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Do Promises Towards Fossil Fuel Owners Matter?

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Abstract: While the energy transition is needed more than ever, for some agents it brings significant losses. This article investigates whether fossil fuel owners could refer to promises to avoid having their assets stranded. It explains how authors, in the context of just transitions, have argued for the normative relevance of Rawlsian legitimate expectations, which refer to promissory entitlements. However, it argues that the normative relevance of promises towards fossil fuel owners is limited, because there are only few promises about what will be permissible in the future and because these promises should be just before they can lead to entitlements.

Keywords: transitional justice, legal transitions, stranded assets, legitimate expectations, promises, climate change

1 Introduction

The world has been confronted with the knowledge of the dangerous and irreversible effects of global warming due to the emissions from fossil fuel use: extreme weather events, higher sea levels, ruined habitats, higher weather unpredictability, drought, crop failure, heatstroke, increased incidence of diseases, etc. Mitigating climate change, therefore, would avoid immense harms. In the short term, however, the energy transition will impose significant transitional losses on many agents: benefits that they cannot realize due to the transition. These transitional losers can be the owners of corporations, employees, consumers and society in general (Green and Gambhir 2020, 4ff.). Economically speaking, the energy transition will affect the value of their assets. Assets are resources that have value because they will benefit their owners in the future. They could refer to various inputs to production and sources of wealth, including capital, labour and natural endowments (Colgan, Green, and Hale 2021, 586). The possession of these resources has beneficial consequences of an enduring nature. This makes them vulnerable to stranding, which means that these assets 'have suffered from unanticipated or premature write-downs,

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devaluations, or conversion to liabilities' (Caldecott 2017, 2) or, in other words, they lost economic value well ahead of their anticipated useful life.

This article focuses on the losses of fossil fuel reserve owners, because fossil fuels represent both a large and a clearly defined category of potentially stranded assets. At the 21st Conference of the Parties (COP21) in Paris in 2015, 195 countries agreed to keep the average global temperature 'well below' 2 °C above pre-industrial levels (UNFCCC 2015, 3, article 2). To have a 67% chance of success, starting from 2020, we would have a remaining budget of 1150 gigatonnes of carbon dioxide ($GtCO_2$). To not exceed 1.5 °C of warming, we would have only 400 $GtCO_2$. The discrepancy of either of these figures to the amount of available fossil fuel reserves is enormous. Fully producing the world's reserves—that is, resources proven to be recoverable under current economic conditions and a specific probability of being produced (McGlade and Ekins 2015)—would result in an estimated 2734.2 $GtCO_2$ (Heede and Oreskes 2016, 15). About two thirds of the world's reserves, therefore, would need to stay underground. These losses should be distributed according to countries' numbers of inhabitants, past fossil fuel production, needs (determined, for instance, by how countries score on the Human Development Index), and efficiency, that is, how much carbon countries emit per unit of energy provided by combustion (Caney 2016; Lenferna 2018; Singer 2010). Based on these criteria, most reserves should be stranded in highly developed countries and in regions with many carbon intensive fossil fuels.

The question arises what is owed to these agents who are disadvantaged by the transition by having their assets stranded. A reformative approach determines what justice requires, makes the necessary changes and lets all losses (and gains) lie where they fall (Green 2019, 3), while conservatists want to preserve the pre-existing situation or status quo, which is also called grandfathering. Conservative measures range from granting transitional support, exemptions from new rules, or financial compensation. Whether and how to deal with the potential fossil fuel production that is foregone or reduced, Pye et al. (2020, 2) argue, is a key challenge for achieving a just transition. Green and Gambhir (2020, 2) also emphasize that the losses caused by the energy transition 'raise complex normative and political questions about which of these burdens on which kinds of agents and groups should be mitigated, and how this should be done'. Similarly, Kartha, Lazarus, and Tempest (2016) consider the relevance of these transitional losses as something that must be further explored.

One way in which grandfathering may be justified is by referring to the normative relevance of promises about the future benefits of owning fossil fuels. The potential implications are huge. Promissory entitlements might overrule general principles of inter- and intragenerational justice and justify that many fossil fuel owners would avoid having their assets stranded. However, this article argues that promises towards fossil fuel owners only have limited relevance and can hardly

protect fossil fuel reserves from being stranded. In doing so, I first explain how authors, in the context of just transitions, have argued for the relevance of promises by discussing a Rawlsian understanding of legitimate expectations (Section 2). I then criticize this view, contending that only few promises exist about future benefits of fossil fuel ownership, as laws typically do not concern what will be permissible in the future and as contracts only concern the near future (Section 3). Finally, I claim that these promises are legitimate only if they are just. In this way, promises do play a role in transitional processes by determining which of the permissible fossil fuel reserves should be granted, but they could not justify the production of fossil fuel reserves of which the stranding is required by justice (Section 4).

2 Legitimate Expectations as Promissory Entitlements

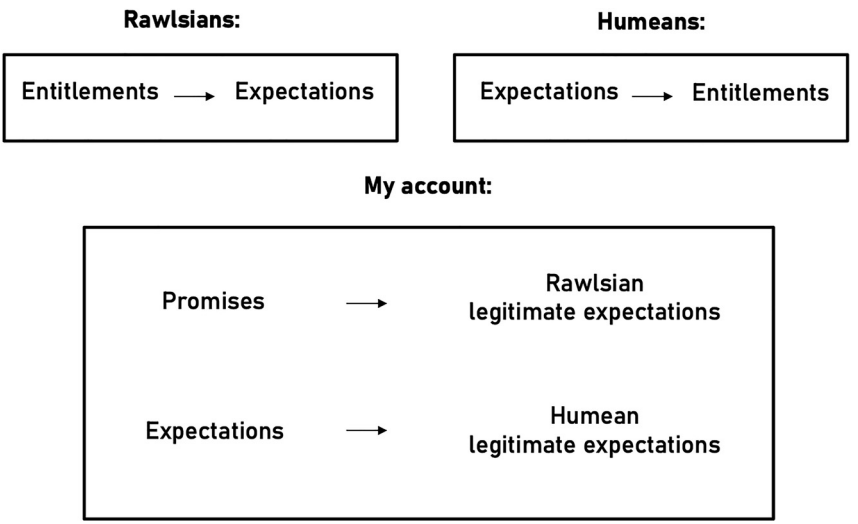
When discussing promises in the context of just transitions, authors use the term 'legitimate expectations' (hereafter LE). This section explains how authors argue for the normative relevance of promises by discussing a Rawlsian conception of LE as promissory entitlements. I contrast this with the Humean understanding of LE, which focuses on the normative relevance of actual expectations.

