept of a labor commons, the notion of a market commons appears to be – at least at first glance – inherently contradictory. The reason for this seeming paradox lies in our contemporary and rather narrow interpretation of markets as institutions structured according to competition, commodities and profits while commons are based on cooperation, concrete goods and use-values. Furthermore, a market is often understood as institutionally open (North et al. 2009), while the goods that are exchanged must be private and closed (Demsetz 1967).

According to some academics, however, an open-access market can also be interpreted as a commons (Carroll et al. 1979) or, more precisely, as an Hardinian unregulated and open-access commons. Although the members of guilds do produce private goods that are exchanged on the market, the pre-capitalist market itself is more or less closed. Sellers and prices were generally defined in advance by the guilds to protect producers from competition and the ‘tragedy of the market’. Through their self-defined rules and regulations guilds created a type of “embedded market” (Polanyi) or “moral economy” (Thompson 2010) that was organized according to the satisfaction of needs instead of a self-regulating price mechanism and profit maximization. In this sense, and depending on its institutional framework, I would argue that a market could theoretically be defined as a democratically self-regulated commons. Yet, despite this similarity, I would argue that medieval markets regulated by guilds should *not* be understood as commons because they did not include a large group of people who were significantly affected by this resource system and its institutional regulation: the consumers. This was the reason for Adam Smith’s critique of guilds; they did not act in favor of consumers. Yet, while Smith advocated the deregulation of markets in the name of lower prices for customers, I argue in favor of the integration of consumers in the democratic regulation of markets. We shall return to this problem later, but first we must understand how regulated medieval markets were transformed into open-access, capitalist markets.

With historian Fernand Braudel, I would argue that in Europe, parallel to the enclosure movements that privatized common pool resources, medieval markets, which up until the 15th century were quite closed, at that point began to be gradually opened. This transformation occurred, most importantly, through private or “counter-markets” for foreign goods, which existed outside of local medieval markets. Here, individual traders became middlemen between producers and consumers outside of the traditional, collectively regulated circuits of exchange. Both the access to mobile capital and the superior knowledge of both ends of the exchange relationship gave the merchant an unequal, quasi-monopoly position in trade and enabled him to accumulate large profits (Braudel 1986: 50–53). The ‘privatization’ of local markets was in turn supported by state colonialism and its foreign

trade relationships. Furthermore, both Braudel and Polanyi show that the mercantilist nation state also opened local markets, ultimately creating a protected yet internally open domestic market (*ibid.*: 88, 97; Polanyi 2001: 63-70). Due to growing criticism of this state intervention in economic matters articulated by people such as Adam Smith, the state slowly withdrew and relaxed its protectionist measures, gradually and carefully transforming the internal open market into a more open international market regime (Chang 2002; Shaikh 2007). Over time, the socially embedded and collectively regulated local markets of the guild economy were transformed into one open, 'common' capitalist market.

With this very simple sketch of the development of markets in recent history, I hope to have shown that we must speak of markets in a differentiated manner. Furthermore, I hope that I have shown that markets often were and, thus, can be collectively regulated in order to serve social needs and desires. The importance of this short excursion in the history of markets for my argument is that we can, or rather should, integrate these insights into our understanding of a possible commons-creating society. So let us now turn to the concept of a market commons.

8.3 The market as a commons

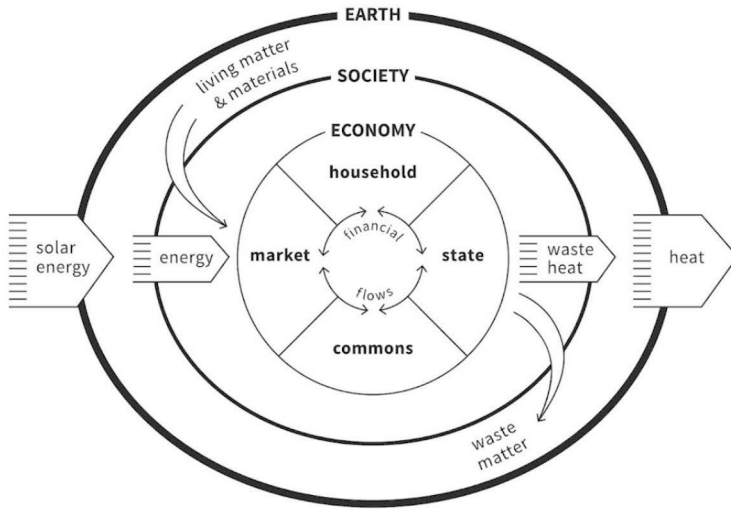
Ecological foundations of a market commons

By defining the market as a commons, we assume that economic activities are primarily to be understood within an ecological framework. The economy is thus not only understood as a subsystem of society, but also as a subsystem of an even larger and more encompassing ecosystem. This notion can best be understood by considering an idea put forward quite recently by Kate Raworth: "doughnut economics" (2017). In order to do justice to the fact that the world's resources are limited, Raworth pictures economic processes as describing paths that trace out the shape of a doughnut – in contrast to an ever increasing linear movement. Hence, she portrays the economy in the following manner:

In Raworth's depiction, the commons exist as one segment of the economy beside the household, market and the state. While I find Raworth's portrayal of an embedded economy accurate on the whole, I have argued here that a democratic and ecologically sustainable society should expand its commons both in the sphere of the state and the sphere of the market. Nevertheless, a strength of this model is that it embeds economics within society and society, in turn, within a larger ecosystem, which is limited. Here, the dynamic reproduction of systems is understood as the metabolic flow of matter and energy within and between systems.

More fundamentally, because matter and energy are limited on planet earth, economic activities are generally understood as a zero-sum game: some people's gains are other people's losses. The question that results from this problem is how

Figure 3: Kate Raworth's diagram of the embedded economy (Raworth 2017: 62)



to minimize the losses and create a relative abundance despite the absolute limitations set by the resources that exist. It is important to bear in mind that when we are talking about a capitalist market, we are talking about both material and symbolic (monetary) relationships. Moreover, the accumulation of wealth in a capitalist context involves both the monetary accumulation of 'good' matter and energy in the hands of a few and the widespread distribution of 'bad' matter and energy in the form of pollution and ecological degradation. In this way, we can understand profits as the extraction, privatization and accumulation of previously non-commodified goods such as individual labor power (including physical strength and creativity), genomes, water, land or fossil fuels. On a symbolic level, this implies the unequal distribution of access to resources (matter and energy) through one's purchasing power. One form of such an unequal distribution of symbolic wealth is found in the large asymmetries between creditors and debtors. Similarly, profits earned through speculation can be understood as gains that increase the costs of goods (e.g. food) and, in turn, decrease the access to this resource for numerous other people. The accumulation that results from speculation can thus be interpreted as a form of extraction from other people's purchasing power and access to a certain good or resource.

In line with this ecological conception of the economy, we might understand the flow of resources with the help of the metaphor of an irrigation system. This

irrigation system can either be democratically organized according to the needs of individual users and therefore be very finely tuned in distributing water to all regions of an ecosystem. Or, conversely, it can be organized according to supply and demand, purchasing power and the Matthew Principle in which the irrigation system is modeled with increasingly large levees and dams that contain and accumulate the water for the use of only a few. Using such a metaphor, migration can, for example, be understood as people simply following the metabolic flow of 'good' matter and energy on the planet earth. These people are coming to drink from the dam of accumulated matter and energy. If we take an ecological perspective of this kind, we have to abandon the belief that economic growth will solve socio-ecological problems, because, as we have seen, accumulation and the highly unequal distribution of wealth inherently lead to socio-ecological conflicts. In the face of these serious problems, the concept of a market commons provides us with an understanding of markets that attempts to take these ecological limits into account by democratically negotiating the market's institutional framework and the coordination of its basic activities. Thus, the aim of a democratic market commons is to transform absolute scarcity into a relative abundance through the mechanisms of cooperation, sufficiency and conviviality.

The general point of such a market commons, however, is not merely democratic inclusion, but the reconceptualization of the market itself as an institution that must fulfill basic needs such as the provision of decent, respectable and, ideally, meaningful and fulfilling jobs, as well as access to essential goods and services – within certain planetary boundaries. This is what one group of scholars has described as the "foundational economy" (Bentham et al. 2013), which is "that part of the economy that creates and distributes goods and services consumed by all (regardless of income and status) because they support everyday life" (ibid.: 7). When we conceptualize the market as a commons, we see that the market's primary function is not to endlessly increase wealth, but to satisfy needs by bringing people who desire things together with people who produce them. This is the basic function of markets that was, at least in theory, originally intended to be realized by open and free markets. Free markets are supposed to fulfill this function better than other markets and better than other institutions such as the state or the community. Yet, in contrast to the intellectuals who believe that this can only occur when the market is self-regulating, I would argue instead that it requires the support of democratic governance mechanisms to perpetually adapt the institutional framework to changing social needs and socio-ecological conditions. Furthermore, a focus on market commons transforms the overarching and often abstract rules and regulations of an open competitive market into decentralized socio-ecological niches in which the default rules of the institutional framework foster cooperation, fairness and the sustainable reproduction of socio-ecological systems. We could call this a type of "democratic experimentalism" (Dorf/Sabel 1998) in economics.

Within the context of open and competitive markets, such strategies are often pejoratively called protectionist. In this critique, protectionism is conceived of as a situation in which one party protects its gains while harming others. In contrast, when the market commons landscape is understood as diverse and contextually interdependent, the rules of a specific market should always attempt to protect the sustainable reproduction of its resource system within its interdependent relationships to other socio-ecological overarching systems. The precise aim of the endeavor is to protect sustainable and (re)generative forms of economic activity that enable the thriving of their members without harming other living beings elsewhere. Lastly, I would argue that a market commons would shift our focus, whenever possible, from global commodity chains to local or regional economic cycles. The relocation of economic activities and market interactions would not only have a positive ecological effect due to shorter transportation routes, but could also provide affected people with greater incentives and opportunities to govern the institutional framework of their market commons in democratic ways. As with democracy in the political sphere, the more local the relationships and the shorter the chains of accountability are, the greater the trust and the more effective mutual monitoring and sanctioning can be.

Nevertheless, a market commons must not solely focus on the local or regional, but should enable people throughout the world to codetermine and adapt their economic institutional frameworks through networked forms of governance in order to fulfill their similar yet conflicting needs. That being said, it is important to emphasize that an economy built up from interconnected market commons requires a larger, overarching political framework that fosters the decentralization of ecological economic activities. But as I have already said in relation to the commons-based provision of basic goods and services such as housing and health care, a market commons cannot simply be implemented top-down from a single center of authority, but must be demanded and jointly developed by people who take their own socio-ecological habitats as starting-points.

Market commons and corporatist-Associative democracy

In order to better understand this idea of a market commons and its democratic-economic governance, I will now compare it to the idea of corporatist and associative democracy as presented by Streeck and Schmitter (1985) and Paul Hirst (1996).³ As in these theories, the notion of a market commons must be understood as a critique of the strict separation of the 'private' and economic from the 'public' political

3 For other notions of associative democracy see also Cohen and Rogers (1995) and Archon Fung (2003b).

and political sphere. Here, economic activities are not understood as strictly private, but rather as public or common affairs that affect a large range of people. Yet, in contrast to top-down state regulation, people can negotiate and coordinate their economic activities themselves, through associations. Paul Hirst's description of the inclusive character of such associative governance bodies has similarities to my notion of the democratic management of a market commons:

Associationalism tries to view the economy from the standpoint of the interests of a wide range of economic agents including those who are economically inactive as well as the active, the consumer and the producer, the worker and the manager – and does so in terms of a wide range of substantive goals. It is democratic in that it seeks to incorporate the widest possible range of actors as full participants in economic governance, and not just as the objects of decision-making and management. (Hirst 1996: 97)

A key aspect of this inclusion is not only the inclusion of those who are particularly affected, but also the negotiation over matters in which people exist in interdependent relationships. By bringing people with apparently antagonistic interests together (e.g. cheap products for consumers, jobs for workers, profits for managers, livable neighborhoods for the people who live there etc.), it is assumed that negotiated answers will be able to be found that satisfy different and conflicting needs. Philippe Schmitter and Wolfgang Streeck discuss these relationships and functions in their comparison of a local community, the market and the state with corporatist-associative organizations:

In a first approximation, this logic can be characterized as follows. In a community order, actor preferences and choices are interdependent, based on shared norms and jointly produced satisfaction. In a market order, the actions of competitors are supposed to be independent since no one singular action can have a determinant and predictable impact upon the eventual allocation of satisfactions. In a state order, the actors are dependent upon hierarchical co-ordination which makes their choices heteronomously determined and asymmetrically predictable according to the structure of legitimate authority and coercive capability. In a corporative-associative order, actors are *contingently or strategically interdependent* in the sense that actions of organized collectivities can have a predictable and determinant effect (positive or negative) on the satisfaction of other collectivities' interests, and this induces them to search for relatively stable pacts. [...] Basically what seems to happen is a shift in the 'rationality' of social choice. In communities, the calculus rests on 'satisfying identity', in markets, economic or political, on 'maximizing advantage'/building 'minimum winning coalitions', in states on 'minimizing risk' and 'maximizing predictability'. What associations in a corporative order strive for is something more prosaic, but quite rational given the structural complexity and in-

formational overload of modern society, namely '*satisficing interests*'. By deliberate mutual adjustment and repeated interaction, these comprehensive, monopolistically privileged actors avoid the temptation to exploit momentary advantages to the maximum, and the pitfall of landing in the worst possible situation. In short, *they avoid the prisoner's dilemma* through inter-organizational trust backed by what we shall call [...] 'private interest government'. (Streeck/Schmitter 1985: 125-7; emphasis added)

As we can see, corporatist-associative organizations are created due to the contingent interdependence of affected people and parties. This would overlap with what we have otherwise called the networked community that shares a contingent reality. Furthermore, with the aid of a "private-interest government", which we have otherwise called a background partner state, problems of free riding and exploitation can, at least theoretically, be mitigated. For these reasons, Waheed Hussain argues that such a corporatist system is the "most just stable regime" and should be integrated in a Rawlsian theory of justice in order to stabilize and democratize the competitive market (Hussain 2009).

Just as important, with Axel Honneth I would argue that such an arena of deliberation in economic associations would bring forth a "discursive flexibilization of seemingly objective [economic] constraints" (Honneth 2014: 193). Through this democratic deliberation and negotiation, non-monetary values can be integrated into the evaluation and organization of economic activities and goods (Anderson 1993). Economist Diane Elson calls this the socialization of the market. As she explains in her more demanding model of a democratic market,

the social relations between buyers and sellers must be changed so that they are *not* antagonistic; the price formation process must be a public process, not one controlled by enterprises; and information must be shared, with the nexus of trust, reciprocity and goodwill setting the limits within which the market operates, rather than being subordinate to the market. (Elson 1988: 27; original emphasis)

According to Elson, the "invisible handshakes" by which prices are confirmed in exclusive gentlemen's clubs and across corporate networks should be replaced by the democratic deliberations of public bodies (ibid.). She calls these public bodies Price and Wage Commissions, and gives them the task of bringing fragments of information in the market together and making the creation of prices transparent. I believe that the collection of and debate over information should not, however, be limited to prices, but must include other information about non-monetary, conflicting values, for example in relation to the quality of living of and respect for the non-human world. In brief, the three functions of such a commission would be "facilitation of information exchange; enforcement of information disclosure;

and an interactive role, in this case in the design and specification of goods and production" (Elson 1988: 34). Importantly, such a commission would enable people to codetermine which goods will be produced and how they will be produced and accessed. Accordingly, a shift occurs from individualistic and contractual *ex post* to collective and democratic *ex ante* decision-making. The shift, however, does not lead to a negation of individual *ex post* price-oriented decision-making, but merely complements and democratically embeds it. This process can therefore be understood as a re-embedding and partial de commodification of economic goods and activities. More generally, the associative democratic management of economic activities makes it possible to mitigate the coercive mechanisms of open markets, which are merely structured according to competing prices and geared towards perpetual growth.

To a certain extent, we could argue that corporatist-associative governance mechanisms transform the open, competitive and *liberal* market into what Peter Hall and David Soskice have called a *coordinated* market economy in their theory of the "varieties of capitalism" (Hall/Soskice 2004). However, there are a few important differences between the notion of a coordinated market economy and a market commons. Firstly, the coordination that occurs in coordinated markets focuses on labor and the ways it is governed, whether through collective wage bargaining or the maintenance of vocational education and training (VET), which we will discuss in more detail shortly. In contrast, a market commons would not only deal with labor and skills but would aim to democratically coordinate all economic activities and goods. Second, a coordinated market economy is still structured according to the principles of competition and perpetual growth – although possibly to a lesser degree than liberal markets are. A market commons therefore attempts to replace the competitive core of coordinated market economies with democratic cooperation. This obviously does not connote that all economic competition will be transformed into cooperation, but rather that the forms and extent of competition will be democratically negotiated over and institutionally regulated. Third, although the notion of a market commons builds on the model of corporatist regulation of a coordinated market, it pushes the notion of participation much further and bases the concept on more social and ecological grounds. It is an attempt to transform the stale backdoor politics of corporatism into more dynamic open-door politics of collaborative network governance. This is what Paul Hirst has attempted to do with his idea of associative democracy. Put somewhat differently, the meeting room in a skyscraper filled with older white men in suits should be replaced by a more accessible meeting place close to home and, more importantly, a more diverse crowd. In this sense, my notion of a market commons is much more akin to Paul Hirst's concept of associative democracy than to either Elson's Price and Wage Commissions or Streeck and Schmitter's corporatist-associative model.

To elucidate this concept of a market commons in contrast to corporatism a little more, let me refer to a more concrete issue that is often raised in this context: skill formation and the labor market. Skill formation or, more precisely, vocational education and training, which have their roots in the guild system, have a long history in German-speaking countries and Northern Europe. Both the apprenticeship systems of guilds and those of VET were developed to reproduce high quality skills through socially regulated corporatist institutions. While in guilds these institutions and regulations were largely defined by craftspeople, the VET system is based on corporatist intermediary institutions between the market and the state that bring people with conflicting interests together, including those of competing firms, employees and municipalities.

Historically, corporatist institutions for the collective management of skill formation were developed as an answer to the problem of economic liberalization after the banning of guilds.⁴ The bans led to the problem of skill degradation and employee poaching (Ritter 2014). Due to competition with large factories, smaller producers wanted to increase the specialization of their workers to make them more efficient and thus to provide products on the market for lower prices. Furthermore, if more energy were invested in a worker to develop their skills in a specific field, there would also be the risk that this worker would then be stolen or 'poached' by competing firms who did not invest in their worker's skill formation. Regarded within the framework of the tragedy of unregulated open-access market commons, we could therefore say that skill degradation was a result of the overuse of labor power through specialization and employee poaching as a form of free riding. As an answer to these problems, the development of the collective management of skill formation was an attempt to defend and upgrade the quality of craftsmanship in workshops and manufactories against the threats of the tragedy of the competitive market.

For these reasons, affected actors including small businesses, wage laborers and certain politicians attempted to solve these problems through collective action. Here, the conflicting needs of firms and workers (e.g. the balance between time on the job and time for general education in school) are expressed in bodies that possess the legal authority to define, implement and regulate the education of workers. This does not only occur in semi-public vocational schools, but also in private training associations (*Ausbildungsverbünde*) in which numerous firms have pooled their resources to provide more professional institutional support for their apprentices (Leemann/Imdorf 2015). More generally, the 'supply' of skills is coordinated with the 'demand' for skills in a decentralized and democratic manner –

4 The literature that I refer to here is based on the example of Switzerland, but I proceed under the assumption that VET mechanisms and historical development of VET systems out of the guild system are similar in other central European countries.

with the support of the state, yet without abolishing the labor market and price mechanisms. Through the inclusion of municipalities and the state into the bodies that oversee skill formation, it can generally be said that economic planning has also become more democratic and more accountable to the wider public.

The importance of the VET system for our discussion of market commons should be fairly obvious. First, it provides us with a very concrete understanding of how market regulation can occur where an economic good (skills and labor power) is produced and organized in a decentralized and democratic manner. Second, the historical development of the VET system – at least in Switzerland – also shows that it was not simply implemented by the state, but was developed via a strenuous process of confrontation, negotiation and deliberation between several parties with diverging interests. In this sense, VET is a superb example – and one that is rather widely acclaimed – of a well-functioning system for the democratic regulation and coordination of economic goods and activities.

However, despite the similarities, I would argue that the contemporary VET systems in many countries would have to realize more of their democratic potential to become part of a market commons. First, this would involve the inclusion of those most affected by its policies: the apprentices themselves. Second, the discourse of the VET system often revolves around the question of the needs of ‘the economy’. Here, it is implicitly assumed that if the needs of businesses are satisfied (competitiveness, efficiency, productivity, profit maximization etc.), people will have jobs and society will prosper. I would contend, however, that although people do appreciate having a job, the interests of private businesses are not equal to those of society in general or to those of ecosystems. For this reason, I would emphasize the importance of the integration of other civil society associations in the democratic governance of VET systems. The question a VET system must then deal with is not merely one of how to satisfy the needs of businesses, but also of how to develop the capabilities and skills of the wider population to provide everyone with sustainable livelihoods. This would, however, go beyond merely “greening skills” (Evans/Stroud 2016) and would integrate more complex social skills that are founded on more democratic and ecological principles of interdependent thriving. This is not to say that these efforts and tendencies do not already exist, but simply that a VET system would need to be developed in this manner to reproduce the necessary institutional framework and practical skills for a market commons.

Social and solidarity economy as a market commons

To develop my notion of a market commons further, I would like to turn to another example of what a market commons could look like: the social and solidarity economy. The social and solidarity economy (SSE) is generally understood as encompassing organizations and companies that pursue economic goals that are

based on social and ecological values. Concrete examples of the social and solidarity economy include organic farming and fair trade networks, community economic development organizations and socio-ecological investment funds as found, for example, in the Social Economy of Quebec (Simon 2001; McCall 2003; Neamtam 2005; Raynolds et al. 2007; Mendell/Neamtam 2008; Reed 2010; Parvathi/Waibel 2013; Wilson 2013). The United Nations Inter-Agency Task Force on Social and Solidarity Economy defines SSE in the following manner:

SSE refers to the production of goods and services by a broad range of organizations and enterprises that have explicit social and often environmental objectives. They are guided by principles and practices of cooperation, solidarity, ethics and democratic self-management. SSE includes cooperatives and other forms of social enterprise, self-help groups, community-based organizations, associations of informal economy workers, service-provisioning NGOs, solidarity finance schemes, among others. (United Nations 2014: iv)

Despite the general goals of integrating social and ecological values into economic activities, SSE's emphasis on democratic participation means that its goals can be realized in a plurality of forms that are best fitting to people's diverse needs and conditions. A social and solidarity economy is therefore not a negation of the market but a transformation of the relationships that constitute it. It aims to replace narrow self-interest with negotiated cooperation, reciprocity and mutual interests (Exner/Kratzwald 2012: 38; Nyssens/Petrella 2015: 184).

