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Perspective

Solving the puzzle of justice: How to bridge the normative and descriptive logics in energy justice

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ABSTRACT

In their uptake of the concept of energy justice, we observe a tension between social scientists on the one hand and ethicists and philosophers on the other hand. This tension seems to arise from the contrastive assumptions and expectations that are maintained within the disciplines of social science and philosophy. While philosophers often present theoretical constructions of non-empirical forms of justice that allow for systematic normative reflection, there are social scientists who demand operationalised and measurable conceptualisations in order to come up with clear policy advice. These assumptions show the incompatibility of the descriptive and normative logics that underlie their respective fields of study. With regard to the question of justice in the energy transition, the use of theory-based normative frameworks to qualify empirically established inequalities would provide a more comprehensive and suitable approach.

1. Introduction

The notion of 'energy justice' was introduced about a decade ago, and since then, it has been gaining traction in academic research and policy practice [1–3]. The societal and ethical challenges induced by climate change necessitate dedicated moral reflection. In this, a large part of the popularity of the concepts seems to follow the realisation that the development and implementation of policies and projects that contribute to a sustainable energy system bring about changing distributions of resources that might be considered undesirable.

The introduction of the notion of justice brings about some conceptual complications, though. The notion has been a key subject of ethics and political philosophy, with philosophers trying to unravel the question of what can be considered 'just' (see [4]). At the same time, scholars from the social sciences with a more activist inclination have been motivated by furthering justice through their work [5], especially in the context of 'environmental justice', which serves as a main inspiration for the discussion on energy justice (see [6,7,8]).

In principle, the use of a concept that allows for different interpretations can bring scholars from various research traditions together. Such a concept can function as a 'boundary object' that unites researchers with different epistemological outlooks [9]. 'Energy justice' does not appear to play such a role. There seems to be a divide between the epistemological worlds of philosophers and social researchers, while scholars on both sides of this divide appear to find it hard to recognise that they inhabit opposed worlds [10]. A situation that may give rise to mutual misunderstanding and frustration.

In this perspective paper, we will try to clear up the confusion by spelling out what researchers mean when they talk about justice in the context of the energy transition. To do so, our argument is built on the following strands. In Section Two, we will identify and sketch out the gap between the social sciences and philosophy regarding the status of 'energy justice'. To illustrate this gap, we think it is most informative to describe the expressions of these fields that reveal the oppositions most distinctly, without claiming that our analysis is representative of these two fields. In Section Three, we turn to philosophy and explain how, in this field, 'justice' is often conceived in terms of *perfect justice*, introducing theoretical constructions of justice that cannot be empirically established. This suggests, in other words, that perfect justice cannot be found *in this world*. In Section Four, we will focus on articulations of justice that, from an idealistic vantage point, can be considered *imperfect*. With that, we may say that *there is no justice* in this world. Instead, there are *inequalities considered to be unjust* that need to be overcome. We will look at how empirical inequalities can give rise to perceptions of injustice, which in many cases is the focus of descriptive studies on 'energy justice'. As such, the term justice is conveniently used to talk

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about injustice. What we will observe is that descriptive studies often fail to contextualise these inequalities in wider theories and frameworks of justice, which, as we will claim, reduces the conceptual and practical leverage of 'energy justice'. In Section Five, we will reflect on the implications and conditions that pertain to theories and frameworks that allow the qualification of the inequalities that arise from the energy transition. We will endorse pluralism and flexibility given the fact that the transition is pervaded by both descriptive and normative uncertainties.

2. Two logics in energy justice research

In the literature on energy justice, one may find quite a few scholars who argue that the current uptake of the concept is substandard. Interestingly, the complaints appear to pull the concept in different directions. Let us start with a recent paper on energy justice, Scholtz and Schuppert [11], who consider it problematic that energy justice lacks "precise formulation" (p.1). The reason for this lack of precision is the presence of different principles and theories of justice that give rise to different policy recommendations, so that energy justice cannot function as a "clear decision-making tool" (p.9). The authors also claim that clear metrics need to be developed to measure "how well somebody fares with regard to justice" (p.6). This need for precision and clarity is also felt by other researchers, for instance by those scholars who operationalise the concept using quantitative parameters or indicators [12–14]. Other authors have used computational models to 'measure' energy justice, proposing quantitative proxies for justice [15–19]. The reason to aspire to precision and measurement is that it allows for policy recommendations. Ahmed et al. [20] write that "to have appropriately designed metrics—that is, quantities that are measured—to identify vulnerable populations; design and analyse possible policy, technology, and business solutions; and monitor and evaluate the outcomes of such efforts".

