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The Anthropocenic Cupola

On Future Models of Climate Change Liability

Die Cupola im Anthropozän:

Klimahaftungsklagen der Zukunft

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Abstract: One of the future challenges of law is to create possibilities for dealing with conflicts in ways that meet the fundamental requirements of environmental and climate protection.

Climate responsibility, as a collective ecological responsibility, is not only expected socially from state policymakers and business enterprises, but also increasingly claimed legally. With the perspective of an ecological private law that thinks of interests worthy of protection and of legal subjectivity from the point of view of vulnerability, new legal channels open up for those affected to take action against impending climate hazards or damage and to demand compensation. Fatefully connected by jointly-suffered climate catastrophes, life communities assemble as associations of human and non-human beings that all incur injury. Legal protection for these injured beings can thus no longer be directed exclusively to human needs but must be based on the ubiquitous vulnerability of all forms of life – a vulnerability that is particularly evident in the face of climate change. The ecological private law of the future will have to ensure that those living entities affected can sue on the basis of their own right. In this way, an effective ecological climate law protection would be created, whose essential task is to help enforce climate policy decisions made in the interest of society.

Zusammenfassung: Eine der Zukunftsaufgaben des Rechts besteht darin, Möglichkeiten der Konfliktbehandlung zu schaffen, die den grundlegenden Erfordernissen

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des Umwelt- und Klimaschutzes gerecht werden. Klimaverantwortung als kollektive ökologische Verantwortung wird dabei sowohl von staatlicher Politik als auch von wirtschaftlichen Unternehmungen gesellschaftlich erwartet und zunehmend auch rechtlich eingefordert.

Mit der Perspektive eines ökologischen Privatrechts, das schutzwürdige Interessen und Rechtssubjektivität von der Verletzbarkeit her denkt, eröffnen sich den vielfältig Betroffenen entsprechend neue Rechtswege, um gegen drohende Klimagefahren oder -schäden vorzugehen und nach Ausgleich zu suchen. Durch gemeinsam erlittene Klimakatastrophen schicksalhaft verbunden, finden Lebensgesamtheiten zusammen, als Assoziationen von menschlichen und auch nichtmenschlichen Wesen, die allesamt tatsächlich zu den Verletzten zählen. Rechtsschutz für diese verletzten lebendigen Wesen kann sich danach nicht mehr ausschließlich auf menschliche Bedürfnisse richten, sondern muss sich auf die im Klimawandel besonders deutlich hervortretende ubiquitäre Verletzbarkeit aller Formen von Leben einstellen. Das ökologische Privatrecht der Zukunft wird mithin dafür sorgen müssen, dass die betroffenen Lebensgesamtheiten aus eigenem Recht klagen können. Auf diese Weise wäre ein wirksamer ökologischer Klimarechtsschutz zu leisten, dessen Aufgabe es schließlich ist, den im gesellschaftlichen Interesse getroffenen klimapolitischen Entscheidungen zur Durchsetzung zu verhelfen.

Keywords: Anthropocene, Climate Change Liability, Ecological Private Law, Future Generations, Rights of Nature, Risk-Collectives

“Whistling in the Woods” Everywhere

How do jurists encounter the Other? How do they deal with the unknown? A fear currently haunts areas of private law, a fear which Gunther Teubner described a few years ago in behavioural-biological terms: When new artificial beings, algorithms, robots, and software agents “invade the territory of civil law like dangerous predators […],” many legal authors react with “assertive sound markings” (Teubner 2018a: 37). Their “strategy of dealing with uncertainty about the identity of the Other” (Teubner 2018: 502 et passim) resembles the behaviour of the fearful, who distract themselves in a dark, threatening forest by whistling a tune instead of facing the dangers they fear.[1] Jurists, however, are not only afraid of the novel electronic agents and creatures of the digital age, but also those less novel, but equally

1 See https://de.wikipedia.org/wiki/Pfeifen_im_Walde [All internet sources cited in this article were accessed on 15 March 2024.].

unfamiliar, non-human beings, whose very aliveness is likely to increase insecurity and anxiousness.

Animals, plants, nature, and climate are essentially alien to the law. Their legal status and the consequences of their behaviour, which is uncontrollable by human standards, are yet to be clearly determined. Legal protection and, above all, the scope of liability are still unresolved issues in these areas. While, on the one hand, there must be a discussion about subjective rights of protected entities, there is also need, on the other, for the attribution of new forms of ecological responsibility, ranging from ordinary individual liability and corporate liability of legal persons to collective liability of risk networks. Unlike corporate actors, these new liability collectives are not identifiable as formal organisations based on existing internal structures; rather, they correspond to the image of an "invisible Cupola" (Teubner 1994) – a collective network with opaque internal relations that can only be identified by the risks it poses within a particular field of ecological conflict.

Thus, on both sides of conflicts over environmental liability, new formations of legal subjects and subjects of responsibility emerge, which constitute themselves as areas of ecological risk according to social and geographical criteria. This invites the following thesis: In the future, the parties to ecological legal conflicts will increasingly be composed of collective subjects on the side of both plaintiff and defendant – vulnerable entities of nature, on the one hand, and ecological problem areas with environmentally harmful effects, on the other – in order to close the responsibility, liability, and enforcement gaps (Savaresi 2021: 2) that can be observed, above all, in relation to climate change.

In particular, critical questions of climate protection, the existential implications of which have only been recognised after decades of struggle for clarification, are yet to be granted the attention they deserve. Echoing common objections to new forms of legal consideration, the third power of state is seen to lack the competence to "save the world by court order" (Wegener 2019: 3; Roberto 2021; Roberto & Fisch 2021).

With a measure of bitter irony, one would certainly have to agree with these traditional views. After all, the "initial steps of courts in matters of climate protection" (Wagner 2020: 113; Wagner 2021) have not yet penetrated too far into this previously unexplored terrain (Weller & Tran 2021). And they are further hindered by the reactionary sentiments of conservative jurists. Yet again, it can be observed how a supposedly apolitical law fails to recognise the responsibility it bears and remains trapped in an almost phobic enclosure, which, when viewed from the outside, bears

"traits of fatality and inevitability" (Menke 2017). The whistling in the woods thus not only rings out in the digital realm, but resounds almost ubiquitously in the face of the most pressing challenges of the future, including, quite literally, the realms of our natural environments.

The general reference to the separation of powers under the rule of law is not, however, only intended to deprive the courts of jurisdiction over political decisions. In varying gradations, the courts are also denied the fundamental ability to deal with existential social problems such as the climate crisis. As Gerhard Wagner (2020: 114) comments on this, "Climate policy is a political issue, and political issues are the responsibility of the legislature and the executive, not the judiciary". Such apodictic principles, however, are not based on the naïve idea that jurisprudence is completely apolitical. Rather, they mask deep doubts about the "effectiveness" and "steering force" of the third power, whose decisions on climate protection issues are seen to have only symbolic effects or even to be "potentially dangerous" (Wegener 2019: 10). From this point of view, civil courts in particular would have to refrain from any judgment on climate issues. Although the "balancing of opposing interests […] is not an unusual task" for them, they would not be "suitable authorities, especially in the field of climate policy […]" (Wagner 2020: 113). Because of their two-party perspective geared towards bilateral conflicts, civil proceedings could therefore not provide a suitable forum capable of doing justice to the complexities of the climate problem and the multitude of interests involved (Wagner 2020: 114).

The one-sided rejection of judicial climate protection fits well with the general aversion that substantial parts of European – and in particular German – civil law doctrine display towards new paths of "private law enforcement," especially the enforcement of rights by private parties through civil proceedings (Hess 2011: 66 ff.; cf. Roth 2016: 1134 ff.; cf. Gruber 2018: 227). Clearly, private enforcement cannot serve to circumvent or even replace political decision-making in democratically authorised legislative processes (Wagner 2020: 114). As such, climate protection remains primarily a matter for the politically responsible bodies. Yet in this sense, the courts too have a function that is not entirely apolitical. This lies in helping to enforce the climate policy decisions that have already been made, in the interest of "society as a whole" (Wagner 2020: 113), at the level of private law too.

As such, the legal enforcement of political decisions by private actors would be no extraordinary procedure that could possibly shatter the foundations of a democratic state based on the rule of law. One need only think of Franz Böhm's classic conception of the private law society, which – likewise aided by civil courts – is responsible for guaranteeing a free market and social order: the society is "not

merely a name for the totality of its members [...], but the designation for a quite particular and specific kind of connection between them, which is peculiar to quite particular institutions – above all legal ones [...] – which have the inherent ability to coordinate the planning and actions of free, autonomous people and in this respect to *indirectly control and influence them*" (Böhm 1966: 88). In this view, private law not only forms a legal framework for individualistic, bilateral relations between isolated private individuals, but is – precisely in the sense of a "Magna Charta of the free society" (Böhm 1966: 77) – a societal constitutional law (*inter alia* Riesenhuber 2007: 4).

Struggling for Future Law

One need not hereby be a follower of German ordo-liberal legal theory to recognise that private law today is tasked with "ordering the whole of society in all its ramifications" (Böhm 1966: 76). What Gunther Teubner (2012: 34) has sharply highlighted as the "peculiar blindness of liberal constitutionalism to constitutions of social segments", whose paradoxical idea of a "constitution of civil society through its public non-constitution" (Teubner 2012: 33) obscures the view of the importance of social institutions and a more comprehensive constitution of society, will, at any rate, not get past the "overall societal status" (Wielsch 2013: 728) of private law. Yet the prevailing view of an unpolitical private law that, in line with a widespread methodological individualism, must limit itself to balancing interests in bilateral individual relationships, inhibits such law from fully realising its social function (Wielsch 2013: 728). Thus, the hoped-for steering effect of the free market as an "instrument of order that serves the general interest of society" might just as readily fail to materialise as the actual guarantee of equal civil liberties (Wielsch 2013: 729).

Giving a kick-start to the "politics of the law" (Politik des Gesetzes) might thus count as one of the truly forward-looking tasks of private law. Rudolf Wiethölter (2014: 445) has already formulated this prospect: "What is at stake is a *forum*, before which transformations of society are negotiated reconstructively and prospectively." The new "Richtigkeits-Vorstellung" (sense of rightness) of positive law, in which society "allows itself to be exposed to new experiences on the basis of its previous experiences" (Wiethölter 2014: 445) and which is achievable via "proceduralisation", promises the necessary emancipation of an enlightened "legal theory of society" with its own "potential for reflection" (Teubner 2019: 611). Gunther Teubner recognises in such a "legal utopia," built upon "recognisable developmental tendencies of

society", the ongoing opportunities, also for private law, "to design a realistic vision of the future".

As the result of an attempted functional shift of law, from safeguarding expectations to controlling behaviours, the "politics of the law" brings into view new possibilities and methods of applying law, which, in contrast to the traditional teleological interpretation, are not limited to "ascertaining the meaning of a norm via considerations of purpose" (Teubner 1990a: 262 f.; Steindorff 1974; Steindorff 1979). According to Teubner (1990a: 263), it is much more a matter of "striving for an internal, 'structural coupling' of the law with regulatory policy, on the one hand, and with the special features of the regulatory field, on the other". Despite all justified doubts about the controlling ability of law, the task would continue to be "the coordination of legal decisions with the 'politics of the law' – in today's parlance: to create, via political and legal self-controlling programs, conditions that intervene in the self-controlling of the economy in such a way that they can 'meet' the directions and conditions of economic self-controlling programs" (Teubner 1990a: 264).

The crucial point here is no longer to oppose a supposedly formal, apolitical private law of a civic-liberal tradition (Wiethölter 1986: 179) to the "material content of political law-making". Instead, the current conflicts of private law should more properly be understood as "policy conflicts" between different sectors of society with corresponding (sub)domains of law; that is, formal contract and organisational law are no longer pitched against political intervention law, but "group law policy versus liability law policy" (Teubner 1990a: 264) – or in a current version: corporate responsibility law policy (as corporate supply chain law) (Beckers 2021: 220–251) versus human and environmental liability law policy.

Whichever subdomain one considers, each raises in a specific way the question of a politicisation inherent in law, which must, however, be clearly distinguished from state policy. No subdomain of law can completely compensate for failures of state environmental and climate policy, whether at the global or local level. It certainly cannot, as is often argued in the opposite direction, effect a "devaluation of democratic decision-making processes" (Wagner 2020: 114) in the domain of climate protection. Rather, it constitutes an independent way of dealing with existential social problems, providing additional juridical instruments for conflict resolution. Helping the "politics of the law" (Politik des Gesetzes) gain legal force can therefore provide substantive legal flanking and procedural support for an otherwise insufficiently enforceable yet existentially urgent climate protection – almost in the sense of a "climate politics of the law," which has an independent function with regard to a law of the future.

Civil procedural law is, indeed – and rightly so – faced with an increase of functions, which include the protection of institutions as a direct purpose of the process. This protection of social institutions, which is to be granted by way of private enforcement of rights, goes beyond the areas reduced to supposed special procedural rights, and so serves as a model for the civil process of the future. Today's civil process cannot only serve the institutional protection of the market and competition (as the basis of economic functioning), but also supports the institutional guarantees of private and social autonomy "beyond traditional individual private autonomy" (Teubner 2003: 333), for example in the domain of consumer protection (Gruber 2018: 237 ff.). The civil process of the future will, additionally, be able to subject all sectors of society to its protective purpose. This scope extends to society as such and thus also to existential bases of life such as the environment and climate.