LE accounts are at an early stage of theoretical development. LE were mentioned already in the 1970s by Buchanan (1975) and Rawls (1971) but faded into the background. About 10 years ago, the concept gained renewed attention and has been applied to different topics and contexts: administrative law (Brown 2017, 2018), land ethics or territorial rights (Moore 2017; Waligore 2017), punishment (Matravers 2017), climate change (Meyer and Sanklecha 2011, 2014; Meyer and Truccone-Borgogno 2022), etc. Both in law and philosophy, LE have mostly been used to limit governments' absolute discretion over policies and measures: frustrating LE is considered an abuse of power. The concept has been considered part of the rule of law, the broad spectrum of principles and values that check and balance the power of governments (Brown 2017, 9, 27).

As the concept is still under debate, it is no surprise that it has different understandings and interpretations. Most authors categorize existing accounts by focusing on the conditions for legitimacy. A typical categorization is provided by Brown (2017, 444), who distinguishes between law-based accounts, which focus on the mere presence of laws, justice-based accounts, which focus on whether the content of the entitlement or the basic structure in which it was created is just, legitimate authority-based accounts, which focus on the legitimacy of the governing agencies and political authorities under which the entitlement arose, and

responsibility-based accounts, which focus on whether governmental administrative agencies were responsible for creating expectations. This categorization reflects important considerations that will be discussed later.

A better categorization, however, focuses on the kind of normative claim LE refer to. In this regard, there is an important disagreement about the relationship between expectations and entitlements. Waldron (1990) argues that LE only arise as a consequence of already existing entitlements, while expectations cannot give rise to entitlements themselves. However, in *Legitimate Expectations and Land*, Moore (2017, 238f.) criticizes this view, arguing that expectations give rise to entitlements, rather than the other way around. Moore (2017, 235) calls these two understandings respectively LE in the Rawlsian and in the Humean sense: 'the Humean view … focuses on how expectations themselves generate entitlements, and the Rawlsian view … suggests the reverse: that entitlements generate expectations, so expectations are not foundational.' What is foundational in the latter understanding is the promissory aspect of an interaction, as I will explain. Both understandings represent important values or principles that could justify important claims for fossil fuel owners. Distinguishing between them is important because the conditions that should be fulfilled before there is a claim differ as well as the kind of claim or measures that could be justified.



Instead of considering LE a specific kind of entitlement, some interpret the concept as referring to *any* kind of entitlement. In *Arendt and the Legitimate Expectation for Hospitality and Membership*, for instance, Weinman (2018) discusses the right to hospitality and membership. Using the term 'LE' instead of 'right' might sound fancy,

but as a matter of parsimony and to avoid confusion we should not introduce another usage of the term 'LE' as we could simply speak of a right. English administrative law also uses the term procedural LE to simply refer to procedural rights. In a recent example, the UK secretary of state for education has been accused of violating the procedural LE 'to have reasons communicated, to be consulted, to be heard, to make representations, and so on, in advance of changes in existing administrative policies or measures' (Brown 2018, 13) of some local councils when the latter were not heard in a decision about scrapping the Building Schools for the Future (BSF) program. As these procedural LE are nothing more than procedural *rights*, one could better stick with the latter term. I will now elaborate on which two specific kinds of entitlements Humean and Rawlsian LE refer to.

The Humean view builds on the normative relevance of expectations. Moore (2017, 235) refers to this understanding of LE as Humean because Hume did valuable work on the importance of expectations in people's lives. She and other authors (see e.g. Brown 2017, 2018; Lazou 2023; Meyer and Truccone-Borgogno 2022) focus on the role expectations play in people's lives as a basis for making and executing plans. Consider the example in which two housemates take turns in preparing dinner for each other on Fridays (Meyer and Sanklecha 2014, 370). Next time it is B's turn to make dinner, so he expects that A will show up. Since B acts upon this expectation, for instance, by refusing other invitations he might receive for that day, it seems that this expectation is normatively relevant and that it cannot be ignored. Elsewhere, I argue that wrongfully causing false expectations justifies compensation for the costs of relying on those expectations (see Lazou 2023). Fossil fuel owners, consequently, may claim compensation if states or international institutions can be held responsible for causing false expectations about regulatory stability. The latter only holds if the expectations were reasonable or epistemically valid. In this way, however, only compensation for investments in fossil fuel exploration and extractive industries may be justified as only these costs follow from having false expectations. These costs are usually much smaller than fossil fuel owners' foregone benefits or opportunity losses, that is, the costs of not being able to produce one's reserves.[1] Their normative relevance, nevertheless, is important to address. Humean LE are important to take into account in just transitions.

In law too, there is an understanding of LE that focuses on the relevance of actual expectations. Schulev-Steindl and Hofer (2021) call them *fact-based LE*. They are not derived from an existing right, but from a factual[2] situation that has been induced by

1 Colla (2017, 298f.) refers to these costs or losses as respectively preliminary and primary losses.

2 Hence the term 'fact-based LE', which is poorly chosen I think as all entitlements or rights depend on facts.

the state. For instance, governments should not first grant subsidies for the purchase of cars with combustion engines and then, only a few years later, ban them or severely restrict their use. Brown (2017, 15) refers to this as substantive LE, arguing that previous courses of conduct by regulators must unambiguously support the expectation of a substantive outcome or benefit. Just as in the normative view I described above, most legal systems consider the costs of relying on expectations as giving rise to compensation claims (Moore 2017, 235).

In the Rawlsian understanding of LE, expectations do not play a constitutive role in forming entitlements. What creates Rawlsian LE is, I claim, the promissory aspect of interactions. In *A Theory of Justice*, Rawls discusses how a just political and legal system gives rise to LE. According to Rawls (1971, 275f.), people acquire claims by doing things encouraged by existing arrangements. When people have accepted and complied with these arrangements, they are entitled, if the arrangements had been made under a just basic structure, to what these arrangements define them to be entitled to. Their LE, Rawls (1971, 275) contends, are bound to be met. LE, in Rawls' view (1971, 5f., 207), are very often derived from social institutions like the law, but rules of games and of private associations can also lead to LE.

Rawls (1971, 273f.) does not clearly indicate how exactly social institutions or arrangements create these entitlements and thus what kinds of entitlements they are. He only focuses on the *function* of these entitlements. That social institutions or arrangements entitle individuals to what these institutions or arrangements announce that they will receive, he explains, creates expectations that incentivize people to pose socially beneficial and cooperative behaviour that will result in these entitlements. In this way, LE replaces the function of desert.[3] Matravers (2017, 309) illustrates this by considering the example of a brain surgeon. According to a defender of the idea of a pre-institutional notion of desert, brain surgeons should be well paid because they deserve to be rewarded for their hard work, which incentivizes them to become a brain surgeon. For a defender of Rawlsian LE, by contrast, brain surgeons should be paid well not because they deserve it, but because the institutions that offer these high salaries generate these entitlements for those who become a brain surgeon. In this way, potential brain surgeons could expect high salaries and be incentivized. Explaining the function of Rawlsian

3 Rawls rejects a pre-institutionalized notion of desert, that is, a notion that considers desert inherently valuable. Moral merit on itself cannot be a principle of distributive justice that can be reasonably chosen under a veil of ignorance, he contends, as the characteristics or talents people are rewarded for are merely coincidences. In line with this, few contemporary liberal philosophers assign a role to desert at the level of fundamental principles (Matravers 2017, 308).