Importantly, a social and solidarity economy is therefore quite different from liberal or market socialism in which individual firms are owned by the workers and democratically run (Pateman 1970; Dahl 1985; Miller 1990). Democratic self-management of firms is an important aspect of the democratization of economic activities and institutions because it overcomes the antagonism between labor and capital. Nevertheless, it leaves the antagonistic and conflicting interests between other isolated economic agents intact (e.g. producers vs. consumers and producers vs. producers). Simply put, democratic self-management leaves the isolation paradox at the heart of the open and competitive market untouched, which, in turn, brings about the tragedy of the unregulated market. In contrast, the social and solidarity economy attempts to deal with this problem of competitive markets by fostering cooperation between conflicting economic agents. In this sense, the previously mentioned mutual interests are not a result of a homogenous and harmonious group but rather come about by bringing different individuals and groups with diverging interests together and enabling them to discuss and deal with their problems collectively. In their article "The social and solidarity economy and Ostrom's approach to common pool resources" (2015), Marthe Nyssens and Francesca Petrella explain that in a social and solidarity economy various stakeholders are part of the organs of governance: "the direct beneficiaries of the activity, the employees,

the volunteers, the public authorities, donors or the local community” (Nyssens/Petrella 2015: 181). In contrast to the competitive market that suppresses conflict and transforms it into competition, social and solidarity economy and market commons bring conflict to the fore and attempt to solve problems through deliberation, negotiation and cooperation.

Furthermore, this more inclusive democratic network of stakeholders also has implications for property arrangements, which differ as between capitalist and democratic firms: “the property regimes of the SSE [...] also deviate from the principle of joint possession of the right to residual control and residual earnings” (ibid.). More concretely, in the social and solidarity economy, “investors are not the owners of the organizations” (ibid.). This is reminiscent of my discussion of common property arrangements that are not based on ownership but rather on stewardship and guardianship on behalf of the wider community and the environment. In the social and solidarity economy, it is not the shareholders who determine the reinvestment and distribution of residual earnings, but the association’s membership, which is made up of the significantly affected stakeholders. In this sense, an SSE is not per se against profits. As the UN Task Force explains in this wider frame of reference:

Rather than assuming that the benefits of growth will ‘trickle down’, or rely on safety nets to protect the vulnerable and on technological fixes to protect the environment, SSE seeks proactively to mobilize and redistribute resources and surplus in inclusive ways that cater to people’s essential needs. Furthermore, SSE promotes environmental protection and the economic and political empowerment of the disadvantaged and others concerned with social and environmental justice. While profitability is a feature of many types of SSE enterprise, profits tend to be reinvested locally and for social purposes. [...] SSE is an economic approach that favours decentralization and local development and is driven by ethical values such as solidarity, fair trade, voluntary simplicity and *Buen Vivir*. It is holistic in the sense that SSE organizations, enterprises and networks simultaneously pursue some combination of economic, social, environmental and emancipatory objectives. (United Nations 2014: ix)

In a social and solidarity economy, profits are thus not pursued for the sake of profits, but rather to improve the concrete living conditions of a wider community. Profits are merely one aspect of enabling people to lead a good life, where what ‘a good life’ means is something that they decide upon together. Additionally, the broad inclusion of a variety of civil society associations in the internal, democratic governance of SSE organizations makes it possible for them to include ecological aspects in their calculations, and thus to attempt to align economic and ecological demands.

As we see, many of the values and goals of SSEs overlap with those of a commons-based economy, including social and ecological justice, democratic self-governance, economic decentralization and sufficiency. SSEs attempt to bring economic activities in line with principles of social development and ecological thriving. Furthermore, the property arrangements underlying social and solidarity economies resemble the principle of guardianship in commons. However, if a social and solidarity economy appears to uphold and exemplify the underlying values of a commons in market arrangements, why use the term 'market commons' at all and not simply stick with SSE? Despite the similarities and strengths of the social and solidarity economy, I would nevertheless advocate the use of the term 'market commons'. The main reason for this is that although SSE projects attempt to change relationships from 'within' the market, SSE thinking appears to lack the theoretical framework to more fundamentally transform and democratize the entire market. Simply put, it seems to remain – both in theory and practice – a niche within open and competitive markets. In order to change the broader institutional framework of open and competitive markets, I would therefore argue that it is necessary to conceptualize the market itself as a commons. The most important reason for this is that defining the market itself as a commons implies that people have the right to reclaim and codetermine its institutional framework in order to satisfy their needs and maintain their livelihoods within the ecological systems that they inhabit.

Market commons and community-supported modes of production

Finally, I would like to discuss one last example of such a market commons that goes beyond previous examples of corporatist coordination and social and solidarity economy: community-supported agriculture (CSA). Here, in contrast to the previous two models, I will argue that community-supported modes of production demonstrate how supply and demand can be democratically coordinated through subscription systems, ultimately enabling people to relocalize economic activities.

Community-supported agriculture is a concrete answer to the problems of farming in an open and competitive market. Without going into detail, it can generally be said that the open and competitive market is extremely problematic for farming and agriculture. The reason for this is the mechanism inherent in the tragedy of the open and competitive market that I have already discussed.⁵

5 Here farmers compete against each other to produce cheaper food for customers. As in other markets, one can find antagonistic relationships between both individual producers among themselves and between producers and consumers. This antagonism leads to a 'race to the bottom' in which farmers are forced to produce more and more output for less and less money. This is euphemistically referred to under the heading of 'efficiency gains' and 'structural adjustments' in agriculture. The effects are often, however, rather problematic, and in-

One commons-based answer to this wide-scale tragedy is community-supported agriculture (CSA) which has been developed since the 1970s in Japan, Switzerland, North America and, more recently, in other countries (Balázsa et al. 2013; Dyttrich/Hösli 2015; Monson 2017; Krul/Ho 2017). Simply put, CSA organizations enable producers and consumers to come together and democratically negotiate over and collectively organize the production and distribution of food. The main feature of this system is actively co-creating a decentralized and democratic “food commons” (Vivero Pol et al. 2019) in which people take (back) control over their local food systems. Although models of CSAs vary widely, most CSAs require that consumers become members of the specific food cooperative and subscribe to a weekly ration of food that can either be individually determined or that is put together according to what is momentarily ripe and available on the farm. From an ecological perspective, this system is attractive because it creates short distances between producers and consumers which minimizes transport routes and greenhouse gas emissions. Furthermore, all the edible goods are passed on to consumers, which reduces food waste that occurs when goods are not accepted by retailers due to their imperfect appearance or are simply not bought by customers at the market or in grocery stores. Lastly, CSA farms typically produce organically (Monson 2017: 83).

Aside from the ecological aspects, the financing scheme of community-supported agriculture is extremely interesting because it solves many problems that result from normal market arrangements. The subscription system provides producers with definite consumers for an entire season or year, which constitutes a type of “guaranteed market” (ibid.: 85). This implies that the costs for the enterprise are paid for in advance and that the risks are shared among all the members of the organization: “If part of the crop fails, then the consumer receives a smaller share.” (ibid.) The commitment of consumers to their subscription also frees farmers from uncertain sales, volatile market prices and powerful middlemen. More generally, a subscription system enables farmers to decrease expenses (e.g. in marketing, packaging and delivery), secures their income and frees them from the necessity to grow

clude the exploitation of humans, animals and ecological systems, the use of poisonous pesticides, the increase in pollution, the creation of unemployment, hunger and migration for those who cannot compete with larger and more industrialized farms – and obesity for those consuming the cheap goods. Other problems in agriculture that arise from a profit maximization imperative include, for example, land grabbing, the deforestation of rainforests for large soy or palm-tree monocultures, the privatization of seeds and the increasing concentration of power of a few large multinational agri-businesses (Friedmann 1993; Shiva 2002, 2005, 2009; Otero 2008; Bello 2009; Lang/Heasman 2009; McMichael 2009; Maurin 2011; Duflot 2011; Ziegler 2011; Ziegler et al. 2011; Sekinger et al. 2014; MultiWatch et al. 2016; Torrado 2016). From this perspective, a food regime based on the open and competitive market results in socio-ecological devastation and relationships of dependency and domination.

in order to survive on a competitive market. This not only allows the money to flow directly to the producers but also allows them, if possible and necessary, to create new jobs for others.

In community-supported agriculture, the price of a subscription is democratically determined and primarily aims to provide producers with living wages that are often higher than normal market wages. Because intermediate buyers are bypassed, products can be less expensive than products of equal quality sold in stores. Nevertheless, due to the smaller scales of production, this is not always possible. One interesting answer to this problem is the notion of ‘offer rounds’ that is, for example, practiced in some CSA projects in Germany. At the yearly general assembly of the organization, each member of the cooperative contributes however much he or she can give. If the necessary amount of money for the yearly production process is not attained, another round of ‘gift-giving’ is required (Siefkes et al. 2016). Interestingly, according to classical economic theory, this would inherently lead to free riding, but practice has shown that it not only works, but is also a method to practice concrete solidarity between members with different purchasing power. Another means to deal with cheaper food prices on the competitive market is the ‘unpaid’ participation of members in the production process. From a commons perspective, we could understand this as a form of commons-based peer production. This not only sinks costs, but also provides the participants with enriching experiences of community and nature. This active participation enables goods and production processes to be valued differently, creating a “non-monetary profit” (Bloemmen et al. 2015: 113). This non-monetary surplus results from an increase in knowledge and skills, new friendships and social networks, the connection to a place and landscape and a sense of meaning, efficacy and responsibility (Cone/Myhre 2000). For farmers, this can also include an increase in recognition for their work and appreciation of their products. In general terms, this democratic and non-monetary form of accounting aims to replace quantitative forms of value with more qualitative notions that are based on the “enjoyment of life” (Bloemmen et al. 2015: 113). Following our discussion of the conviviality that results from common property arrangements, we might call this a socio-ecological surplus value that results from commoning.

The fields in which the community-supported agriculture model could be applied are basically endless: a bakery, the production of pasta, clothes and shoes or even a restaurant at which people subscribe for lunch or a dinner once a week. But can these projects still be considered *market* commons, or have they not simply done away with fundamental market mechanisms – such as the price mechanism – and become commons associations? The question is difficult to answer because community-supporting organizations dissolve the original market-commons dichotomy. Some features of the market remain, such as the opportunity to exit relationships, the existence of prices and the exchange of money for goods. Yet, at the

same time, people do not buy their individual goods at the (super)market. Instead, they commit to a subscription that provides them simply with what is produced – similarly to a subscription to a newspaper or magazine. Yet, in contrast to these familiar types of subscriptions, prices are not solely defined by producers and the market, but also by consumers. The contract understood as *quid pro quo* or exchange of equivalents is replaced by a type of social contract resulting from deliberation. Here, not merely prices, but also the technology, the institutional framework, the uses to which surplus value is put, and the products themselves are collectively determined. Maybe we could understand this as the democratic development of what is otherwise understood as bargaining between two parties at a farmer's market or in a bazaar. And in contrast to collective bargaining between trade unions and employers, the democratic negotiation of prices in these community-supported associations is not an attempt to shortchange the other party but, at least ideally, to solve problems that more or less suit the divergent needs and demands of different parties. In the case of offer rounds, the notion of market prices and costs are even further undermined. Therefore, it is not exactly clear whether we can still consider such organizations to be markets. While money is still used in all these projects, the exchange of equivalents is partly dissolved and economic activities and goods partly decommodified. In the end, however, I believe that it might not actually matter if such organizations are still understood as market arrangements or not. The emphasis in all these projects should be laid on their commons aspect and on their ability to overcome the tragic, vicious circles brought about by open and competitive markets.

8.4 Responses to possible critiques of the market commons

Having discussed different economic arrangements that can provide us with insights into what a market commons might look like, I would now like to turn, in a final step, to possible criticisms of this concept. Some of the central problems of the democratic management of economic activities that are often expressed are that freedom of choice is reduced for consumers, that the motivation to innovate diminishes for producers and that not all goods and services can be planned in advance. Most importantly, it is said that the democratic management of economic affairs is inefficient. Other limitations are that people lack the time and interest for democratic participation and that such a model cannot be scaled up to encompass a global economy. I will address each of these problems one at a time.

Let us begin with the problem of consumer choice. Here, it can be argued that a consumer loses the freedom to choose if production and distribution arrangements are organized through democratic forms of governance. Firstly, I would answer that consumer choice is not eradicated because people can still buy their goods in

stores or order them in subscriptions. A market commons merely enables people to codetermine the default settings and institutional framework of the market – and not to pre-determine what each person shall consume. Similarly, subscription systems are voluntary economic associations that not only provide different goods to choose from, but can also be exited. In this case, while the consumer does voluntarily give up some of their freedom to choose what they wish to buy every day, they are also freed from the necessity of shopping. More fundamentally, however, the most important function of the democratic management of economic affairs is precisely to overcome the problems that would arise if all economic decisions were made on an individual basis. In the case of subscriptions, this implies that while the individual might ‘lose’ a part of their consumer sovereignty, they nevertheless gain access to a world of production that is otherwise closed off and acquire the ability to collectively codetermine the way in which the specific good is being produced and distributed.

On the producer’s side of the relationship, it is often argued that the democratic management of economic affairs undermines innovation and product diversity: entrepreneurs and producers are limited in their creative potential. One main problem of this criticism is that it rests on a misconception regarding democracy. Democracy is sometimes misunderstood as the implementation of the will of the majority over the will of all: the collective dictates what the individual must do (Queralt 2018: 288–9). However, as I have already mentioned in our discussion of ecology, democracy should be understood as the negotiation of interests and the flourishing of each individual within overlapping socio-ecological systems. Within the framework of negative rights, this can be interpreted as the pursuit of individual interests as long as they do not harm other individuals. This individual negative freedom is the principle that also underlies the open and competitive market. Here, the freedom to innovate is always bound by the ability to sell one’s goods and, more importantly, to generate profits to survive on the market. In turn, innovation is perpetually required to maintain economic growth. In such a system, however, innovation is also limited – to those with the skills and free capacity to innovate while others implement and realize these inventions. In contrast, the democratic organization of a market commons aims to mitigate the existential competition in economic activities to provide more space for innovation in goods and services that people need and desire – rather than those merely goods and services that are profitable. In subscription schemes, the financial security provided by the commitment of consumers provides producers with more free time and energy to develop new and better goods which ultimately leads to a greater diversity in their products, as existing CSA projects demonstrate. Furthermore, in a market commons, the knowledge, skills and capabilities for innovation are, at least ideally, distributed among the affected participants: each member has the opportunity to bring in new ideas for products or for how to optimize the organization and institutional frame-

work of the existing economic activities. Collaborative peer-to-peer networks in a market commons thus provide fertile ground for an even broader dispersion of innovative potential than a competitive market economy.

In response to this, it is sometimes said that democratic management of economic activities is impossible because economic affairs are too complex and therefore cannot be planned (Hayek 2013: 34–52). Simply put, I believe the argument from complexity to be a theistic argument that aims to veil and immunize economic affairs from democratization. The problem of complexity has not stopped human beings flying to the moon, deciphering the genome – and developing the stock exchange. The question whether we *can* should not replace the normative imperative that we *should* democratize the economy. As previously argued, it is clear that the tragedy of the competitive market can only be overcome through the democratic management of economic affairs. Here however, we must differentiate between democracy as an institutional arrangement and the democratic planning of economic activities. Democratic control of the institutional framework of a market commons does not imply that all future activities are planned in advance, but rather that the institutional arrangement of the market is perpetually adapted to the changing conditions of the ecosystem and the needs and desires of people who are affected. Prices can, for example, be democratically negotiated without determining in advance what each individual will consume. In more general terms, a market commons increases the *ex ante* democratic management of economic affairs without negating the possibility of people ‘spontaneously’ buying goods *ex post*. However, a market commons can also support democratic planning in the form of democratic network collaboration and coordination between producers and consumers. In such scenarios, everyday economic planning activities within a firm are simply extended to a wider community of agents. Both the democratic management of the market commons and the collaborative democratic planning of individual networks must be understood as decentralized and overlapping bodies that renegotiate their interests when novel issues arise. Hence, democratic management and planning in a market commons should not be interpreted as a top-down five-year plan developed and implemented by states and large corporations, but rather as an interactive and ongoing process of negotiation and coordination between different actors and on different levels.

But can the democratic management of economic affairs be efficient? This is a classical rhetorical question that implicitly assumes that all forms of allocation that are not based on the open and competitive market are inefficient. As we have already seen in our discussion of the justification of the open and competitive market, efficiency is one of the main sources of legitimation: competition forces enterprises to produce more efficiently to survive on the market. This criticism applies not only to the model of community-supported agriculture, but also to the social and solidarity economy and to the concept of market commons in general.

Despite this general assumption, our discussions of the problems of privatization and the market have demonstrated that an open and competitive market might be efficient in perpetually generating and concentrating monetary wealth in the hands of a few, but not necessarily efficient in maintaining sustainable livelihoods and ecosystems. Considering this fundamental inefficiency of open and competitive markets, our examples of democratic management of and active participation in production processes provide us with positive models of how to organize economic activities and the institution of the market in more efficient ways. A market commons is thus more efficient than a competitive market in two central ways. Firstly, widespread democratic control of economic production is efficient because it enables people to express their needs and desires before the production process occurs, rather than after all the goods have been brought to and in the hope that they will be sold on the market. Collaboration and coordination can increase the production of goods that people want and decrease the large number of goods that are not sold. Second, in open and competitive market arrangements, well-being is assumed to be realized via economic growth, deferring it to a later date and transforming economic activities into means to future ends. It can be said that this set-up is, in itself, rather inefficient. In contrast, democratic management of economic activities and institutions enables people to codetermine processes and co-create outcomes that include non-monetary values that are often neglected in competitive price-formation and quantitative measurements of prosperity (e.g. GDP), including well-being, conviviality or sustainability. In a market commons, the aim is to realize well-being both efficiently and in the here-and-now – paradoxically by decreasing the “rationality” of economic efficiency and profit-making.

But do people have the time to partake in so many democratic negotiations and other unpaid productive activities? Here, it might be important to note that it is not expected that everyone will participate in all processes everywhere. This would obviously be impossible. In relation to democratic participation, a rather simple answer to this problem would be the representation of the affected either through election or through sortition. Nevertheless, the problem of time for these activities remains, considering the demands of contemporary jobs and the necessity for many people to work long hours to pay their bills. This is a reason why, for example, we find that it is mostly women in full-time housekeeping positions or who work part-time that actively participate in CSA projects (Cone/Myhre 2000: 193). This is also the reason why it is mostly educated, middle and upper class families who both desire and are able to partake in such projects (Monson 2017: 87). The unequal distribution of time, money and education is a fundamental socio-political problem that limits people's participation in both parliamentary politics and the democratic management of economic activities. One rather simple answer to these problems is that participation in these activities be rewarded in some manner, be that in the form of money, vouchers, free subscriptions or recognition more

generally. Nevertheless, it must be admitted that a market commons – let alone individual projects therein – cannot fundamentally solve or mitigate these problems. To structurally provide people with more resources (e.g. better education, higher minimum wages, fewer working hours per week), collective *political* action is necessary. Despite these limitations, it must be noted, however, that people often do have time outside of wage-labor relationships that they spend on different activities such as shopping, hobbies, sports and volunteer work in other associations. The question that then arises is how this time is spent and what priorities are set. The energy that many people already devote to such activities could be channeled into the co-creation of democratic market commons.

But are people interested in these forms of participation in economic affairs? This question reminds us of our short discussion of stealth democracy. Here, it might suffice to note that people will probably not experience the necessity of exerting time and energy in democratic economic governance as long as an open and competitive market appears to be more or less functioning. The more people perceive and experience the ecological and economic crises that result from an economic system based solely on individual negative freedom, the more willing people might be to invest time and energy into coordinated, collective action. Therefore, interest in democratic economic governance is not merely an abstract ideal, but also an attempt to alleviate real insecurities and injustices, by solving concrete problems of hunger, unemployment, exploitation and environmental degradation. This does not mean that we must wait until things get much worse for a market commons to develop, but rather that interest in democratic participation often arises out of a desire to change and improve existing social arrangements.

Let us now turn to the final criticism of democratic management of a market commons: the problem of up-scaling. It is often argued that the open and competitive market is global and that it is therefore impossible to create democratic institutions that can coordinate and regulate these economic activities. My response here is similar to what I said in answer to the complexity argument. The problem of global commodity chains should not necessarily hinder people who want to take control of their economic activities at home and in collaboration with people elsewhere. While some of my examples were rather local and small-scale, this should in no way imply that larger institutional frameworks could not be developed to foster socio-ecological enterprises in different places. Although such community-supported commons associations would generally imply a relocation of economic activities, they could theoretically also be developed with producers on the other side of the world. Such associations already exist. The same can be said, more generally, for the democratic management of global market commons. This is what James Tully understands as “glocal” cooperative networks of democratic economic governance in which the global emerges out of the interaction and collaboration between diverse local socio-ecological systems.

9. Conclusion

After this long journey examining the relationships between democracy, markets and commons, let us now return to the original problem and question with which we began our investigation. We commenced this study with the question of whether democratic capitalism truly was the best and only social arrangement that human beings could imagine and realize. With reference to diverse political, socio-economic and ecological crises, we recognized that democratic capitalism is facing fundamental challenges: decline in political participation, democratic deficits, rising inequalities, economic instability, ecological degradation and, last but not least, climate change. The question then arose to what extent democratic capitalism brings these possibly interrelated problems about and whether the institutional arrangements of democratic capitalism have the potential to solve them. Assuming that this is not possible, we then asked whether the concept of the commons could provide us with social arrangements that might be more adequate for this task. More specifically, I asked whether – and if so, how – the concept of the commons can strengthen democratic practices and institutions by limiting or even overcoming the negative political, socio-economic and ecological effects of open and competitive markets.

Generally put, the conclusion that we have arrived at is positive. We can conclude that commons are highly conducive to democracy, which we defined as entailing that people have the rights and capabilities to codetermine their social conditions or, in more ecological terminology, to co-create their shared socio-ecological realities. The central reasons for this are twofold. Firstly, commons enhance individual freedom in a limited world by giving people direct access to resources, ultimately enabling them to secure their interdependent lives and liberty. Secondly, the democratic governance structures of commons allow humans to collectively solve conflicts and problems, by perpetually adapting to changing socio-ecological conditions. That, in a nutshell, is the conclusion to this book. But let me now recapitulate its central arguments in a little more detail.