The experience of European commercial law shows that only effective private enforcement of the law can bring to bear legal protection of global scope against the divergent special interests of individual nation states or "private" transnational corporations (Teubner 2006a: 327–346), which do not abide by common rules. The rules of climate and environmental protection are becoming essential for global survival and, with increasing urgency, a "task for humanity" (Klingenfeld 2020). This not only justifies the political demand for a collective effort in the sense of a "Fight for Climate Justice" (Kuebler 2021; Source & Dumitrica 2021), but also vindicates a continued struggle for justice, especially by means of collective legal protection.

"The Floodgates Are Open": Against Law's Silence on Climate Protection

Collective legal protection means to make a law that can only ever be insufficiently enforced by the state into a matter of private initiative. Wronged parties and their legitimate representatives should be able to take the rights to which they are entitled into their own hands, especially where public law does not make adequate provisions against an unjustified "moral hazard" posed by environmentally harmful companies. Among other things, the task is to hold corporations accountable for harmful corporate actions, even if these actions 'only' cause mass and dispersed damages, which are thinly spread over an indeterminate number of individual persons (Peterson & Zekoll 1994; Schaub 2011: 15 f.). Such damages are hardly covered by the law, especially if they present themselves as 'genuine' collective damages, which can no longer be assessed individually for injured persons due to the collective allocation of the object of damage or due to the collective nature

of the subject of damage (Gruber 2015a: 178 ff). However, it is by no means obligatory to limit such collective damages as damages of common goods that must be compensated only via state policy or, at most, public law regulations. Rather, the time has come to question the previous silence of liability law on environmental law, especially for future cases of globally distributed ecological damage. The argument that environmental damages, as damages to common goods, must be purely a matter of the state has long lost its persuasive power. Now, we can see how this position relies on a strategy that falls back on an outdated dualism of state and society in order to reject any development of private environmental liability law, and to dismiss attempts to go beyond the previous limitations to individual violations of legal rights as an allegedly systemic mix-up with third-party or general interests (Westermann 2008). Ecological damage and its perpetrators therefore continue to escape the individualistic two-sided view of civil law and civil procedural law. Its silence could at best be sugar-coated as a means of reducing complexity.

Crisis of Causal Attribution and Invisible Cupola

But what happens if this view gets so divorced from the harsh reality of existential threats that the law turns into its opposite – possibly even becoming a danger in and of itself as a rejection of justice?

Focusing on (quasi-)contractual third-party liability in the domain of expert liability, Gunther Teubner has already shown that the almost counterfactual self-restriction of private law to bilateral considerations is likely grounded in the feared danger of an uncontrollable expansion of liability: “The floodgates are open” (Teubner 2003: 334 f.) – something that is feared not just by jurists. In a literal, almost macabre sense, however, mankind should fear quite different floods today. The reductionism of private law was oriented towards a necessary limitation of liability. In the past, this limitation could still prevail against efforts to protect global environmental media such as clean water, pure air, or undisturbed enjoyment of nature as legal goods under tort law (Westermann 2008: 146; cf. Köndgen 1983: 348 ff; Godt 1997: 149 ff.; Medicus 1986; Seibt 1994: 48 ff.; Wilhelmi 2009: 42 ff). However, the collective dangers posed by global climate and environmental damage today are much more pronounced (Doelle & Seck 2021; French & Pontin 2016: 9–19).

In addition to the aforementioned environmental media or values, danger also looms over clearly specified, definable communities of life. They might therefore naturally be considered under private law as bearers of subjective rights and endowed with their own interests that are worthy of protection. In principle, the

scope of private law in this respect depends on who or what is recognised as a legal entity (Gruber 2006: 152 ff.; Teubner 2006b: 497 ff.) and which actions, responsibilities, and causalities are accepted in the first place (Teubner 1994: 429 ff.).

Gunther Teubner's clear insights into the mechanics of private law once again expose the systemic shortcomings of its adherence to individual causation and culpability. These shortcomings are especially pronounced in climate and environmental liability law. Italian criminal law has the liability figure of the "Cupola," which was developed for phenomena of organised crime, and which originally draws its name from the common designation of the top nodes in the Mafia's hierarchy. While the Cupola was designed to make mere Mafia membership sufficient to become accomplices of Mafia-like offences, it can also be used to grasp corresponding attribution problems of private tort law:

> "The legal construction of the Cupola makes the causal attribution of individual crimes superfluous by replacing it with collective attribution. It transforms individual liability into collective liability. The contours of a similar Cupola are emerging from some recent legal constructions of ecological liability. Ecology is a world of tremendously complex interacting causes. The complexities of causation in the three ecological media – air, water, soil – have frustrated lawyers in their attempts to construct causal links between individual actions and ecological damage" (Teubner 1994: 429 ff.).

This complexity, however, does not imply that ecological damage can, due to its collective causes and effects, be qualified for private law only as "subject-less" damage to common goods (Wagner 2009: 50 f.). Even if climate change is classified as harmful to the general public (the same applies to adverse changes in biotopes, whether at sea or on land), it can still be attributed to those "subjectivised" life communities of humans or non-humans that are existentially affected. These communities may then appear in court as plaintiff parties, whether as affected people or groups (Kivalina v. ExxonMobil 2012; Lliuya v. RWE 2017), as appointed organisations (Urgenda v. The Netherlands 2015; Milieudefensie v. Shell 2021), or also as threatened animal (Seehunde v. Deutschland 1988) and natural entities (cf. Sierra Club v. Morton 1972; Salim v. State of Uttarakhand 2017; Miglaniv. State of Uttarakhand 2017; Uttarakhand v. Salim 2017b; Punjab and Haryana High Court, Court on its own motion v. Chandigarh Administration 2009; Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016) with corresponding representation. In this case, their success will certainly depend on the extent to which the asserted damage is attributed to the plaintiffs themselves as injured legal subjects. To simply infer concretely protected interests and subjective rights from the currently accepted legal entities would, on this point, fall short of the mark. Instead, one must move in the opposite direction. It is necessary to start from the interests deemed worthy of protec-

tion, and only then to develop the legal (re)construction of the person based on the specific comparability and vulnerability of human and non-human (Gruber 2006: 110ff., 119 ff., 142 ff. et passim) beings (Ingold 2014: 217 f.; Fischer-Lescano 2018: 214).

The constructive determination of a legal person is therefore not set in stone; neither is the supposed "subjectlessness" of ecological damage. It is precisely one of the noblest potentials of law and its distinctions – notably, the two-sided form of the person (Luhmann 1995: 153) – to reflexively observe oneself in one's Other, above all in one's human, natural, technical, and material environments (Menke 2008: 90 ff.; Luhmann 1981: 45–104). It is therefore always possible to uncover paradoxes that have been concealed by the previous distinctions of legal subjects and objects, of actions and events, and of causalities and contingencies, and which have to be unfolded via new distinctions. Concretely, this would mean, among other things, to decide anew on questions of legal capacity, as well as on rights to sue and to be sued. New distinctions are needed above all when new types of damage, especially ecological damage, occur that can no longer be denied with sound arguments, and for which there are also no legal avenues for compensation or redress, simply because they are not yet justiciable.

The path forward is the social perception that there are obviously aggrieved parties, whose legitimate interests have not yet found protection through the courts. Even if these aggrieved parties are often not individually identifiable as single human persons, they can be legally traced as determinable collectives. In particular, the rejection under private law of so-called "diffuse damage" (Schaub 2011: 13 ff.) to "subject-less" common property (Wagner 2009: 41 ff.) appears, from this perspective, to be a sign of legal blindness to those types of dispersed and mass damage in which the aggrieved parties can no longer be individually determined. The aim must be to compensate for the deficits of private enforcement in tort law – deficits that result primarily from the exclusion of injured parties from the contingent individualistic two-party operation of civil jurisdiction. "Private enforcement" denotes a suitable procedure for such compensation. It seeks to improve private-law consideration, including the private enforcement of so-called "third-party interests" (Westermann 2008: 141 ff.).

Social Self-Regulation as the Basis of an Ecological Private Law

Such interests of "third parties" or of a "public good" are, of course, always involved in relations of private law, even if only in the form – interpretable from a third point of view – of a party's will, of a type of legal relation yet to be determined, or of a law

presupposed to the general public (Westermann 2008: 147 ff.). There is no doubt, however, that the prevailing private law doctrine would still like to abstract from third-party or general interests. It justifies its self-imposed limitation, for instance, by arguing that this limitation allows private law to fulfil its special social function – one which requires a "decentralisation of conflicts of interest to the concrete life situation of the subjects involved in a legal relationship [...] mainly for the sake of individual justice" (Westermann 2008: 148). In doing so, however, this doctrine overlooks the broader functions of private law, which seeks to resolve situations of social conflict. One must recognise that decentralised decisions and activities of subjects are also performed by the groups they constitute (Westermann 2008: 148). This recognition points towards a first approach to recentralise, group by group, the decentralisation of individualistically interpreted conflicts of interest – and so to effectively collectivise the postulated individual justice.

From there, it is only a small step towards the insight that genuine decentralisation and, even more so, the desired individual justice can ultimately only be achieved through social self-regulation beyond the traditional private autonomy of individuals (Teubner 2003: 333 ff.). A private law thus adapted to social conditions, oriented not only to "individual" private autonomy but also to social autonomy (Schmidt 1980), would be a private law that is truly social. Its procedural equivalent – social civil litigation (Wassermann 1978) – then finds its task in enforcement. This "enforcement" must be understood literally as the "setting-into-force" of living-communicative potentials – potentials that exceed the traditional individualistic notion of competing individual interests and individual party rule.

This is exactly the point where the ecological private law of the future must start: In accordance with its basic idea, it can – probably more than ever before – continue to serve individual justice by providing for decentralised conflict resolution. In doing so, however, it must examine its own conceptual centralisations, especially its previous fixation on key distinctions between the individual and the community and between public and private legal relationships. In any case, such a future law can no longer be content with analysing everything 'private' counterfactually into bilateral relationships of human individuals, which are then contrasted with the communal interests of a 'public'. Rather, it must perceive and conceptualise the internal rationality and normativity of ecological conflicts, the involved agents, and their interests. At the same time, a future law must develop civil procedures that give a voice to those affected by various climate and environmental damages, especially those who are still unheard. This enables an adequate negotiation of ecological damages.

In essence, it takes a "further advancement of law" in the sense of Rudolf Wiethölter's (1988: 22 f.) conception of procedural law; that is

> "[…] an implementation – still untouched by future time and future knowledge, but co-determinable – of a determination of possibility yet to be realised, aiming at nothing less than an – in stable permanent change – 'autonomous' perception of respective self-interests at the same time as/for general-(foreign-)interest, both beyond the 'market' as well as 'politics,' as a 'further advancement of law.'

Courts will have to increasingly rule over climate and environmental conflicts. They hence wield considerable authority, and their decisions must "[…] transform complex social problems into self-processing problems and 'change' them in the possible interest of different affected parties" (Wiethölter 1988: 23 f.). Wiethölter (1988: 24 f.) puts this idea in visual terms when he writes, "Here, every important legal decision is a stable permanent change of law, i.e., 'law-production'". In other words, today's jurisprudence is itself decisively involved in the (re)production of law. It plays a decisive role in the process of "stable permanent change" in that it reflexively standardises the production of legal norms by co-determining the means, procedures, and processes of the standardisation activity (Wiethölter 1988: 23 f.). In this function, it may even come closest to the social reality of ecological conflicts. By adopting, for instance, a broader private-law perspective in the domain of civil law, it can better examine and legally comprehend the underlying conflicts of rationality.

'Third-party interests' must, then, no longer be exiled to the realm of non-civil law as interests of the common good that exceed the limits of the system. They are no longer considered alien to private law, as intruders that merely disturb private law in its usual course. And their importance is no longer secondary, as reflections of individual self-interests. Instead, third-party interests are now brought to bear directly under private law, specifically by granting primary subjective rights for the protection of social autonomy and its required institutional conditions. Put differently, the protection of social institutions and existential livelihoods must no longer hope to be co-protected by certain 'reflex rights' within the framework of bilateral legal relations of civic individuals. The protection requires its own subjective rights, which are to be assigned according to criteria of specific affectedness and which are to be advocated based on competencies and responsibilities of care.

From the Actio Pro Institutione to the Actio Pro Convictione

The significance and scope of third-party protection must thus also acquire a different status in the private law system of the future. This is not to say that the criticism against the conceptions of 'private enforcement' and collective legal protection will, at once, fall silent. Such criticism may, for instance, ask "[...] under what conditions the individual can, in asserting private claims, make himself the trustee of general interests, thereby giving his legal prosecution the higher dignity of the public" (Westermann 2008: 146). But such questions are likely to soon miss their target. Future private law will be less and less concerned with the extent to which public general interests can be privately enforced – e.g., in the context of climate and environmental liability actions. There will be even less doubt about the assertion of allegedly 'diffuse' damages, which appear to be diffuse only from the limited perspective of traditional law. Rather, the question of the future will be how to determine, or at least treat, conflicts of rationality and collisions of social spheres of autonomy in such a way that their stability and compatibility are maintained.

The challenge here is first and foremost to identify those who are affected or involved and to equip them with effective 'legal remedies,' to give them access to judicial conflict resolution and grant them legal protection. This is the ambitious future goal of ecological private law: to identify interests worthy of protection in legal violations, i.e., to conceptualise legal personhood in terms of vulnerability. Private law must therefore aim to ensure that no one affected by rights violations is left unprotected solely because of a lack of justiciability. The protection can go beyond the mere individualistic view of single beings and be directly linked to the plurality of affected persons, grasping them in their common and unifying fate as biosocial associations. Or put more simply: as life communities. Their collective identity is specially formed in those cases of injury and damage where no single injured individual is identifiable, but it is certain that many individuals have been injured and suffered damages in a comparable way (Gruber 2006: 152 ff. and 188 ff.).