LE, however, is different from explaining how these entitlements arise. That they create expectations and incentives to cooperate does not explain what grounds them.[4]

According to Rawls (1971, 5f., 207), entitlements depend on how just arrangements define them. The act of defining thus creates entitlements. This seems equivalent to how promising leads to promissory entitlements. For this reason, I contend, we can consider Rawlsian LE as promissory entitlements. The *normative power view* explains with satisfying simplicity how an act of promising (or defining) leads to obligations and entitlements. It considers promising as 'a special sort of power we have over our normative circumstances, the power to invoke obligations by promissory utterance' (Habib 2018). In this view, promisors impose duties on themselves directly by their own powers. A promissory entitlement is created in the promisee, the agent to whom the promise has been made. A more specific version, the *rights-transfer view*, which has been accepted by many authors from Grotius onwards (Owens 2014), argues that by making a promise, the promisor transfers the right to decide whether she will perform the act mentioned in the promise to the promisee, through the communicated intent to do so (Shiffrin 2011, 157). For instance, if I promise my housemate to make dinner for him tonight, I transfer my right to decide on whether I will make dinner for him tonight. Only if he waives the promise am I allowed not to make dinner. In this way, promisees are not merely entitled to compensation for investment costs, as would be the case if they relied on Humean LE. Instead, they have a right to have the promise fulfilled or, in other words, to be protected from bearing opportunity or primary losses.

In discussing whether just transitions require transitional measures or grandfathering, some authors argue for the relevance of LE understood in the Rawlsian way as referring to promissory entitlements. Meyer and Sanklecha (2011, 467f.) contend that LE constrain what is a fair solution to the climate crisis or, in other words, how climate change mitigation regulations may be imposed. They refer to how Rawls developed the concept in *A Theory of Justice* and adopt his view that an institution with a just basic structure creates LE when individuals stand in a certain kind of relation with the institution. They further discuss these ideas in 'How legitimate expectations matter in climate justice' (2014), where they argue that people are entitled to maintain their current levels of personal emissions if these entitlements can be inferred from existing rules and if they fall within a range of what can be considered just. They explicitly refer to promises when they locate the concept of LE in the tradition by referring to Hobbes and Curley (1994), according to whom 'justice

4 I come back to this later in this section, where I argue that Rawlsian LE do not require the presence of an expectation.

is essentially about the keeping of promises—each man ought to perform what he has covenanted to do' (2014, 371) and Sidgwick (1962, 269), who considered not only verbal promises but also 'implied contracts' or 'tacit understandings' as giving rise to binding engagements.[5]

Matravers (2017) also argues for the importance of LE in a nonideal world. In discussing when punishment is justified, he argues that LE can arise from an unjust system if no obvious injustices are involved that violate basic rights or fundamental freedoms. Matravers explicitly relies on a Rawlsian understanding of LE: 'the paper is concerned with legitimate expectations in a specific, Rawlsian, sense (although not with Rawls exegesis). Put differently, the paper asks what follows in certain contexts given that legitimate expectations are meant to plug the gap left in desert's absence.' He also refers to promises when he argues that certain conditions should be fulfilled before there can be a LE: 'merely enacting a rule that promises certain consequences does not provide sufficient reason to deliver those consequences' (Matravers 2017, 317).

Green (2020, 404) also conceives of LE as promissory entitlements. He contends that 'promises and contracts are conceptual devices by which individuals create special rights … I am merely proposing that LE be understood in similar terms, as a species of special rights (with corresponding special obligations), similar in nature to the special rights that arise from a promise or contract but which occupy and illuminate the 'dim borderland' of *tacit* understandings' (and implied contracts) (Green 2020, 399). In this understanding, however, LE are not just *similar* to promissory entitlements, they *are* promissory entitlements, as tacit understandings and implied contracts are just specific kinds of promises (see above). While Green (2020) is sceptical about the relevance of LE for highly political, legislative matters, the reasons why he rejects the usefulness of the notion in the context of just transitions are, in my view, problematic. More needs to be said to show why Rawlsian LE or promissory entitlements cannot save transitional losers like fossil fuel owners from having their assets stranded. I come back to this in the remaining sections of this article, where I discuss which promises towards fossil fuel owners exist and when Rawlsian LE or promissory entitlements arise.

One could criticize the view that Rawls and the other authors discussed above understand LE as promissory entitlements by arguing that expectations are a

5 One might argue that Meyer and Sanklecha (2014) and others do not understand LE as promissory entitlements because they do not consider explicitly made promises as necessary for the formation of LE. That they contend LE can follow from implicit contracts or understandings, however, does not imply that they do not consider LE as promissory entitlements; on the contrary, contracts are legally binding promises and 'understandings' may refer to agreements (that is, joint promises, see Section 3). In the next section, where I investigate which promises towards fossil fuel owners exist, I will discuss whether it makes sense to speak of implicit promises.

necessary part of their claims. However, many of them do not insert an expectation condition and do not rely on the relevance of expectations in people's lives for making and executing plans. Green (2020, 418) noticed this earlier and calls such views expectation-independent LE accounts:

> The latter notion is surprisingly commonplace in both philosophical and legal usage of the term. The general idea behind the expectation-independent model, as applied to a theory of legal transitions, I take it, is this: to say an agent has a LE is to express that the agent is normatively entitled to the benefits of legal stability, or at least entitled to a remedy in response to losses incurred as a result of the state having changed the law, *whether or not the agent actually, predictively 'expected' the law to stay the same.*

Green (2020) criticizes such expectation-independent accounts,[6] arguing that without an expectation condition, it is unclear what gives rise to the entitlements: 'the motivation must stem from something else, and we are owed an account of what that "something else" is. The worry, then, is that there is something *opaque* about an expectation-independent model of LE: it leverages the rhetorical power of frustrated expectations … but on closer inspection it in fact turns out to derive its normative force from some other, mysterious source'. The rights-transfer view, however, solves the mystery: promissory entitlements arise as a consequence of the promisor transferring the right to decide whether she will perform the act mentioned in the promise to the promisee, through the communicated intent to do so (see above). To see that this suffices and that expectations are not necessary for grounding Rawlsian LE or promissory entitlements, consider a brain surgeon who did not make any plans based on the expectation of receiving a high salary. Perhaps she is not very concerned with money and did not even expect a high salary at all. It seems that she is still entitled to her high salary if the institution where she works agreed to it. Similarly, Habib (2018) refers to deathbed promises, which seem to create promissory entitlements even though there is no expectation (as the promisee is dead).