Democracy

I began my examination of democratic capitalism with an analysis of the concept of democracy. The reason for this was that democracy has historically and theoretically turned out to be one of the central means of legitimizing social arrangements. As we saw, it is often assumed that democracy means representative democracy, where people participate in periodic elections in order to elect representatives who will define the rules and regulations of society. I pointed out, however, that although representative democracy might be the most widespread form throughout the world, this in no way implies that it is the most desirable. We therefore asked ourselves what other concepts of democracies exist and discovered various models and concepts of democracy, each of which is contested. With reference to the work of Wolfgang Merkel and others, I grouped these concepts according to a three-tier system of minimal, medium-range and maximalist models of democracy. Simply put, the minimal model understands democracy as a competitive system through which elites are formed; the medium-range model emphasizes just procedures and civil rights; and the maximalist model underlines substantive socio-economic rights as a central component of democracy. Merkel argued that the minimalist model is unsatisfactory because it remains unclear to what extent people possess the opportunity to influence political affairs. In turn, he also criticized the maximalist model for being too demanding and therefore unrealizable. Thus, he concludes that we should uphold a medium-range model of democracy. I argue, however, that this conclusion is problematic because it transforms the historically contingent existing form of democracy into a universal model of the best political arrangement. Unsatisfied with this conclusion, I argued with Mouffe and Laclau that democracy has an underlying “surplus meaning” that always has the tendency to dynamically go beyond and transform its existing form. Furthermore, I argued that a dichotomy opposing the form of a democracy to its substance (e.g. formal civil rights versus substantial socio-economic rights) cannot be maintained, because all forms of democracy endorse specific substantial values. Thus, I conclude that there exists a notion of democracy that lies at the heart of all three models democracy. With reference to David Held, we ultimately defined this notion of democracy as the “principle of autonomy”, which requires that people have the rights and capabilities to codetermine their social conditions. In light of this definition, however, democracy cannot be limited to the sphere of politics and the state, but rather must be understood as a principle that applies to all spheres of life.

The open and competitive market

Having arrived at this definition of democracy, I then turned to the concept of capitalism or, rather, the open and competitive market and its relationship to both

the state and democracy. With reference to Hobbes, we discovered that an absolute state is of central importance for the protection of individual private property and the creation of a competitive market. In turn, the justification of the market was discussed with reference to Adam Smith and more recent economists such as Friedrich August von Hayek. We discovered that individual private property coupled with competitive markets brings about social order and a perpetual growth of wealth. Within this framework, social order is created through the free or self-regulating interaction of producers and consumers, which is not only supposed to bring about the most efficient possible allocation of resources but also disciplines market agents to be more productive. Importantly, the self-regulating mechanism of the market requires that state intervention in 'private' economic affairs is limited and that markets are opened up beyond the level of the nation-state. I therefore call this economic institution the open and competitive market. After discussing the relationship between the market and the state, I then analyzed its relationship with democracy. Here, we discovered the interesting fact that both Adam Smith and Hayek recognize that most people do not necessarily desire such competitive market arrangements, because of their 'egotistical' interest in leading a secure and stable life. The question then arises who can politically implement and uphold such a social order. In view of the resistance to these arrangements, Hayek openly argues that democratic politics must be "dethroned" and replaced with wise and impartial rulers, who are elected once in their lifetime. Due to the substitution of democratic politics with economist quasi-kings, I argued with reference to Herman Heller that this market-state arrangement can be interpreted as a type of authoritarian liberalism. But we then discovered that even with periodic elections the opportunities for politicians and the state to influence economic activities and correct market outcomes are extremely limited. The reason for this is the free movement of private property that enables investors – or what, with Streeck, I've called the *Marktvolk* – to move their capital to places where the rates of accumulation are the highest. As we saw, when the *Staatsvolk* and politicians attempt to limit accumulation strategies and redistribute wealth, this second constituency can indirectly punish them simply by withholding investments, thereby causing unemployment and economic crises. Hence, I contended that the structural constraints of open and competitive markets severely limit and undermine peoples' ability to alter and codetermine their social arrangements in democratic ways. Accordingly, I then concluded that democratic capitalism and its underlying state-market dichotomy is most likely quite incapable of institutionally adapting and solving the diverse social, economic and ecological problems that exist.

Commons

Given this conclusion, I asked whether the concept of the commons provides us with different social arrangements that might mitigate or possibly even solve the antagonism between the market and democracy. In order to answer this question, I began my investigation with a discussion of Garrett Hardin's 1968 article, "The Tragedy of the Commons". Simply put, this influential article or, rather, metaphor presented us with a situation in which individuals using a commonly owned yet unregulated, open-access pasture find that it is rational for each herder to put more and more cows on the field despite its limited carrying capacity. The reason for this is that each herder can privatize the benefits (e.g. milk and meat) and externalize the costs (e.g. degeneration of soil fertility). Because it is assumed that each will act in this manner, the herders are compelled to pursue maximization strategies in order to survive, which, however, paradoxically leads to the overuse and destruction of the resource system. From this perspective, it can thus be assumed that unregulated resources held in common inherently lead to tragedy and therefore do not present us with a viable alternative to democratic capitalism. This is at least a widespread interpretation of Hardin's article. That being said, Hardin's answers to the tragedy also remain caught in the state-market dichotomy of democratic capitalism: privatization or socialization (i.e. nationalization).

Another answer to this problem is that presented by Elinor Ostrom and, to a certain extent, her husband Vincent Ostrom. Expressed in the most general terms, Elinor Ostrom demonstrates that the sustainable and democratic self-government of commons is a possible alternative form of organization "beyond markets and states". In her work, commons are more technically defined as common pool resources (CPRs) such as pastures, forests and water, on the one hand, and common property arrangements, on the other. CPRs are characterized by the fact that their goods (e.g. fish, wood) are rival and that it is difficult (i.e. costly) to exclude others from using the resource system. As Hardin demonstrated, the difficulty of regulating these resource systems often leads to tragedy. The vast empirical work of Elinor Ostrom and her colleagues shows however, that tragedy can be averted and overcome – not through privatization or nationalization, but through democratic self-government. Or more precisely, democratically structured common property arrangements can enable the sustainable management of common property resources. We saw that Elinor Ostrom develops eight design principles that support the sustainable use of such resource systems. Here, I would like to focus on one important feature in her findings for our concluding reflections on her work. From a normative perspective, the most significant insight is that the people who use and are significantly affected by resources should also have the rights to democratically regulate them. This enables people to develop and enforce rules and regulations against free riding and unlimited appropriation. This enables not only the eco-

logically sustainable use of the resource system, but also the fair appropriation of goods within a specific group. When the people who use the resources can define the rules, they are able to continually adapt these rules when conditions change since they often have much more knowledge of the specificities of the relevant contexts than others would. As we see, this understanding of the democratic process comes very close to our previously developed definition of democracy, according to which democracy requires that people have the right and the capability to code-terminate their social conditions. It can be said that Ostrom provides the empirical evidence that this form of democratic self-government is not simply possible, but also socially and ecologically robust. From these insightful findings, it can generally be concluded that commons provide us with a viable alternative to democratic capitalism.

As I showed, however, there are some limits to the Ostroms' work on the commons. Despite their focus on existing and functioning commons arrangements, their work either lacks a critique of markets or, to the extent that such a critique is present, it is executed in a problematic way. Although the Ostroms do defend commons as a superior form of organization to hierarchical monocentric orders, they do not fully deal with the problems that arise through privatization and the competitive market. Let me briefly summarize these arguments again. The Ostroms argue that hierarchical, monocentric orders often define unified rules that are either not adapted to specific contexts or not implemented at all. If implemented, this then leads to a form of oppression; if they are, however, not implemented, this then transforms state-owned resources into a *de facto* open-access common that will probably be overused. I called this the tragedy of hierarchical and monocentric orders. As an alternative to this problem, the Ostroms propose a type of overlapping multi-scalar and polycentric governance system. Although I agree with their critique of hierarchical and uniform management schemes, Vincent Ostrom's vehement critique of the state is somewhat problematic because it risks throwing the baby out with the bathwater. As we discovered with Elinor Ostrom's work on the commons, a pooling of individual coercive power is necessary in order to limit free riding and overcome tragedy. In this sense, the model of commons also provides us with a monocentric structure. For questions of democratic governance beyond the nation-state this insight becomes rather central, for it implies that the arrangement must be monocentric while simultaneously being multiscalar and overlapping.

But more importantly, a central problem in the Ostroms' theory lies, as previously mentioned, in their lack of a critique of privatization and competitive markets. Vincent Ostrom remains silent on the topic. Elinor Ostrom, in contrast, argues that privatization might not occur in common pool resources, because it is rather costly. Obviously, this economic reasoning provides a rather weak argument against privatization. For this reason, I argued that privatization is problematic because it excludes others from access to important resources that are necessary

for their life and liberty, ultimately creating power asymmetries and enabling domination. We may call this the tragedy of privatization. In relation to markets, however, Elinor Ostrom provides us with a little more insight. Using the model of the prisoner's dilemma, Ostrom argues that highly competitive markets force people to pursue maximization strategies and create a "straitjacket situation" in which people have "no alternative" (E. Ostrom 2003: 25). Despite this insight, she does not pursue the problems of markets any further. For this reason, I developed an argument that aimed to bring the models of the open and competitive market and the unregulated commons together. Both institutional arrangements are structured according to what is technically called the prisoner's dilemma or the "isolation paradox" (Amartya Sen) and lead to the necessity to perpetually appropriate and accumulate more and more wealth. Yet while Adam Smith and other economists praise this arrangement for its ability to perpetually generate more wealth, Hardin's metaphor presents this same competitive dynamic as one that increasingly destroys ecological resources and other resources held in common. I argued, however, that this would also occur if all the goods in the world were privatized, because the competitive growth dynamic between proprietors would remain. In existing societies, this market mechanism also leads to the increase in socio-economic inequalities and the destruction of livelihoods and economic crises, thereby ultimately undermining the institution of the market itself. Last but not least, I argued that the incessant necessity to increase productivity reinforces structural constraints on democratic deliberation and government. Here, we clearly see how various ecological, economic and political crises are interrelated. And again, we see that the open and competitive market places strict limits on people's capabilities to alter their institutional arrangements in order to solve problems in collective ways. I thus argue that the tragedy of privatization ultimately also leads to the tragedy of the (open and competitive) market.

If we return to the Ostroms, it must now also be said that even with a better-formulated critique of hierarchical monocentric orders and competitive markets, two fundamental problems remain in their work. Firstly, the Ostroms also lack explicit normative arguments for democratic commons arrangements. Secondly, their focus on the management of common pool resources, makes it appear as though only goods that are rival and non-excludable (e.g. waters, forests, alpine meadows etc.) should be managed with common property arrangements. The two problems are obviously interrelated. The lack of general, normative arguments for common property arrangements inherently supports the assumption that commons are merely something that refer to pastures and forests. Accordingly, commons will most probably maintain a rather marginal, niche existence despite the possibility of applying the concept to a wide range of goods and resources, thereby potentially creating not only a more sustainable society, but also one that is freer and more just. After recognizing these shortcomings of the Ostroms' work I there-

fore attempted to develop a more explicit and elaborate normative argument for the commons.

Nature

In order to do this, I began by developing a normative argument for the commons from an ecological perspective. The aim of this step was to break with the framework provided by Hardin in which nature is portrayed as a background stage and, ultimately, a limit to human freedom. Furthermore, the problem with such a Malthusian model is not only that nature is dealt with in an instrumental and, possibly, exploitative manner, but also that the basis of existence is assumed to be the antagonistic conflict between all living beings. Simply put, I argue that this is not only false, but also cannot lay the foundation for a sustainable and democratic society. Here it must again be acknowledged that the organization of the world will not be changed as an automatic consequence of us changing our conceptions of the world. To assume that would be solipsistic and naïve. Nevertheless, it cannot be denied that concepts, models and metaphors play a central role in our interaction with one another and the arrangements of the world. If this were not the case, we would not have to take on the trouble of writing books and discussing ideas. Accordingly, I argued that our understanding of nature is extremely relevant not only because of its implications for our relation to the environment but also because it provides a type of symbolic backbone for all other relationships. I therefore argue that we must shift from a dualistic and anthropocentric to an interrelated and eco-centric model of nature. With reference to Andreas Weber and others, I elaborated the notion of self-organizing organisms that dynamically adapt in and with their environments, ultimately taking an active part in the interdependent co-creation of reality. The concept of interdependence provides us with a key principle for developing an understanding of abundance in a limited yet shared common reality. In this approach, other living beings are understood as a precondition for one's own freedom and flourishing. From there, I developed an ecological understanding of freedom, which I defined as freedom with, through and against the other. Within this framework of interdependence, the central principle of care for the other was apparent. Yet despite my emphasis on empathy, cooperation and shared, common realities, by combining intrinsic, instrumental and antagonistic principles in the one notion of freedom, we were able to comprehend our interactions with other beings in a complex, multivalued and conflictual manner. Here, the simple fact that we share a common reality does not imply that people always cooperate, but rather that conflicts arise and must be dealt with. Freedom is thus defined as an ongoing process of negotiated cooperation in the co-creation of a shared common reality. This presents us with an ecological reinterpretation of our original definition of democracy, which we defined as the codetermination of social conditions. With

reference to the work of James Tully, I understood this as a civic notion of democracy that emphasizes the dynamic adaptation and transformation of institutions through civic practices of collective action. This civic understanding of democracy, in turn, provided us with an adequate theoretical framework for the commons. Here, I discussed Ugo Mattei and Fritjof Capra's notion of eco-law as a second order commons that is based on the civic activities of democratic negotiation and cooperation. This ultimately led us to a new interpretation of the commons, which was not understood merely as a resource, an institutional arrangement or the relation between the two. Instead, commons are comprehended as a performative civic activity of self-organizing or commoning that brings common goods and our common reality about through a process of co-creation.

Common property

After presenting this ecological reinterpretation of freedom, democracy and the commons, I then attempted to elaborate a commons theory of property. With reference to my previous discussion of socio-ecological interdependence, I argued that a commons theory of property revolves around the concept of access to and democratic governance of shared resources for the satisfaction of people's similar yet conflicting needs. With this general notion, I then sought to critically reflect on and reinterpret John Locke's famous labor theory of property. In a nutshell, Locke's theory of property declares that in a state of nature people have the right to individually appropriate resources from a commons that was originally given to everyone. I discussed this theory in relation to three central concepts: (self-)ownership, non-interference and labor. With reference to G. A. Cohen, I argued that the concept of self-ownership is based on the prioritization of freedom from all non-contractual claims and obligations towards the wider community. This is basically the principle of non-interference, which lies at the heart of conceptions of negative freedom. Put somewhat differently, ownership frees the individual from considering the negative effects of one's actions on the other. I argued that in light of my notion of ecological freedom this is particularly problematic, because it denies the inherent, pre-contractual interdependence between beings and the underlying conflicts that result from constituting this shared reality. While the owner of individual property can enter cooperative relationships through contracts, she is systematically freed from having to deal with existing conflicts. For this reason, I argued that we must develop another notion of property that is more suited to the principles of interdependence. With reference to Michael Sandel I then contended that the concept of guardianship or stewardship is more adequate for a commons theory of property, because it aims to integrate other affected beings into the structures by which resources are governed.

In a second step, I discussed the notion of non-interference in more depth. Here, I argued that non-interference is problematic, because the un-interfered-in or unlimited appropriation and accumulation of resources by individuals inherently interferes with the freedom of other people. The reason for this is that it changes the quantity and quality of the resources that other people have access to. Simply put, if someone appropriates a plot of land, I cannot use it; fewer resources are now available to me. Assuming unequal opportunities to appropriate, access to resources can, as a consequence, become highly unequal. Those without direct access to resources must then pursue wage labor in order to exchange labor for money and money for food. Owing to their dependence on wages, people without resources must enter wage-labor relationships. And due to the underlying power asymmetries between the employer and the employee in such a constellation, I argued – with reference to Philipp Pettit – that wage labor relationships are problematic because of the threat of arbitrary domination that they carry. In short, non-interference can lead to serious forms of arbitrary interference and, importantly, domination. I therefore argue that a commons theory of property must replace the principle of non-interference with the notion of non-domination.

In a third step, I argued that we must replace the central category of labor in Locke's theory with that of needs. According to Locke, labor is the central justification for the right to appropriate resources. With reference to Carol Gould, I argued that a commons theory of property would emphasize the social appropriation of resources in joint activities. The problem that arises here is, however, that people and groups have highly unequal productive capabilities. This could theoretically lead us to a similar asymmetrical distribution of resources and thus to relations of domination. As an answer to this, I argued with Jeremy Waldron that this special right to appropriate resources through labor must be replaced with a general right to access resources according to need. Yet in contrast to the unlimited access to resources as conceptualized in Locke's original commons, in this scenario, commons would be democratically regulated.

After this critical reinterpretation of Locke's theory of property, I then turned to John Rawls. For me, Rawls' property-owning democracy presents an interesting social arrangement that also emphasizes positive freedom that consists in having access to resources as a precondition for life and liberty in a democratic society. Schematically portrayed, in comparison to the *ex post* distribution schemes of the welfare state in the form of housing and health care for those in need, Rawls conceptualizes this positive right as an *ex ante* or predistribution of "productive assets". While I agree with much of his reasoning, I contended that the coupling of these individualized resources with competitive markets is highly problematic because it leads to maximization strategies and perpetual economic growth as already discussed in relation to the tragedy of the market. For this reason, I argued that not only must we be critical of the emphasis on the competitive market, but

we must also shift our focus in such a predistribution scheme from productivity to care. I interpreted care, however, not as the supposedly 'unproductive' activities of housekeeping and social work, but rather as the emphasis on the sustainable reproduction of resources through labor activities. Accordingly, I argued with Sibyl Schwarzenbach that this is best done with common property arrangements that are more conducive to care and sustainability due to their inclusive and democratic governance structure.

In order to avoid possible misunderstandings, I would like to mention something important about my numerous claims that we must 'shift from X to Y'. Throughout my investigation I have argued that we must change concepts that underly other concepts. These 'shifts' include, for example: from anthropocentric to ecocentric, from dualistic to systemic, from ownership to guardianship, from non-interference to non-domination, from labor to needs and, finally, from productivity to care. I must admit that this sure is a lot of shifting. Critical readers of my argument will have noticed, however, that I regularly fall back on old terms that I had just criticized. Often enough, the shifts that I argue for rarely imply that a term should be entirely annulled. Let me illustrate this with reference to a few examples. In my discussion of nature and ecology I argue that we must replace our dualistic understanding of nature with a systemic concept. This does not, however, mean that all linguistic distinctions between mind and body or culture and nature simply disappear. The point is that although we differentiate these things symbolically, they remain organically interrelated parts of a whole. In my discussion of Locke, I argued that we must replace the special right to resources through labor with the general right to access resources according to needs. While I maintain that this is true, I do not, however, intend to imply that all rights to the fruits of one's labor should be denied. Instead, the shift to a needs-orientation in property theory simply implies its prioritization over the value of labor, without necessarily negating it. This is also the case in relation to non-interference, which should be replaced by the notion of non-domination: obviously, non-interference remains an important value, but should be positioned under non-domination in the ordering of principles. Similarly, my critique of the focus on productivity in Rawls' property-owning democracy does not free me from using this term. I cannot simply replace the word productive with care, because no one would then understand what I was talking about. I do not intend to banish the word productivity from our vocabulary. Instead, my discussion hopes to replace its connotation with endless monetary growth with one of care, sustainable reproduction and qualitative growth. That being said, let me now turn to summarize the last section of my discussion of a commons property theory, in which I, again, use the term productive.

In the final step in my commons theory of property I discussed the relation between productive and consumptive goods. Here, I asked myself whether we should

organize only some activities and goods by means of common property arrangements. In this discussion, I referred to the problem of greenhouse gas emissions and their unequal distribution: the wealthiest 20 percent of the world's population produces 80 percent of the world's greenhouse gas emissions. This problem provides us with the insight that strategies of accumulation do not only occur in the sphere of production, but also in the sphere of consumption. Furthermore, strategies of consumption maximization are largely interrelated with accumulation strategies in production. I argue that this maximization strategy occurs in the sphere of consumption because it is assumed that my freedom is increased, if I extend my reach over my possession of goods. More goods equal more freedom. And because the access to these consumption goods is normally structured according to the principle of individual private property and non-interference, the central means to access more goods is simply to buy them. This leads to the situation where everyone strives to own increasingly more and more things. As we well know, this is problematic in a world of limited resources. A commons approach to this problem is rather simple: if people share these goods, they can increase their access to resources, without necessarily having to produce and buy more goods. Thus, the direct access to common goods can substantially expand the range of people's individual freedom. This is a concrete example of how abundance can be created within planetary boundaries.

Commons and the state

Having developed a commons theory of property I then turned to analyze the relationship between the state and commons. The focus here was not the organization of governmental bodies, but rather the question if and how the state should provide citizens access to common resources. Before turning to this question, however, it is important to briefly mention the theoretical organizational structure of a state in a commons-based society. As previously mentioned in my discussion of Vincent Ostrom's critique of hierarchical monocentric orders, from a commons perspective the democratic state should be interpreted as a pooling of coercive abilities through collective action. Ideally, democratic state power is then understood as a form of reciprocal and public coercion. Importantly, in order to deal with the problem of free riding, the state must be structured in a monocentric manner. The problems of a monocentric order therefore result not from its monopoly on the use of force, but rather from its undemocratic internal organization. In order to uphold a democratic structure within, the internal organization of the monocentric state should, however, consist of multilayered, overlapping democratically governed bodies. This is normally understood as federalism. The unity of the superstructure would, in turn, aim to limit free riding on the part of individual units and competition between them.

Before continuing with the summary of my argument, I would like now to touch briefly on an issue that is under-examined in my analysis: supranational global governance. Theoretically, the insights above also apply to a system of global governance. But since this issue was underdeveloped in my investigation, I would like to briefly consider the problem here. To my mind, the insights I have considered imply that in order to overcome global tragedies, a type of monocentric global government is theoretically required. A democratic organization of such a federal, supranational structure can be understood with the help of David Held's notion of a cosmopolitical order (Held 1995) or with Francis Cheneval's concept of a "demoicracy" (Cheneval 2011). At first glance, this conclusion might seem to imply a rather important break with the Ostroms' theory of a polycentric order. Here, we might ask ourselves why the Ostroms did not see this inconsistency in their theory. One reason for their emphasis on polycentricity could have been of pragmatic nature. Knowing that the world is messy and supranational collective action can be difficult to realize, they simply opted for a more viable alternative. Another explanation could, however, be that an overarching global government is not necessary, because only the different global commons (e.g. air, the Internet etc.) need governing bodies and not the world *per se*. Here, the concept of territorial units would be replaced with functionally defined jurisdictions. To be fair, I can imagine that it is this notion of a plurality of functional governing bodies over commons that they imagined. It can nevertheless be asked whether the coordination of these diverse bodies does not also require a higher level monocentric order. According to the arguments I have presented here, my assumption is that they would. Whether such a monocentric order is realizable is, however, another question.