Once connected as communities of common fate (cf. Gruber 2012), all these living beings – as well as future generations (Monterossi 2020) and potential persons – can in this respect be considered as associations of human and non-human beings (Latour 1993: 4 et passim). This is precisely because the individuals are not able to legally assert their individual, comparable interests and affectedness. Here, one would slide back into the error of traditional private law doctrine if one wanted to differentiate whether these individual interests, which are comparable on a supra-individual level, are 'private' or 'public,' i.e., ultimately only 'general'. Effective private legal protection must not only be able to accommodate the interest of

individuals in avoiding infringement of their rights, but also the collective affectedness resulting from damages to nature or climate. This is the public dimension of the private protection of the natural foundations of life – which, it should be noted, are existential for all private legal relationships, and whose significance goes beyond institutional foundations.

Today, the protection of the latter by private law is a matter of course. However, this protection is still framed as a merely indirect effect of a private law system that is primarily fixated on protected individual interests. In this sense, institutional protection, Ludwig Raiser argues, merely signifies an individualistic attribution of institutional interests in the form of "secondary" subjective rights (Raiser 1961: 472 f.; Raiser 1963). The view that institutional interests, as 'public welfare interests,' are best protected reflexively within the framework of individual self-interest seems to have survived into the present day with little change (Poelzig 2012: 425 ff.). But in this respect, too, methodological individualism has probably reached its end. Social institutions are not mere vehicles of private interests but form their necessary basis. They are, in Gunther Teubner's (2003: 333 ff.) sense, "ensembles of norms" understood as "partial structures of social systems". That is why they require independent subjective legal protection that is not reducible to simple "reflex rights" (Gruber 2018: 227 f. and 247). Such independent protection of institutions can be found in Wolfgang Fikentscher's (1983: 527 ff.) construction of an "actio pro institutione," which is based on the "actio pro socio" in corporate law, and which could be developed into a genuine institutional form of action. The focus would not be on the fiduciary right of action of individual private persons, but on the self-interest of the institutions and their suitable representation. In this respect, it would seem logical to place institutional rights in the hands of suitable trustees, in particular appropriately legitimised groups and organisations, which qualify for such a task because they are affected by or are close to the social conflicts (Gruber 2015a: 195 ff.).

Collective forms of legal protection, thus structured, could take account of the social conflicts described above, most of all by helping to overcome the narrow individualistic view of two-sided legal relationships. Especially in liability law, they need not be limited to mechanisms of interindividual compensation, which always focuses on the compensation of damages suffered by individuals, or – on the opposing side – remain in the preventive perspective of individual behavioural control of liable subjects. Instead, they obtain their specific civil-law character in a form of collective compensation of distinct institutional damages appropriate to the conflict situations mentioned above.

How such collective legal protection could be designed, without 'disrupting the system' of private law thinking, is shown by the claim for profit skimming under Section 10 of the German Act Against Unfair Competition (UWG). This claim, too, is not intended to compensate individual damages; rather, it refers to those cases in which the parties affected by competition law violations do not seek compensation for their losses. Contrary to common interpretations, however, Section 10 also does not use class actions for profit skimming to deter anti-competitive behaviour or to remedy enforcement deficits (Poelzig 2012: 497 f.). Rather, this form of collective legal protection continues to balance private interests, but now with special consideration for conflicting institutional interests of economic competition, the market, and consumer protection. These can, at best, be represented 'supra-individually' to the extent that they are determined by different logics of action and different colliding rationalities of social systems. But this is precisely where the special conceptual potential of future private law scholarship is to be found: in a successful "privatisation of collective claims" that can still be based on claims under private law and yet, at the same time, capture the collective dimension of damages at the level of social institutions (Gruber 2015a: 189 ff.).

Social collision situations arising at this level (e.g., mass and dispersed damages) can only be resolved after overcoming the bilateral two-party model of civil procedure. They require collective forms of legal protection, such as class actions. Once this has been recognised (Hess 2011: 66 ff.), the potential significance for current cases of climate and environmental damages becomes even more apparent. What becomes clear in this regard is, above all, that the individually affected parties are often prevented from asserting their violated rights in individual civil proceedings. However, the problem is not to be found in economic or other personal reasons. Nor does it lie in a possible lack of judicial access, which could provide compensation even at the level of petty offences. Nor again is it due to a possible reduction in the regulatory power or controlling effect of private law, which would have to be strengthened in the public's interest. The demand for further expansion of collective legal protection need not therefore be justified on the grounds that private law has a controlling function in addition to the function of compensation for damages. Rather, it is necessary to recognise the institutional protection described above as an independent concern, in which serious social conflicts that are of vital importance – and which also affect the development of individual freedoms – are reflected.

Particularly with regard to the existential conflicts of climate change, it would then be necessary to go beyond the already progressive claim construction of an "actio pro institutione" (cf. Fikentscher 1983: 527 ff.) towards an "actio pro convictione" or, bluntly put, towards an "actio pro exsistentia" (cf. Fikentscher 1983: 527 ff.) – which

is geared towards tolerable *coexistence*. More concretely, this means exploring legal avenues that address this kind of multiple affectedness by empowering these associations of individually injured and collectively harmed beings in civil proceedings of the future. Even more concretely, this essentially means developing the collective legal protection of the future by basing it on a "care responsibility under private law" (Micklitz & Rott 2022: § 3 UKlaG, para 4.) of suitable trustees.

Breaking Law's Silence

An important difference to the above-mentioned cases of fair trade law and, especially, consumer class actions lies in the matter that climate and environmental damages, even if they are also mass and dispersed damages, can hardly be dismissed as petty offences today. The extension of corresponding forms of collective legal protection to areas of environmental and climate liability should therefore appear all the more urgent. Nevertheless, there is still a long way to go to achieve a conflict-adequate design of the ecological civil process. Current private law scholarship, in particular, falls well short of these objectives and is mostly indifferent to 'general' environmental and climate damages. As long as this is the case, those affected by such damages and their associations must continue using various makeshift remedies offered by the substantive and formal law of the respective states.

Actions of Nature and the Effects of Judicial Climate Policy

Half a century has now passed since Christopher Stone (1972) elevated the ecological question "Should trees have standing?" to the status of a legal issue. Back then, his goal was to provide effective legal protection against the planned establishment of recreational facilities in the mostly untouched *Mineral King Valley* at the foot of the *Sierra Nevada* (Sierra Club v. Morton 1972). Yet to the present day, the history of claims made in the name of nature still reads as a near-constant tale of failure.

Of the many subsequent attempts to sue for the rights of nature, animals, and even human generations, very few have been successful in court. The reasons for their failure can be broadly classified according to the party to the lawsuit (including their objectives) and the subject matter of the lawsuit. The first aspect can be broken down further by asking whether the plaintiff parties have already been denied recognition of their legal capacity, capacity as parties, and capacity as participants on the grounds that they, as wild animals or as natural objects, were not sufficiently

determinable or definable for the courts (Seehunde v. Deutschland 1988; Sierra Club v. Morton 1972; Salim v. State of Uttarakhand 2017; Miglani v. State of Uttarakhand 2017; Uttarakhand v. Salim 2017b; Punjab and Haryana High Court, Court on its own motion v. Chandigarh Administration 2009; Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016). For plaintiff organisations or trustees, a further distinction must be made as to whether they were denied the right to represent or sue because they were not themselves affected (Urgenda v. The Netherlands 2015; Milieudefensie v. Shell 2021). In addition, there are different objectives of the action, which can be distinguished for the different areas of law. Within private law, they can already be sub-divided into claims for injunctive relief or removal,[2] as well as damages[3] and compensation[4] with corresponding obligations to bear costs. It is also relevant whether the cause of action is based on imminent or actual damage caused by concrete interventions (e.g. emissions, construction projects, waste disposals), or whether it involves more distant, general, 'global' impacts, especially climate change effects.

Finally, from a substantive legal perspective a common reason for rejection are complex causal connections that resist legal determination (Kivalina v. ExxonMobil 2012; Lliuya v. RWE 2017). The causal chains must be established not only between the defendants' actions and their adverse effects on the environment and climate, but also between the adverse environmental changes and the specific harms on the side of the plaintiff. Especially in private liability law, there is thus little chance of success for nature, animals and people from the outset. There is a high probability that the "silence of the law" (Gruber 2017: 111 ff.) – i.e., the legal ignorance of existential ecological risks – that has persisted so far will continue to do so deep into the climate crisis.

But must this be the case? Must, for example, the right of action of a conservation organisation and its members fail because they are not themselves adversely affected, economically or otherwise, "in any of their activities or pastimes," by the extensive development of *Mineral King Valley* (Sierra Club v. Morton 1972)? And if, as a consequence, those directly affected bring suits themselves (Sierra Club v. Morton 1972: 741) – must the juridical reconstruction of natural entities, such as the Ganges and Yamuna, and their "re-naturalisation" as natural legal entities ulti-

2 For German law, in particular see the claim of "Störerhaftung" (interferer's liability) in section 1004 German Civil Code (Bürgerliches Gesetzbuch – BGB).

3 See e.g. section 828 (1) BGB and section 1 German Environmental Liability Act (Umwelthaftungsgesetz – UmweltHG).

4 See section 906 (2) sentence 2 BGB and section 14 sentence 2 German Immission Control Act (Bundesimmissionsschutzgesetz – BImSchG).

mately fail because they do not adhere to the territorial boundaries of a regional jurisdiction (Salim v State of Uttarakhand 2017)? Must the seals in the North Sea lack the capacity to participate because they are not numerically determinable and individually identifiable (Seehunde v. Deutschland 1988)? And if people themselves sue as presently and directly affected: Must courts dismiss claims of villages that are swallowed by the sea – as in the case of the Alaskan Inupiat community of Kivalina (2012) – as supposedly "political questions" (Gruber 2017: 111 f.)? Must they continue to treat the causal link to anthropogenic climate change under the traditional causation requirements of "fair traceability" and "substantial likelihood" of individual causation (Kivalina v. ExxonMobil 2009)? Does every legal climate responsibility have to fail due to the lack of any "particular" affectedness, for example of "climate seniors" – even when it should be clear by now that all humans, animals, and plants are affected by climate change to a notable degree (KlimaSeniorinnen v. Schweiz 2018; KlimaSeniorinnen v. Switzerland 2021)? And must corporate responsibility as supply chain liability always take a back seat to national economic interests, as recently happened once again in Switzerland?[5]

The national limitations of economic interests and state control certainly form a recurring motive for claiming the alleged ineffectiveness of a "judicial climate policy" (Wagner 2020: 111 ff.). From this perspective, the limited territorial scope of national legislation and jurisdiction only ever leads to distortions of competition. These distortions, it is said, are mainly manifested to the detriment of domestic companies, since national measures for climate protection do not always apply to foreign actors (Wagner 2020: 120 f.).

Indeed, national climate protection must not lead to an excessive advantage for companies operating in jurisdictions with lower levels of climate protection and which may even have relocated there for this very reason. Even more importantly, it must be avoided that individual nation states take advantage of such 'leakage' by attracting foreign companies under the guise of supposedly liberal economic policies, thereby entering a race to the bottom for the most damaging environmental and climate policies. It goes without saying, therefore, that the greatest international efforts will be required to resist such small-state special interests via political cooperation. Climate protection is and remains, precisely because of its global scope, primarily a matter of international politics. But this in no way precludes other policy levels and sectors of society from assisting the effort; this includes the

5 See https://www.bj.admin.ch/bj/de/home/wirtschaft/gesetzgebung/verantwortungsvolle-unternehmen.html.

law and, especially, liability law. The usual argument that individual actors, states, and jurisdictions alone cannot do anything about global climate change loses its plausibility in view of the urgency of the situation and how it affects everyone. The time for the grand sweep in world politics has simply run out. Now all sectors of society – even jurists and their law – are called upon to do what is necessary, each within their own framework.

Against this backdrop, the usual free-rider arguments appear just as weak. They see in the limited controlling effect of liability law the danger that more stringent climate liability elsewhere could trigger countervailing incentives for environmentally harmful state regulation and corporate decisions in the sense of a 'moral hazard' (Wagner 2020: 118 ff.). Under the current existential threat, however, the most important thing is to make the legal instruments for conflict resolution available in the first place, so that the fundamental requirements of climate protection can be legally enforced. Here and now, it is important to provide a forum for the future-oriented conflict resolution of corporate responsibility as well as environmental and climate liability (Teubner 1990a: 264).

Controlling the Process of Risk-Collectivisation

In this respect, Teubner's account of collective responsibility as a variable, simultaneously multiplied liability of corporate networks (Teubner 1990b: 88 ff.) can be further developed into a form of risk liability that has emerged from the climate crisis. This risk liability finds a new, promising watch post, especially for environmental liability law, "under the umbrella of the Cupola". It becomes obvious at this point how the traditional attribution schemata of individual liability are transformed into collective liability. They can only be hidden behind all kinds of auxiliary constructions, such as specific legal concepts of causality, the use of prima facie evidence, the reversal of the burden of proof, probabilistic proof of causality, and the extension of joint liability in the case of multi-causally induced environmental damage (Teubner 1994: 429 f.). However, such loosening of the legal chains of causation and evidence, forced by the "complexities of causation" (Teubner 1994: 430), ultimately constitutes collective attributions of responsibility for environmental damage that cannot be attributed to individual behaviour alone. More precisely, they are imputations of responsibility for actions committed by others. Individual responsibility for one's own actions is then joined by co-responsibility for the actions of others, linking individual actors into risk communities and liability collectives (Teubner 1994: 432 ff.):

> "Ecological interdependencies press the law to substitute the dominant actor perspective by a systemic perspective. The law tends to create new forms of risk pooling, and even, in some cases, outright formal organizations of risk management which seem to be more adequate for the characteristics of certain ecological risks" (Teubner 1994: 431).