Green (2020) also contends that without an expectation condition, the term 'LE' would be problematic. Legal scholars have raised the same criticism: 'if the doctrine of legitimate expectation were now extended to matters about which the person affected has no knowledge, the term "expectation" would be a fiction' (Justice McHugh of the High Court of Australia, quoted in Green 2020, 419). However, this does not imply that expectation-independent models are mistaken, it rather shows

6 Green (2020) defends the expectation condition in order to raise the *moral costs problem*, which holds that enforcing LE claims would impose huge *financier moral costs* on states, that is, the costs of doing the necessary investigations, and *agent moral costs* on the expectors, that is, the negative effects on agents as a consequence of the intrusive investigations of the state in their private life. If the existence of actual expectations, however, is not required, there are no such costs. This argument for the inapplicability of Rawlsian LE to just transitions, in my view, should be rejected.

that the term 'LE' is poorly chosen. In the remainder of this article, I use as much as possible the term 'promissory entitlements', as it might be confusing to speak of LE when we are not concerned about expectations at all.[7] While actual expectations may justify compensations for investment costs, I will argue in the remainder of this article that promises can hardly justify claims for fossil fuel owners who should leave their reserves in the ground.

3 Promises About Benefits of Fossil Fuel Ownership

Although I argue that distinguishing between Rawlsian and Humean LE is more important, the categorization of Brown (2017, 444), which focuses on the criteria for legitimacy, provides interesting considerations that might be relevant for determining whether someone has a promissory entitlement. These criteria (the law, the justice of the entitlement, the just basic structure, or the legitimate authority) can be relevant in two ways: for being able to speak of a promise and for determining whether a promise leads to entitlements. Before I investigate under which conditions a promise is legitimate or leads to promissory entitlements, this section indicates which promises exist about the benefits of owning fossil fuels. I focus more specifically on promises about regulatory circumstances, because the existence of such promises is more likely and because the energy transition is most likely to occur due to regulatory changes (Bos and Gupta 2019, 4).

International institutions do not create promises about permissions to benefit from fossil fuel ownership. International regulations are only relevant for fossil fuel owners in the sense that they determine that states are the sovereign owners of the reserves under their territory. One might criticize states' sovereignty, arguing that natural resources are owned by the agents that own the property under which the resources are located (private individuals, groups of individuals or companies) or all humanity (Caney 2016, 22). However, I am only concerned with transitional losses that follow from the need for climate change mitigation and not from changes in property regulations. Apart from this, there are few international regulations about how states could use their reserves. International law says that a country should not use its resources in a way that harms others (Caney 2016, 23), but it has not been

7 Since there should be no expectation for a promissory entitlement to arise, there is no reasonableness criterion either. This criterion, therefore, only holds for a Humean LE to arise. This illustrates how the conditions that should be fulfilled before there could be a claim differ depending on whether one argues for a Rawlsian or Humean LE and why it is important to distinguish between these two kinds of claims.

specified what this implies. In contrast to international institutions, states implement laws and regulations that determine the conditions under which fossil fuel owners could produce their reserves or not.

Referring to promises is a plausible way to explain how rules or laws lead to entitlements and obligations: duties to follow rules arise by making agreements or joint promises[8] to follow them. Schulev-Steindl and Hofer (2021) also grant that the entitlements that arise from laws are promissory entitlements. They call them *rights-based LE*. Having a license to drive, for instance, leads to the rights-based LE to drive a car. People may also agree that following these rules will be enforced via coercive mechanisms, for instance, by punishment. When a rule is enforceable by a higher governmental office, like the police, it is a law. A law-based account of LE also holds that laws lead to promissory entitlements (Brown 2017, 54ff.). It lays the legitimacy of an expectation in the underpinning laws and legal entitlements: if one has a legal entitlement to x, one has a (Rawlsian) LE or promissory entitlement to x. Law-based accounts are problematic however as they hold that promissory entitlements *only* follow from laws, while they can also follow from social customs, habits, conventions, or interpersonal interactions. Moreover, this view unrightly holds that laws *always* lead to promissory entitlements and ignores the possibility of other relevant conditions for legitimacy.

Promises about the permissibility of producing fossil fuels are not made by individual people, but by a legitimate authority.[9] If an authority is legitimate, it has a right to rule or, in other words, it can change the normative status of those under its rule (Applbaum 2010). One power the right to rule entails is making promises in the name of the people about following and enforcing rules. This imposes both promissory obligations on the people to follow these rules and collectively enforce them and to entitlements that others will do so too. If an authority introduces a law that a tax should be paid for extracting fossil fuels, for instance, it transfers each individual's right to decide on whether they will pay a tax for extracting fossil fuels to the rest of the community. Illegitimate authorities have no right to rule and cannot

8 Agreeing is a joint action that the involved parties perform together. It can be explained by referring to another action that can be performed individually: promising. Two or more promises add up to an agreement when they are exchanged or interdependent in a particular way: when each party understands that her commitment is motivated by the promise-making of the other person (Sheinman 2011).

9 Note that the term 'legitimate' has been frequently used in political philosophy in various ways. It can be a property of a process, an outcome, an authority, etc. People also use it in, for instance, 'legitimate argument', 'legitimate self-defense', or 'legitimate theater'. Apart from some vague notion of properness, these uses of the term do not have much in common (Applbaum 2010, 217). The kind of legitimacy I discuss in Section 4, the legitimacy of a promise, differs from the kind of legitimacy I discuss here, the legitimacy of an authority.

make promises in the name of the ruled individuals. This would be as if A would promise that B will help C while not having legitimate authority over B. If a government is not legitimate, therefore, fossil fuel owners who own reserves in this country have no promissory entitlements to production permissions. Legitimate authority-based accounts of LE also focus on the legitimacy of the authority who creates the entitlement (Brown 2017, 61; Meyer and Sanklecha 2014, 378). They consider it, however, a sufficient condition, while in my view, additional criteria should be fulfilled before promissory entitlements can arise.

To determine whether an authority is legitimate, I accept a procedural account, according to which the legitimacy of an authority or decision is determined 'primarily on the basis of procedural features that shape these institutions and underlie the decisions made' (Peter 2017). In other words, the power should have been transferred in the right way. A typical procedural account is defended by John Locke, whose version of social contract theory raised consent to the main source of the legitimacy of an authority. The power to make promises, according to Locke, initially exists in individuals and is transferred to an authority by consenting to a social contract. Some argue that procedural requirements do not suffice for an authority to be legitimate, but that it also depends on the values that the authority realizes. Rawls (1971, 273f.), for instance, claims that a promissory entitlement (an LE in his terms) can only exist if it arises under a just basic structure. Meyer and Sanklecha (2014, 377) consider this a procedural version of the justice-based view: not the justice of the entitlement itself, but the substantive justice of the authority that creates the entitlement matters. I believe that an authority is legitimate as soon as the procedural requirements are fulfilled, regardless of the justice of its basic structure or other promises the authority makes. I do not consider justice relevant, thus, for assessing the legitimacy of the promise-maker, only for assessing whether a specific promise may be fulfilled (see Section 4).