It is likely that these authors are contrasting their work with qualitative research on energy justice, which comprises most of the field. Without measurement, so it seems to be the reasoning, researchers cannot provide recommendations that can be taken up by policymakers (cf. [21]). Quantitative indicators may be helpful, but in themselves, they do not say anything about what is considered to be just or not. For this, we need another source of reasoning, one that is rooted in philosophical reflection. This point has been underlined by recent conceptual work on energy justice done by scholars who have a background in philosophy. For instance, Wood et al. [22] "argue that the energy justice framework indeed faces a normative challenge: the tenet-framework is insufficient to normatively evaluate energy systems, technologies or policies, or to justify a certain course of action". This claim is affirmed by Laes et al. [23] who say that most work on energy justice has a descriptive character, while "[m]ore fundamental philosophical questions such as what counts as a just distribution or a fair procedure have hardly been tackled". The problem of this negligence is that existing energy justice frameworks in themselves are insufficient for justifying normative conclusions, as there is normative uncertainty about what is just [3]. Or, as is written by Brandstedt et al. [24], "[these frameworks] provide little guidance as to which normative considerations are more or less important to take into consideration in energy decision-making, and which considerations are fundamental principles and which are instead judgments derived from principles". In order to provide guidance, "[a normative framework should position] certain norms in relation to each other and gives a justification why these norms should be followed, for example because of deontological reasons that norms are unconditionally valid and should be accepted for what they are as norms, or because the consequences of adhering to these norms are favourable" [25].

These quotations indicate a gap between the expectations that social scientists and philosophers have about what 'energy justice' should be about. Using the notion of 'logic' to describe the way claims are to be legitimised and the way in which these claims are to be used, we can say that the first group of researchers maintains a *descriptive logic* that is typical of social scientists and, in contrast with researchers who have a qualitative orientation, expects that concepts can serve as yardsticks to measure empirical phenomena, allowing for concrete advice for policy interventions. The second group of researchers deploys a *normative logic*, which holds that justice cannot be measured; it figures as a concept that allows us to systematically reflect on normative questions.

These underlying logics are largely contrastive, but still, we think that they can be related to each other in a meaningful way. In fact, these logics allow for the establishment of claims that can reinforce each other. Our line of reasoning starts from the consideration that discussions on energy justice are usually held in terms of empirical *inequalities*. We will contend that in order to determine the injustice of such inequalities, we need to be able to articulate and reflect upon the normative assumptions that underlie the evaluations of inequalities as unjust. For this, ethicists may provide theories, frameworks and concepts. Though these theoretical accounts may have no empirical representation, they help us in deciding on the acceptability of certain inequalities. At the same time, we need to realise that without appropriate descriptive knowledge, philosophical musings about justice will not have any bearing or substance.

3. There is no justice in this world?

The aim of this section is to spell out the normative logic that is used by philosophers in their accounts of justice. We will start with a relatively simple analogy between 'justice' and 'good music'. All people like their music to be 'good', just like all people like their world to be 'just'. However, the respective questions of what is 'good' or what is 'just' will give rise to answers that may diverge. In both cases, the labels of 'good' and or 'just' do not refer to a singular yardstick; people will maintain different quality criteria to make their evaluation.

There is no doubt that 'good music' needs to be substantiated by referring to actual songs, artists, or genres. Something similar can be said about 'justice': if we want the notion to make some sense, we need to specify what it actually stands for. That is also where the analogy ends; the 'goodness' of music is a subjective judgement, while 'justice' is a normative evaluation that applies to society as a whole, and we have to be able to transcend individual judgments about what is considered to be just or not. In the next section, we will explain that human beings are born with intuitions about fairness, but the step from an innate intuition of fairness to a comprehensive and authoritative understanding of justice involves systematic ethical reflection. This has been the task of philosophers, who have taken 'justice' as a description of how the world *ought* to be. In other words, we cannot find justice in the empirical world, but we have to find out what we think justice is and subsequently organise our world in such a way that it converges to this moral ideal (cf. [26]).