Unlike corporate networks in group law, these new "risk pools" are not pre-determined organisations with a fixed internal structure that can be based on pre-existing contractual agreements. There is no pre-existing collective actor here that could be compared to a legal entity as an overall organisation and that could become the point of attribution for collective responsibility with respect to the behaviour of its members (Teubner 1994: 436 f.). But this is precisely what characterises the opportunities Teubner recognises in the "ecological Cupola" of a development of environmental liability law into a new law of risk liability. There is a special potential to constitute new centres of accountability as centres of self-control, thereby reconstructing and influencing "self-organising processes in the real world" in a legally perceptible way (Teubner 1994: 430 f.). Accordingly, the focus of this liability law perspective is less on the superficial problems of attributing causality or relevant evidentiary possibilities, and more on the question of the extent to which "the law of ecological liability is able to control this process of risk collectivisation in such a way that the obvious loss of individual responsibility is outweighed by the gains of collective responsibility" (Teubner 1994: 431).

Teubner's scepticism towards the overconfident explanatory models of legal economics appears to be well-founded. It contrasts the one-sided system of economic incentive control with the social "multitude of self-organization processes," such as "ecological politics, the law of liability, the product market, and the formal organization" – all of which react to one another in a highly selective and unpredictable manner (Teubner 1994: 452). Once this knowledge of the multiplicity of social rationalities is secured, it is possible to develop a realistic legal approach to economic agents – an approach that could make the institutions of liability law "more sensitive to their real effects in the world of economic organizations" (Teubner 1994: 452).

The simple economic model of reality could be replaced with a legal model of reality that dispenses with an a priori unidirectional illusion of control. A legal model like this is better suited to represent social reality, including that of economic life. Liability law in particular may strengthen its sense of reality by shifting away from its exclusive speculative focus on economic consequences of incentive and by experimenting instead with provisional liability orders in a continuous "discovery process". Based on these transitional regimes, the expectations of the real regulatory effects of liability law are to be calibrated with the actual "corporative

reactions" of the economic actors and, if necessary, adjusted in a learning process. In this respect, the concepts of liability are to be continuously improved by "new legal pressure and new corporate reactions" according to the model of "social order from legal noise" (Teubner 1994: 450; Teubner 1993: 64 ff; Teubner 1989: 740; Gruber 2017: 115), without, however, being able to immediately assume stable behavioural patterns (Teubner 1994: 452 f.).

Technologies of Risk Management and Ecological Risk Associations

Any one-sided fixation on norm incentives inevitably loses its persuasive power because it is blind to the diversity of rationalities mentioned above. This diversity makes the actions of both economic and state actors more complex and thus less predictable *ex ante* than the economic analysis of law would like to admit. Future regulatory concepts must thus be adjusted to the multitude of alternative expectations – which, incidentally, have long since been directed towards economic actors and been captured by these in 'corporate codes of conduct'. In this context, 'corporate social responsibility' no longer refers to a mere company-internal reformulation of such expectations, but also reshapes economic self-control programs, including cost calculations, and the legal obligations tied to collective responsibility generated in this way (Beckers 2015: 30 ff. et passim). Humanitarian or ecological agreements may then, for example, lead to "new forms of vertical risk management" (Teubner 1994: 445) in group and supply chain responsibility; or they may constitute new "ecological problem areas" at the horizontal level as risk associations, which are to be determined according to their "suitability to collective risk management" (Teubner 1994: 443 ff.).

This capacity for risk management should serve as a model for the future attribution of collective responsibility and liability. This attribution constitutes its subjects of liability based not only on provable ecological causal links or existing corporate structures, but also on a future-oriented goal "to create a realistic basis for an active and joint risk prevention in an area where ecological problems are concentrated" (Teubner 1994: 443). This kind of "opportunistic" attribution certainly exceeds the traditional limitations of liability law, defined by the standards of causality and culpability. It does, however, integrate well with other, larger developments in liability law, which pursue new strategies to absorb uncertainty and stabilise expectations when dealing with technical risks. Given the increasing technisation, attribution criteria of individual causation and culpability are increasingly replaced by collective mechanisms of strict and causal liability – as is happening in internet liability

law, for example. In doing so, they are aligned with the standard of effective damage avoidance or assistance possibilities of social networks and intermediaries, identified as hybrid risk associations (Gruber 2014; Gruber 2015b: 337 ff.; Gruber 2015c: 99 ff.).

In a similar way, the new networks of ecological risks can now be held responsible as risk communities with special potential for effective "ecological risk prevention" (Teubner 1994: 458 ff). In climate and environmental liability law, these spheres of collective responsibility enable corresponding attributions towards new liability collectives. The boundaries of such liability collectives are to be determined according to ecological, geographical, and social criteria, possibly even along the real demarcations of natural landscapes (Salim v. State of Uttarakhand 2017). As a result, there is a broad spectrum of conceivable problems, which could ground potential risk associations responsible under liability law. Companies and entire markets of environmentally harmful products and production chains are examples of such associations, as are ecological chains and systems, contaminated sites, as well as polluted lakes and rivers. Due to their special interconnections, the latter ecological entities also constitute risk areas, which allows them to deal with their own ecological risks in the sense of "ecological risk management" – or otherwise to be liable for damage compensation (Teubner 1994: 443).

Bundling Climate Responsibility and Interests

Liability law identifies and legally reconstructs such risk collectives as independent 'social entities'. It thereby constitutes, in the manner described above, new types of ecological institutions that are suitable as centres of accountability for any collective liability. Such collective liability can, for example, involve the participants of an entire product market within the framework of a "market share liability" (Teubner 1994: 436 f., 440 ff.); it can also establish a "vertical liability" (Teubner 1994: 444) for production or supply chains; or it can create a new risk association along the lines of the American "superfund" (Teubner 1994: 437, 445). However, it could also introduce the even more far-reaching tool of liability according to emission or pollution shares in the sense of a "pollution share liability" (Teubner 1994: 445 f.), which is particularly relevant in view of the global consequences of climate change. Strictly speaking, collective climate liability would have to be directed against an ecologically or socially determined 'polluter collective' – e.g., a product market, a supply chain, a contaminated site, or another ecological problem area. For this, the law would have to develop a separate legal entity as an addressee of liability,

which has not been done yet. However, for the time being, corresponding claims can also be asserted against the collectively co-responsible actors and even against individual states that only insufficiently fulfil their voluntary commitments to climate protection.

Climate Liability of Risk Collectives: The Hague Decisions

The Hague Court has handed down two landmark rulings in *Urgenda Foundation v. The State of the Netherlands* (2015) and *Vereniging Milieudefensie et al. v. Royal Dutch Shell PLC* (2021). The rulings have shown how both state and non-state actors must answer to such collective failures and are held to civil law expectations. These expectations go beyond the economically constrained rationality of increasing efficiency and maximising economic benefits. On 20 December 2019, the *Hoge Raad der Nederlanden* (Urgenda v. The Netherlands 2019) upheld in the last instance a civil court decision in the *Urgenda* case that had ordered the Dutch state to reduce its greenhouse gas emissions by 25 percent by 2020 (compared to 1990 levels) (Urgenda v. The Netherlands 2015: paras 4.93, 5.1.). In the *Shell* case, a private company must now also assume responsibility for meeting climate protection targets – this time by achieving an emissions reduction of at least 45 percent by 2030 (compared to 2019 levels) (Milieudefensie v. Shell 2021: paras 4.4.38–39, 5.3.). This is more than a purely 'private' or individual obligation of a single company, but an exemplary imposition of collective responsibility related to the new ecological problem areas associated with climate risks. This is made clear by the tangible corporate obligations to act. Accordingly, the *Shell Group* must, on the one hand, reduce the emissions arising from its own activities, but also, on the other hand, work as hard as possible to reduce emissions throughout the company's production and value chain, all the way to the end consumers. It therefore effectively owes two things: success and effort. This implies compliance with a dual obligation to which it is bound by its own corporate codes as well as the due diligence standards of national civil law – of the Paris Climate Agreement, and of the general validity of human rights (Milieudefensie v. Shell 2021: para 4.4). What is noteworthy here is the central function that human rights are to play in sustainable climate protection, putting the onus on both nation states and private corporations. The extension of the fundamental rights obligation to the private sector (Teubner 2006a: 327–346) is based, in particular, on the threat of climate change (Milieudefensie v. Shell 2021: para 4.1.3). The inclusion of non-state, "non-contracting parties" in the targets of the Paris Agreement also introduces a comprehensive ecological risk field of private climate protection. The Hague Court succinctly justifies the constitution of these new risk associations, stating: "The signatories have emphasized that the reduction of CO2 emissions and

global warming cannot be achieved by states alone. Other parties must also contribute" (Milieudefensie v. Shell 2021: para 4.4.26).

Other, non-state actors can no longer evade this responsibility. One of the greatest existential challenges facing humanity thus requires a joint effort by all actors, state and non-state, or – in an increasingly outdated diction – 'public' and 'private.' Beyond the dualisms of state and society, beyond the different attributions of public and private responsibilities, beyond the separate functions of public and private law, i.e., beyond all false fronts of statist dichotomies, it becomes clear that climate protection cannot be reduced to state responsibility. The obligation of others to protect the climate – its 'third-party effect' on private individuals, so to speak – does not stem from contractual obligations or corporate legal relationships. No contract and no organisational constitution are necessary when it comes to the attribution of collective ecological responsibility of global existential scope. Instead, the *Shell Group*'s ecological responsibility is measured by the "opportunistic" mechanism of collective responsibility attribution, which mainly considers the group's "control and influence" over companies and business relationships (Milieudefensie v. Shell 2021 para 4.4.2). This mechanism does not ask to what extent the group's actions cause avoidable climate-damaging emissions, or to what extent it individually causes global climate change and the resulting climate damage – questions that are hardly answerable. The group's collective climate liability is instead established by a "political decision-making position" (Milieudefensie v. Shell 2021 para 4.4.16, 4.4.22–25), i.e., its ability to prevent risks based on business policy. This attribution of liability is collective, in the true sense of the word, because of an extended causal standard of legal attribution of action and responsibility, and because of The Hague Court's emphasis on a similar collective co-responsibility of other oil and gas companies (Milieudefensie v. Shell 2021 para 4.4.50).

The joint risk responsibility of *Shell* and its competitors might thus serve as the foundation for a yet-to-be-developed 'market share liability'. The practical consequences of such a joint liability would then include a cross-company "duty to organise" joint risk management (Teubner 1994: 449). To fulfil this duty, the participating companies would have to take concerted precautions to monitor each other, making transparent any 'moral hazard' or 'free riding' of individual companies. They may even impose effective sanctions or compensation mechanisms for the consequences of damage (Teubner 1994: 434, 455). Such a "joint ecological risk prevention" would be suitable to counter "the prevailing economic cynicism about cooperative action" by developing collective liability beyond its purely economic function into an "ecological institution" (Teubner 1994: 447 ff., 458 ff.). Besides, corporate policies have not only changed under the influence of climate change. Business enterprises no

longer act solely according to economic ideas of short-term benefit maximisation. In addition to "self-interest seeking with guile" (Teubner 1994: 453), there are now maxims of sustainable management that integrate alternative social rationalities and incorporate functions of intra- and inter-generational justice (Gottschlich & Friedrich 2014: 23–29). They go beyond mere economic calculations and assume environmental responsibility. Under current conditions, it is thus perfectly rational for economic actors to comply with the climate policy of the law through their own business decisions and actions. After all, The Hague Court has called for a joint effort to achieve collective responsibility for a common good. The right legal means of collective liability and the resulting risk management can conserve this common good and, in the sense of collective climate responsibility, protect it from the uncontrolled grip of exploitative individual actors.

This suggestion is not undermined by the image of the "tragedy of the commons" (Hardin 1968: 1243–1248) that is often employed against corporate climate responsibility; nor is it threatened by comparing the climate with an uncontrollably accessible, indivisible, global public good (Wagner 2020: 112) that would ultimately have to perish through overuse due to a lack of individual responsibility and a lack of incentives for resource-conserving behaviour. These objections only rehash a well-documented conceptual confusion of the core economistic criticism of any cooperative economic activity (Schläppi 2018: 24 ff.; Mattei 2012). Who at all should use the "world climate as a commons" (Wagner 2020: 112) and, if so, how? From a historically informed point of view, commons are characterised by the fact that they are not freely accessible and usable, but are largely regulated, especially on the base of use and participation. If one wanted to compare the climate with a commons, one should thus also recognise the corresponding collective ties and incentives of climate protection: Those who use the atmosphere as a 'CO2 drain', for example, must then accept corresponding sanctions, compensation demands, and possibly also direct negative effects on their own livelihoods. They should also price these into their cost calculations. Especially from an individual entrepreneurial point of view, it would then be inefficient and dangerous to ignore the actual consequences of climate-damaging activities in one's own cost calculations. It would be equally unwise to persistently exclude the growing legal risks of a collective liability from one's own self-management programs. Such behaviour would then indeed be called tragic: 'the tragedy of the commons' is, after all, the tragedy of legal economics. In the face of the climate crisis, its tragic figure, the *homo economicus*, atrophies from a rational actor to a rational fool (Sen 1977).