Even legitimate authorities, however, generate only a limited number of promises that are relevant for fossil fuel owners, because laws typically only concern what is permissible or not at the moment that the law is in play and not what will be permissible in the future. Only in exceptional cases is it indicated that a law will be applicable in the future, for instance, in the case of temporary laws (Schulev-Steindl and Hofer 2021). This is not the case for permissions about producing fossil fuels. There are only promises, thus, about the permissibility of producing fossil fuels that have already been produced. If the law changes, it may no longer generate promises about the permissibility to produce fossil fuels.

While explicit promises about future extraction permissions are lacking, perhaps fossil fuel owners could rely on *implicit* promises, promises that are not expressed but nevertheless exist. In *Legal Transitions without Legitimate Expectations*, Green (2020) discusses an account of implicit promises applied to the context of just transitions. By discussing his view, I will explain why I think the idea of implicit

promises is problematic. If an explicit utterance of a promise is absent, which interactions could instead lead to promises? According to Green's practice-dependent account of LE, adhering to a shared norm that governs a social practice or interaction in which the relevant agents partake leads to promissory entitlements ('LE' in his terms). The social practice of taking turns in preparing dinner, for instance, is governed by the shared norm that the other one will show up. A has a right that B will show up when it is A's turn to cook because it follows from this shared norm. Similarly, states may adhere to a shared norm that they should not (suddenly) change the rules, which may create a promise not to do so. Assuming that the norms to which A and B should stick may differ, the relevant norm for the regulated agent could be, for instance, that one should make efforts to follow the rules.

In Green's (2020, 398) view, the argument works in the domain of interpersonal morality and private law, but not for highly political, legislative matters, because the regulator and regulated agent do not mutually participate in interactions or social practices that are governed by shared norms. He considers the relationship between regulator and regulated agents fundamentally different than relationships in an interpersonal context: 'the generality and impersonal nature of characteristic legislative enactments precludes any intersubjective understanding—any tacit agreement— between particular citizens and the legislature'. It is problematic, he contends, 'to think about individuals as engaged in an interpersonal interaction with the state qua legislator' (412). I disagree that regulators and regulated agents cannot participate in a (practice-governed) interaction that gives rise to shared norms. After all, we could already speak of an interaction when they influence or react to each other. When they influence each other's behaviour by sticking to a certain desirable behaviour, they are also creating a shared norm. Perhaps the interaction is not 'personal', but it is unclear what this means and why it matters. Green (2020, 412) also argues that there are no practice-independent standards (norms, in other words) that the law should change or stay the same. However, while there may be no shared norm that regulators should *never* change the laws, there might be a shared norm that they should not *constantly* or *suddenly* change the laws.

However, I do not think that participating in interactions that are governed by shared norms grounds promissory entitlements, as Green claims. Following the rights-transfer view, promissory entitlements arise when a promisor autonomously decides to transfer a right to decide whether she will perform the act mentioned in the promise to the promisee, through the communicated intent to do so (see Section 2). The promisor's willingness to transfer this right is thus crucial. That the alleged promisor believes she should do x, as Green's account proposes, however, does not imply that she had an intent to transfer a right. If there is no explicit communication of the promisor's intent to transfer a right, it is, I believe, questionable whether there is such an intent. In the housemates' example, although both A and B adhered to a shared

norm, they may have preferred not to make a binding promise. Similarly, it is unlikely that regulators intend to issue promises about regulatory stability. Imposing a promissory obligation on them would unrightly threaten their autonomy. This makes Green's practice-dependent view, and other views that defend the idea of implicit promises, problematic. Although there can be various ways to explicitly communicate an intent, depending on the specific ways people communicate, this explicit utterance is necessary for claiming that a promise had been made.

While agreements about following and enforcing laws cannot ground entitlements to future permissions to produce fossil fuels, perhaps agreements with companies about specific permissions can do so. In most cases, states, the original owners of fossil fuels, make agreements with companies in the form of contracts. These agreements differ from each other depending on the kind of fossil fuel, their location (under the land or the seafloor), the jurisdiction of the state in which they are located, etc. In the typical case, states promise that companies may undertake fossil fuel explorations in their territory and that they may produce the reserves they find as a consequence. These permissions are usually granted in the form of licenses of a limited duration (about five years). What motivates states to make these promises is that companies promise a fixed sum or a share of the benefits they realize from their fossil fuel production.[10] In some cases, moreover, selling their reserves is more profitable than producing them themselves.

These agreements, however, only protect a limited amount of benefits for fossil fuel companies since licenses cover a relatively short period, while the investments of fossil fuel producers are only profitable in the long run and because, just as when it comes to promises about the continuation of laws, there are no implicit promises about the continuation of these licenses. Nevertheless, as states issued promises about future extraction permissions in the form of contracts and now have to break them, significant complaints are on the table. The Canadian company TC Energy, for instance, is suing the US government for no less than €14.26 billion after the Biden administration cancelled the Keystone XL pipeline project. Similarly, Rockhopper is suing the Italian government for €309 million because they banned offshore oil drilling close to the coastline after having issued licenses (Thomas-Peter 2021).

When investors invest in fossil fuel reserves abroad, they sometimes make additional long-term contracts or treaties that are protected by private (international) law. Instead of merely issuing promises that concern permissions for a limited period of time, these contracts are made to fully protect their investments against future regulatory stranding. One way in which investors are legally protected against stranding is by international investor-state dispute settlement (ISDS) mechanisms. These are clauses that are included in bi- or multilateral international agreements

10 Schlumberger Oilfield Glossary, https://glossary.oilfield.slb.com/en/terms/l/licensing_round (accessed September 5, 2022).

and allow investors to sue states for adopting environmental or climate change policies. Panama, for instance, was sued by the US mining company Dominion Minerals under a bilateral agreement over its rejection to extend the company's terms of concession rights in mining. The company is claiming 268.3 million euros for its loss of investments. Similarly, the Canadian Eco Oro Minerals is suing Columbia because of deprivation of mining rights (Bos and Gupta 2019, 8). The Energy Charter Treaty (ECT) is an important instance of such a legally binding agreement open for international participation that protects investors from stranded assets by making use of ISDS mechanisms. Protected by ECT, carbon-dependent companies claim compensations for changes in environmental and climate change policies that negatively affect their future profits (Bos and Gupta 2019, 8).