At the same time, this moral ideal is a moving target. Pursuing justice by adapting institutions and developing new technologies also produces new knowledge and evaluative schemes [27]. We learn as we go along, especially in the context of the energy transition, which is subject to both epistemological uncertainties, concerning technical efficacy related to carbon emissions, and normative uncertainties, concerning the evaluative frameworks that will be current in the future [28,29]. The transition raises normative questions that cannot be answered unequivocally, because we do not know how the energy system will develop, which values and norms might be applicable, and how to apply existing moral theories and concepts. We have to account for these normative and empirical uncertainties that evolve from the technical and societal changes that result from developing a sustainable energy system [30].

Studying what *ought* to be can be hard, as it involves a kind of reasoning that is unfamiliar to many social researchers who have been taught to deal with descriptive questions about what *is*. These different kinds of reasoning follow Hume's observation that an 'ought' can not be derived from an 'is' without making a so-called 'naturalistic fallacy' [31].

It needs to be added that philosophers do little to make their work and reasoning accessible or relevant for practice [22]. For instance, theories on justice tend to be highly abstract, mostly serving as theoretical explorations to find out what 'justice' would be in an ideal context. Illustrative here is John Rawls's *A Theory of Justice* ([32], originally from 1971) – likely the most influential modern book on justice. In this dense work of over 500 pages, Rawls proposed a hypothetical situation in which a group of rational individuals imagine themselves to be behind a 'veil of ignorance'; they are ignorant of their social and economic identities. This thought experiment can be used to legitimise the welfare state, but its idealised shape does not allow for an empirical description of a just society.

Though it needs to be admitted that there is a wide variety of alternative approaches, including theories that claim to be 'non-ideal', most authors tend to follow the template of Rawls by assuming an idealised society that is stable and about which we know the outcomes of certain decisions. However, this is a strategy that does not help us cope with the epistemic and moral uncertainties related to the energy transition, as change is its very essence (cf. [33]). The energy transition entails radical sociotechnical transformations in which institutional rules and commitments and cultural practices and values co-evolve with technological developments [27].

At the beginning of Section Two, we showed the need expressed by scholars following a descriptive logic to operationalise or measure energy justice. The normative logic informs us that this need is based on an incorrect understanding of what justice is. As a moral concept, one cannot derive whether something is (un)just merely on the basis of empirical data [34]. One cannot operationalise or measure energy justice as 'justice' presents an ideal situation that does not exist in this world, which would mean the concept is seen as a set-in-stone phenomenon that corresponds to a state in the world that can be objectively described. The additional threat is that definitions, indicators and thresholds for energy justice selected by researchers are taken for granted. This may seduce policymakers and other readers to reduce justice to a set of parameters, reproducing implicit normative ideas of researchers uncritically [3].

In line with this argument, we can say that in the analysis of justice issues in the energy domain, the 'tenets' and 'principles' of energy justice are useful analytical tools. But it needs to be emphasised that they are in themselves unsubstantiated and cannot direct decision-making towards justice without additional theories or principles of justice [3,22,23,25]. They are categorisations, spelling out different forms of justice; very much like jazz, rock, and classical sort out different musical genres, which, unless you are a snob of some kind, does not help you to say anything about the quality of the music. Likewise, these are categorisations that are not exhaustive; there is more to justice than the three tenets, just like there are more genres of music that commercial radio stations play.

If researchers fail to acknowledge this underlying logic of a normative concept, they are likely to use implicit moral convictions as grounds for making claims about what is just or not. Articulating these convictions would make it much easier to understand and discuss the normative uncertainties that are intrinsic to the energy transition. For instance, many social scientists use the values and preferences of living people, stated in surveys, focus groups, participatory settings, etc., as their ground to make normative claims. In such cases, scholars may tend to make a naturalistic fallacy by deriving normative conclusions about energy justice from empirical observations of a range of perceived injustices created by the energy transition, without reflecting on the underlying normative assumptions and intuitions.

4. There is no justice in this world

Above, we have mostly talked about the pursuit of the moral ideal of 'justice', which brings us to the domain of the 'ought' – a domain that many philosophers try to disclose by purifying ordinary language from contingent terms. When we turn to everyday discourse on justice, it is striking that when people talk about 'justice', they usually mean overcoming *injustice* [29]. To be more precise, whenever there is an inequality that is considered to be unacceptable, the pursuit of justice entails the eradication of that inequality. The claim that we will make here is that a descriptive logic allows us to identify inequalities, but cannot, in itself, inform us about the acceptability of this inequality.