Current and Future Generations as Clusters of Interests

Climate responsibility, as a collective ecological responsibility, is thus not only socially expected by state policymakers or business enterprises, but it is now also demanded by law – as shown by the two cases of The Hague Court. The difficulty here is not that the collective responsibility demanded is not feasible. For nation states can readily fulfil their ecological responsibilities via climate policy, and companies can fulfil their due diligence and organisational obligations via forms of risk management and jointly organised risk control. What remains problematic, however, against the backdrop of these decisions, is the matter of how to ensure that these governmental and corporate obligations are fulfilled in situations in which obligated parties fail to comply with their judicially determined climate protection duties. For even after the decision has become final, legal enforcement and execution still depend on the political will of the losing defendants. In the *Urgenda* case, things continue to depend on the Dutch government's will to enact the required climate policies; in the case of *Shell*, it will essentially be the company's management that decides how the requirements are translated into concrete company policy. In both cases, therefore, 'judgment enforcement' is, to an extent, in the hands of the convicted parties.

The problem is that the courts were only able to determine the defendants' climate policy obligations and order them to pay the legal costs. A claim for compensation under liability law, in particular indemnity, however, was not asserted. Most notably in the *Shell* case, the reason for this is the limited scope of class actions filed in the "public interest," specifically in their focus on "public interests, which cannot be individualised because they accrue to a much larger group of persons, which is undefined and unspecified" (Milieudefensie v. Shell 2021 para 4.2.2.; Peterson & Zekoll 2011: 15 f.). The lawsuits filed by *Milieudefensie* and other organisations, foundations, and 17,379 individuals (!), who had commissioned *Milieudefensie* to represent their interests, failed to assert any individually quantifiable claims (Milieudefensie v. Shell 2021 para 4.2.7.).

This concentration on indeterminate general interests is, of course, in tension with the further requirements for admissibility, which ultimately demand a limitation of the asserted 'public' interests to similar interests that are 'suitable for bundling' in the collective action. Claims that cannot be individually determined through 'bundling' are consequently reserved for a certain group of persons, namely the "current and future generations of Dutch residents" (Milieudefensie v. Shell 2021 para 4.2.4). At the same time, however, this denies the right to sue to many of those worldwide who are injured by the global climate burdens. It is thus not surprising that the assertion of a quantified claim for damages or compensation was not even considered: How could

a small part of the world population claim a global damage for itself if that damage cannot be determined based on isolated shares? In this way, it would not even have been possible to quantify a proportionate damage. The collective assertion of such a partial damage, which is difficult to calculate, thus seems impossible.

In the *Shell* case, it would have made no major difference if the court had extended the capacity for collective action, irrespective of the provisions of the Dutch Civil Code, to "current and future generations of the world's population" – apart, of course, from determining the right of action of individual (Milieudefensie v. Shell 2021 para 4.2.5, 4.6.1, 5.1 and 5.2) plaintiffs (Milieudefensie v. Shell 2021 para 4.2.3). At best, another instrument of liability law, which has already been asserted in the context of collective legal protection under unfair competition law (Poelzig 2012: 497), would then perhaps have come into view *de lege ferenda*: Following the conceptual paradigm of consumer group actions, one could, for example, design a profit skimming claim for class actions conducted exclusively in the public interest. The benefits resulting from the defendant's globally harmful activities would then be compensated in ways other than individual damages. But even this would ultimately only cover a portion of the actual injured parties, together with their damages. Because, unlike consumer protection cases, the dispersed and mass damages caused by global environmental pollution do not affect people alone. The consequences of climate change not only threaten human needs and interests – which are themselves partially responsible for the climate crisis – but they threaten life as a whole. Genuine compensation for damage would accordingly have to be claimed on behalf of all those affected. Literally all. Not just a limited group of human individuals.

The legal task for the future will therefore be to fully cover all injured parties and to provide them with the necessary instruments of collective legal protection. Rather than continuing to exclusively link the – already fairly progressive – conceptions of class actions to human rights, and so allowing only humans to speak for humans, other entities must now also be considered. At any rate, the focus of the law on human rights can never achieve its ostensible objective of really doing justice to all humans. This is exemplified by The Hague Court's *Shell* verdict, which in its substantive justification was based on universal human rights – "the right to life and the right to respect for private and family life"[6]. In the end, however, the verdict was limited to "Dutch residents and the inhabitants of the Wadden region" (Milieudefensie v. Shell 2021 para 4.4.2, 4.4.9 ff.).

6 Art. 2 and 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR); Art. 6 and 17 of the International Covenant on Civil and Political Rights (ICCPR).

In this way, not even all human beings attain collective legal protection. This fact recalls, in somewhat bitter irony, Hannah Arendt's account of the "discrepancy between the efforts of well-meaning idealists who stubbornly insist on regarding as 'inalienable' those human rights that are enjoyed only by citizens of the most prosperous and civilized countries, and the situation of the rightless themselves […]" (Arendt 1949: 755). The class action against *Shell*, too, could only, despite its recourse to human rights, directly serve those people who already enjoyed a privileged legal status. Although the protective effect of The Hague Court's class action was originally oriented towards human rights, the court's decision to make the bundling of interests an admissibility requirement ultimately focused its protections on civil or Dutch rights.

However, the ruling does allow, at least in principle, that other beneficiaries – in their capacity as residents of the Netherlands and the Wadden Sea – may be considered in addition to citizens. In a daring but no longer abstruse extension of such resident rights, other populations of these territories could then also be protected in their right to life. Climate change has an impact on more than just human needs in the territories at issue. This gives rise to the perspective of an ecological private law that uses the criterion of vulnerability to identify interests worthy of protection and to define legal personhood. Such an ecological private law introduces a large number of legal avenues for those affected to take joint action against climate hazards or climate damage, and to seek compensation. Fatefully connected by jointly suffered climate catastrophes, life communities unify human and non-human beings (Latour 1993: 4 et passim) because they have all been injured. Legal protection for these injured living beings can thereafter no longer be directed exclusively to human needs but must be based on the ubiquitous vulnerability of all forms of life – a vulnerability that is particularly evident in the face of climate change.

Hearing the Voiceless

Overcoming the exclusive, anthropocentric focus on human interests would mark a new step towards transforming civil proceedings into collective forms of legal protection. This de-individualisation is already observed in numerous jurisdictions, such as class actions and test cases (Roth 2016: 1135).[7] The next step could be

7 On recent legal developments in Europe, see Directive (2020/1828/EU) of 25 November 2020 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC, OJ L 409/1; in Switzerland, the benefits of collective redress are now also

a de-anthropocentrisation of legal protection, for which there are already several models. In the interests of developing a future climate protection law, there is much that can be learned from the numerous attempts worldwide to achieve more effective enforcement of environmental and conservation law via the assertion of intrinsic rights of nature or, particularly, via claims in the name of natural entities (Abate 2020a: 15 et passim; Abate 2020b; Abate 2021; Gruber 2006: 205 ff.).

De-Anthropocentration of Collective Legal Protection

Far-reaching advances in this direction have lately been observed outside of Europe. Several natural entities: the sacred rivers of India – the *Ganges* (Salim v. State of Uttarakhand 2017) and *Yamuna* (Miglani v. State of Uttarakhand 2017) –, the *Whanganui River*[8], *Mount Taranaki*[9] in New Zealand, the *Río Atrato*, and, last but not least, the *Amazon (*Barragán v. Presidency of the Republic 2018) in Colombia have all become legal entities in their own right (O'Donnell & Talbot-Jones 2018; O'Donnell, 2018; Macpherson et al. 2021; Abate 2020a: ch. 5, pp. 120 ff.; Cyrus R. Vance Center 2020), when it came to protecting the human and non-human beings associated with them.

In particular, the example of the Colombian Amazon shows that such natural persons with legal standing are not just some kind of anthropomorphic hyper-organisms. Rather, they are to be understood as hybrid, biosocial associations of living beings, which may also be described as life communities. The *Corte Suprema de Justicia de Colombia* initially granted subjective rights to the river in a manner similar to the *Río Atrato* case, but then contoured the attribution subject of these rights – or, so to speak, the "natural person" called *Amazonía Colombiana* – along the river's course. In doing so, the court constituted a collective legal person that encompasses the entire Amazonian ecosystem, including the rainforest, with all its

being recognised, as shown by a corresponding Federal Council initiative: Botschaft zur Änderung der Schweizerischen Zivilprozessordnung (Verbandsklage und kollektiver Vergleich), 10.12.2021, BBl 2021 3048, including draft bill (BBl 2021 3049), available from: https://fedlex.data.admin.ch/eli/fga/2021/3049.

8 *Te Awa Tupua (Whanganui River Claims Settlement) Bill* [20 March 2017], available from: https://www.whanganui.govt.nz/About-Whanganui/Our-District/Te-Awa-Tupua-Whanganui-River-Settlement.

9 *Te Anga Pūtakerongo (Record of Understanding for Mount Taranaki, Pouākai and the Kaitake Ranges)* [20 December 2017], and *Te Ruruku Pūtakerongo (Collective Redress Deed)* [01. September 2023] both available from: https://www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/taranaki-maunga/.

human and non-human inhabitants (Barragán v. Presidency of the Republic 2018: para 14; Abate 2020a: 74 ff.).

However, a closer look at the other personified natural entities reveals that they, too, essentially serve as legal points of attribution, granting subjective rights to the respective collectives composed of humans and non-humans. As *loci* of attributions, they are intended to convey the greatest possible legal protection to environmental and climatic victims of specific life communities. The *Ganges* and *Yamuna* have also obtained their special legal status from the collective bond of the inhabitants, who live in their area and community:

> "Rivers Ganga and Yamuna have spiritual and physical sustenance. They support and assist both the life and natural resources and health and well-being of the entire community. Rivers Ganga and Yamuna are breathing, living, and sustaining the communities from mountains to sea." (Salim v. State of Uttarakhand 2017: para 17)

The rivers appear to be connecting lifelines. They unite humans in all dimensions of their existence and connect them with all kinds of non-human beings – "the Himalayan Mountain Ranges, Glaciers, rivers, streams, rivulets, lakes, jungles, air, forests, meadows, dales, wetlands, grasslands and springs" (Miglani v. State of Uttarakhand 2017: 63) – into communities.

Other living natural entities seem to enjoy a comparable existential as well as spiritual, religious, and cultural significance. The *Whanganui River* becomes a legal entity in order to preserve the special cultural relationship of the *Māori* to the natural resources, which include the spiritual and physical bases of life (Abate 2020a: 139ff.). The same applies to *Mount Taranaki*.[10] The deep collective bond also legitimises the local inhabitants as the appropriate guardians of these natural persons, whose interests they must protect as a life community, together with state representation (O'Donnell & Talbot-Jones 2018).

Finally, the Río Atrato is granted a similar representation for the protection of its rights as *sujeto de derechos*. The *Corte Constitucional de Colombia* has appointed the ethnic communities living in the river basin, in addition to the Colombian state, as suitable legal representatives (Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016: para 9.32). These, in turn, are to summon a commission of administrators, which consists of a member of the communities, a state delegate, and an advisory team of public institutions and NGOs. In this case, too, the

10 See *supra* note 9.

entire river – together with its tributaries and surrounding terrain – is recognised as a single natural entity with subjective rights to protection, conservation, maintenance, and restoration (Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016: para 10.2). Here, an ecological problem area is constituted for the previously unentitled subjects of "biocultural rights" (Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016: para 5.11). This problem area is based on "the profound unity and interdependence between nature and the human species" and a subsequent "new socio-legal understanding, in which nature and its environment must be taken seriously and given full rights" (Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016: para 9.28). The *Corte Constitucional* argues that nature – together with its cultures and life forms, and its biological diversity – constitutes *una entidad viviente*, specifically a "living entity composed of a multitude of other life forms and cultural expressions" (Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016: 5.10; see also Sierra Club v. Morton 1972; Salim v. State of Uttarakhand 2017; Miglani v. State of Uttarakhand 2017; Uttarakhand v. Salim 2017b; Punjab and Haryana High Court, Court on its own motion v. Chandigarh Administration 2009).

Future Entitlements of Ecological Associations

This already shows how, within concrete ecological risk areas, new collectives materialise on both sides of climate liability conflicts – as plaintiffs and as defendants. On the defendant side, the previously described ecological risk associations of collectively responsible actors become addressable as liability opponents. On the plaintiff side, by contrast, the corresponding associations of endangered living entities emerge. As "living entities," they can now appear before courts and assert their liability claims with the help of appropriate representatives. However, these living associations of natural entities are of a special, eco-centric kind, because they include not only the affected humans but also non-human beings – the "not-yet-entitled" and "yet-to-be-entitled," so to speak. This also answers Hannah Arendt's question (1949: 755), which was later extended by Bruno Latour to encompass the entire circle of the "not-yet-entitled" (Latour 2005: 75 et passim), and that is now – since nobody can consider themselves to be on safe grounds in the face of global crisis (Latour 2017; Serres 1990) – being asked more often and concretely: How to make those heard who have not yet found a voice in the law (Gruber 2020: 267 ff.)?

Randall Abate suggests that the future of climate protection crucially depends on the future legal protection of the "voiceless," who have yet to be heard. He sees the *Río Atrato* case as a landmark ruling. Based on an insight into the "biocultural"

interconnectedness of biological and cultural diversity, it revealed not only sound reasons for conferring legal subjectivity on a natural entity, but it also disclosed the special importance of eco-centric legal protection – for natural resources and animals as well as for future generations (Abate 2020a: 138 f.). What the Colombian Constitutional Court had demonstrated in the *Río Atrato* case, the *Corte Suprema de Justicia* was now able to advance in the *Amazonía Colombiana* case (Barragán v. Presidency of the Republic 2018: para 14; Abate 2020a: 74 ff) on behalf of future generations. In so doing, the court upheld the eco-centric rationale of an inseparable bond between human beings and their natural environments.