Let us now return to the level of the nation-state and examine the role of the state in the management and provisioning of commons. I began this analysis with a recapitulation of various models of the state and their principles when it comes to organizing common resources. Let me briefly summarize these findings. As we know, the hierarchical and monocentric state manages common resources in a top-down manner according to unitary rules. Theoretically, the range of commons managed by the state depends on the will of the sovereign. As I have already mentioned, the problems here can range from oppression, through paternalistic provisioning to tragedies of over- and underuse. In a minimal, market-based state common resources are generally minimalized. Within the Lockean framework, we can say that the resources of the original commons have largely been enclosed and privatized. A possible later expansion of commons by the state is constrained by the structures of the open and competitive market. In contrast to the minimal market-based state, both the welfare state and a property-owning democracy aim to provide individuals access to resources that have been pooled through the collection of levies. The distributed resources are often understood as public goods that are provided for by the state and often consumed individually (e.g. housing, health care etc.). While

this model provides people with access to resources, the criticism is often made that this occurs in a paternalistic manner. A property-owning democracy aims to mitigate this problem by providing people with productive assets. As we have seen, coupled with competitive markets this leads to the problem of perpetual growth, which tends to overuse society's common, socio-ecological resources.

After having gone over these models, I asked myself how the state could provide access to resources in a commons-creating society. Furthermore, I asked which resources and goods a state should provide. Beginning with the second question, I briefly discussed the problem of ideal theory in political theory. My main claim here was that ideal theory can not only disempower people, but can also lead to a type of paternalism in which people (e.g. philosophers) create lists of the goods that the state should provide. For this reason, I argued with Amartya Sen that instead of such a "transcendental institutionalism", a "realization approach" might be more suitable to answering these questions. According to Sen, a realization approach focuses on injustices and aims to overcome them through widespread democratic deliberation and participation. In this manner people can express their own concerns, needs and desires and are empowered in their democratic capabilities. From a commons perspective, this also includes the civic activities of commoning in the state provisioning of public goods. This would generally imply the democratic coproduction of public goods. In order to understand this in more detail I then compared three examples of the provision of public goods with state supported commons arrangements: housing, health care and education. In most general terms, public goods as commons implies that the significantly (and potentially) affected people have the rights and capabilities to create and manage the common resources. The state would provide an enabling role. For this reason, I refer here to the notion of a background partner state. In the case of housing, this would imply that the people actually co-owned their housing units; the land could in turn be organized as a Community Land Trust. The access to a home could occur, for example, through the provision of housing commons coupons. In the case of health care, I discussed the problem of rising costs and the tragedy of the anti-commons caused by an increase in the registration of patents in medical research and development. As an answer to this, I presented the notion of an open-access health commons for research in which information can be shared freely. Another example I described was a model of community health centers that can be understood as a commons. Lastly, I discussed education as a commons. With reference to the problem of the enclosure of scientific information through private academic journals, I again propagated a model of an open-access information commons. In relation to schools and schooling I emphasized the democratic participation in education policymaking and the actual governing of schools. Furthermore, I discussed the importance of ecological and democratic principles in schooling, both in relation to teaching content and the organization of learning processes. Importantly, this would imply the in-

dividual and collective self-organization of learning in relation with one's concrete environment. In most general terms, I conclude that the state should not simply provide commons, but rather support the co-creation and maintenance thereof.

After having fleshed out the difference between public goods and commons, I then turn to some final questions of the state-commons relationship in a non-ideal world. Firstly, it is important to recognize that, in a non-ideal world, possibilities to democratically participate in the processes of commoning are not necessarily given. It can also be expected that powerful social actors resist these practices, because they largely limit their appropriation possibilities and might even transform some of their resources back into commons. Due to the power of such actors, they are often able to influence politicians and politics, ultimately illegitimately utilizing the state monopoly to protect their private interests. Considering such illegitimate social arrangements, it can be expected that both fewer common resources are provided to citizens and that democratic participation is limited. In such cases, I argue that it is necessary to widen our understanding of democratic participation. This can include, for example, practices of confrontation. Confrontation understood as social protest can provide people with a means to criticize injustices and illegitimate social arrangements through collective action. When politicians do not hear these voices, another strategy that is practiced is that of 'reclaiming the commons' in which privatized resources are (re-)appropriated, either on the supposition that they were originally held in common or because it is said that they ought to be held in common. Besides confrontation, another strategy of dealing with elite resistance and state oppression is through 'interstitial' commoning. Here, people actively create commons in the cracks of existing social arrangements by pooling resources and collectively organizing common goods and services for the satisfaction of their needs and desires.

Market commons

Finally, in the last step of our investigation I examined the relationship between the market and commons. Despite my rather thorough-going critique of open and competitive markets, in this chapter I asked whether the institution of the market could be organized in a different manner. The reason for this is that I believe that the basic principle of contractual exchange of goods and services is a very practical social institution. The question therefore is whether we can have democratically regulated exchange-based markets without having the self-regulation of supply and demand through competitive prices as the dominant form of social organization. Interestingly, a quick review of commons literature on markets shows that many authors criticize the market and defend democratically organized firms, but few deal with this rather important issue. In order to develop an understanding of this problem I approached the topic from an historical perspective. With reference

to Karl Polanyi and Fernand Braudel I argued that markets have existed throughout human history, even if they have often only been on the margins of society. This is not to say that exchange or markets are inherently 'natural' practices or institutions, but rather that an historical perspective might provide us with illustrations of other market arrangements. Importantly, the competitive market developed only slowly from its inception in the 15th century; it has gained importance and influence only since the 18th century. I interpreted this development as a process of opening up socially embedded markets, a process that occurred parallel to the enclosure movements that transferred common fields and forests into private property. In order to comprehend how markets may have been organized before the existence of open and competitive markets, I discussed the role of guilds in medieval markets. Importantly, guilds defined rules and regulations that limited competition and stabilized prices in particular markets; the guilds did this in order to protect themselves from potential economic instabilities and existential threats. Importantly, market institutions were regulated and adjusted in order to satisfy people's 'egotistical' needs and desires. Although it can be questioned to what extent this regulation was truly democratic, it nevertheless was a means of institutionalizing an exchange system yet without allowing market competition and monetary growth to determine economic activities.

After this rather short historical excursion, I then attempted to develop a concept of a social embedded and democratically regulated market, which I call the market commons. The aim is thus to transform the open, common market into a market commons. By defining the market as a commons I argue that we must conceptualize the market within an ecological framework. Here, we must keep in mind the flows of matter and energy that are brought about through monetary exchange. Furthermore, I argued that a market commons must be structured according to the democratic regulation of the people who are significantly affected. Ideally, democratic management of economic institutions provides people with ways to collectively organize their economic activities in order to satisfy their similar yet conflicting needs and desires. In this situation, the concept of wealth would itself be democratically defined, thereby replacing a purely quantitative monetary notion of growth with a plurality of forms of qualitative development. The aim of such arrangements is to enable people to maintain local and regional economic cycles without, however, negating interregional and global exchanges. In this sense, the democratic management of the market commons transforms the overarching and transcendent rules and regulations of an open competitive market into decentralized socio-ecological niches, in which the default rules of the institutional framework foster cooperation, fairness and the sustainable reproduction of socio-ecological systems. Acknowledging the problems of uneven development and regional disparities, such a decentralized arrangement would, however, necessarily

also require higher-level democratic governing bodies for the codetermination and perpetual adaptation of its overall framework.

After laying out this somewhat idealized model, I then discussed some other concepts and examples of markets in order to flesh out the idea of a market commons. I began this exploration with a corporatist-associative notion of democracy. Viewed in a general way, Paul Hirst's understanding of associationalism comes quite close to my own concept of a market commons in that it emphasizes the widespread democratic inclusion of significantly affected people in the governing practices it describes. Similarly, Wolfgang Streeck and Philippe Schmitter discuss the notion of corporatist-associative organizations that aim to overcome the prisoner's dilemma in competitive markets through processes of negotiation between conflicting parties. Put somewhat differently, a market commons enables people to complement *ex post* individual decision-making in the market with *ex ante* collective decision-making *about* the market. With Axel Honneth, I described this as a "discursive flexibilization" of market mechanisms, in which other non-monetary values can be expressed and integrated into the evaluation of resources, goods and services. More generally, I grasped this as a re-embedding and decommodification of economic goods and activities.

In general, this notion of corporatist-associative democracy can be interpreted as a transformation of the competitive, liberal market into a socially embedded, co-ordinated market. As Hall and Soskice argue in their *Varieties of Capitalism* (2004), a classical example of such coordinated market is the labor market and, more specifically, the production of skills through a vocational education and training (VET) system. VET was interesting to me insofar as it exemplifies concrete corporatist 'intermediary' institutions between the market and the state that possess legal authority to define, adapt and enforce its own rules and regulations. Importantly, VET is a governance system that was historically developed in order to mitigate employee poaching and overcome the tragedy of skill degradation that results from competitive markets. Yet despite these similarities to a market commons, there do exist fundamental differences between corporatist arrangements and existing VET systems. A major problem in existing VET systems is their focus on the needs of 'the economy', that is firms, and not on the needs and desires of the wider public, due to their limited democratic inclusion, on the one hand, and the structuring principles of the wider competitive market in which they are enmeshed, on the other.

For this reason, I then turned to another example of what a market commons could look like: the social and solidarity economy. The social and solidarity economy aims to organize market arrangements according to the principles of fairness, ecological sustainability and democratic self-government. A central feature of its institutional arrangements is the satisfaction of basic needs. Classical examples of the social and solidarity economy are fair trade and organic farming networks,

community development organizations and socio-ecological investment funds. In contrast to the notion of market socialism, in which firms are democratically run in a competitive market setting, here, the isolation paradox is overcome through negotiated cooperation between producers and consumers. Other, diverse stakeholders are also integrated into the governance schemes thereby creating arenas for conflict management and collective action. Importantly, the governing bodies of these market arrangements often have the right to collectively codetermine the reinvestment strategies that firms may pursue, thereby democratizing the flow of capital. As we remember from our original discussion of the state-market relationship, the private control over capital is a central cause of the structural constraints on democratic government. An inclusive, democratic governance structure for such economic activities provides the institutional framework that can foster principles of guardianship towards the wider community and ecological systems.

My last example of a market commons is what can generally be called community modes of production. The most prevalent type of this is community-supported agriculture (CSA), which can be understood as a practical response to the diverse and severely negative effects of open and competitive markets in agriculture. CSA can generally be understood as a 'food commons' that aims to re-appropriate the control over one's local food system. A central feature of CSAs is that consumers normally subscribe to a weekly ration of food, which finances the enterprise prior to production processes. This small change in the payment structure frees the producers from having to sell their goods 'on the market' and thereby enables them to plan the production process in accordance to the needs of the members of the association. Importantly, this interesting 'trick' suspends the coercive market mechanisms that force one to perpetually produce more and more goods for less and less money. Furthermore, the payment in advance leads to a socialization of the entrepreneurial risks between all the members of the group. Acknowledging that such organizations might not be affordable to everyone, some CSAs have even institutionalized 'offer rounds' in which the members pay for their subscription according to their abilities. These offer rounds provide a somewhat new interpretation of monetary exchange that replaces competitive prices with practices of gift giving. Furthermore, the opportunities often provided for CSA members to participate in the production process not only decrease the costs of the subscriptions but also demonetize the value of the goods being produced and consumed. All in all, production and consumption become social activities that are not organized simply according to efficiency gains, but rather according to shared notions of a convivial, good life. Even though it must be recognized that this model cannot be used for all economic activities, it can nevertheless be applied to many other goods and services.

Now, in my very last section I will bring my paper to a close with a short recapitulation of the defense of market commons against possible criticisms. A first crit-

icism that might be raised is that a democratic market commons limits and eradicates market choice. Here, it must be emphasized that choice is not eradicated, because the buying of goods 'on the market' (or in the supermarket) still remains. Instead, a market commons aims to alter the institutional framework of the market and those of its principles that structure the choice of products. Furthermore, the democratic governance of these institutions provides people with the abilities to codetermine these arrangements according to their shared and conflicting needs and desires. Lastly, in some cases feedback loops exist in which consumers can influence the creation of products before they are even produced. From an ecological perspective, this *ex ante* choice and codetermination is of great importance because it coordinates supply and demand through democratic deliberation and negotiation processes, ultimately replacing the invisible hand of the competitive market with the transparent and democratic self-determination of people.

A second criticism is that economic affairs are too complex to be democratically regulated. I argue that this widespread belief is nothing other than a theistic argument that aims to immunize economic activities from democratization. The question is not necessarily if we can, but rather if we should (attempt to) break up the complexity into more transparent and manageable units. Nevertheless, it is important to make a distinction here between democratic institutions in general and the democratic planning of economic institutions and activities in particular. The mere fact that the institutional framework is democratic does not imply that all activities will be planned in advance. Instead, it connotes that the institutional framework can be perpetually adapted to the changing socio-ecological conditions. While prices can be democratically codetermined, the *ex post* choice in the market is individually and 'spontaneously' chosen – often in reference to these prices. Beyond this, however, democratic economic institutions can also provide producers and consumers with opportunities to coordinate their economic activities in overlapping networks. In this sense, democratic planning must not occur in a uniform, top-down manner, but can occur in decentralized organizations that are created through the free association of consumers and producers.

A third criticism that is often heard in these debates is that democratic governance of economic activities is not efficient. This is another knock-down argument that aims to silence all challenges to the competitive market. As we have seen from our extensive discussion of the open and competitive market, this institutional arrangement might be efficient in generating wealth for the few but not at maintaining sustainable livelihoods for the many. In this sense, the democratic management of economic activities is more efficient in two ways. As just mentioned, democratic governance can, firstly, increase the *ex ante* deliberation over what shall be produced, thereby short-circuiting the rather energy-intensive, time-consuming and, thus, costly feedback loop of markets that are based on purchasing choices. Secondly, democratic governance can allow people to codetermine their economic in-

stitutions and activities according to non-monetary values that competitive prices and regular commodities cannot take into account. In this sense, we can conclude that democratic economic governance is significantly more efficient in satisfying people's diverse and rich needs than one-dimensional competitive markets.

A fourth criticism is that people do not have the time for or interest in such time-consuming commoning activities. But time is used for a plethora of activities. The question of time is therefore more a question of priorities in the valuation of these activities. This leads us to the actual key question: will people desire to partake in such democratic activities of economic governance? This is a question that theory cannot answer. But assuming that people are reflexive, sentient beings that aim to solve problems, it can be assumed that they will take interest in commoning as an answer to the various socio-economic, ecological and political challenges that they face.

Last but not least, market commons will most likely be criticized because it is assumed that they cannot be scaled up. Here, we are dealing with the general problem of globalization. If we interpret globalization as a unified entity, it will be a difficult nut to crack. But fortunately, globalization can be broken down into existing commodity chains and real, interdependent relationships. While some or most of my examples might have appeared to focus on the local, regional and national, this is because it is in the local that the global social relations are anchored. The global and the local are interwoven. Taking democratic control over one's local economy in no way negates the possibility of communicating and collaborating with people on the other side of the world. When we understand the market as a *glocal* commons, we can aim to provide people with the rights and capabilities they need to reclaim, codetermine and adapt their institutional frameworks on various scales in order to satisfy their needs and maintain their livelihoods within the changing ecological systems that they inhabit.

Literature

- Acemoglu, Daron, and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. Cambridge: Cambridge University Press.
- . 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. London: Profile Books.
- Ackerman, Bruce, and Anne Alstott. 1999. *The Stakeholder Society*. New Haven: Yale University Press.
- Alexander, Gregory S., and Eduardo M. Penalver. 2009. “Properties of Community.” *Theoretical Inquiries in Law* 10 (1): 127–160.
- Aligica, Paul Dragos, and Peter J. Boettke. 2009. “Postscript: Rethinking Institutional Analysis and Development. Dialogues with Vincent and Elinor Ostrom.” In *Challenging Institutional Analysis and Development: The Bloomington School*, 142–59. New York: Routledge.
- Allen, Barbara, and Vincent Ostrom. 2008. “Constitutional Choice and Constitutional Development.” In *The Political Theory of a Compound Republic: Designing the American Experiment*. Third edition, 133–80. New York: Lexington Books.
- Alperovitz, Gar. 2012. “The Pluralist Commonwealth and Property-Owning Democracy.” In *Property-Owning Democracy: Rawls and Beyond*, edited by Martin O’Neill and Thad Williamson, 266–86. Malden, MA: Wiley-Blackwell.
- Amanatidou, Effie, Giorgos Gritzas, and Karolos Iosif Kavoulakos. 2015. “Time Banks, Co-Production and Foresight: Intertwined towards an Alternative Future.” *Foresight: The Journal of Futures Studies, Strategic Thinking and Policy* 17 (4): 308–31.
- Amir-ud-Din, Rafi, and Asad Zaman. 2016. “Failures of the ‘Invisible Hand’.” *Forum for Social Economics* 45 (1): 41–60.
- Anderson, Elizabeth. 1993. *Value in Ethics and Economics*. Cambridge, MA: Harvard University Press.
- Apple, Michael. 1996. *Cultural Politics and Education*. New York: Teachers College Press.
- . 2000. *Official Knowledge: Democratic Education in a Conservative Age*. New York: Routledge.

- . 2006. *Educating the “Right” Way: Markets, Standards, God, and Inequality*. New York: Routledge.
- Arnhart, Larry. 2015. “The Evolution of Darwinian Liberalism.” *Journal of Bioeconomics* 17 (1): 3–15.
- Arrow, Kenneth, and Gerard Debreu. 1954. “Existence of an Equilibrium for a Competitive Economy.” *Econometrica* 22 (3): 265–90.
- Arrow, Kenneth, and F. H. Hahn. 1971. *General Competitive Analysis*. San Francisco: Holden-Day.
- Arvind, Gaysu R. 2009. “Local Democracy, Rural Community, and Participatory School Governance.” *Journal of Research in Rural Education* 24 (2): 1–13.
- Assies, Willem. 2003. “David versus Goliath in Cochabamba: Water Rights, Neoliberalism, and the Revival of Social Protest in Bolivia.” *Latin American Perspectives* 30 (3): 14–36.
- Austin, J. L. 2009. *How to Do Things with Words*. Oxford: Oxford University Press. Original edition, 1962.
- Azzellini, Dario. 2016. “Labour as a Commons: The Example of Worker-Recuperated Companies.” *Critical Sociology*, August, 1–14.
- Babie, Paul. 2016. “Magna Carta and the Forest Charter: Two Stories of Property.” *North Carolina Law Review* 94 (5): 1431–74.
- Baier, Andrea, Tom Hansing, Christa Müller, and Karin Werner. 2016. *Die Welt Reparieren: Open Source and Selbermachen als Postkapitalistische Praxis*. Bielefeld: transcript Verlag.
- Baier, Andrea, Christa Müller, and Karin Werner. 2013. *Stadt der Commonisten: Neue urbane Räume des Do It Yourself*. Bielefeld: transcript Verlag.
- Bailey, Saki, and Ugo Mattei. 2013. “Social Movements as Constituent Power.” *Indiana Journal of Global Legal Studies* 20 (2): 965–1013.
- Bak, Per. 1997. *How Nature Works*. Oxford: Oxford University Press.
- Balázs, Bálint, György Patakia, and Orsolya Lazányia. 2013. “Prospects for the Future: Community Supported Agriculture in Hungary.” *Futures* 83: 100–111.
- Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press.
- Barbar, Benjamin. 1984. *Strong Democracy: Participatory Politics for a New Age*. Berkeley: University of California Press.
- Barbieri, Marcello. 2003. *The Organic Code: An Introduction to Semantic Biology*. Cambridge: Cambridge University Press.
- . 2015. *Code Biology: A New Science of Life*. Cham: Springer.
- Barnes, Peter. 2006. *Capitalism 3.0: A Guide to Reclaiming the Commons*. San Francisco: Berret-Koehler Publishers.
- Baron-Cohen, Simon. 2011. *The Science of Evil: On Empathy and the Origins of Cruelty*. New York: Basic Books.
- Bateson, Gregory. 1979. *Mind and Nature: A Necessary Unity*. New York: E. P. Dutton.

- Batson, C. Daniel. 2011. *Altruism in Humans*. Oxford: Oxford University Press.
- Bellamy, Richard, and Uta Staiger, eds. 2013. *The Eurozone Crisis and the Democratic Deficit*. London: UCL European Institute.
- Bello, Walden. 2009. *The Food Wars*. London: Verso.
- Benkler, Yochai. 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven: Yale University Press.
- . 2013. "Commons and Growth: The Essential Role of Open Commons in Market Economies." *The University of Chicago Law Review* 80 (3): 1499–1555.
- Benkler, Yochai, and Helen Nissenbaum. 2006. "Commons-Based Peer Production and Virtue." *The Journal of Political Philosophy* 14 (4): 394–419.
- Bennett, Jane. 2001. *The Enchantment of Modern Life: Attachments, Crossings, and Ethics*. Princeton: Princeton University Press.
- Bentham, Justin, Andrew Bowman, Marta de la Cuesta, Ewald Engelen, Ismail Ertürk, Peter Folkman, Julie Froud, et al. 2013. "Manifesto for the Foundational Economy." CRESC Working Paper. <http://www.cresc.ac.uk/publications/manifesto-for-the-foundationaleconomy> (accessed 17 April 2017)
- Berg, Lawrence D. 2012. "Knowledge Enclosure, Accumulation by Dispossession, and the Academic Publishing Industry." *Political Geography* 31 (5): 260–62.
- Bergstrom, Theodore C. 2001. "Free Labor for Costly Journals?" *Journal of Economic Perspectives* 15 (3): 183–98.
- Berlin, Isaiah. 2008. "Two Concepts of Liberty." In *Liberty*, edited by Henry Hardy, 166–217. Oxford: Oxford University Press.
- . 2013. *The Crooked Timber of Humanity: Chapters in the History of Ideas* edited by Henry Hardy. Second edition. Princeton: Princeton University Press.
- Berlinski, Claire. 2008. *"There Is No Alternative": Why Margaret Thatcher Matters*. New York: Basic Books.
- Bernstein, Basil. 1973. *Class, Codes and Control*. Hertfordshire: Paladin.
- Binswanger, Hans Christoph. 2013. *The Growth Spiral: Money, Energy, and Imagination in the Dynamics of the Market Process*. Berlin: Springer.
- Björk, Bo-Christer. 2017. "Scholarly Journal Publishing in Transition: from Restricted to Open Access." *Electronic Markets* 27 (2): 101–9.
- Blackburn, Robin. 2007. "Economic Democracy: Meaningful, Desirable, Feasible?" *Daedalus* 136 (3): 36–45.
- Blackstone, William. 2016. *Commentaries on the Laws of England. Book II: Of the Rights of Things*, edited by Wilfrid Prest. Oxford: Oxford University Press.
- Blickle, Peter. 2000. *Kommunalismus: Skizzen Einer Gesellschaftlichen Organisationsform*. Vol. 1 and 2. München: Oldenbourg Verlag.
- Bloemmen, Marjolijn, Roxana Bobulescu, Nhu Tuyen Le, and Claudio Vitari. 2015. "Microeconomic Degrowth: The Case of Community Supported Agriculture." *Ecological Economics* 112: 110–15.