4 When Are Promises Legitimate?

The previous section investigated which promises exist about permissions to produce fossil fuels. I argued that there are only promises about what is permissible at the moment that the law is in play, but not about which laws will be followed and enforced in the future. Only in contracts do states make promises towards companies about future permissions, but these contracts only concern the near future. The amount of fossil fuel benefits promises cover, therefore, is relatively small, although promises made in bi- or multilateral investment treaties concern more extensive claims. This section discusses which of these promises are legitimate. As noted earlier, the term 'legitimacy' is used in various ways in political philosophy. The kind of legitimacy I discuss in this section should not be confused with the kind of legitimacy I discussed in the previous section, where it was the property of an authority. In the LE literature, the term 'legitimate' is understood very broadly as meaning 'normatively relevant' (Meyer and Sanklecha 2014, 371f.). Arguably then, a Humean LE refers to a normatively relevant expectation, while a Rawlsian LE refers to a promise that is normatively relevant in the sense that it leads to promissory obligations and entitlements. Legitimate promises thus lead to promissory obligations and entitlements, while illegitimate promises don't.[11] In what follows, I argue that a

11 Arguably, illegitimate promises cannot be considered promises at all. One variety of the rights-transfer view, the *existence view*, holds that promises only exist if there is a valid transfer of a right from the promisor to the promisee. Otherwise, there is no real promise. The *bindingness view* contends that even if there is no valid rights-transfer, and therefore no entitlement, we can still speak of a promise. Illegitimate promises, in other words, are true promises without moral force (Shiffrin 2011, 146). Whether or not we consider illegitimate promises as real promises is only a conceptual choice. As there is no adequate term for unreal promises, I accept the bindingness view for reasons of convenience.

promise is legitimate when fulfilment is compatible with justice and explain how this limits promissory entitlements about the benefits of fossil fuel ownership. I also refute two criticisms to the justice-based view: that it leads to indeterminacy and that the justice condition makes promises redundant.

4.1 Why Justice Matters

The justice-based view, which I defend in this section, holds that before a promise leads to promissory obligations and entitlements, fulfilling the promise should be compatible with the promisor's perfect duties or duties of justice, although it may contradict one's imperfect duties or duties of charity. Having a drink with someone is not unjust, for instance, so promising to do so generates a promissory entitlement. Promising to steal someone's wallet, by contrast, does not lead to promissory entitlements because stealing someone's wallet is unjust. Promises, thus, do not allow people to commit injustices.

Although the view that only fully just promises are legitimate has received challenging criticisms (see Section 4.2), many authors consider justice relevant at least to some extent. Moore (2017, 232f.) contends that leaving out the justice condition to grant any entitlement that follows from accepted legal rules would be too permissive. She refers to the case of slaveowners in the southern United States of America in the 19th century. Being legally entitled to own slaves did not give them a moral right to own these people. Matravers (2017, 318) argues that promises that concern violating basic rights or fundamental freedoms do not lead to entitlements. He asks us to imagine a college that institutes 'burning at the stake' as the declared penalty for missing chapel. Even if this rule had the correct procedural origin, the community (who benefits from people attending chapel) has no entitlement that people be burnt at the stake for missing chapel (Matravers 2017, 312).[12] It is thus not enough that the authority that imposes laws is legitimate: the promises it makes in the name of the people should also meet some substantial standards. In the account I defend, promises should be fully just before a promissory entitlement could arise.

Adopting the justice condition is not only intuitively plausible, as these examples show, the rights-transfer view can also ground it: when fulfilling a promise is incompatible with justice, the promisor cannot transfer the right to decide on whether she will do X to the promisee in a valid way because she had no right to decide on it in the first place. Imagine that a criminal promises her conspirator that

12 While Matravers (2017, 312) contends that those who violate the rules are (not) entitled to punishment, I think it is the community in general that is entitled to punishment of rulebreakers (in order to avoid future violations).

she will rob a bank and give him part of the money. As Shiffrin (2011, 159) explains, she does not have any more reason to rob a bank than before she made the promise. Because she had no right to decide to rob a bank or not, her utterance does not create any valid reason to do so. In this way, the rights-transfer view also explains why slaveowners are not morally entitled to own and mistreat their slaves. For this to be the case, people must have transferred the right to decide whether they will be owned and mistreated to the slaveowner. However, since they do not have a right to decide to be owned and mistreated in the first place, it cannot be transferred to the slaveowners. Similarly, people cannot transfer a right to decide whether they will be burnt at the stake either. These promises, therefore, are illegitimate.[13]

Alternatively, Driver (2011) argues that promises that are incompatible with justice are still legitimate or normatively relevant, but that the duties to which they give rise can be defeated by other moral considerations. In this view, in other words, unjust promises lead to obligations (e.g. the criminal has a duty to rob the bank because of her promise or states have to allow fossil fuel owners to produce because of their promise) that may collide with more important duties (e.g. the duty not to steal or the duty to impose climate change mitigation measures). If the promissory obligation is overridden, Driver (2011, 184) contends, the promisor should not fulfil the promise but its normative relevance is not eliminated: 'the promise imposes an obligation to the agent even when the specific act promised cannot be performed' (186). If practically possible, the promisor should provide compensation for the broken promise, according to Driver (186, 190). This would imply that unjust promises towards fossil fuel owners should not be fulfilled if mitigation duties outweigh them, but these promises still entitle fossil fuel owners to be compensated for their unrealized benefits.

This view is, I believe, problematic. As Shiffrin (2011, 158) argues, it is an 'unpleasant consequence that the conspirator has an obligation or greater reason to perform an immoral action because one has promised to do it'. Relatedly, I consider it counterintuitive to say that the conspirator is owed compensation and should receive the money the criminal promised her or that slaveowners should receive compensation for not being able to use people as their slaves. If the normative relevance of the promise outweighs the wrongness of fulfilling it, it would be even more counterintuitive. Another problem of the view that unjust promises also lead to promissory entitlements is that it implies that one is obliged to fulfil a promise even if one cannot fulfil it (due to normative reasons). This is inconsistent with the 'ought implies can' doctrine, according to which one could only have an obligation to do x if one can do x. For these reasons, I consider it more plausible that unjust promises are illegitimate and do not lead to promissory entitlements, as the rights-transfer view suggests.

13 People may have some freedom to choose what will be done to them, but the rights in these examples are, arguably, inalienable.

Although the criminal did not have promissory obligations, he may still feel regret and self-disappointment, just as the conspirator may still feel frustration and anger, which suggests that making and breaking unjust promises is still wrongful. This can be explained by referring to the false expectations that the criminal caused in the conspirator or, in the words of Shiffrin (2011, 161), a fraudulent misrepresentation: 'the recipient is wronged by the pseudo-promisor's fraudulent misrepresentation that the action is in that person's moral power to perform'. In Section 2 and in Lazou (2023), I argue how causing false expectations could justify compensation for the costs of relying on those expectations. If the conspirator thus made plans based on the expectations caused by the criminal's promise, e.g. if he booked a holiday to an exotic destination and now has to pay a cancellation fee because he cannot afford it, the criminal should compensate the conspirator for the costs of relying on that expectation and pay back the cancellation fee if the expectation was reasonable.[14] Although these expectations matter, the promise itself is not normatively relevant. The criminal may only be obliged to compensate the cancellation fee, not the value of the holiday, neither should she fulfil the promise. The same holds for fossil fuel owners, who might be owed compensation for the costs of their investments but not for being unable to produce their reserves.