Future humans are part of this bond. When compared with humans living today, very little is known about what the survival of future humans will depend on, how they will live, and what their needs and interests will be. One should therefore not reduce future generations to a merely temporal conception of later-born humans – as if one could save the world by simply replacing the egoism of previous humans with the egoism of later humans. Nor can it have any lasting effect if the interests of younger generations are pitted against those of older generations in court proceedings. To be sure, the preliminary success of climate lawsuits, filed under the invocation of human and children's rights, are important intermediate steps on the way to an ecological climate rights protection, which is yet to be established. These include positively received decisions, such as those of the German Federal Constitutional Court, especially the one on the Federal Climate Change Act (German Constitutional Court 2021) and of the European Court of Human Rights (Duarte v Portugal 2020; KlimaSeniorinnen v. Switzerland 2021). Yet even these decisions cannot hide the fact that an "intertemporal safeguarding of freedom", in the sense of an intergenerational redistribution of finite consumable resources for survival, is not enough alone. It does not suffice to protect the rights of future generations primarily through the human rights of younger citizens, who are often still members of the "most prosperous and civilized countries" (Arendt 1949: 755), and then to substitute their protection for the supposedly conflicting interests of the older humans (Ladeur 2022).

To do justice to the "collective social dimension of climate protection law" (Ladeur 2022), more far-reaching institutional and procedural arrangements are required than simply exchanging one anthropocentrism for the next, one human interest for another, one specific egoism for a new one. While it is impossible to "save the world by court order" (Ladeur 2022), doing nothing helps even less (Winter 2019: 270). The legal inactivity seems to be the result of an almost devout hope for 'help from above,' which relies on the idea that only state policy and legislation are, based on their "assessment prerogative", able to protect the climate. This

idea, however, underestimates the potentials of an evaluation of climate protection policy in accordance with fundamental rights – i.e. the ability of civil society to control state action under conditions of uncertainty (Ladeur 2022). The idea also neglects the potential of private law to regulate society, in particular the powers of progressive civil liability law, which increasingly has a life-sustaining function.

This calls for new forums to unfold, in private law, the kind of "realistic vision of the future" (Teubner 2019) sought by Gunther Teubner, which is now more needed than ever, and which will soon be absolutely vital. In essence, climate change necessitates a transformation of society from an anthropocentric to an eco-centric protection of future generations and the "voiceless," a transition Randall Abate describes in three steps (Abate 2020a: 173 ff.): First, appropriate institutions and legal procedures must be established and adjusted to protect all vulnerable subjects. Second, climate protection must be included as an integral part of a sustainable movement towards comprehensive environmental protection that takes equal account of the concerns of human and non-human living beings, natural entities and future generations. Third and finally, these subjects require care responsibilities and accountabilities, which can be exercised by both state and private representatives within the framework of their "stewardship responsibility" or "guardianship" – e.g. as "next friends" or as close, legitimate trustees of natural entities (Abate 2020a: 174, 185 ff., 202 ff.). This also demonstrates that sustainable climate protection law cannot do without independent, subjective legal protection. This protection could be structured according to the collective action model of "actio pro convictione" described above (Micklitz & Rott 2022: § 3 UKlaG, para 4).

Future Generations as Aspects of the Environment

There are already some promising approaches, which are, however, still scattered across different jurisdictions around the world (Abate 2020a: 209 ff.). To overcome the anthropocentric approach to climate protection, the law must recognise animals and natural entities as legal subjects with their own rights; it must identify them as 'natural' legal persons; and it must include future generations. To be consistent, future generations should not be reduced to the egocentric perspectives of human generations, but should, just like 'natural persons', be conceptualised as associations of human and non-human beings. It would then be possible to assert the global affectedness of all inhabitants of the earth by way of collective legal protection. As this would entail the assertion of no individually determinable damages, but just damages common to all, however, only the legal consequences of profit-making for activities that harm the climate and the environment would come into question.

If it was, however, possible to identify definable life communities that are particularly affected, these could, in principle, be granted their own rights of action to assert claims for damages. This, of course, presupposes the recognition of these life communities as independent bearers of rights, or at least as subjects with partial legal capacity. Their rights would then have to be differentiated according to the concrete problem area, the context of application, the comparability of interests, and the specific vulnerability. For the time being, the idea of a partial legal capacity might thus be more feasible than, for example, the unconditional demand for full, human-like status as a legal entity (cf. Fischer-Lescano 2018: 211; Gutmann 2021: 166 f.). In any case, not even the 'natural person' can be identified with the human being concealed behind it. Natural personhood "thus never encompasses the whole being" (Fischer-Lescano 2018: 208) or the natural being as such, but rather demarcates points of legal attribution, to expectations and rights that can be addressed. And so, their design may well vary, depending on "[…] who or what and how someone participates in communication and is considered an aspect of the environment" (Fuchs 2007: 158). The protective concepts of legal subjectivity and legal capacities must account for the diversity of natural dynamics, developmental processes, and affectedness of human and non-human living beings. It thus makes sense to vary their functional manifestations accordingly and to confer them in different stages of differential legal capacity (Gruber 2019: 55 ff.).

Corresponding to this, one can construct different kinds of partial legal subjectivity, which reflect the social phenomena of partial personhood, especially in the ecological problem areas of the life communities associated with human and non-human beings (Gruber 2006: 110 ff., 152 ff.). The content of their rights is based on their specific vulnerability, including their need for protection, preservation, care, and restoration (Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia 2016: para 10.2; O'Donnell & Talbot-Jones 2018), all of which are related to claims for compensation under liability law. The procedural enforcement of these rights will be based on the comparability of their interests, their collective composition, and their reconstruction as partial legal subjects. This provides the appropriate means of collective legal protection for the relevant subarea, but also limits them in a meaningful way. Before such entitlement is given to the 'not-yet-entitled', it is necessary to understand several things: What can be the objects of their lawsuits? Who can raise these lawsuits? Where can these lawsuits be raised and for whom? In which social, legal, and biocultural context do they arise? And finally, how are they legally justified and classified with regard to their effects in legal reality (Winter 2019: 270)?

Many identifiable natural entities arguably share similar interests. These entities include the river courses now capable of holding rights, as described above, the "terrestrially" connected (Barragán v. Presidency of the Republic 2018: para 14; Abate 2020a: 74 ff.; cf. Latour 2019: et passim) and thus protected human and non-human inhabitants, as well as future generations, which are no longer reducible to specific humans or anthropologies. Because of their differentiated, domain-specific, context-dependent limitation to subjects capable of partial rights, such provisions may inevitably still appear to be anthropocentric in an epistemic sense (Gutmann 2021: 157, 170 f.). The material communicative conditions of human societies inevitably determine the decisive criteria of the attribution of legal personality, legal subjectivity, and legal capacity, the priority of those closely affiliated ("next friends"), the assessment of comparabilities and vulnerabilities, of interests and needs, as well as rights and duties. But in a substantive, "extensional" sense (Krebs 1999: 19 ff), these conditions enable the needed eco-centric legal protection for present and future generations in the first place. The "de-anthropocentrisation" does not consist in doing without humans; instead, humans are asked to invent themselves anew and to join forces with non-human living beings to constitute a common "terrain of life" (Latour 2017: 109 f.).

Opening the Gates to Climate Justice

This task has not yet been fully accepted, let alone tackled, by lawyers and legal scholars. As such, climate lawsuits based on human rights still offer the best prospects for contributing to effective climate protection, at least on a transitional basis. For the time being, human rights and children's rights should hence be used as provisional "stopgaps" to bridge the existing gaps in legal protection (Savaresi 2021: 2). Likewise, today's youth may act as trustees and represent the interests of future generations, thereby serving an important placeholder function for ecological litigation on behalf of the future (Abate 2020a: 43 ff., 202 ff.). But the struggle for the law of the future does not end on Fridays, but rather requires a continued rebellion in law and legal thinking. The transitory legal climate protection of the present must therefore be quickly replaced by a pioneering ecological climate law protection. The ecological private law of the future will eventually ensure that the affected living entities can sue in their own right.

One day, rivers and their natural surroundings may acquire their own rights, just like the *Río Atrato* or the *Amazon*, which, as natural associations of human and non-human inhabitants, are now accorded their own specific rights to physical

integrity (cf. Gutmann 2021; Gutmann 2022; Gray 1996).[11] Even the Wadden Sea, which was involved in the Dutch *Shell* case, may one day become a comparable plaintiff – in the sense of a legal person with legal capacity and party status (Lambooya et al. 2019). The decisive factor here is that its future protection is no longer framed as a mere placeholder for the present human inhabitants, who, moreover, are still limited to Dutch territory. Rather, the rights of the Wadden Sea are associated with the protection of all human and non-human inhabitants and – crossing the boundaries of national state territories – also of future generations. Similar interests could be justified for the living terrain of the Wadden Sea, as well as the specific vulnerability of its inhabitants. In the case of climate damage, the latter could proceed as actually injured parties by way of collective legal protection and claim a jointly determinable compensation for damage.

Something similar could also be imagined in Germany for the case of *Saúl Luciano Lliuya*, who lives in the Peruvian city of *Huaraz*, against *RWE*, which is still pending appeal (Lliuya v. RWE 2017) at the Higher Regional Court of Hamm (Gruber 2017: 112 ff.). In the future, it will no longer be necessary to file an individual lawsuit by a resident whose property is affected by climate-related glacial melting. Instead, it would be possible to use the model of private legal enforcement by way of collective legal protection for the entire affected region of *Huaraz*. As an association of the local population – or in Latour's words, as a life community of the "earthbound" (Latour 2017: 109 f.; Abate 2020a: 74 ff; Barragán v. Presidency of the Republic 2018: para 14) living there –, *Huaraz* could then assert its entire damage, composed of mass individual injuries, and claim compensation for the removal of disturbances and protective measures.[12] In this way, the legal dispute could also escape the superficial accusation that an NGO is merely using the individual lawsuit of *Lliuya* (Wagner 2020: 5), the Peruvian citizen, and his legal position under civil law as the owner of a plot of land threatened by climate change, to engage in "strategic litigation" (Graser 2019: 337; Weller & Tran 2021: 577f; Gruber 2017: 113ff.).

When possibilities for collective legal action could, in this sense, be created for particularly affected regions and terrains of life, then this would, quite literally, constitute a gaining of ground for climate protection and a climate liability law of the future. At the same time, it would also help disarm polemical claims regarding

11 With regard to the question of how these specific rights could be shaped in terms of content, the "derechos de la naturaleza" enshrined in the seventh chapter of the Ecuadorian Constitution (*Constitución de la República del Ecuador* 2008) provide a template for possible answers, especially in Art. 71.1 and in Art. 72.1, in addition to the aforementioned court decisions.

12 Cf. *supra* note 2.

the – undeniable – symbolic character of previous proxy litigation processes. There is nothing here, however, that prevents one from recognising the importance of representation and agency in civil proceedings, especially via collective legal protection. A dissenting judge in the famous *Sierra Club v. Rogers C. B. Morton* (1972: 721) litigation arrived at the progressive view that, after a change of parties, the title of the judgement should be renamed "*Mineral King v. Morton*". In line with this, future climate liability litigation could also be aptly captioned "*Wadden Sea v. Shell*" or "*Huaraz Region v. RWE*."

And the Invisible Becomes Essential: The Cupola in the Anthropocene

This would certainly not affect the option of individual actions as in the *Lliuya* case. That said, their scope would probably be limited to relatively small partial damages which, compared to the total damages, almost seem to fall within the realm of dispersed damages. At least this one specific case was able to advance legal doctrine: The Court of Appeal considered the plaintiff's submission on the claim for compensation to be sound. Specifically, the plaintiff sought compensation for the costs of preventive protective measures against *RWE*, which, as an actor, was considered to be jointly responsible for climate damage (Schirmer 2021: 1099).[13] The court now entered into the taking of evidence (Lliuya v. RWE 2017: Hinweis- und Beweisbeschluss). The next hurdle will be the required proof of causality, a hurdle which, however, has hardly been overcome in climate liability (Faure & Peeters 2011: 267 f., et passim). Yet in the meantime, some legal progress has been made on the attribution side in dealing with existential ecological risks. In particular, attempts were made to address the specific complexity and diversity of causal links between environmentally damaging activities, adverse climate change, and concrete risks of damage. These attempts certainly reduce the previous difficulties of proof, both according to the scientific knowledge of climate research, and with regard to the legal standards of adequate causality.

By pursuing these approaches further, down to the causal agents – now identifiable even by jurists –, it will finally become clear how the new, scientifically justified chains of causality and evidence enable more convincing collective attributions of

13 The civil claim for reimbursement of costs is based on section 1004 (1) sentence 2 BGB, combined with sections 677, 683 sentence 1, section 670 and section 812 (1) sentence 1 BGB.

responsibility (Schirmer 2021: 1099 ff.). These, in turn, unite the actors involved in climate and environmental damage into risk and liability collectives (Teubner 1994: 429). The path to climate-related risk liability would be paved if these collectives could be held liable for climate damages that cannot be attributed to individual actions, i.e., if they were held responsible for violations that were also committed by others. The responsible ecological collective actors would then have to redistribute the environmental risks taken, manage the environmental behaviour of their individual members, and develop new environmental technologies. To pioneer the private climate liability law of the future, it will thus be necessary, as Gunther Teubner has previously noted, "to blur the line between 'private' liability mechanisms and 'public' regulatory institutions" (Teubner 1994: 432).