- Boer, Harry de, Jürgen Enders, and Uwe Schimank. 2007. "On the Way towards New Public Management? The Governance of University Systems in England, the Netherlands, Austria, and Germany." In *New Forms of Governance in Research Organizations: Disciplinary Approaches, Interfaces and Integration*, edited by Dorothea Jansen, 137–52. Dordrecht: Springer.
- Boix, Charles. 2011. "Democracy, Development, and the International System." *American Political Science Review* 104 (4): 809–28.
- Boix, Charles, and Susan C. Stokes. 2003. "Endogenous Democratization." *World Politics* 55: 517–49.
- Bolli, Thomas, and Frank Somogyi. 2010. "Do Competitively Acquired Funds Induce Universities to Increase Productivity?" *Research Policy* 40 (1): 136–47.
- Bollier, David. 2013. "Interview with David Bollier: Viewing Education as a Commons." *Education Week*, interview by Anthony Cody. http://blogs.edweek.org/teachers/living-in-dialogue/2013/03/question_1_can_you_explain.html (accessed 30 August 2020).
- . 2014. *Think Like a Commoner: A Short Introduction to the Life of the Commons*. Gabriola, BC: New Society Publishers.
- Bollier, David, and Silke Helfrich, eds. 2015. *Patterns of Commoning*. Amherst, MA: Levellers Press.
- . 2019. *Free, Fair and Alive: The Insurgent Power of the Commons*. Gabriola, BC: New Society Publishers.
- Bollier, David, Silke Helfrich, and Commons Strategy Group, eds. 2012. *The Wealth of the Commons: A World Beyond Market and State*. Amherst, MA: Levellers Press.
- Boltanski, Luc, and Eve Chiapello. 2007. *The New Spirit of Capitalism*. Translated by Gregory Elliott. London: Verso.
- Bourdieu, Pierre, and Jean-Claude Passeron. 1990. *Reproduction in Education, Society and Culture*. London: SAGE Publications.
- Bowles, Samuel, and Herbert Gintis. 2011. *A Cooperative Species: Human Reciprocity and Its Evolution*. Princeton: Princeton University Press.
- Boyle, James. 2003. "The Second Enclosure Movement and the Construction of the Public Domain." *Law and Contemporary Problems* 66 (1/2): 33–74.
- Boyte, Harry C., Stephen Elkin, Peter Levine, Jane Mansbridge, Elinor Ostrom, Karol Soltan, and Rogers Smith. 2014. "The New Civic Politics: Civic Theory and Practice for the Future." *The Good Society* 23 (2): 206–11.
- Brand, Ulrich, and Markus Wissen. 2013. "Crisis and Continuity of Capitalist Society-Nature Relationships: The Imperial Mode of Living and the Limits to Environmental Governance." *Review of International Political Economy* 20 (4): 687–711.
- . 2018. *The Limits to Capitalist Nature: Theorizing and Overcoming the Imperial Mode of Living*. London: Rowman and Littlefield.

- Bratman, Michael E. 1999. *Faces of Intention: Selected Essays on Intention and Agency*. Cambridge: Cambridge University Press.
- Braudel, Fernand. 1986. *Die Dynamik des Kapitalismus*. Translated by Peter Schöttler. Stuttgart: Klett-Cotta.
- Bregman, Rutger. 2020. *Humankind: A Hopeful History*. Translated by Elizabeth Manton and Erica Moore. London: Bloomsbury Publishing.
- Brehony, Kevin J., and Rosemary Deem. 1995. "School Governing Bodies: Reshaping Education in Their Own Image?" *The Sociological Review* 43 (1): 79–99.
- Brettschneider, Corey. 2012. "Public Justification and the Right to Private Property." In *Property-Owning Democracy: Rawls and Beyond*, edited by Martin O'Neill and Thad Williamson, 53–74. Malden, MA: Wiley-Blackwell.
- Brownlee, Shannon. 2007. *Overtreated: Why Too Much Medicine Is Making Us Sicker and Poorer*. New York: Bloomsbury.
- Buchanan, James M. 1965. "An Economic Theory of Club Goods." *Economica* 32 (125): 1–14.
- Buchstein, Hubertus. 2009. *Demokratie und Lotterie: Das Los als politisches Entscheidungsinstrument von der Antike bis zur EU*. Frankfurt am Main: Campus Verlag.
- Bühlmann, Marc, and Hans-Peter Kriesi. 2013. "Models for Democracy." In *Democracy in the Age of Globalization and Mediatization*, edited by Hans-Peter Kriesi, Sandra Lavenex, Frank Esser, Jörg Matthes, Marc Bühlmann, and Daniel Bochsler, 44–68. Basingstoke: Palgrave Macmillan.
- Butos, William N. 1985. "Hayek and General Equilibrium Theory." *Southern Economic Journal* 52 (2): 332–43.
- Campbell, Neil A., and Jane B. Reece. 2002. *Biology*. Sixth edition. World Student Series. San Francisco: Addison Wesley.
- Campbell, Neil A., Jane B. Reece, Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, and Robert B. Jackson. 2015. *Biology: A Global Approach*. Tenth edition. London: Pearson.
- Capra, Fritjof. 1996. *The Web of Life: A New Scientific Understanding of Living Systems*. New York: Anchor Books.
- Capra, Fritjof, and Pier Luigi Luisi. 2014. *The Systems View of Life: A Unifying Vision*. Cambridge: Cambridge University Press.
- Capra, Fritjof, and Ugo Mattei. 2015. *The Ecology of Law: Toward a Legal System in Tune with Nature and Community*. Oakland, CA: Berrett-Koehler.
- Carroll, Thomas, David Ciscil, and Roger Chisholm. 1979. "The Market as a Commons: An Unconventional View of Property Rights." *Journal of Economic Issues* 8 (2): 605–28.
- Castel, Robert. 2003. *From Manual Workers to Wage Laborers: Transformation of the Social Question*. New Brunswick, NJ: Transaction Publishers.
- Castoriadis, Cornelius. 1987. *The Imaginary Institution of Society*. Translated by Kathleen Blamey. Cambridge, MA: The MIT Press.

- Chang, Ha-Joon. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*. London: Anthem Press.
- Cheneval, Francis. 2011. *The Government of the People: On the Idea and Principles of Multilateral Democracy*. New York: Palgrave Macmillan.
- . 2015. *Demokratiethorien Zur Einführung*. Hamburg: Junius Verlag.
- Cheneval, Francis, and Christoph Laszlo. 2013. "Property-Owning Democracy." *Analyse und Kritik: Zeitschrift Für Sozialtheorie* 35 (1).
- Cheneval, Francis (Rapporteur). 2008. "Empowering the Poor Through Property Rights." In *Making the Law Work for Everyone*. Vol. II, edited by Commission on Legal Empowerment of the Poor (UNDP), 63–110. New York: UNDP.
- Christiano, Thomas. 2008. *The Constitution of Equality: Democratic Authority and Its Limits*. Oxford: Oxford University Press.
- . 2010. "The Uneasy Relationship between Democracy and Capital." *Social Philosophy and Policy* 27 (1): 195–217.
- Coase, Robert H. 1937. "The Nature of the Firm." *Economica* 4 (16): 386–405.
- Cohen, G. A. 1995. *Self-Ownership, Freedom, and Equality*. Cambridge: Cambridge University Press.
- . 1979. "The Labor Theory of Value and the Concept of Exploitation." *Philosophy and Public Affairs* 8 (4): 338–60.
- . 2011. "Capitalism, Freedom, and the Proletariat." In *On the Currency of Egalitarian Justice, and Other Essays in Political Philosophy*, edited by Michael Otsuka, 147–65. Princeton: Princeton University Press.
- Cohen, Joshua. 1989. "The Economic Basis of Deliberative Democracy." *Social Philosophy and Policy* 6 (2): 25–50.
- Cohen, Joshua, and Joel Rogers. 1983. *On Democracy: Towards a Transformation of American Society*. New York: Penguin Books.
- . 1995. "Secondary Associations and Democratic Governance." In *Associations and Democracy. The Real Utopias Project*, Vol I, edited by Erik Olin Wright, 7–98. London: Verso.
- Collins, Randall. 2008. *Violence: A Micro-Sociological Theory*. Princeton: Princeton University Press.
- Collyer, Fran, and Kevin White. 2011. "The Privatisation of Medicare and the National Health Service, and the Global Marketisation of Healthcare Systems." *Health Sociology Review* 20 (3): 238–44.
- Conaty, Pat, and David Bollier. 2014. "Toward an Open Co-Operativism: A New Social Economy Based on Open Platforms, Co-Operative Models and the Commons." August 27-28, 2014. Berlin, Germany: Commons Strategy Group. http://bollier.org/sites/default/files/misc-file-upload/files/Open%20Co-operativism%20Report%2C%20January%202015_o.pdf (accessed 30 April 2017).

- Cone, Cynthia Abbott, and Andrea Myhre. 2000. "Community-Supported Agriculture: A Sustainable Alternative to Industrial Agriculture?" *Human Organization* 59 (2): 187–97.
- Cornes, Richard, and Todd Sandler. 1999. *The Theory of Externalities, Public Goods, and Club Goods*. Cambridge: Cambridge University Press.
- Cowen, Tylor. 1985. "Public Goods Definitions and Their Institutional Context: A Critique of Public Goods." *Review of Social Economy* 43 (1): 53–63.
- Crouch, Colin. 2009. "Privatized Keynesianism: An Unacknowledged Policy Regime." *The British Journal of Politics and International Relations* 11 (3): 382–99.
- Dahl, Robert. 1985. *A Preface to Economic Democracy*. Cambridge: Polity Press.
- . 1998. *On Democracy*. New Haven: Yale University Press.
- Damasio, Antonio. 2003. *Looking for Spinoza: Joy, Sorrow, and the Feeling of the Brain*. London: William Heinemann.
- Darwin, Charles. 2004. *The Descent of Man, and Selection in Relation to Sex*. London: Penguin Books.
- Dawkins, Richard. 2006. *The Selfish Gene*. Oxford: Oxford University Press.
- De Angelis, Massimo. 2007. *The Beginning of History: Value Struggles and Global Capital*. London: Pluto Press.
- De Moor, Tine. 2008. "The Silent Revolution: A New Perspective on the Emergence of Commons, Guilds, and Other Forms of Corporate Collective Action in Western Europe." *The International Review of Social History* 53 (Supplement 16): 179–212.
- Demsetz, Harold. 1967. "Toward a Theory of Property Rights." *The American Economic Review* 57 (2): 347–59.
- . 2002. "Toward a Theory of Property Rights II: The Competition Between Private and Collective Ownership." *The Journal of Legal Studies* 31 (S2): S653–72.
- Des Chene, Dennis. 2001. *Spirits and Clocks: Machine and Organism in Descartes*. Ithica: Cornell University Press.
- Dewey, John. 1929. *Experience and Nature*. London: Allen and Unwin.
- . 1930. *The Quest for Certainty: A Study of the Relation of Knowledge and Action*. London: Allen and Unwin.
- . 1946. *The Public and Its Problems: An Essay in Political Inquiry*. Chicago: Gateway Books.
- . 2008. "Democracy and Education: An Introduction to the Philosophy of Education." In *The Middle Works: 1899–1924*, Vol. 9, edited by J.A. Boydston, P. Baysinger, and P. Levine. Carbondale: Southern Illinois University Press.
- Diamond, Stanley. 2007. *In Search of the Primitive: A Critique of Civilization*. London: Transaction Publishers.
- Dietz, Thomas, Elinor Ostrom, and Paul C. Stern. 2003. "The Struggle to Govern the Commons." *Science* 302 (5652): 1907–12.
- Dolnick, Edward. 2011. *The Clockwork Universe: Isaac Newton, the Royal Society, and the Birth of the Modern World*. New York: HarperCollins.

- Dorf, Michael C., and Charles F. Sabel. 1998. "A Constitution of Democratic Experimentalism." *Columbia Law Review* 98 (2): 267–473.
- Dowlen, Oliver. 2008. *The Political Potential of Sortition: A Study of the Random Selection of Citizens for Public Office*. Exeter: Imprint Academic.
- Driessen, Travis. 2008. "Collective Management Strategies and Elite Resistance in Cochabamba, Bolivia." *Development* 51: 89–95.
- Dryer-Witherford, Nick. 2007. "Commonism." In *Turbulence Book: What Would It Mean to Win?*, edited by Turbulence Collective, 81–87. http://turbulence.org.uk/wp-content/uploads/2008/07/turbulence_jrnl.pdf (accessed 14 April 2017).
- Dryzek, John S. 1987. *Rational Ecology: Environmental and Political Economy*. Oxford: Blackwell.
- Duflot, Jean. 2011. *Orangen fallen nicht vom Himmel: Der Sklavenaufstand in Rosarno*. Basel: Europäisches Bürgerforum.
- Dupuy, Jean-Pierre. 2013. *The Mark of the Sacred*. Translated by M. B. DeBevoise. Stanford, CA: Stanford University Press.
- . 2014. *Economy and the Future*. Translated by M. B. DeBevoise. East Lansing, MI: Michigan State University Press.
- Dworkin, Ronald. 1991. "Liberalism." In *Public and Private Morality*, edited by Stuart Hampshire, 113–43. Cambridge: Cambridge University Press.
- Dyttrich, Bettina, and Giorgio Höpli. 2015. *Gemeinsam auf dem Acker: Solidarische Landwirtschaft in der Schweiz*. Zurich: Rotpunkt.
- Eckersley, Robyn. 1992. *Environmentalism and Political Theory: Towards an Ecocentric Approach*. London: UCL Press.
- Economist, The. 2011. "Of Goats and Headaches: One of the Best Media Businesses Is Also One of the Most Resented." *The Economist* May 26, 2011: <http://www.economist.com/node/18744177> (accessed 29 August 2017).
- Ehrenreich, John. 2016. *Third Wave Capitalism: How Money, Power, and the Pursuit of Self-Interest Have Imperiled the American Dream*. Ithaca: Cornell University Press.
- Ehrlich, Paul. 1968. *The Population Bomb*. New York: Ballantine Books.
- Elson, Diane. 1988. "Market Socialism or Socialization of the Market?" *New Left Review* 172 (1): 3–44.
- Engel, Christoph. 2002. "Die Soziale Funktion des Eigentums." In *Bericht zur Lage des Eigentums*, edited by Thomas von Danwitz, Otto Depenheuer, and Christoph Engel, 9–107. Berlin: Springer.
- Epstein, Richard A. 1994. "On the Optimal Mix of Private and Common Property." *Social Philosophy and Policy* 11 (2): 17–41.
- . 1997. *Mortal Peril: Our Inalienable Right to Health Care?* Reading, MA: Addison-Wesley.
- . 2011a. *Design for Liberty: Private Property, Public Administration, and the Rule of Law*. Cambridge, MA: Harvard University Press.

- . 2011b. "Direct Democracy: Government of the People, by the People, and for the People." *Harvard Journal of Law and Public Policy* 34 (3): 819–26.
- Esping-Andersen, Gosta. 1990. *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.
- Euler, Johannes. 2016. "Commons-Creating Society: On the Radical German Commons Discourse." *Review of Radical Political Economics* 48 (1): 93–110.
- . 2018. "Conceptualizing the Commons: Moving Beyond the Goods-Based Definition by Introducing the Social Practices of Commoning as Vital Determinant." *Ecological Economics* 143: 10–16.
- . 2020. *Wasser als Gemeinsames: Potenziale und Probleme von Commoning bei Konflikten der Wasserbewirtschaftung*. Bielefeld: transcript Verlag.
- Evans, Claire, and Dean Stroud. 2016. "Greening Steel Work: Varieties of Capitalism and the 'greening' of Skills." *Journal of Education and Work* 29 (3): 263–83.
- Exner, Andreas, and Brigitte Kratzwald. 2012. *Solidarische Ökonomie und Commons: Eine Einführung*. Wien: mandelbaum.
- Federici, Silvia. 2009. *Caliban and the Witch: Women, the Body and Primitive Accumulation*. Brooklyn, NY: Autonomedia.
- Fehr, Ernst, and Klaus Schmidt. 2006. "The Economics of Fairness, Reciprocity and Altruism: Experimental Evidence and New Theories." In *Handbook of the Economics of Giving, Altruism and Reciprocity*, edited by Serge-Christophe Kolm and Jean Mercier Ythier, 1:615–91. Elsevier.
- Flora, Peter, and Arnold J. Heidenheimer, eds. 2009. *The Development of Welfare States in Europe and America*. New Brunswick: Transaction Publishers.
- Foucault, Michel. 2002. *The Order of Things: An Archeology of the Human Sciences*. London: Routledge.
- Freedman, Matthew, and Tamara McGavock. 2015. "Low-Income Housing Development, Poverty Concentration, and Neighborhood Inequality." *Journal of Policy Analysis and Management* 34 (4): 805–34.
- Freeman, Samuel. 2013. "Property-Owning Democracy and the Difference Principle." *Analyse und Kritik: Zeitschrift für Sozialtheorie* 35 (1): 9–36.
- Freire, Paulo. 2012. *Pedagogy of the Oppressed*. Translated by Myra Bergman Ramos. New York: Bloomsbury.
- Freud, Sigmund. 1962. *Civilization and Its Discontents*. Translated by James Strachey. New York: W. W. Norton and Company.
- Friedman, Milton. 1955. "The Role of Government in Education." In *Economics and the Public Interest: Essays Written in Honor of Eugene Ewald Agger*, edited by Robert A. Solo. New Brunswick: Rutgers University Press.
- . 1975. *There's No Such Thing as a Free Lunch*. La Salle, IL: Open Court.
- . 2002. *Capitalism and Freedom*. 40th Anniversary. Chicago: University of Chicago Press.

- Friedman, Milton, and Rose Friedman. 1980. *Free to Choose*. London: Secker and Warburg.
- Friedmann, Harriet. 1993. "The Political Economy of Food: A Global Crisis." *New Left Review* I (197): 29–57.
- Fromm, Erich. 1997. *To Have or To Be?* New York: Continuum.
- Fukuyama, Francis. 1992. *The End of History and the Last Man*. New York: Free Press.
- Fung, Archon. 2003a. "Associations and Democracy: Between Theories, Hopes, and Realities." *Annual Review of Sociology* 29: 515–39.
- . 2003b. "Deliberative Democracy, Chicago Style: Grass-Roots Governance in Policing and Public Education." In *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance*, edited by Archon Fung and Erik Olin Wright, 111–43. London: Verso.
- Fung, Archon, and Erik Olin Wright. 2003. *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance. The Real Utopias Project*, Vol. IV. London: Verso.
- Garfield, Jay L. 1994. "Dependent Arising and the Emptiness of Emptiness: Why Did Nāgārjuna Start with Causation?" *Philosophy East and West* 44 (2): 219–50.
- Gaus, Gerald. 2003. "Liberal Neutrality: A Compelling and Radical Principle." In *Perfection and Neutrality: Essays in Liberal Theory*, edited by George Klosko and Steven Wall, 191–218. Lanham, MD: Rowman and Littlefield.
- Gerbas, Jennifer, and Mildred E. Warner. 2007. "Privatization, Public Goods, and the Ironic Challenge of Free Trade Agreements." *Administration and Society* 39 (2): 127–49.
- Geyman, John R. 2004. *The Corporate Transformation of Health Care: Can the Public Interest Still Be Served?* New York: Springer.
- Gherghina, Serghina, Sergiu Mişcoiu, and Sorina Soare, eds. 2013. *Contemporary Populism: A Controversial Concept and Its Diverse Forms*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Gilbert, Scott F., Jan Sapp, and Alfred I. Tauber. 2012. "A Symbiotic View of Life: We Have Never Been Individuals." *The Quarterly Review of Biology* 87 (4): 325–41.
- Gillies, Robyn M. 2007. *Cooperative Learning: Integrating Theory and Practice*. Los Angeles: SAGE Publications.
- Glackin, Shane Nicholas. 2014. "Back to Bundles: Deflating Property Rights, Again." *Legal Theory* 20: 1–24.
- Glare, P.G.W., ed. 2012. *Oxford Latin Dictionary*. Vol. II: M–Z. Oxford: Oxford University Press.
- Glenn, John. 2010. "Global Governance and the Democratic Deficit: Stifling the Voice of the South." *Third World Quarterly* 29 (2): 217–38.
- Goering, John, Ali Kamely, and Todd Richardson. 1997. "Recent Research on Racial Segregation and Poverty Concentration in Public Housing in the United States." *Urban Affairs Review* 32 (5): 723–45.