Before fossil fuel owners can have promissory entitlements to extraction permissions, thus, the state who promised so should have the right to decide on this, which is the case only when these permissions do not contradict justice considerations, that is, when the promised extraction permissions do not exceed the country's fair budget. Under these conditions, fossil fuel owners have a promissory entitlement to produce their reserves, which cannot be withdrawn later. This relates to what has been called the principle of non-retrospectivity or non-retroactivity, which prohibits the application of law to events that took place before the law was introduced (Colla 2017, 284; Schulev-Steindl and Hofer 2021). This principle is justified since promises can only be waived by the promisee and not by the promisor. If a regulator already promised that a company is allowed to extract and the promisee does not waive the promise, the regulator cannot issue a promise that contradicts the earlier promise, like a promise that extracting will be taxed or punished, as it had already transferred its right to decide on this. There are also practical difficulties in retrospectively changing laws, as is it hard to undo the past (Gosseries 2021, 292).

Promises about unjust extractions, however, are illegitimate and do not generate promissory entitlements. If states have used up their budget, or if they have already issued promises about all their remaining extraction permissions, any additional

14 Shiffrin (2011, 161) also seems to consider reasonableness relevant: 'the transparency of the lie [or the false expectation] may partly mitigate the wrong of the lie [or of having caused the false expectation]'.

promise is illegitimate. That some extractions that were illegitimately promised to be permissible had already taken place does not change this. Fulfilling an illegitimate promise, after all, does not make it legitimate. For the same reasons, unjust contracts may not be fulfilled either. The principle of non-retrospectivity, thus, does not apply to illegitimate promises, in which there is no valid rights-transfer as fulfilling the promise is not compatible with justice considerations. In this case, after all, there is no valid promise that can be changed retrospectively.

In bi- or multilateral agreements, countries do not unjustly promise not to take necessary mitigation measures, they only promise to compensate the losses of investors if their reserves are stranded. Since they do have a right to decide to provide compensation, the rights-transfer is valid. However, it is questionable whether this rights-transfer can be said to be an autonomous choice. Issuing such a promise obliges a country to pay huge compensations if it wants to fulfil its mitigation duties. Mostly, developing countries are pushed into making such promises by Western investors (Bos and Gupta 2019, 8). Making such promises is also objectionable because it seriously impedes the possibility of mitigating climate change: the biggest impact of the ECT comes from the fear it creates in countries to change policies (Knottnerus 2018). For these reasons, I do not consider these promises valid: they do not entitle fossil fuel owners to financial compensations.

4.2 Two Criticisms

I will now discuss two criticisms, which have received significant attention in the literature on (Rawlsian) LE, of the idea that promises should be just before they lead to entitlements. The *indeterminacy problem* is rather practical and has been raised by Green (2019, 125ff.) and Meyer and Sanklecha (2014, 379ff.). It holds that an account that accepts justice as a criterion 'require[s] a clear and conclusive identification of what justice requires' (Green 2019, 125). Similarly, Meyer and Sanklecha (2014, 379) argue that 'we need to be in a position to clearly and conclusively identify what justice requires'. Meyer and Sanklecha (2014, 379ff.) elaborately explain that we lack such clear and conclusive knowledge. To reach conclusive knowledge, after all, we need to know that we know, and we should be able to show that alternative views are false. While it is already hard, they contend, to reach conclusive knowledge about what a fair target is, it is even harder to reach conclusive knowledge about the fair distribution of the remaining benefits.[15]

According to Meyer and Sanklecha (2014, 380), instead of knowing or having good reasons for believing what justice requires, we need *conclusive* knowledge

15 Meyer and Sanklecha (2014) discuss the justice of personal carbon emissions instead of fossil fuel productions, but the same arguments apply.

because, in this context, a collective decision has to be made: 'what we need to be able to do in this context, where a collective decision is necessary, is show those who hold not-X that they are wrong and that X is right—and being able to do this amounts to knowing that we know X. If we cannot do this, then there is no way of resolving the dispute'. In order to reach an agreement to make a collective decision, it is required to show that a particular view is more plausible than other views, but it is not clear why we would need conclusive knowledge or evidence to convince others and why it would not suffice to convince them by providing arguments or good reasons. After all, people agree on a lot of things without having conclusive knowledge or evidence. *Some* knowledge or clarity, therefore, seems enough to reach an agreement about what justice requires and thus to determine which promises may be fulfilled.

Perhaps one could argue that justice-based theories cannot reach *clear enough* conclusions to be agreed on. However, consider that very often the need for transitioning is a consequence of new information or changed circumstances. In many cases, we know which past promises are just and which are not. Concerning the fair stranding of fossil fuel reserves, moreover, the Doctrine of Common but Differentiated Responsibilities and Respective Capabilities and the Lofoten Declaration for a Managed Decline of Fossil Fuel Production Around the World prove that there is already some agreement (The Lofoten Declaration 2017; United Nations 1992).

Green (2019, 120ff.; 2020, 410) argues that to assess the justice of the entitlements people claim, we also need knowledge about their political duties. What he calls the *generality problem* (Green 2019, 120ff.) holds that justice-based LE accounts focus too much on the rights of the potential victims of certain unjust regimes instead of on the specific duties and responsibilities of different agents for the maintenance of the unjust laws (Green 2020, 410). If we consider justice as a criterion to assess people's entitlements, we therefore need, Green (2019, 123) contends, an account of people's duties to resist and reform unjust or oppressive institutions. Moore (2017, 232) also points to the empirical fact that ordinary people usually do not investigate the justice of what is promised to them or their duties to resist these promises: 'they do not normally subject every policy or law or practice to critical scrutiny'. She replies to this by arguing that many people are critical or at least could be critical and reflect on the practices of their society (Moore 2017, 233). Still, it may be difficult to reach conclusions about people's political duties to resist these practices.

I disagree that in assessing whether fulfilling a promise is just, we need to have knowledge about the duties of the promisees. We only need to assess the acts of the promisor. If I promised a friend to rob a bank and share the money, whether he is entitled to the money does not depend on his duties to resist the promise. Knowing that I have no right to rob the bank is enough to say that he has no promissory entitlement. Only if the promisor violates his moral duties is it relevant to investigate the duties of the promisee, but not for assessing what is owed to transitional losers.

The duties of fossil fuel owners themselves do not matter, thus, for assessing whether fulfilling promises towards them is just. Moreover, since only the promisor's duties matter, the justice-based account fits much better with how people actually treat promises than Moore's (2017) concern suggests. After all, as promisors, I believe, people are much more concerned with whether it is fair to fulfil a promise than when they receive a promise.