Hybrid risk associations constitute themselves accordingly – induced by liability law – as responsible collective actors, whose liability for environmentally damaging behaviour will also be measured against the standard of damage avoidance or assistance opportunities (Teubner 1994: 443 ff.). Climate change makes Teubner's collectives increasingly visible in the legal system: The Cupola appears in the Anthropocene (Kersten 2014: 21 ff; Kersten 2013). Hybrid associations, however, are not only found on the side of liability collectives. The new forms of collective responsibility provide visibility everywhere; they provide a glimpse of the existential legal conflicts of the near future, which are essential for survival.

Ecological associations will be found on all sides of the conflict. These associations will be formed based on their specific vulnerability and their 'capacity for responsibility', understood as an aptitude for collective risk management. Thus, new associations may soon face each other in climate liability litigation, all of them ecological, geographic risk areas (Teubner 1994: 445 f.). But while the side of the claiming plaintiff will consist of living, natural, 'terrestrially' connected life communities, the defendant side will consist of collective opponents, such as networked business communities, market segments, supply chains, or even customer bases (Milieudefensie v. Shell 2021 para 4.4.2.). The proxy litigation in climate cases will therefore have to first find their parties. They might even be able to constitute them based on ongoing personification processes, which are informed by constantly emerging climate conflicts. A jurisprudence that is fit for the future would thus, on the one hand, would have to conceptualise the claimants as endangered entities (i.e., in terms of vulnerability), and, on the other, have to identify the opponents as those responsible for the risk (i.e., in terms of violation). What they all have in common, however, is their necessary basis for existence, namely their dependence on the terrain of their lives and their inextricable 'earth-boundedness'. This makes the struggle for justice seem almost like a "fight for Gaia"

(Latour 2015). For the time being, individuals or groups of individuals or human organisations will have to join forces in this fight; in the near future, ecological life communities – like the mentioned river courses, the Wadden Sea, or the Huaraz region – may soon be able to continue the fight;[14] and one day perhaps, it will be the future generations of this world who will rally against the risk associations of fossil energy corporations or other ecological problem areas, to secure the victory of collective climate liability. This victory, in turn, might make a modest contribution to saving the world, even if still via court order. "It looks like the 'Cupola' could change its contours" (Teubner 1994: 464).

Bibliography

Abate, Randall (2020a) *Climate change and the voiceless: Protecting future generations, wildlife, and natural resources*. Cambridge UK, New York: Cambridge University Press.

Abate, Randall S. (Hrsg.) (2020b) *What can animal law learn from environmental law?* Washington, D. C.: Environmental Law Institute.

Abate, Randall (2021) Anthropocene Accountability Litigation: Confronting Common Enemies to Promote a Just Transition. *Columbia Journal of Environmental Law*, Vol. 46 (2021): 225–291

Arendt, Hannah (1949) Es gibt nur ein einziges Menschenrecht. *Die Wandlung*, Vol. 4 (1949): 754–770

Beckers, Anna (2015) *Enforcing corporate social responsibility codes: On global self-regulation and national private law*. Oxford, Portland: Hart Publishing.

Beckers, Anna (2021) Globale Wertschöpfungsketten: Theorie und Dogmatik unternehmensbezogener Pflichten. *Zeitschrift für die gesamte Privatrechtswissenschaft*, Vol. 7 (2021): 220–251.

Böhm, Franz (1966) Privatrechtsgesellschaft und Marktwirtschaft. *ORDO: Jahrbuch für Die Ordnung von Wirtschaft und Gesellschaft*, Vol.17 (1966): 75–151.

Doelle, Meinhard & Seck, Sara L. (Hrsg.) (2021) *Research handbook on climate change law and loss & damage*. Cheltenham UK, Northampton MA: Edward Elgar.

Faure, Michael & Peeters, Marjan (2011) *Climate change liability*. Cheltenham, Northampton: Edward Elgar.

Fikentscher, Wolfgang (1983) *Bd. 2: Deutsches Wirtschaftsrecht*. München: Beck.

Fischer-Lescano, Andreas (2018) Natur als Rechtsperson. Konstellationen der Stellvertretung im Recht. *Zeitschrift für Umweltrecht*, no. 4, 205–216.

von Foerster, Heinz (1981) *Observing Systems*. Seaside CA: Intersystems Publications.

French, Duncan & Pontin, Benjamin (2016) Chapter I.1: The science of climate change: a legal perspective on the IPCC, pp. 9–19 in D. A. Farber & C. P. Carlarne (eds.) *Climate change law*. Eagan MN: Foundation Press.

14 For Europe, the Spanish Parliament has just taken a first step towards this future by granting legal entity status to the Mar Menor, a saltwater lagoon off the coast of Murcia (Ley 19/2022, de 30 de septiembre, para el reconocimiento de personalidad jurídica a la laguna del Mar Menor y su cuenca); see https://www.boe.es/diario_boe/txt.php?id=BOE-A-2022-16019.

Fuchs, Peter (2007) *Das Maß aller Dinge: Eine Abhandlung zur Metaphysik des Menschen*. Weilerwist: Velbrück Wissenschaft.

Godt, Christine (1997) *Haftung für ökologische Schäden: Verantwortung fur Beeinträchtigungen des Allgemeingutes Umwelt durch individualisierbare Verletzungshandlungen*. Berlin: Duncker & Humblot.

Gottschlich, Daniela & Friedrich, Beate (2014) The Legacy of Sylvicultura oeconomica. A Critical Reflection on the Notion of Sustainability. Das Erbe der Sylvicultura oeconomica. Eine kritische Reflexion des Nachhaltigkeitsbegriffs. *GAIA - Ecological Perspectives for Science and Society* 23: 23–29.

Graser, Alexander (2019) Strategic Litigation - oder: Was man mit der Dritten Gewalt sonst noch so anfangen kann. *Rechtswissenschaft* 10: 317–353.

Gray, Mark Allan (1996) The International Crime of Ecocide, *California Western International Law Journal,* Vol. 26 (2) 215–271

Gruber, Malte-Christian (2006) *Rechtsschutz für nichtmenschliches Leben: Der moralische Status des Lebendigen und seine Implementierung in Tierschutz, Naturschutz- und Umweltrecht*. Baden-Baden: Nomos Verlagsgesellschaft.

Gruber, Malte-Christian (2012) What Is It Like to Be Unborn? Our Common Fate with Future Generations, pp. 113–137 in K. Mathis (ed.) *Efficiency, Sustainability, and Justice to Future Generations*. Dordrecht, Heidelberg, London and New York: Springer

Gruber, Malte-Christian (2014) Vermittler, Störer, Rechtsverletzer: Zur Hybridhaftung im Internet, *Zeitschrift für Geistiges Eigentum*, Vol. 6 (3) 302–324

Gruber, Malte-Christian (2015a) *Bioinformationsrecht. Zur Persönlichkeitsentfaltung des Menschen in technisierter Verfassung*. Tübingen: Mohr Siebeck.

Gruber, Malte-Christian (2015b) Flashmobs, Flashboys und Flashbacks des automatisierten Handelns. Zur rechtlichen Konstruktion neuer Verantwortlichkeiten. *Soziale Systeme* 19: 327–349.

Gruber, Malte-Christian (2015c) Legal responsibility of AI in social media and algorithmic trading, pp. 90–104 in M. Jankowska, M. Pawełczyk & M. Kulawiak (eds.), *AI: Law, Philosophy & Geoinformatics.* Warsaw: Prawa Gospodarczego.

Gruber, Malte-Christian (2017) Escaping the Epistemic Trap: An Ecological Analysis of Law and Economics, pp. 107–121 in K. Mathis & B. R. Huber (eds.) *Environmental law and economics*. Cham: Springer.

Gruber, Malte-Christian (2018) Fluide Zivilverfahren. Zur prozessualen Präsentation von Ermöglichungs- und Gegenrechten, pp. 227–247 in A. Fischer-Lescano, H. Franzki & J. Horst (eds.) *Gegenrechte. Recht jenseits des Subjekts.* Tübingen: Mohr Siebeck.

Gruber, Malte-Christian (2019) Mensch oder Maschine: Zur Humanität des Rechts nach dem Ende des Menschen, pp. 43–59 in A. Funke & K. Ulrich Schmolke (eds.), *Menschenbilder im Recht*, Tübingen: Mohr Siebeck.

Gruber, Malte-Christian (2020) Why Non-Human Rights?, *Law & Literature,* Vol. 32 (2): 263–270.

Gutmann, Andreas (2021) *Hybride Rechtssubjektivität: Die Rechte der „Natur oder Pacha Mama" in der ecuadorianischen Verfassung von 2008*. Baden-Baden: Nomos Verlagsgesellschaft.

Gutmann, Andreas (2022) Der Nebelwald als Rechtssubjekt. Das Urteil des ecuadorianischen Verfassungsgerichts im Fall Los Cedros. *Kritische Justiz* 55: 27–41.

Hardin, Garrett (1968) The tragedy of the commons. *Science* 162: 1243–1248.

Hess, Burkhard (2011) "Private law enforcement" und Kollektivklagen: Regelungsbedarf für das deutsche Zivilprozessrecht? *Juristenzeitung* 66: 66–74.

Ingold, Albert (2014) Grundrechtsschutz sozialer Emergenz. Eine Neukonfiguration juristischer Personalität in Art. 19 Abs. 3 GG angesichts webbasierter Kollektivitätsformen. *Der Staat* 53: 193–226.

Kersten, Jens (2013) The Enjoyment of Complexity: A New Political Anthropology for the Anthropocene?", pp. 39–55 in H. Trischler (ed.), *Anthropocene: Exploring the Future of the Age of Humans*.

Kersten, Jens (2014) *Das Anthropozän-Konzept: Kontrakt, Komposition, Konflikt*. Baden-Baden: Nomos.

Klingenfeld, Daniel (2020) *Menschheitsaufgabe Klimaschutz: Das Übereinkommen von Paris*. Wiesbaden: Landeszentrale für politische Bildung.

Köndgen, Johannes (1983) Überlegungen zur Fortbildung des Umwelthaftpflichtrechts. *Umwelt- und Planungsrecht 3:* 345–356.

Krebs, Angelika (1999) *Ethics of nature: A map*. Berlin, New York: W. de Gruyter.

Kuebler, Martin (2021) Has COVID changed Fridays for Future? *DW* (19.03.2021), available from: <https://p.dw.com/p/3qnJh>.

Ladeur, Karl-Heinz (2022) Das Bundesverfassungsgericht ist zu staatsgläubig. *Frankfurter Allgemeine Zeitung* (F. A. Z. Einspruch, 13.01.2022), available from: <https://www.faz.net/-irg-ak14i>.

Lambooy, Tineke, van de Venis, Jan & Stokkermans, Christiaan (2019) A case for granting legal personality to the Dutch part of the Wadden Sea. *Water International* 44: 786–803.

Latour, Bruno (1993) *We have never been modern*. Cambridge MA: Harvard University Press.

Latour, Bruno (2005) *Reassembling the social: An introduction to actor-network-theory*. Oxford, New York: Oxford University Press.

Latour, Bruno (2015) *Face à Gaia. Huit conférences sur le nouveau régime climatique.* Paris: La Découverte.

Latour, Bruno (2017) *Où atterrir?: Comment s'orienter en politique*. Paris: La Découverte.

Luhmann, Niklas (1981) Subjektive Rechte: Zum Umbau des Rechtsbewußtseins für die moderne Gesellschaft, pp. 45–104 in N. Luhmann, *Gesellschaftsstruktur und Semantik 2*, Frankfurt: Suhrkamp.

Luhmann, Niklas (1995) Die Form 'Person', pp. 142–154 in N. Luhmann, *Soziologische Aufklärung 6. Die Soziologie und der Mensch*, Opladen: Westdeutscher Verlag.

Macpherson, Elizabeth, Borchgrevink, Axel, Ranjan, Rahul & Vallejo Piedrahíta, Catalina (2021) Where ordinary laws fall short: 'riverine rights' and constitutionalism. *Griffith Law Review* 30: 438–473.

Mattei, Ugo (2012) First Thoughts for a Phenomenology of the Commons, pp. 37–45 in D. Bollier & S. Helfrich (eds.), *The Wealth of the Commons: A World beyond Market & State,* Amherst MA: Levellers Press.

Medicus, Dieter (1986) Zivilrecht und Umweltschutz, *Juristenzeitung* 41: 778–785.

Menke, Christoph (2008) Subjektive Rechte: Zur Paradoxie der Form / Subjective Rights. The Paradox of Form. *Zeitschrift für Rechtssoziologie* 29: 81–108.

Menke, Christoph (2017) Unsere Zerrissenheit ist doch das Beste an der Moderne, was wir haben, *DIE ZEIT* 20/2017 (Interview Assheuer, 10.05.2017).

Micklitz, Hans-Wolfgang & Rott, Peter (2022) Münchener Kommentar zur Zivilprozessordnung Bd. 3: 6. Auflage 2022, München: C. H. Beck.

Monterossi, Michael W. (2020) *L'orizzonte intergenerazionale del diritto civile: Tutela, soggettività, azione*. Pisa: ETS.

O'Donnell, Erin L. (2018) At the Intersection of the Sacred and the Legal: Rights for Nature in Uttarakhand, India. *Journal of Environmental Law* 30: 135–144.

O'Donnell, Erin L. & Talbot-Jones, Julia (2018) Creating legal rights for rivers: lessons from Australia, New Zealand, and India. *Ecology and Society* 23.