- Golarz, Raymond, and Marion Golarz. 1995. *The Power of Participation: Improving Schools in a Democratic Society*. Champaign, IL: Research Press.
- Goodin, Robert E. 1996. "Enfranchising the Earth, and Its Alternatives." *Political Studies* 44 (5): 835–49.
- Goodnight, G. Thomas, and David Hingstman. 2013. "The Student Debt Bubble: Neoliberalism, the University, and Income Inequality." *Journal of Cultural Economy* 8 (1): 75–100.
- Goodwin, Brian. 2001. *How the Leopard Changed Its Spots: The Evolution of Complexity*. Princeton: Princeton University Press.
- Gorz, Andre. 1989. *Critique of Economic Reason*. Translated by Gilian Handyside. London: Verso.
- . 2005. *Reclaiming Work: Beyond the Wage-Based Society*. Translated by Chris Turner. Cambridge: Polity Press.
- Gould, Carol. 1990. *Rethinking Democracy: Freedom and Social Cooperation in Politics, Economy, and Society*. Cambridge: Cambridge University Press.
- Gourevitch, Alex. 2013. "Labor Republicanism and the Transformation of Work." *Political Theory* 41 (4): 591–617.
- Grey, Thomas C. 1980. "The Disintegration of Property." *Nomos* 22: 69–85.
- Guédon, Jean-Claude. 2001. In *Oldenburg's Long Shadow: Librarians, Research Scientists, Publishers, and the Control of Scientific Publishing*. Washington, DC: Association of Research Libraries.
- Habermas, Jürgen. 1981. *Theorie des kommunikativen Handelns*. Vols. I and II. Frankfurt am Main: Suhrkamp.
- . 2015. *The Lure of Technocracy*. Cambridge: Polity Press.
- Hall, Peter A., and David Soskice, eds. 2004. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- Hampe, Michael. 2007. *Eine kleine Geschichte des Naturgesetzbegriffs*. Frankfurt am Main: Suhrkamp.
- Hardin, Garrett. 1968. "The Tragedy of the Commons: The Population Problem Has No Technical Solution: It Requires a Fundamental Extension in Morality." *Science* 162 (3859): 1243–48.
- . 1972. *Exploring New Ethics for Survival: The Voyage of the Spaceship Beagle*. New York: Viking Press.
- . 1974. "Commentary: Living on a Lifeboat." *BioScience* 24 (10): 561–68.
- . 1977a. "An Operational Analysis of 'Responsibility.'" In *Managing the Commons*, edited by Garrett Hardin and John Baden, 66–75. New York: W. H. Freeman and Company.
- . 1977b. "What Marx Missed." In *Managing the Commons*, edited by Garrett Hardin and John Baden, 3–7. New York: W. H. Freeman and Company.
- . 1978. "Political Requirements for Preserving Our Common Heritage." In *Wildlife and America: Contributions to an Understanding of American Wildlife and Its*

- Conservation*, edited by Howard P. Brokaw, 310–18. Washington D.C.: Superintendent of documents, U.S. Government Printing Office.
- . 1979. “Human Overpopulation, Survival, and Morality. Interview with Dr. Garrett Hardin.” *Mother Earth News*, May/June 1979. <http://www.motherearthnews.com/Nature-and-Environment/garrett-hardin-human-overpopulation-zmaz79mjzraw> (accessed 24 April 2017).
- . 1993. *Living within Limits: Ecology, Economics, and Population Taboos*. Oxford: Oxford University Press.
- Harrington, Anne. 1996. *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler*. Princeton: Princeton University Press.
- Harvey, David. 1993. “The Nature of Environment: The Dialectics of Social and Environmental Change.” *The Socialist Register* 29: 1–51.
- . 2004. “The ‘New’ Imperialism: Accumulation by Dispossession.” *Socialist Register* 40: 63–87.
- . 2013. *Rebel Cities: From the Right to the City to the Urban Revolution*. London: Verso.
- Hatcher, Richard. 2012. “Democracy and Governance in the Local School System.” *Journal of Educational Administration and History* 44 (1): 21–42.
- Hayek, Friedrich August von. 1980. “The Economic Conditions of Interstate Federalism.” In *Individualism and Economic Order*, edited by Friedrich August von Hayek, 255–72. Chicago: University of Chicago Press.
- . 2007. *The Road to Serfdom: Text and Documents*, edited by Bruce Caldwell. Chicago: The University of Chicago Press.
- . 2013. *Law, Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy*. New York: Routledge.
- Hayes, William. 2007. *The Progressive Education Movement: Is It Still a Factor in Today's Schools?* Lanham, MD: Rowman and Littlefield.
- Heinlein, Robert. 1966. *The Moon Is a Harsh Mistress*. New York: G.P. Putnam's Sons.
- Held, David. 1987. *Models of Democracy*. Cambridge: Polity Press.
- . 1995. *Democracy and the Global Order: From the Modern State to Cosmopolitan Governance*. Stanford, CA: Stanford University Press.
- Helfrich, Silke. 2012a. “Common Goods Don't Simply Exist – They Are Created.” In *The Wealth of the Commons: A World Beyond Market and State*, edited by Silke Helfrich and David Bollier, 61–67. Amherst, MA: Levellers Press.
- . 2012b. “The Logic of the Commons and the Market: A Shorthand Comparison of Their Core Beliefs.” In *The Wealth of the Commons: A World Beyond Market and State*, edited by David Bollier, Silke Helfrich, and Commons Strategy Group. Amherst, MA: Levellers Press.
- Helfrich, Silke, Rainer Kuhlen, Wolfgang Sachs, and Christian Siefkes. 2010. “The Commons: Prosperity by Sharing.” Berlin: Heinrich Böll Stiftung. <https://www.>

- boell.de/sites/default/files/20101029_Commons_Prosperty_by_Shar-ing.pdf (accessed 18 July 2017).
- Heller, Herman. 2015. "Authoritarian Liberalism." *European Law Journal* 21 (3): 295–301.
- Heller, Michael A. 1998. "The Tragedy of the Anticommons: Property in the Transition from Marx to Markets." *Harvard Law Review* 111 (3): 621.
- . 2008. *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*. New York: Basic Books.
- Heller, Michael A., and Rebecca S. Eisenberg. 1998. "Can Patents Deter Innovation? The Anticommons in Biomedical Research." *Science, New Series* 280 (5364): 698–701.
- Henderson, David R. 2014. "TANSTAAFL, There Ain't No Such Thing as a Free Lunch." *Library of Economics and Liberty*, March 3, 2014. <http://www.econlib.org/library/Columns/y2014/Hendersontanstaaf.html> (accessed 17 February 2017).
- Hendrix, Burke A. 2008. *Ownership, Authority, and Self-Determination*. University Park, PA: The Pennsylvania State University Press.
- Hess, Charlotte, and Elinor Ostrom, eds. 2007. *Understanding Knowledge as a Commons: From Theory to Practice*. Cambridge, MA: The MIT Press.
- Hessayon, Ariel. 2008. "Restoring the Garden of Eden in England's Green and Pleasant Land: The Diggers and the Fruits of the Earth." *Journal for the Study of Radicalism* 2 (2): 1–25.
- Heyn, Nik, James McCarthy, Scott Prudham, and Paul Robbins, eds. 2007. *Neoliberal Environments: False Promises and Unnatural Consequences*. London: Routledge.
- Hibbing, John R., and Elizabeth Theiss-Morse. 2004. *Stealth Democracy: America's Beliefs About How Government Should Work*. Cambridge: Cambridge University Press.
- Hilpert, Konrad. 1999. "Rechte der Natur: Zur Problematik der Ausweitung der Menschenrechtsfigur auf die Natur." In *Ethik der Menschenrechte: Streit um die Universalität einer Idee*. Vol. 1, edited by Hans-Richard Reuter, 321–350. Tübingen: Mohr Siebeck.
- Hilty, Reto. 2007. "Copyright Law and Scientific Research." In *Copyright Law: A Handbook of Contemporary Research*, edited by Paul Torremans, 315–54. Cheltenham, UK: Edward Elgar.
- Hirschman, Albert O. 1997. *The Passions and the Interests: Political Arguments for Capitalism before Its Triumph*. Twentieth Anniversary. Princeton, NJ: Princeton University Press.
- Hirst, Paul. 1996. *Associative Democracy: New Forms of Economic and Social Governance*. Cambridge: Polity Press.
- Hobbes, Thomas. 1985. *Leviathan*, edited by C. B. Macpherson. London: Penguin Books.

- Hoffmeyer, Jesper. 1993. *Signs of Meaning in the Universe*. Translated by Barbara J. Haveland. Bloomington: Indiana University Press.
- . 2008. "From Thing to Relation. On Bateson's Bioanthropology." In *A Legacy for Living Systems: Gregory Bateson as Precursor to Biosemiotics*, edited by Jesper Hoffmeyer, 27–44. Luxemburg: Springer.
- Hohfeld, Wesley N. 1913. "Some Fundamental Legal Conceptions as Applied in Judicial Reasoning." *The Yale Law Journal* 23 (1): 16–59.
- Holt, J.C. 1972. "Politics and Property in Early Medieval England." *Past and Present* 57: 3–52.
- Honneth, Axel. 2014. *Freedom's Right: The Social Foundations of Democratic Life*. Translated by Joseph Ganahl. Cambridge: Polity Press.
- Honoré, A.M. 2015. "Ownership." In *Property: Critical Concepts in Law*. Vol. 1, *Defining Property*, edited by Margaret Davies, 109–36. London: Routledge.
- Hosch, William L. 2017. "Conservation Law." In *Encyclopædia Britannica*. <http://academic.eb.com/levels/collegiate/article/conservation-law/25938> (accessed 17 August 2017).
- House, Ernest R. 1998. *Schools for Sale: Why Free Market Policies Won't Improve America's Schools, and What Will*. New York: Teachers College Press.
- Houser, Neil O. 2009. "Ecological Democracy: An Environmental Approach to Citizenship Education." *Theory and Research in Social Education* 37 (2): 192–214.
- Howell, David. 1984. "The Property-Owning Democracy: Prospects and Policies." *Policy Studies Journal* 4 (3): 14–21.
- Hsieh, Nien-he. 2012. "Work, Ownership, and Productive Enfranchisement." In *Property-Owning Democracy: Rawls and Beyond*, edited by Martin O'Neill and Thad Williamson, 149–62. Malden, MA: Wiley-Blackwell.
- Hui, Eddie C.M., Jiawei Zhong, and Kahung Yu. 2015. "Housing Policy, Work-Residence Mismatch and Poverty Concentration." *Habitat International* 48: 198–208.
- Hussain, Waheed. 2009. "The Most Just Stable Regime." *Journal of Social Philosophy* 40 (3): 412–33.
- Hutt, William H. 1936. *Economists and the Public: A Study of Competition and Opinion*. London: Jonathan Cape.
- . 1940. "The Concept of Consumers' Sovereignty." *The Economic Journal* 50 (197): 66–77.
- Illich, Ivan. 1972. *Deschooling Society*. New York: Harper and Row.
- . 1973. *Tools for Conviviality*. Glasgow: Fontana/Collins.
- Jackson, Ben. 2012. "Property-Owning Democracy: A Short History." In *Property-Owning Democracy: Rawls and Beyond*, edited by Martin O'Neill and Thad Williamson, 33–52. Malden, MA: Wiley-Blackwell.
- Jaeggi, Rahel. 2018a. *Critique of Forms of Life*. Translated by Ciaran Cronin. Cambridge, MA: The Belknap Press of Harvard University Press.

- . 2018b. "Ökonomie als Soziale Praxis." *Zeitschrift für Wirtschafts- und Unternehmensethik* 19 (3): 343–61.
- Jensen, Keith, Amrisha Vaish, and Marco F.H. Schmidt. 2014. "The Emergence of Human Prosociality: Aligning with Others through Feelings, Concerns, and Norms." *Frontiers in Psychology* 5: 1–14.
- Johnson, David W., and Roger T. Johnson. 2009. "An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning." *Educational Research* 38 (5): 365–79.
- Jung, Hildegard Susana, Ana Maria Carvalho Metzler, and Edite Maria Sudbrack. 2016. "School Councils in Brazilian Public School: Possibilities and Challenges for Social Control Through Democratic Participation." *Reflexão and Ação* 24 (2): 177–96.
- Kahn, Richard. 2010. *Critical Pedagogy, Ecoliteracy, and Planetary Crisis: The Ecopedagogy Movement*. New York: Peter Lang.
- Kant, Immanuel. 2001. "Religion within the Boundaries of Mere Reason." In *Religion and Rational Theology*, translated by George Giovanni, 39–216. Cambridge: Cambridge University Press.
- . 2002. *Groundwork for the Metaphysics of Morals*. Translated by Allen W. Wood. New Haven: Yale University Press.
- . 2006. *Toward Perpetual Peace and Other Writings on Politics, Peace and History*, edited by Pauline Kleingeld. Translated by David Colclasure. New Haven: Yale University Press.
- Kapeller, Jakob. 2008. *Das Menschenbild moderner Ökonomie*. Linz: Trauner.
- Karaliotas, Lazaros. 2016. "Towards Commoning Institutions in, against and beyond the 'Greek Crisis.'" *Soundings: A Journal of Politics and Culture* 64: 93–99.
- Kauffman, Stuart A. 1993. *The Origins of Order: Self-Organization and Selection in Evolution*. New York: Oxford University Press.
- . 1995. *At Home in the Universe: In Search for the Laws of Self-Organization and Complexity*. New York: Oxford University Press.
- Kelly, Marjorie. 2012. *Owning Our Future: The Emerging Ownership Revolution*. San Francisco: Berrett-Koehler Publishers.
- Kelso, J. A. Scott. 1995. *Dynamic Patterns: Self-Organization of Brain and Behavior*. Cambridge, MA: MIT Press.
- Kilstrup, Mogens. 2015. "Naturalizing Semiotic: The Triadic Sign of Charles Sanders Peirce as a Systems Property." *Progress in Biophysics and Molecular Biology* 119: 563–75.
- Kindon, Sara, Rachel Pain, and Mike Kesby, eds. 2007. *Participatory Action Research Approach and Methods: Connecting People, Participation and Place*. Oxon: Routledge.
- Klein, Daniel B., Ryan Daza, and Hannah Mead. 2013. "Elinor Ostrom [Ideological Profiles of the Economics Laureates]." *Econ Journal Watch* 10 (3): 536–42. http://econjwatch.org/file_download/758/OstromIPEL.pdf (accessed 30 August 2020).

- Klein, Naomi. 2001. "Reclaiming the Commons." *New Left Review* 9: 81–89.
- Knight, Frank. 1921. *Risk, Uncertainty and Profit*. New York: Houghton Mifflin Company.
- Knight, Jack, and James Johnson. 2007. "The Priority of Democracy: A Pragmatist Approach to Political-Economic Institutions and the Burden of Justice." *American Political Science Review* 101 (1): 47–61.
- Kocka, Jürgen. 2014. *Capitalism: A Short History*. Translated by Jeremiah Riemer. Princeton: Princeton University Press.
- Kolm, Serge-Christophe, and Jean Mercier Ythier, eds. 2006. *Handbook of the Economics of Giving, Altruism and Reciprocity: Foundations*. Vol. 1. Amsterdam: North-Holland.
- Koopman, Colin. 2006. "Pragmatism as a Philosophy of Hope: Emerson, James, Dewey, Rorty." *The Journal of Speculative Philosophy* 20 (2): 106–16.
- Korten, Fran, and Elinor Ostrom. 2010. "Elinor Ostrom Wins Nobel for Common(s) Sense." *Yes! Magazine*, issue 53. <https://www.yesmagazine.org/issue/america-remix/2010/02/27/elinor-ostrom-wins-nobel-for-common-s-sense/> (accessed 30 August 2020).
- Kothari, Ashish. 2014. "Radical Ecological Democracy: A Path Forward for India and Beyond." *Development* 57 (1): 36–45.
- . 2018. "Toward Radical Alternatives to Development." In *The Good Life Beyond Growth: New Perspectives*, edited by Hartmut Rosa and Christoph Henning. London: Routledge.
- Kothari, Ashish, and Federico Demaria. 2017. "The Post-Development Dictionary Agenda: Paths to the Pluriverse." *Third World Quarterly* 38(12): 2588–2599.
- Kranich, Nancy. 2007. "Countering Enclosure: Reclaiming the Knowledge Commons." In *Understanding Knowledge as a Commons: From Theory to Practice*, edited by Charlotte Hess and Elinor Ostrom, 85–122. Cambridge, MA: The MIT Press.
- Kriesi, Hans-Peter. 2013. "Introduction – The New Challenges to Democracy." In *Democracy in the Age of Globalization and Mediatization*, edited by Hans-Peter Kriesi, Sandra Lavenex, Frank Esser, Jörg Matthes, Marc Bühlmann, and Daniel Bochsler, 1–16. Basingstoke: Palgrave Macmillan.
- Kropotkin, Peter. 1998. *Mutual Aid: A Factor of Evolution*. London: Freedom Press.
- Krouse, Richard, and Michael McPherson. 1988. "Capitalism, 'Property-Owning Democracy,' and the Welfare State." In *Democracy and the Welfare State*, edited by Amy Gutmann, 79–106. Princeton, NJ: Princeton University Press.
- Krul, Kees, and Peter Ho. 2017. "Alternative Approaches to Food: Community Supported Agriculture in Urban China." *Sustainability* 9 (5).
- Krupat, Arnold. 2011. "Chief Seattle's Speech Revisited." *The American Indian Quarterly* 35 (2): 192–214.
- La Follette, Cameron, and Chris Maser. 2017. *Sustainability and the Rights of Nature: An Introduction*. New York: CRC Press.

- Laclau, Ernesto, and Chantal Mouffe. 2001. *Hegemony and Socialist Stragety: Towards a Radical Democratic Politics*. Second edition. London: Verso.
- Lang, Tim, and Michael Heasman. 2009. *Food Wars: The Global Battle for Mouths, Minds and Markets*. London: Earthscan.
- Lapniewska, Zofia. 2015. "(Re)Claiming Space by Urban Commons." *Review of Radical Political Economics* 49 (1): 54–66.
- Lareau, Annette. 2003. *Unequal Childhoods. Class, Race, and Family Life*. Berkeley, CA: University of California Press.
- Larivière, Vincent, Stefanie Haustein, and Philippe Mongeon. 2015. "The Oligopoly of Academic Publishers in the Digital Era." *PLoS ONE* 10 (6): e0127502.
- Laslett, Peter. 2008. "Introduction." In *Two Treatises of Government*, edited by Peter Laslett, 3–133. Cambridge: Cambridge University Press.
- Latour, Bruno. 1993. *We Have Never Been Modern*. Translated by Catharine Porter. Cambridge, MA: Harvard University Press.
- . 2004. *Politics of Nature: How to Bring the Sciences into Democracy*. Translated by Catharine Porter. Cambridge, MA: Harvard University Press.
- Lavalette, Michael, and Gerry Mooney, eds. 2000. *Class Struggle and Social Welfare*. London: Routledge.
- Lavenex, Sandra. 2013. "Globalization and the Vertical Challenge to Democracy." In *Democracy in the Age of Globalization and Mediatization*, edited by Hans-Peter Kriesi, Sandra Lavenex, Frank Esser, Jörg Matthes, Marc Bühlmann, and Daniel Bochsler, 105–34. Basingstoke: Palgrave Macmillan.
- Lawson, Hal A., James Garing, Loretta Jurkowski, and Christine Boziak. 2015. *Participatory Action Research*. Oxford: Oxford University Press.
- Leemann, Regula Julia, and Christian Imdorf. 2015. "Ausbildungsverbünde als Organisationsnetzwerke." In *Organisationen und Konventionen: Die Soziologie der Konventionen in der Organisationsforschung*, edited by Lisa Knoll, 137–61. Wiesbaden: Springer.
- Leopold, Aldo. 1987. *A Sand County Almanac and Sketches Here and There*. Oxford: Oxford University Press.
- Lessenich, Stephan. 2019. *Living Well at Others' Expense: The Hidden Costs of Western Prosperity*. Cambridge: Polity Press.
- Levine, Peter. 2011. "Seeing Like a Citizen: The Contributions of Elinor Ostrom to 'Civic Studies.'" *The Good Society* 20 (1): 3–14.
- Levitin, Adam J., and Susan M. Wachter. 2012. "Explaining the Housing Bubble." *Georgetown Law Journal* 100 (4): 1177–1258.
- Lewellen, David. 2016. "Urban Gardens Grow Healthy Communities." *Health Progress* 97 (3): 30–34.
- Lewis, Michael, and Pat Conaty. 2012. *The Resilience Imperative: Cooperative Transitions to a Steady-State Economy*. Gabriola Island, BC: New Society Publishers.

- Lewis, Suzanne Grant, and Jordan Naidoo. 2006. "School Governance and the Pursuit of Democratic Participation: Lessons from South Africa." *International Journal of Educational Development* 26 (4): 415–27.
- Liberman, Varda, Steven M. Samuels, and Lee Ross. 2004. "The Name of the Game: Predictive Power of Reputations Versus Situational Labels in Determining Prisoner's Dilemma Game Moves." *Personality and Social Psychology Bulletin* 30 (9): 1175–85.
- Libet, Benjamin. 1985. "Unconscious Cerebral Initiative and the Role of Conscious Will in Voluntary Action." *The Behavioral and Brain Sciences* 8: 529–66.
- . 1999. "Do We Have Free Will?" *Journal of Consciousness Studies* 6 (8–9): 47–57.
- Lindblom, Charles E. 1982. "The Market as Prison." *The Journal of Politics* 44 (2): 324–36.
- Linebaugh, Peter. 2008. *The Magna Carta Manifesto: Liberties and Commons for All*. Berkeley, CA: University of California Press.
- Lipset, Seymour Martin. 1960. *Political Man: The Social Bases of Politics*. New York: Doubleday and Company.
- Lloyd, William Foster. 1833. *Two Lectures on the Checks of Population*. Oxford: J. H. Parker.
- Lockard, Alan A. 2003. "Decision by Sortition: A Means to Reduce Rent-Seeking." *Public Choice* 116: 435–51.
- Locke, John. 2008. *Two Treatises of Government*, edited by Peter Laslett. Cambridge: Cambridge University Press.
- Long, Justin R. 2014. "Democratic Education and Local School Governance." *Willamette Law Review* 50 (4): 401–64.
- Low, Denise. 1995. "Contemporary Reinvention of Chief Seattle: Variant Texts of Chief Seattle's 1854 Speech." *The American Indian Quarterly* 19 (3): 407–21.
- Loy, David R. 1997. "Loving the World as Our Own Body: The Nondualist Ethics of Taoism, Buddhism and Deep Ecology." *Worldviews: Environment, Culture, Religion* 1 (3): 249–73.
- Lozanovska, Mirjana, and Leilei Xu. 2013. "Children and University Architecture Students Working Together: A Pedagogical Model of Children's Participation in Architectural Design." *International Journal of CoCreation in Design and the Arts* 9 (4): 209–29.
- MacLaury, Bruce K. 1990. "Foreword." In *Politics, Markets and America's Schools*, edited by John E. Chubb and Terry M. Moe. Washington, DC: The Brookings Institution.
- Macpherson, C. B. 1977. *The Life and Times of Liberal Democracy*. Oxford: Oxford University Press.
- . 1985. "Introduction." In *Leviathan*, edited by C.B. Macpherson, 9–63. London: Penguin Books.

- . 2011. *The Political Theory of Possessive Individualism: Hobbes to Locke*. Oxford: Oxford University Press.
- Macy, Joanna Rogers. 1979. "Dependent Co-Arising: The Distinctiveness of Buddhist Ethics." *The Journal of Religious Ethics* 7 (1): 38–52.
- Maddison, Angus. 2007. *Contours of the World Economy. 1-2030 AD*. Oxford: Oxford University Press.
- Malthus, Thomas Robert. 1966. *First Essay on Population, 1798*. London: Palgrave Macmillan.
- Mandeville, Bernard. 1924. *The Fable of the Bees or Private Vices, Publick Benefits*. Oxford: Clarendon Press.
- Martinho III, Antone, and Alex Kacelnik. 2016. "Ducklings Imprint on the Relational Concept of 'Same or Different.'" *Science* 353 (6296): 286–88.
- Marx, Karl. 1982a. *Capital: A Critique of Political Economy*. Vol. 1. Translated by Ben Fowkes. Harmondsworth, Middlesex: Penguin Books.
- . 1982b. *Critique of Hegel's "Philosophy of Right"*, edited by Joseph O'Malley. Translated by Annette Jolin. Cambridge: Cambridge University Press.
- . 1989. "Critique of the Gotha Programme." In *Karl Marx and Friedrich Engels Collected Works: Marx and Engels 1874-83*, 24:75–99. New York: International Publishers.
- . 1991. *Capital: A Critique of Political Economy*. Vol. 3. Translated by David Fernbach. London: Penguin Books.
- . 2009. *Critique of the Gotha Programme*. Gloucester: Dodo Press.
- Marx, Karl, and Friedrich Engels. 1998. *The German Ideology*. Amherst, NY: Prometheus Books.
- Mason, Paul. 2015. *PostCapitalism: A Guide to Our Future*. London: Allen Lane.
- Mattei, Ugo. 2012. "First Thoughts for a Phenomenology of the Commons." In *The Wealth of Commons: A World Beyond Market and State*, edited by David Bollier, Silke Helfrich, and Commons Strategy Group. Amherst, MA: Levellers Press.
- . 2013a. "Future Generations Now! A Commons-Based Analysis." In *Protecting Future Generations through Commons*, edited by Saki Bailey, Gilda Farrell, and Ugo Mattei. Trends in social cohesion, No. 26, 9–26. Strasbourg: Council of Europe.
- . 2013b. "Protecting the Commons: Water, Culture, and Nature: The Commons Movement in the Italian Struggle against Neoliberal Governance." *The South Atlantic Quarterly* 112 (2): 366–76.
- Mattei, Ugo, and Laura Nader. 2008. *Plunder: When the Rule of Law Is Illegal*. Malden, MA: Blackwell Publishing.
- Maturana, Humberto R., and Francisco J. Varela. 1980. *Autopoiesis and Cognition: The Realization of the Living*. Boston: D. Reidel Publishing.
- . 1987. *The Tree of Knowledge: The Biological Roots of Understanding*. Boston: Shambala.