For the sake of argument, however, let us assume that we cannot agree on which fossil fuel productions are just. Meyer and Sanklecha (2014, 383ff.) propose to turn to a procedure to determine whether one should be able to benefit from, in our case, producing fossil fuels: if certain entitlements can reasonably be inferred from the existing rules and if they fall within a range of what can be considered just (although they may not be fully just), they may be granted. This is problematic because too many promises, including unjust ones, would be fulfilled. Green (2019) reacts in the opposite way and simply rejects LE theories as a response to transitional losses. This solution does not work either as it simply ignores an important normative consideration. Moreover, it is unclear why these approaches would make it easier to reach an agreement. As explained, however, agreeing on which fossil fuel productions are compatible with justice is not as hard as Green (2019) and Meyer and Sanklecha (2014) assert.

Let us turn to another, more theoretical criticism: if promises may only be fulfilled if they are just, they are redundant, because if the relevant entitlement is compatible with justice, it needs to be fulfilled anyway, even in the absence of the promise. In this way, promises are useless for fossil fuel owners who should leave their fossil fuels under the ground. After all, before they could have a promissory entitlement, the promise should be just, but if the promise is just, there is no need to leave their reserves unproduced in the first place. One author who raises this problem is Matravers (2017, 317): if less than just institutional schemes do not generate entitlements, he contends, the idea of LE would be redundant. Green (2020, 409f.) also raises the objection: 'using a justice-based legitimacy basis for LE would tend to generate intuitively plausible results in cases where obvious injustice is at stake—slavery abolition is perhaps a good example. But in these cases the value of justice would do all of the important normative work for us; appealing to LE would be redundant'.

To resolve this problem, Matravers (2017, 318) distinguishes promises (expectations, in his terms) that concern violating basic rights or fundamental freedoms from those that concern 'merely political matter'. While the latter can be legitimate, the former cannot. Similarly, Radbruch, Paulson, and Paulson (2006, 14) argue that 'there can be laws that are so unjust and so socially harmful that validity, indeed legal character itself, must be denied them', implying that laws that are only a bit unjust do lead to entitlements. Similarly, Shiffrin (2011, 159) contends that promissory

entitlements arise when fulfilling the promise is immoral, but not *intrinsically* immoral. While theft, assault, murder, or fraud are intrinsically immoral, she argues, other immoral conduct is only immoral in specific circumstances. Refusing to swim in one's clothes, for instance, is only immoral in certain circumstances, for example, if it could save a child's life. I find these solutions unconvincing. If it is impermissible to fulfil clearly unjust or intrinsically immoral promises, it is unclear why it would be permissible to fulfil promises that are 'only a bit' unjust or non-intrinsically immoral.

I do not adjust our justice-based account to overcome the redundancy problem, as I think the redundancy critique is mistaken. Adopting the justice condition implies that promises do not save assets of which the stranding is required by justice, but this does not mean that promises are redundant or that they play no role at all in determining who should get what in the transition towards low carbon. After all, there is not only one just distribution of the remaining fossil fuel production benefits, there are several possible just outcomes. Although one outcome may be preferable over another, both could be compatible with justice. Imagine I could spend my Sunday afternoon by having dinner with my housemate or by participating in a climate demonstration. In neither of these options do I violate a duty of justice: they are neither contrary to justice nor required by justice, although they differ in the sense that in the second option I fulfil a positive duty of charity, while in the other I don't. These positive duties of charity and negative duties of justice are also called respectively *imperfect* and *perfect duties*.

States could use their remaining budgets in several ways that are compatible with justice. They could use their reserves to generate energy for domestic use or they could use them as a source of revenue (Caney 2016) and they could undertake fossil fuel production themselves or make contracts with companies. Using their budget in a way that maximizes a distributive justice principle would be praiseworthy, but not required by justice if we consider distributive justice to be relevant for distributing goods that have no owner yet, as Lamont (2015, 3) argues: 'distributive justice is the *creation* of a system of rights [emphasis added]'. When a good has been distributed according to a fair distributive scheme, distributive justice is no longer relevant when the scheme changes. Only corrective justice, then, can come into operation when the scheme has unrightly been infringed upon (Lamont 2015, 3). Accepting a distributive justice principle in order to distribute a good that has no owner yet thus does not imply that, when the good has been distributed, any action that changes this distribution is unjust. When we determine the fair distribution of the global carbon budget (a good that has no owner yet) and the fair national budgets are known, states are free to use their reserves as they wish, as long as the citizens they represent consent to be ruled by the state (see Section 3) and as long as they do not harm others.

By making a promise, one transforms an (imperfect) duty of charity into a (perfect) duty of justice. If I promise my housemate to have dinner, I can no longer choose to participate in the climate demonstration without violating a duty of justice. If a state promises a company a permission to extract fossil fuels, it transforms the duty of charity to allow the company to extract into a duty of justice. Making this promise, therefore, was not redundant: the normative situation has changed since a duty of charity became a duty of justice. Although promises about extraction permissions should be just before they lead to entitlements, they do determine which of the remaining extractions that are compatible with a state's budget should be permitted.

5 Conclusion

This article investigates what fossil fuel reserve owners could claim in the transition towards low carbon based on promises to be able to benefit from producing their reserves. I argue that fossil fuel owners have only limited promissory entitlements. First, I explained how authors, in the context of just transitions, have argued for the relevance of promises by discussing a Rawlsian understanding of LE. Whereas a Humean understanding focuses on the normative relevance of actual expectations which may justify compensations for the costs of relying on false expectations about regulatory stability in terms of investments, the Rawlsian understanding focuses on the promissory aspect of interactions which could justify entitlements to realize the benefits of producing fossil fuels. To explain how an act of promising leads to obligations and entitlements, I relied on the rights-transfer view on promises, according to which making a promise implies the transfer of a right to decide on whether the act mentioned in the promise will be performed.

I then investigated which promises have been made about the benefits of fossil fuel ownership. I argued that promises about what is legally allowed and what is not only have limited relevance. The authorities under which these laws are agreed on are not always legitimate and, more importantly, these laws only concern the past and do not say anything about the future. I rejected the idea that there is any kind of implicit promise that the law will stay the same. Only in agreements or contracts between states and companies have promises been made about the future permissibility of producing fossil fuels, but, except in bi- or multilateral investment treaties, these usually concern only the near future.

Finally, I explored when promises are legitimate or lead to entitlements and obligations. I argued that this is the case if promises are compatible with justice because otherwise, there can be no valid rights-transfer. I also refuted the objections that this approach leads to indeterminacy and that it makes the concept of promises

redundant. Promises do play a role in transitional processes, as they determine which of the permissible productions should be granted, but they cannot justify the extraction of fossil fuel reserves of which the stranding is required by justice. In such cases, the normative relevance of fossil fuel owners' expectations could justify claims that are more successful but less far-reaching as only investment costs may be subject to compensation.

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