Peterson, Courtland H. & Zekoll, Joachim (1994) Mass Torts. *The American Journal of Comparative Law* 42: 79–146.

Poelzig, Dörte (2012) *Normdurchsetzung durch Privatrecht*. Tübingen: Mohr Siebeck.

Raiser, Ludwig (1961) Der Stand der Lehre vom subjektiven Recht im Deutschen Zivilrecht, *Juristen-zeitung* 16: 465–473.

Raiser, Ludwig (1963) Rechtsschutz und Institutionenschutz im Privatrecht, pp. 145–167 in L. Raiser, *Summum ius summa iniuria. Individualgerechtigkeit und der Schutz allgemeiner Werte im Rechtsleben*, Tübingen: Mohr Siebeck.

Riesenhuber, Karl (2007) Privatrechtsgesellschaft: Leistungsfähigkeit und Wirkkraft im deutschen und europäischen Recht, pp. 145–167 in K. Riesenhuber (ed.), *Privatrechtsgesellschaft: Entwicklung, Stand und Verfassung des Privatrechts*, Tübingen: Mohr Siebeck.

Roberto, Vito (2021) Zivilrechtliche Klima-Klagen. Der Shell-Entscheid des Bezirksgerichts Den Haag aus schweizerischer Perspektive. *Aktuelle Juristische Praxis* 30: 1225–1241.

Roberto, Vito & Fisch, Jürg (2021) Klimarettung per Gerichtsentscheid? *Neue Zürcher Zeitung (NZZ),* Nr. 228 (Gastkommentar, 01.10.2021), 18.

Roth, Herbert (2016) Private Rechtsdurchsetzung im Zivilprozess. *Juristenzeitung* 71: 1134–1140.

Savaresi, Annalisa (2021) Plugging the enforcement gap: The rise and rise of human rights in climate change litigation. *Questions of International Law* 77: 1–3.

Schaub, Renate (2011) Streuschäden im deutschen und europäischen Recht. *Juristenzeitung* 66: 13–23.

Schirmer, Jan-Erik (2021) Klimahaftung und Kausalität – und es geht doch! *Juristenzeitung* 76: 1099–1106.

Schläppi, Daniel (2018) Einleitung, pp. 9–70 in D. Schläppi & M. C. Gruber (eds), *Von der Allmende zur Share Economy. Gemeinbesitz und kollektive Ressourcen in historischer und rechtlicher Perspektive*, Berlin: Berliner Wissenschafts-Verlag

Schmidt, Eike (1980) Von der Privat – zur Sozialautonomie. Vorläufige Gedanken zur abnehmen-den Gestaltungskraft konventioneller juristischer Dogmatik im Privatrechtssystem. *Juristenzeitung* 35: 153–161.

Seibt, Christoph H. (1994) *Zivilrechtlicher Ausgleich ökologischer Schaden: Eine rechtsvergleichende Untersuchung zum repressiven Schutz kollektiver Rechtspositionen an Naturgütern und zum Ausgleich von Beeinträchtigungen des Naturhaushalts im Zivilrecht*. Tübingen: Mohr.

Sen, Amartya K. (1977) Rational Fools: A Critique of the Behavioral Foundations of Economic Theory. *Philosophy & Public Affairs* 6 (4): 317–344.

Serres, Michel (1990) *Le contrat naturel*. Paris: Éditions François Bourin.

Snyder, Gary (1980) *The real work: Interviews & talks 1964–1979*. New York: New Directions.

Sorce, Giuliana & Dumitrica, Delia (2023) #fighteverycrisis: Pandemic Shifts in Fridays for Future's Protest Communication Frames. *Environmental Communication* 17: 263–275.

Steindorff, Ernst (1973) Politik des Gesetzes als Auslegungsmaßstab im Wirtschaftsrecht, pp. 217–244 in G. Paulus, U. Diederichsen & C. W. Canaris (eds.), *Festschrift für Karl Larenz zum 70. Geburtstag*, München: C. H. Beck.

Steindorff, Ernst (1974) Wirtschaftsordnung und -steuerung durch Privatrecht, pp. 622–643 in F. Baur, J. Esser, F. Kübler & E. Steindorff (eds.), *Funktionswandel der Privatrechtsinstitutionen. Festschrift für Ludwig Raiser zum 70. Geburtstag*, Tübingen: Mohr Siebeck.

Steindorff, Ernst (1979) Legal Consequences of State Regulation. *International Encyclopedia of Comparative Law* 17 (1979), ch. 11. [Kitch, Edmund W. (1981) International Encyclopedia of Comparative Law. Volume IX: State and Economy, Boris T. Blagojevic and Kenneth W. Dam, Chief Editors. Tübingen: Mohr/Alphen a.d Rijn: Sijthoff, 1979.]

Stone, Christopher D. (1972) Should Trees Have Standing? – Toward Legal Rights for Natural Objects. *Southern California Law Review* 72: 450–501.

Teubner, Gunther (1989) How the Law Thinks: Toward a Constructivist Epistemology of Law. *Law & Society Review* 23 (5): 727–757.

Teubner, Gunther (1990a) Die 'Politik des Gesetzes' im Recht der Konzernhaftung: Plädoyer für einen sektoralen Konzerndurchgriff, pp. 261–279 in J. F. Baur, K. J. Hopt & K. P. Mailänder (eds.), *Festschrift für Ernst Steindorff zum 70 Geburtstag,* Berlin: de Gruyter.

Teubner, Gunther (1990b) Unitas Multiplex: Corporate Governance in Group Enterprises, pp. 67–104 in G. Teubner & D. Sugarman (eds.), *Regulating Corporate Groups in Europe*, Baden-Baden: Nomos.

Teubner, Gunther (1993) *Law as an autopoietic system*. Oxford, Cambridge Mass.: Blackwell.

Teubner, Gunther (1994) The Invisible Cupola: From Causal to Collective Attribution in Ecological Liability. *Cardozo Law Review* 16: 429–464.

Teubner, Gunther (2003) Expertise as Social Institution: Internalising Third Parties into the Contract, pp. 333–364 in D. Campbell, H. Collins & John Wightman (eds.), *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts*, Oxford, Portland: Hart.

Teubner, Gunther (2006a) The Anonymous Matrix: Human Rights Violations by 'Private' Transnational Actors. *Modern Law Review* 69: 327–346.

Teubner, Gunther (2006b) Rights of Non-humans? Electronic Agents and Animals as New Actors in Politics and Law. *Journal of Law and Society* 33 (4): 497–521.

Teubner, Gunther (2012) *Verfassungsfragmente: Gesellschaftlicher Konstitutionalismus in der Globalisierung*. Berlin: Suhrkamp.

Teubner, Gunther (2018) Digitale Rechtssubjekte? Zum privatrechtlichen Status autonomer Softwareagenten/Digital Personhood? The Status of Autonomous Software Agents in Private Law. *Ancilla Iuris*: 35–78.

Teubner, Gunther (2019) Von 'Wirtschaftsverfassung I, II' zum 'selbstgerechten Verfassungsrecht': Zur Kritizität von Rudolf Wiethölters kritischer Systemtheorie. *Kritische Justiz* 52: 601–625.

The Cyrus R. Vance Center, Earth Law Center, and International Rivers (eds.) 2020, *Rights of Rivers. A global survey of the rapidly developing Rights of Nature jurisprudence pertaining to rivers.*

Wagner, Gerhard (2009) Kollektiver Rechtsschutz – Regelungsbedarf bei Massen- und Streuschäden, pp. 41–86 in M. Casper, A. Janssen, P. Pohlmann & R. Schulze (eds.), *Auf dem Weg zu einer europäischen Sammelklage?*, München: Sellier.

Wagner, Gerhard (2020) *Klimahaftung vor Gericht: Eine Fallstudie*. München: C. H. Beck.

Wagner, Gerhard (2021) Klimaschutz durch Gerichte. *Neue Juristische Wochenschrift (NJW):* 2256–2263.

Wassermann, Rudolf (1978) *Der soziale Zivilprozess: Zur Theorie und Praxis des Zivilprozesses im sozialen Rechtsstaat*. Neuwied, Darmstadt: Luchterhand.

Wegener, Bernhard (2019) Urgenda – Weltrettung per Gerichtsbeschluss? Klimaklagen testen die Grenzen des Rechtsschutzes. *Zeitschrift für Umweltrecht (ZUR)*: 3–13.

Weller, Marc-Philippe & Tran, Mai-Lan (2021) Klimawandelklagen im Rechtsvergleich – private enforcement als weltweiter Trend? *Zeitschrift für Europäisches Privatrecht (ZEuP)* 29: 573–605.

Westermann, Harm Peter (2008) Drittinteressen und öffentliches Wohl als Elemente der Bewertung privater Rechtsverhältnisse. *Archiv für die civilistische Praxis* 208: 141–181.

Wielsch, Dan (2013) Grundrechte als Rechtfertigungsgebote im Privatrecht. *Archiv für die civilistische Praxis* 213: 718–759.

Wiethölter, Rudolf (1986) *Rechtswissenschaft*. Basel, Frankfurt: Helbing & Lichtenhahn.

Wiethölter, Rudolf (1988) Zum Fortbildungsrecht der (richterlichen) Rechtsfortbildung. Fragen eines lesenden Recht-Fertigungslehrers. *Kritische Vierteljahresschrift für Gesetzgebung und Rechtswissenschaft (KritV)* 71: 1–28.

Wiethölter, Rudolf (2014) Materialisierungen und Prozeduralisierungen von Recht, pp. 423–450 in P. Zumbansen & M. Amstutz (eds.), *Recht in Recht-Fertigungen*, Berlin: Berliner Wissenschafts-Verlag.

Wilhelmi, Rüdiger (2009) *Risikoschutz durch Privatrecht: Eine Untersuchung zur negatorischen und deliktischen Haftung unter besonderer Berücksichtigung von Umweltschäden*. Tübingen: Mohr Siebeck.

Winter, Gerd (2019) Armando Carvalho et alii versus Europäische Union: Rechtsdogmatische und staatstheoretische Probleme einer Klimaklage vor dem Europäischen Gericht. *Zeitschrift für Umweltrecht (ZUR)*: 259–271.

Cited Decisions

Andrea Lozano Barragán et al. v. Presidency of the Republic et al. (Supreme Court of Colombia, Judgement STC 4360-2018 [5 April 2018]), Spanish version available from: https://cortesuprema.gov.co/corte/wp-content/uploads/2018/04/STC4360-2018-2018-00319-011.pdf.

Duarte Agostinho et al. v. Portugal et al., (European Court of Human Rights – ECtHR, Request No. 39371/20 (13 November 2020), available from: https://hudoc.echr.coe.int/eng?i=002-13055.

German Federal Constitutional Court (Bundesverfassungsgericht – BVerfG), Order of 24.3.2021 – 1 BvR 2656/18, 1 BvR 78/20, 1 BvR 96/20, 1 BvR 288/20, available from: https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/DE/2021/03/rs20210324_1bvr265618.html.

Lalit Miglani v. State of Uttarakhand et al. (High Court of Uttarakhand, Writ Petition (PIL) 140/2015 [30 March 2017]).

Native Village of Kivalina v. ExxonMobil Corporation, 663 F. Supp. 2d 863, 878–883 (N. D. Cal. 2009).

Native Village of Kivalina v. ExxonMobil Corporation et al. (United States Court of Appeals for the Ninth Circuit, 9th Cir.2012, 696 F.3d 849).

Punjab and Haryana High Court, *Court on its own motion v. Chandigarh Administration*, CWP No. 18253 of 2009 and other connected petitions of 2 March 2020, granting personhood to Sukhna Lake in Chandigarh (India).

River Atrato Case: Center for Social Justice Studies et al. v. Presidency of the Republic of Colombia et al. (Constitutional Court of Colombia, Judgement T-622/2016 [10 November 2016]), Spanish version available from: https://www.corteconstitucional.gov.co/relatoria/2016/t-622-16.htm.

River Ganges and Yamuna Case: Mohammad Salim v. State of Uttarakhand et al. (High Court of Uttarakhand, Writ Petition (PIL) 126/2014, [20 March 2017]).

Saúl Luciano Lliuya v. RWE (OLG Hamm, I-5 U 15/17).

Seehunde in der Nordsee v. Bundesrepublik Deutschland (Verwaltungsgericht Hamburg, 7 VG 2499/88).

Sierra Club v. Rogers C. B. Morton (US Supreme Court, 405 U. S. 727 [19 April 1972]).

State of Uttarakhand et al. v. Mohammed Salim et al. (Special Leave to Appeal (C) No. 016879/2017 [7 July 2017]).

Urgenda Foundation v. The State of the Netherlands (Ministry of Infrastructure and Environment) (The Hague District Court, C/09/456689/HA ZA 13-1396 [24 June 2015]).

Urgenda Foundation v. The State of the Netherlands (Supreme Court of the Netherlands, ECLI:NL:HR:2019:2007. [20 December 2019]).

English version available from: https://deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:HR:2019:2007.

Verein KlimaSeniorinnen Schweiz et al. v. Schweiz, BVGer A-2992/2017 [27.11.2018].

Verein KlimaSeniorinnen Schweiz et al. v. Switzerland, European Court of Human Rights, Request No. 53600/20 (26 March 2021), available from: https://hudoc.echr.coe.int/eng?i=002-13212; see also the recent Judgement [9 April, 2024]: https://hudoc.echr.coe.int/eng?i=001-233206.

Vereniging Milieudefensie et al. v. Royal Dutch Shell PLC (The Hague District Court, C/09/571932 / HA ZA 19-379 [26 May 2021], English version available from: https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339.