- Maurin, Jost, ed. 2011. *Cola, Reis und Heuschrecken: Welternährung im 21. Jahrhundert*. Edition Le Monde Diplomatique, No. 10. Berlin: taz.
- Mauss, Marcel. 2002. *The Gift: The Form and Reason for Exchange in Archaic Societies*. Translated by W. D. Halls. London: Routledge.
- McCall, Tony. 2003. "Institutional Design for Community Economic Development Models: Issues of Opportunity and Capacity." *Community Development Journal* 38 (2): 96–109.
- McCarthy, James. 2004. "Privatizing Conditions of Production: Trade Agreements as Neoliberal Environmental Governance." *Geoforum* 35: 327–41.
- McGuigan, Glenn S., and Robert D. Russel. 2008. "The Business of Academic Publishing: A Strategic Analysis of the Academic Journal Publishing Industry and Its Impact on the Future of Scholarly Publishing." *Electronic Journal of Academic and Special Librarianship* 9 (3).
- McMichael, Philip. 2009. "A Food Regime Analysis of the 'World Food Crisis.'" *Agriculture and Human Values* 26 (4): 281–95.
- Mead, George Herbert. 1967. *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*, edited by Charles W. Morris. Chicago: The University of Chicago Press.
- Meade, James E. 1964. *Efficiency, Equality, and the Ownership of Property*. London: George Allen and Unwin Ltd.
- Meadowcraft, John. 2004. "Externalities and the Proper Role of Government." *Economic Affairs* 24 (3): 77.
- Mendell, Marguerite, and Nancy Neamtam. 2008. "The Social Economy in Quebec: Towards a New Political Economy." Project No. 33, Social Economy Centre, University of Toronto. sec.oise.utoronto.ca/english/project_outputs/project33_February09Report.pdf (accessed 30 August 2020).
- Meretz, Stefan. 2012. "The Structural Communitality of the Commons." In *The Wealth of the Commons: A World Beyond Market and State*, edited by David Bollier, Silke Helfrich, and Commons Strategy Group. Amherst, MA: Leverllers Press.
- Merkel, Wolfgang. 2014a. "Is Capitalism Compatible with Democracy?" *Zeitschrift für vergleichende Politikwissenschaft* 8 (2): 109–28.
- . 2014b. "Is There a Crisis of Democracy?" *Democratic Theory* 1 (2): 11–25.
- . 2015. "Die Herausforderungen der Demokratie: Zum schwierigen Verhältnis von Theorie und Empirie." In *Demokratie und Krise*, edited by Wolfgang Merkel, 7–42. Wiesbaden: Springer VS.
- Merleau-Ponty, Maurice. 2001. *The Incarnate Subject: Malebranche, Biran, and Bergson on the Union of Body and Soul*. Translated by Paul B. Milan. Amherst, NY: Humanity Books.
- Mies, Maria, and Veronika Bennholdt-Thomsen. 1999. *The Subsistence Perspective: Beyond the Globalized Economy*. New York: Zed Books.

- Milgate, Murray. 2017. "Goods and Commodities." In *The New Palgrave Dictionary of Economics*, 1–7. London: Palgrave Macmillan UK.
- Miller, David. 1990. *Market, State, and Community: Theoretical Foundations of Market Socialism*. Oxford: Clarendon Press.
- Mirowski, Philip. 2014. *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown*. London: Verso.
- Mises, Ludwig von. 1951. *Socialism: An Economic and Sociological Analysis*. Translated by J. Kahaneb. New Haven: Yale University Press.
- Mitchell, Timothy. 2011. *Carbon Democracy: Political Power in the Age of Oil*. London: Verso.
- Monbiot, George. 2016. *How Did We Get Into This Mess? Politics, Equality, Nature*. London: Verso.
- Monson, Katie L. 2017. "Community-Supported Agriculture." In *Green Food: An A-to-Z Guide*, edited by Dustin Mulvaney and Paul Robbins, 83–87. Thousand Oaks: SAGE Publications.
- Montesquieu, Charles de. 1989. *The Spirit of the Laws*, edited by Anne Cohler, Basia Miller, and Harold Stone. Cambridge: Cambridge University Press.
- Moore, Jason M. 2015. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.
- Moran, Emilio F., and Elinor Ostrom, eds. 2005. *Seeing the Forest and the Trees: Human-Environment Interactions in Forest Ecosystems*. Cambridge, MA: The MIT Press.
- Morar, Nicolae, and Brendan JM Bohannan. 2019. "The Conceptual Ecology of the Human Microbiome." *The Quarterly Review of Biology* 94 (2): 149–75.
- Mortenson, Thomas G. 2012. "State Funding: A Race to the Bottom." *The Presidency: The American Council on Education's Magazine for Higher Education Leaders* Winter 2012.
- Moskowitz, Eric J., and David B. Nash. 2008. "Medical-Industrial Complex." In *Encyclopedia of Social Problems*, edited by Vincent N. Parrillo, 567–68. Thousand Oaks: SAGE Publications.
- Mouffe, Chantal. 2000. *The Democratic Paradox*. London: Verso.
- Mudde, Cas. 2004. "The Populist Zeitgeist." *Government and Opposition* 39 (4): 541–63.
- . 2014. "Fighting the System? Populist Radical Right Parties and Party System Change." *Party Politics* 20 (2): 217–26.
- MultiWatch, Miguel Altieri, and Vandana Shiva. 2016. *Schwarzbuch Syngenta*. Zurich: edition8.
- Murray, Charles. 1984. *Losing Ground: American Social Policy, 1950–1980*. New York: Basic Books.
- Nancy, Jean-Luc. 1993. *The Experience of Freedom*. Stanford, CA: Stanford University Press.

- Narby, Jeremy. 2006. *Intelligence in Nature: An Inquiry into Knowledge*. New York: Penguin.
- Narveson, Jan. 1988. *The Libertarian Idea*. Philadelphia: Temple University Press.
- Neamtam, Nancy. 2005. "The Social Economy: Finding a Way Between the Market and the State." *Policy Options* July-August: 71–76.
- Neeson, J.M. 1996. *Commoners: Common Right, Enclosure and Social Change in England, 1700-1820*. Cambridge: Cambridge University Press.
- Neumann, Richard. 2014. "An Analysis of the Treatment of Corporate Influence on Government by United States History and American Government High School Textbooks." *The Social Studies* 105 (2): 57–68.
- Noonan, Jeff. 2004. "Need Satisfaction and Group Conflict: Beyond a Rights-Based Approach." *Social Theory and Practice* 30 (2): 175–92.
- North, Douglass C., John Joseph Wallis, and Barry R. Weingast. 2009. *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. Cambridge: Cambridge University Press.
- Nozick, Robert. 1999. *Anarchy, State, and Utopia*. Oxford: Blackwell.
- Nyssens, Marthe, and Francesca Petrella. 2015. "The Social and Solidarity Economy and Ostrom's Approach to Common Pool Resources: Towards a Better Understanding of Institutional Diversity." In *Civil Society, the Third Sector and Social Enterprise: Governance and Democracy*, edited by Jean-Louis Laville, Dennis R. Young, and Philippe Eynaud, 178–90. London: Routledge.
- O'Brien, Catherine. 1998. *Education for Sustainable Community Development: Barefoot College, Tilonia, India*. Dissertation at McGill University, Montreal, Canada. Ottawa: National Library of Canada.
- Oelkers, Jürgen. 1989. *Die grosse Aspiration: Zur Herausbildung der Erziehungswissenschaft im 19. Jahrhundert*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- . 2010. *Reformpädagogik: Entstehungsgeschichte einer internationalen Bewegung*. Seelze: Kallmeyer.
- Offe, Claus. 1985. *Contradictions of the Welfare State*, edited by John Keane. Cambridge, MA: The MIT Press.
- O'Neill, Martin. 2012. "Free (and Fair) Markets without Capitalism: Political Values, Principles of Justice, and Property-Owning Democracy." In *Property-Owning Democracy: Rawls and Beyond*, edited by Martin O'Neill and Thad Williamson, 75–100. Malden, MA: Wiley-Blackwell.
- O'Neill, Martin, and Thad Williamson, eds. 2012. *Property-Owning Democracy: Rawls and Beyond*. Malden, MA: Wiley-Blackwell.
- Onions, C. T., ed. 1966. *The Oxford Dictionary of English Etymology*. Oxford: Oxford University Press.
- Ophuls, William. 1977. *Ecology and the Politics of Scarcity: Prologue to a Political Theory of The Steady State*. San Francisco: W. H. Freeman.

- Ostrom, Elinor. 1986. "How Inexorable Is the 'Tragedy of the Commons?': Institutional Arrangements for Changing the Structure of Social Dilemmas." Paper presented at the Workshop in Political Theory and Policy Analysis. Bloomington, IN.
- . 1996. "Crossing the Great Divide: Coproduction, Synergy, and Development." *World Development* 24 (6): 1073–87.
- . 1998. "A Behavioral Approach to the Rational Choice Theory of Collective Action: Presidential Address, American Political Science Association, 1997." *The American Political Science Review* 92 (1): 1–22.
- . 1999. "Coping with Tragedies of the Commons." *Annual Review of Political Science* 2: 493–535.
- . 2002. "Type of Good and Collective Action." Paper presented at University of Maryland, Collective Choice Center and IRIS in honor of Mancur Olson, 22 February 2002.
- . 2003. "Toward a Behavioral Theory Linking Trust, Reciprocity, and Reputation." In *Trust and Reciprocity: Interdisciplinary Lessons from Experimental Research*, edited by Elinor Ostrom and James Walker, 19–79. New York: Russell Sage Foundation.
- . 2005a. *Understanding Institutional Diversity*. Princeton, NJ: Princeton University Press.
- . 2005b. "Unlocking Public Entrepreneurship and Public Economies." Paper presented at the EGDI-WIDER Conference on Unlocking Human Potential. <https://www.wider.unu.edu/sites/default/files/dp2005-01.pdf> (accessed 12 July 2017).
- . 2007. "Sustainable Social-Ecological Systems: An Impossibility?" In *Annual Meetings of the American Association for the Advancement of Science*. <http://dlc.dlib.indiana.edu/dlc/handle/10535/3826> (accessed 7 November 2017).
- . 2008a. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- . 2008b. "The Tragedy of the Commons." In *The New Palgrave Dictionary of Economics*, edited by Steven N. Durlauf and Lawrence E. Blume, Second edition. Palgrave Macmillan.
- . 2010. "Beyond Markets and States: Polycentric Governance of Complex Economic Systems." *American Economic Review* 100: 1–33.
- . 2012. "Green from the Grassroots." *Project Syndicate: The World's Opinion Page*, June 12, 2012. <https://www.project-syndicate.org/commentary/green-from-the-grassroots> (accessed 24 April 2017).
- Ostrom, Elinor, Thomas Dietz, Nives Dolsak, Paul C. Stern, Susan Stonich, and Elke U. Weber, eds. 2002. *The Drama of the Commons*. Washington, DC: National Academy Press.

- Ostrom, Elinor, and Charlotte Hess. 2010. "Private and Common Property Rights." In *Property Law and Economics*, edited by Boudewijn Bouckaert, 53-106. Cheltenham: Edward Elgar.
- Ostrom, Elinor, and Vincent Ostrom. 1977. "Public Goods and Public Choices." In *Alternatives for Delivering Public Services: Toward Improved Performance*, edited by E. Savas, 7-49. Boulder: Westview Press.
- Ostrom, Vincent. 1974. *The Intellectual Crisis in American Public Administration*. Revised edition. Alabama: The University of Alabama Press.
- . 1975. "Public Choice Theory: A New Approach to Institutional Economics." *American Journal of Agricultural Economics* 57 (5): 844-50.
- . 1984. "The Meaning of Value Terms." *American Behavioral Scientist* 28 (2): 249-262.
- . 1991. *The Meaning of American Federalism: Constituting a Self-Governing Society*. San Francisco: ICS Press.
- . 1993. "Cryptoimperialism, Predatory States, and Self-Governance." In *Rethinking Institutional Analysis and Development. Issues, Alternatives, and Choices*, edited by Vincent Ostrom, David Feeny, and Hartmut Picht, 43-68. San Francisco: ICS Press.
- . 1997. *The Meaning of Democracy and Vulnerability of Democracies: A Response to Tocqueville's Challenge*. Ann Arbor: The University of Michigan Press.
- . 1999. "Polycentricity (Part 1)." In *Polycentricity and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis*, edited by Michael D. McGinnis, 52-74. Ann Arbor: University of Michigan Press.
- . 2008. *The Political Theory of a Compound Republic: Designing the American Experiment*. Third edition. New York: Lexington Books.
- . 2011a. "An Alternative Approach to the Design of Public Organizational Arrangements." In *The Quest to Understand Human Affairs*. Vol. 1, *Natural Resources Policy and Essays on Community and Collective Choice*, edited by Barbara Allen, 177-218. New York: Lexington Books.
- . 2011b. "Political Orders and Public Service Structures." In *The Quest to Understand Human Affairs*. Vol. 1, *Natural Resources Policy and Essays on Community and Collective Choice*, edited by Barbara Allen, 351-79. New York: Lexington Books.
- Ostrom, Vincent, and Elinor Ostrom. 1999. "Public Goods and Public Choices." In *Polycentricity and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis*, edited by Michael D. McGinnis, 75-118. Ann Arbor: University of Michigan Press.
- Otero, Gerardo, ed. 2008. *Food for the Few: Neoliberal Globalism and Biotechnology in Latin America*. Austin: University of Texas Press.
- Oxfam. 2017. "An Economy for the 99%: It's Time to Build a Human Economy That Benefits Everyone, Not Just the Privileged Few." Ox-

- ford. https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp-economy-for-99-percent-160117-en.pdf (accessed 3 August 2017).
- Pacione, Michael. 1997. "Local Exchange Trading Systems as a Response to the Globalisation of Capitalism." *Urban Studies* 34 (8): 1179–99.
- Palier, Bruno. 2010. "Ordering Change: Understanding the 'Bismarckian' Welfare Reform Trajectory." In *A Long Goodbye to Bismarck? The Politics of Welfare Reforms in Continental Europe*, edited by Bruno Palier, 19–44. Amsterdam: Amsterdam University Press.
- Parks, Roger B., Paula C. Baker, Larry L. Kiser, Ronald J. Oakerson, Elinor Ostrom, Vincent Ostrom, Stephen L. Percy, Martha B. Vandivort, Gordon P. Whitaker, and Rick K. Wilson. 1981. "Consumers as Coproducers of Public Services: Some Economic and Institutional Considerations." *Policy Studies Journal* 9 (7): 1001–11.
- Parvathi, Priyanka, and Hermann Waibel. 2013. "Fair Trade and Organic Agriculture in Developing Countries: A Review." *Journal of International Food and Agribusiness Marketing* 25 (4): 311–323.
- Pateman, Carole. 1970. *Participation and Democratic Theory*. Cambridge: Cambridge University Press.
- Peacock, Alan. 2004. *Eco-Literacy for Primary Schools*. Stoke on Trent: Trentham.
- Penner, James E. 1996. "The 'Bundle of Rights' Picture of Property." *UCLA Law Review* 43: 711–820.
- Pennington, Mark. 2012. "Elinor Ostrom, Common-Pool Resources and the Classical Liberal Tradition." In *The Future of the Commons: Beyond Market Failure and Government Regulation*, edited by Elinor Ostrom, Christina Chang, Mark Pennington, and Vlad Tarko, 21–47. London: The Institute of Economic Affairs.
- Pettit, Philip. 1993. *The Common Mind: An Essay on Psychology, Society, and Politics*. Oxford: Oxford University Press.
- . 1997. *Republicanism: A Theory of Freedom and Government*. Oxford: Clarendon Press.
- . 2006. "Freedom in the Market." *Politics, Philosophy and Economics* 5 (2): 131.
- . 2007. "A Republican Right to Basic Income?" *Basic Income Studies* 2 (2).
- Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Translated by Arthur Goldhammer. Cambridge, MA: The Belknap Press of Harvard University.
- Pinker, Steven. 2018. *Enlightenment Now: The Case for Reason, Science, Humanism and Progress*. London: Allen Lane.
- Polanyi, Karl. 1977. *The Livelihood of Man*. New York: Academic Press.
- . 2001. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press.
- Polanyi, Karl, Conrad M. Arsenberg, and Harry W. Pearson. 1957. *Trade and Market in the Early Empires: Economies in History and Theory*. Glencoe, IL: The Free Press and the Falcon Wing's Press.

- Pontusson, Jonas. 1992. *The Limits of Social Democracy: Investment Politics in Sweden*. Ithaca, NY: Cornell University Press.
- populationmatters.org. 2009. "Gaia Scientist to Be OPT Patron." August 26, 2009. <https://www.populationmatters.org/gaia-scientist-opt-patron/> (accessed 4 January 2017).
- Qidwai, Waris. 2013. "Increasing Health Care Costs and Its Adverse Impact on Healthcare and Health: A Call for Action." *Journal of the Liaquat University of Medical and Health Sciences* 12 (2): 68–69.
- Queralt, Jahel. 2018. "Are Economic Liberties Basic Rights?" In *The Routledge Handbook of Libertarianism*, edited by Jason Brennan, Bas van der Vossen, and David Schmidtz, 283–300. New York: Routledge.
- Ram-Tiktin, Efrat. 2012. "The Right to Health Care as a Right to Basic Human Functional Capabilities." *Ethical Theory and Moral Practice* 15 (3): 337–51.
- Rawls, John. 1988. "The Priority of the Right and Ideas of the Good." *Philosophy and Public Affairs* 17 (4): 251–76.
- . 1999. *A Theory of Justice*. Second edition. Cambridge, MA: The Belknap Press of Harvard University Press.
- . 2001. *Justice as Fairness: A Restatement*, edited by Erin Kelly. Cambridge, MA: The Belknap Press of Harvard University Press.
- . 2005. *Political Liberalism*. Expanded. New York: Columbia University Press.
- Rawls, John, and Philippe Van Parijs. 2003. "Three Letters on The Law of Peoples and the European Union." *Revue de Philosophie d'économique* 7 (Special Issue: Autour de Rawls): 7–20. <https://cdn.uclouvain.be/public/Ex-ports%20reddot/etes/documents/2003.RawlsVanParijs.R.Phil.Econ.pdf> (accessed 10 August 2017).
- Raworth, Kate. 2017. *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist*. White River Junction, VT: Chelsea Green Publishing.
- Raynolds, Laura, Douglas L. Murray, and John Wilkinson, eds. 2007. *Fair Trade: The Challenges of Transforming Globalization*. New York: Routledge.
- Reed, Matthew. 2010. *Rebels for the Soil: The Rise of the Global Organic Food and Farming Movement*. London: Earthscan.
- Relman, Arnold S. 1980. "The New Medical-Industrial Complex." *The New England Journal of Medicine* 303 (17): 963–70.
- Rifkin, Jeremy. 2009. *The Empathetic Civilization: The Race to Global Consciousness in a World in Crisis*. Cambridge: Polity Press.
- . 2015. *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*. New York: Palgrave Macmillan.
- Ritter, Hans Jakob. 2014. "Aushandlungsprozesse und Einigungsmodelle in der Berufsbildungspolitik des Kantons Basel-Stadt 1900–1930." *Basler Zeitschrift für Geschichte und Altertumskunde* 114: 167–89.

- Rizzolatti, Giacomo, and Corrado Sinigaglia. 2008. *Mirrors in the Brain: How Our Minds Share Actions and Emotions*. Translated by Frances Anderson. Oxford: Oxford University Press.
- Robbins, Lionel. 1932. *An Essay on the Nature and Significance of Economic Science*. London: Macmillan and Co.
- Rockström, Johan, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart III Chapin, Eric Lambin, Timothy M. Lenton, et al. 2009. "Planetary Boundaries: Exploring the Safe Operating Space for Humanity." *Ecology and Society* 14 (2): 32.
- Rodrik, Dani. 2012. *The Globalization Paradox: Democracy and the Future of the World Economy*. New York: W. W. Norton and Company.
- Roemer, John E. 2013. "Thoughts on Arrangements of Property Rights in Productive Assets." *Analyse und Kritik: Zeitschrift für Sozialtheorie* 35 (1): 55–63.
- Rosa, Hartmut. 2010. "Full Speed Burnout? From the Pleasures of the Motorcycle to the Bleakness of the Treadmill: The Dual Face of Social Acceleration." *International Journal of Motorcycle Studies* 6 (1).
- . 2013. *Social Acceleration: A New Theory of Modernity*. Translated by Jonathan Trejo-Mathys. New York: Columbia University.
- . 2016. *Resonanz: Eine Soziologie der Weltbeziehung*. Berlin: Suhrkamp.
- . 2019. *Resonance: A Sociology of Our Relationship to the World*. Cambridge: Polity Press.
- Rothenberg, David. 1999. "Will the Real Chief Seattle Please Speak Up?: An Interview with Ted Perry." In *The New Earth Reader: The Best of Terra Nova*, edited by David Rothenberg and Marta Ulvaeus, 36–51. Cambridge, MA: MIT Press.
- Roussopoulos, Dimitrios, and C. George Benello, eds. 2005. *Participatory Democracy: Prospects for Democratizing Democracy*. Montréal: Black Rose Books.
- Roy, Bunker, and Jesse Hartigan. 2008. "Empowering the Rural Poor to Develop Themselves: The Barefoot Approach." *Innovations: Technology, Governance, Globalization* 3 (2): 67–93.
- Safner, Ryan. 2016. "Institutional Entrepreneurship, Wikipedia, and the Opportunity of the Commons." *Journal of Institutional Economics* 12 (4): 743–71.
- Sahlins, Marshall. 1972. *Stone Age Economics*. Chicago: Aldine Atherton.
- Sandel, Michael. 1986. *Liberalism and the Limits of Justice*. Cambridge: Cambridge University Press.
- Santos, Boaventura de Sousa, ed. 2008. *Another Knowledge Is Possible: Beyond Northern Epistemologies*. Vol. 3, *Reinventing Social Emancipation: Toward New Manifestos*. London: Verso.
- . 2016. *Epistemologies of the South: Justice against Epistemicide*. New York: Routledge.
- Sartre, Jean-Paul. 1989. *No Exit and Three Other Plays*. New York: Vintage International.

- Satterthwaite, David. 2009. "The Implications of Population Growth and Urbanization for Climate Change." *Environment and Urbanization* 21 (2): 545–67.
- Saward, Michael. 2003. *Democracy*. Cambridge: Polity Press.
- Schäfer, Armin. 2015. *Der Verlust politischer Gleichheit: Warum die sinkende Wahlbeteiligung der Demokratie schadet*. Frankfurt am Main: Campus Verlag.
- Schlager, Edella, and Elinor Ostrom. 1992. "Property-Rights Regimes and Natural Resources: A Conceptual Analysis." *Land Economics* 68 (3): 249–62.
- Schneider, Wilhelm. 1997. *Die Markgenossenschaft im Frühmittelalterlichen Alamannien*. Tübingen: W. Schneider.
- Schorr, David B. 2009. "How Blackstone Became a Blackstonian." *Theoretical Inquiries in Law* 10 (1): 103–26.
- Schulz, Knut. 2010. *Handwerk, Zünfte und Gewerbe: Mittelalter und Renaissance*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schwarzenbach, Sibyl A. 1987. "Rawls and Ownership: The Forgotten Category of Reproductive Labor." *Canadian Journal of Philosophy* S13:139–167.
- Schwarzenbach, Sibyl A. 1991. "Rawls, Hegel, and Communitarianism." *Political Theory* 19 (4): 539–71.
- Schweickart, David. 2012. "Property-Owning Democracy or Economic Democracy?" In *Property-Owning Democracy: Rawls and Beyond*, edited by Martin O'Neill and Thad Williamson, 201–22. Malden, MA: Wiley-Blackwell.
- Scott, James C. 2017. *Against the Grain: A Deep History of the Earliest States*. New Haven: Yale University Press.
- Searle, John R. 2005. *Speech Acts: An Essay in the Philosophy of Language*. New York: Cambridge University Press.
- Seitz, John. 2009. "Urban Gardens: Catalysts for Restorative Commons Infrastructure." In *Restorative Commons: Creating Health and Well-Being Through Urban Landscapes*, edited by Lindsay Campbell and Anne Wiesen, 96–107. General Technical Report NRS-P-39. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.
- Sekinger, Urs, Johannes Gruber, Riccardo Pardini, Walter Schöni, and Therese Wüthrich, eds. 2014. *Ernährung: Agrobusiness oder Agrikultur*. Widerspruch 64. Zürich: Rotpunkt.
- Sen, Amartya. 1984. *Resources, Values and Development*. Oxford: Basil Blackwell.
- . 1988. *On Ethics and Economics*. Oxford: Basil Blackwell.
- . 2009. *The Idea of Justice*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Shaikh, Anwar, ed. 2007. *Globalization and the Myths of Free Trade: History, Theory, and Empirical Evidence*. New York: Routledge.
- Shiva, Vandana. 2002. *The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics*. London: Zed Books.

- . 2005. *Earth Democracy: Justice, Sustainability, and Peace*. Brooklyn, NY: South End Press.
- . 2009. *Water Wars: Privatization, Pollution and Profit*. Cambridge, MA: South End Press.
- Siefkes, Christian. 2008. *From Exchange to Contributions: Generalizing Peer Production into the Physical World*. Berlin: Edition C. Siefkes.
- Siefkes, Christian, Johannes Euler, Gunter Kramp, and Nikolas Kichler. 2016. "Commons Associations." In *keimform.de*, 23 August 2016. <https://keimform.de/2016/commons-associations/> (accessed 19 September 2917)
- Simmons, A. John. 1992. *The Lockean Theory of Rights*. Princeton University Press: Princeton, NJ.
- Simon, William H. 2001. *The Community Economic Development Movement: Law, Business and the New Social Policy*. Durham: Duke University Press.
- Slavin, Robert E. 1996. *Cooperative Learning: Theory, Research, and Practice*. Boston, MA: Allyn and Bacon.
- Smit, Marius H., and Izak J. Oosthuizen. 2011. "Improving School Governance through Participative Democracy." *South African Journal of Education* 31 (1): 55–73.
- Smith, Adam. 2009. *The Theory of Moral Sentiments*. London: Penguin Books.
- Smith, Henry E. 2011. "Property Is Not Just a Bundle of Rights." *Econ Journal Watch* 8 (3): 279–91.
- Smith, Adam. 1994. *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by Edwin Cannan. New York: Modern Library.
- Smith-Nonini, Sandy. 2006. "Conceiving the Health Commons: Operationalizing a 'Right' to Health." *Social Analysis: The International Journal of Social and Cultural Practice* 50 (3): 233–45.
- Soto, Hernando de. 2001. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. London: Black Swan.
- Soto, Hernando de, and Francis Cheneval, eds. 2006. *Realizing Property Rights*. Zurich: Rüffer und Rub.
- Steffen, Will, Åsa Persson, Lisa Deutsch, Jan Zalasiewicz, Mark Williams, Katherine Richardson, Carole Crumley, et al. 2011. "The Anthropocene: From Global Change to Planetary Stewardship." *Ambio* 40 (7): 739–61.
- Steffen, Will, Katherine Richardson, Johan Rockström, Sarah E. Cornell, Ingo Fetzer, Elena M. Bennett, Reinette Biggs, et al. 2015. "Sustainability. Planetary Boundaries: Guiding Human Development on a Changing Planet." *Science* 347 (6223): 1259855.
- Stengers, Isabelle. 2010. *Cosmopolitics*. Vol. 1 and 2. Translated by Robert Bononno. Minneapolis: University of Minnesota Press.
- Stiglitz, Joseph. 1999. "Knowledge as a Global Public Good." In *Global Public Goods: International Cooperation in the 21st Century*, edited by Inge Kaul, Isabelle Grunberg, and Marc Stern, 308–25. Oxford: Oxford University Press.

- . 2006. "Joseph Stiglitz Q & A." *Economists View*, October 11, 2006. http://economistsview.typepad.com/economistsview/2006/10/joseph_stiglitz.html (accessed 23 April 2017).
- . 2010. *Freefall: America, Free Markets, and the Sinking of the World Economy*. New York: W. W. Norton and Company.
- Stilz, Anna. 2009. *Liberal Loyalty: Freedom, Obligation, and the State*. Princeton: Princeton University Press.
- Stone, Christopher. 1972. "Should Trees Have Standing? Toward Legal Rights for Natural Objects." *Southern California Law Review* 45: 450.
- . 2010. *Should Trees Have Standing? Law, Morality, and the Environment*. Third edition. Oxford: Oxford University Press.
- Streeck, Wolfgang, ed. 1998. *Internationale Wirtschaft, nationale Demokratie: Herausforderungen für die Demokratietheorie*. Frankfurt am Main: Campus Verlag.
- . 2013. *Gekaufte Zeit: die vertagte Krise des demokratischen Kapitalismus*. Berlin: Suhrkamp.
- . 2014. *Buying Time: The Delayed Crisis of Democratic Capitalism*. London: Verso.
- Streeck, Wolfgang, and Philippe Schmitter. 1985. "Community, Market, State – and Associations? The Prospective Contribution of Interest Governance to Social Order." *European Sociological Review* 1 (2): 119–38.
- Strohman, Richard C. 1997. "The Coming Kuhnian Revolution in Biology." *Nature Biotechnology* 15 (3): 194–200.
- Suber, Peter. 2007. "Creating an Intellectual Commons through Open Access." In *Understanding Knowledge as a Commons: From Theory to Practice*, edited by Charlotte Hess and Elinor Ostrom, 171–208. Cambridge, MA: The MIT Press.
- Taylor, Charles. 1994. "Justice after Virtue." In *After Macintyre: Critical Perspectives on the Work of Alasdair Macintyre*, edited by John Horton and Susan Mendus. Notre Dame, Ind.: University of Notre Dame Press.
- . 1995. "Irreducibly Social Goods." In *Philosophical Arguments*. Cambridge, MA: Harvard University Press.
- . 2003. "Cross-Purposes: The Liberal-Communitarian Debate." In *Debates in Contemporary Political Philosophy. An Anthology*, edited by Derek Matravers and Jon Pike, 195–212. London: Routledge.
- Tenenbaum, Marty, and John Wilbanks. 2008. "Health Commons: Therapy Development in a Networked World." Science Commons c/o MIT CSAIL. <http://sciencecommons.org/wp-content/uploads/health-commons-whitepaper-launch.pdf> (accessed 11 April 2017).
- Tenopir, Carol, and Donald W. King. 2000. *Towards Electronic Journals: Realities for Scientists, Librarians, and Publishers*. Washington, DC: Special Libraries Association Publishing.
- Thaler, Richard H., and Cass R. Sunstein. 2008. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven: Yale University Press.

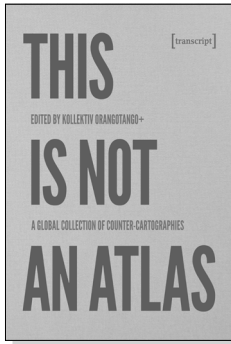
- Thomas, Alan. 2017. *A Republic of Equals: Predistribution and Property-Owning Democracy*. Oxford: Oxford University Press.
- Thompson, E.P. 2010. *Customs in Common*. Pontypool, Wales: Merlin Press.
- Tocqueville, Alexis de. 2004. *Democracy in America*. Vol. 1 and 2. Translated by Joseph Epstein. New York: Bantam.
- Tomasello, Michael. 2009. *Why We Cooperate*. Cambridge, MA: The MIT Press.
- Torrado, Marla. 2016. "Food Regime Analysis in a Post-Neoliberal Era: Argentina and the Expansion of Transgenic Soybeans." *Journal of Agrarian Change* 16 (4): 693–701.
- Tortia, Ermanno C. 2011. "The Firm as a Common. The Case of Accumulation and Use of Common Resources in Mutual Benefit Organizations." University of Trento, Italy: Department of Economics.
- Tronto, Joan. 1993. *Moral Boundaries: A Political Argument for an Ethic of Care*. New York: Routledge.
- . 2013. *Caring Democracy: Markets, Equality, and Justice*. New York: New York University Press.
- Tully, James. 2008a. "An Ecological Ethics for the Present." In *Public Philosophy in a New Key*. Vol. 2, *Imperialism and Civic Freedom*, 73–90. Cambridge: Cambridge University Press.
- . 2008b. *Public Philosophy in a New Key*. Vol. 2, *Imperialism and Civic Freedom*. Cambridge, MA: Cambridge University Press.
- . 2013a. "Two Ways of Realizing Justice and Democracy: Linking Amartya Sen and Elinor Ostrom." *Critical Review of International Social and Political Philosophy* 16 (2): 220–32.
- . 2013b. "Citizenship for the Love of the World." Conference paper delivered 14 March 2013.
- . 2014. *On Global Citizenship: James Tully in Dialogue*. London: Bloomsbury Academic.
- UDHR. 1948. "Universal Declaration of Human Rights." Paris. http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf (accessed 23 August 2017).
- United Nations. 2014. "Social and Solidarity Economy and the Challenge of Sustainable Development: A Position Paper by the United Nations Inter-Agency Task Force on Social and Solidarity Economy (TFSSE)." Geneva, Switzerland. http://unsse.org/wp-content/uploads/2014/08/Position-Paper_TFSSE_Eng1.pdf (accessed 17 April 2017).
- Van Parijs, Philippe. 2003. *Real Freedom for All: What (If Anything) Can Justify Capitalism?* Oxford: Clarendon Press.
- Vaughn, Karen I. 2013. "Hayek, Equilibrium, and The Role of Institutions in Economic Order." *Critical Review* 25 (3–4): 473–96.

- Verschraegen, Gert, and Michael Schiltz. 2006. "Knowledge as a Global Public Good: The Role and Importance of Open Access." *Societies Without Borders* 2 (2): 157–74.
- Vivero Pol, Jose Luis, Tomaso Ferrando, Olivier De Schutter, and Ugo Mattei, eds. 2019. *Routledge Handbook of Food as a Commons*. London: Routledge.
- Waal, Frans de. 1996. *Good Natured: The Origins of Right and Wrong in Humans and Other Animals*. Cambridge, MA: Harvard University.
- . 2009. *The Age of Empathy: Nature's Lessons for a Kinder Society*. New York: Harmony Books.
- Walberg, Herbert J., and Joseph L. Bast. 2003. *Education and Capitalism: How Overcoming Our Fear of Markets and Economics Can Improve America's Schools*. Stanford, CA: Hoover Institution Press.
- Waldron, Jeremy. 1988. *The Right to Private Property*. Oxford: Clarendon Press.
- . 2009. "Community and Property – For Those Who Have Neither." *Theoretical Inquiries in Law* 10 (1): 161–92.
- Wall, Derek. 2014. *The Sustainable Economics of Elinor Ostrom: Commons, Contestation and Craft*. London: Routledge.
- Wallimann-Helmer, Ivo. 2013. "The Republican Tragedy of the Commons: The Inefficiency of Democracy in the Light of Climate Change." *Ancilla Iuris* 8: 1–14.
- Walras, Léon. 1965. *Elements of Pure Economics, or the Theory of Social Wealth*. Translated by William Jaffé. Homewood, Ill.: Irwin.
- Walzer, Michael. 1988. "Socializing the Welfare State." In *Democracy and the Welfare State*, edited by Amy Gutmann, 13–26. Princeton, NJ: Princeton University Press.
- . 1989. "A Critique of Philosophical Conversation." *The Philosophical Forum* 21 (1): 182–96.
- Weale, Albert. 2013. "The Property-Owning Democracy versus the Welfare State." *Analyse und Kritik: Zeitschrift für Sozialtheorie* 35 (1): 37–54.
- Weber, Andreas. 2013. *Enlivenment: Towards a Fundamental Shift in the Concepts of Nature, Culture and Politics*. 31. Berlin: Heinrich Böll Stiftung. https://www.boell.de/sites/default/files/enlivenment_vo1.pdf.
- . 2014. *Alles Fühlt: Mensch, Natur und die Revolution der Lebenswissenschaften*. Klein Jasedow: thinkOya.
- . 2015. "Reality as Commons: A Poetics of Participation for the Anthropocene." In *Patterns of Commoning*, edited by David Bollier and Silke Helfrich. Amherst, MA: Levellers Press.
- . 2016a. *Biopoetics: Towards an Existential Ecology*. Dordrecht: Springer.
- . 2016b. *Enlivenment: Eine Kultur des Lebens – Versuch einer Poetik für das Anthropozän*. Berlin: Matthes und Seitz.
- . 2019. *Enlivenment: Toward a Poetics for the Anthropocene*. Cambridge, MA: MIT Press.

- Weber, Andreas, and Francisco J. Varela. 2002. "Life after Kant: Natural Purposes and the Autopoietic Foundations of Biological Individuality." *Phenomenology and the Cognitive Sciences* 1: 97–125.
- Weber, Max. 2001. *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. London: Routledge.
- Weis, Lael K. 2015. "Resources and the Property Rights Curse." *Canadian Journal of Law and Jurisprudence* 28 (1): 209–36.
- Wenar, Leif. 2008. "Property Rights and the Resource Curse." *Philosophy and Public Affairs* 36 (1): 2–32.
- Wenzler, John. 2017. "Scholarly Communication and the Dilemma of Collective Action: Why Academic Journals Cost Too Much." *College and Research Libraries* 78 (2): 183–200.
- Wesche, Tilo. 2013. "The Concept of Property in Rawls' Property-Ownning Democracy." *Analyse und Kritik: Zeitschrift für Sozialtheorie* 35 (1): 99–111.
- Weston, Burns H., and David Bollier. 2013. *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons*. Cambridge: Cambridge University Press.
- Westra, Laura. 2011. *Human Rights: The Commons and the Collective*. Vancouver: UBC Press.
- White, Stuart. unpublished manuscript. "Pluralist Predistribution: Labour, Capital, and Commons."
- Whitehead, Alfred North. 1958. *The Function of Reason*. Boston: Beacon Press.
- . 1978. *Process and Reality: An Essay in Cosmology*, edited by David Ray Griffin and Donald W. Sherburne. New York: The Free Press.
- Whiteley, Paul. 2012. *Political Participation in Britain: The Decline and Revival of Civic Culture*. Basingstoke: Palgrave Macmillan.
- WHO. 2008. "China's Village Doctors Take Great Strides." *Bulletin of the World Health Organization* 86 (12): 914–15.
- Widerquist, Karl. 2013. *Independence, Propertylessness, and Basic Income: A Theory of Freedom as the Power to Say No*. New York: Palgrave Macmillan.
- Williamson, Thad. 2010. *Sprawl, Justice, and Citizenship: The Civic Costs of the American Way of Life*. New York: Oxford University Press.
- . 2012. "Is Property-Ownning Democracy a Politically Viable Aspiration?" In *Property-Ownning Democracy: Rawls and Beyond*, edited by Martin O'Neill and Thad Williamson, 287–306. Malden, MA: Wiley-Blackwell.
- Willis, Paul. 1981. *Learning to Labor: How Working Class Kids Get Working Class Jobs*. New York: Columbia Press.
- Wilson, Bradley. 2013. "Delivering the Goods: Fair Trade, Solidarity, and the Moral Economy of the Coffee Contract in Nicaragua." *Human Organization* 72 (3): 177–88.
- Wohl, Stanley. 1984. *The Medical Industrial Complex*. New York: Harmony Books.

- Wolford, Wendy. 2010. *This Land Is Ours Now: Social Mobilization and the Meanings of Land in Brazil*. Durham: Duke University Press.
- Wright, Erik Olin. 2010. *Envisioning Real Utopias*. London: Verso.
- Wrigley, E.A. 2004. *Poverty, Progress, and Population*. Cambridge: Cambridge University Press.
- Zhang, Daqing, and Paul U. Unschuld. 2008. "China's Barefoot Doctor: Past, Present, and Future." *The Lancet* 372 (9653): 1865–67.
- Ziegler, Jean. 2011. *Destruction Massiv: Géopolitique de La Faim*. Paris: Éditions du Seuil.
- Ziegler, Jean, Christophe Golay, Claire Mohan, and Sally-Anne Way. 2011. *The Fight for the Right to Food: Lessons Learned*. Basingstoke: Palgrave Macmillan.
- Zückert, Hartmut. 2003. *Allmende und Allmendeaufhebung: Vergleichende Studien zum Spätmittelalter bis zu den Agrarreformen des 18./19. Jahrhunderts*. Stuttgart: Lucius und Lucius.
- Zweifel, Peter. 2007. "The Sisyphus Syndrome in Health: New Evidence." *Jahrbücher für Nationalökonomie und Statistik* 227 (5–6): 660–80.
- Zweifel, Peter, Lukas Steinmann, and Patrick Eugster. 2005. "The Sisyphus Syndrome in Health Revisited." *International Journal of Health Care Finance and Economics* 5 (2): 127–45.

Social Sciences



kollektiv orangotango+ (ed.)

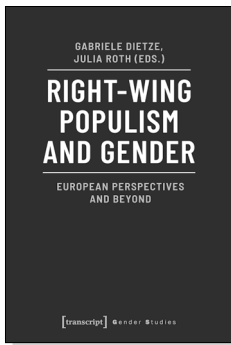
This Is Not an Atlas

A Global Collection of Counter-Cartographies

2018, 352 p., hardcover, col. ill.

34,99 € (DE), 978-3-8376-4519-4

E-Book: free available, ISBN 978-3-8394-4519-8



Gabriele Dietze, Julia Roth (eds.)

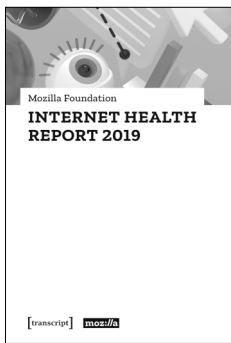
Right-Wing Populism and Gender

European Perspectives and Beyond

April 2020, 286 p., pb., ill.

35,00 € (DE), 978-3-8376-4980-2

E-Book: 34,99 € (DE), ISBN 978-3-8394-4980-6



Mozilla Foundation

Internet Health Report 2019

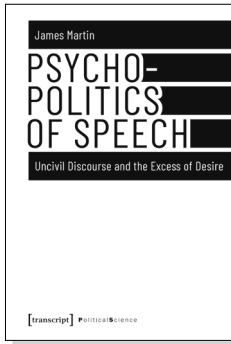
2019, 118 p., pb., ill.

19,99 € (DE), 978-3-8376-4946-8

E-Book: free available, ISBN 978-3-8394-4946-2

**All print, e-book and open access versions of the titles in our list
are available in our online shop www.transcript-publishing.com**

Social Sciences



James Martin

Psychopolitics of Speech

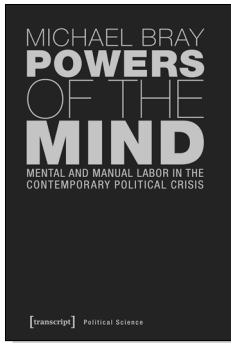
Uncivil Discourse and the Excess of Desire

2019, 186 p., hardcover

79,99 € (DE), 978-3-8376-3919-3

E-Book:

PDF: 79,99 € (DE), ISBN 978-3-8394-3919-7



Michael Bray

Powers of the Mind

Mental and Manual Labor

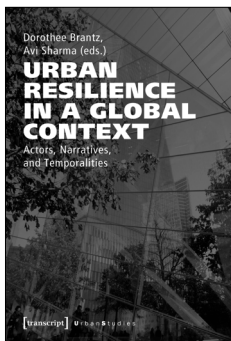
in the Contemporary Political Crisis

2019, 208 p., hardcover

99,99 € (DE), 978-3-8376-4147-9

E-Book:

PDF: 99,99 € (DE), ISBN 978-3-8394-4147-3



Dorothee Brantz, Avi Sharma (eds.)

Urban Resilience in a Global Context

Actors, Narratives, and Temporalities

October 2020, 224 p., pb.

30,00 € (DE), 978-3-8376-5018-1

E-Book: available as free open access publication

PDF: ISBN 978-3-8394-5018-5

**All print, e-book and open access versions of the titles in our list
are available in our online shop www.transcript-publishing.com**