The emphasis on injustices seems to be a quality that we are born with. It may be one of the first of our abilities to point out to others (usually our parents) that things are 'not fair' [35]. What is considered to be 'not fair' is that we are not given our share of something (a toy, time to play, a treat), or 'what is due' (cf. [36,37]). The parents have to react by restoring the unfairness or by giving a *reason* why the situation is *not* unfair.

With this idea in mind, it makes sense that in the context of the energy transition, most discussions relate to energy injustices and not energy justice. Most notably, decarbonising the energy system will mitigate global warming and, hence, overcome the injustices that are caused by the carbon emitted by the current energy system. In fact, we would claim that the notion of energy justice revolves around the question of how to cope with the injustices involved in the energy transition in two ways. On the one hand, 'just energy transitions' represent a large-scale pursuit to identify and overcome the major injustices created by the current fossil-fuel-based energy system; on the other hand, adapting this system will create new injustices [38]. For example, employees in the fossil fuel industry might lose their jobs, energy might become more expensive, the supply of energy might become less reliable, and ingrained cultural practices might have to be changed. Renewable energy technologies like wind turbines and solar panels might have detrimental effects on people living nearby who are confronted by the visual and auditory impacts of these technologies. People living far away might have to suffer from mining extraction and the depletion of resources.

These examples show that there is no change within the energy system that will only produce winners. There will always be parties that are affected somehow, which not only include living people but also unborn generations and non-human actors such as animals and ecosystems. The parties affected, or their representatives, may demand attention to the injustices that are imposed upon them [39,40]. It is precisely the emergence of such side-effects, which are mostly inequalities of some kind, which seems to have triggered the interest in 'energy justice'. Energy poverty or job loss in coal-intensive economies have been among the first issues considered to be seen as manifestations of injustice, later to be extended by other inequalities.

In sum, there are 'inequalities' in the world, and they can be measured empirically (*is*). In contrast, there is no 'justice' in this world, because justice is a normative-evaluative judgement (*ought*). From this, we can conclude that inequalities cannot be simply equated with injustice – in order to allow for this, a normative judgement about these inequalities needs to be formed and argued for. The fact that philosophy does not come across as practical should not deter energy justice scholars from engaging in normative reasoning. Inequalities related to energy systems and transitions need to be mapped out, analysed, and subsequently conquered by ethical reflection (cf. [41]).

The need to go further than empirically measured perceptions of injustice in the energy transition is especially relevant with regard to the spatial and temporal scales involved in this transition. This means that inequalities need to be compared, including inequalities that cannot be measured yet [42]. Here, we can think about future generations, non-human animals, plants and ecosystems [40]. We may also think of systemic inequalities that marginalise certain groups within society (cf. [43,44]). If we think of justice in the energy transition, we need to account for the inequalities that are suffered by such silent actors. By focusing on observations of perceived injustices, these unarticulated injustices are left out of the discussion. This means that an empirics-based account of justice sanctions the injustices that are embedded

within existing institutional settings.

With that, the question about 'energy justice' is the question of how to judge the inequalities that are articulated both in academia and in society in a comparative and systematic way. This means that theories and frameworks that allow for normative evaluation are necessary, and that, also, in cases in which claims of injustice are considered to be legitimate, the relative weight of these claims needs to be traded off in order to further the energy transition.

5. Discussion: What energy justice *can* do for us

In this paper, we have aimed not to take the moral high ground but to bring together the underlying logics that are maintained by philosophers and social scientists. With that, we hope to have contributed to an understanding of 'energy justice' that is consistent with ethics and that can be connected to descriptive research. We believe that a more reflective uptake of the concept of energy justice will improve its theoretical and practical efficacy. For this, social scholars and philosophers need to be able to understand each other's underlying 'logic', which allows for meaningful exchange of insights and productive collaboration.

Our motivation for writing this paper is based on the conviction that the acknowledgement of the is-ought gap is essential for societal progress. It allows us to think about a more desirable future, which inspires us to set up institutions that facilitate such a society that is desirable [26]. With that, normative reflection has motivated democracy, women's suffrage, the abolishment of slavery, and human rights. In the same vein, the notion of energy justice is helpful because it turns the focus towards issues that are crucial for establishing a decarbonised energy system. But which are the conditions that need to be fulfilled in order to engage in normative reflection?

Given the dynamics of the energy transition, which are unpredictable from both an empirical and a normative perspective, we think that there is no singular framework that would help us to spell out decisions that are just (cf. [45]). Instead, there are different frameworks that help us to organise or understand a particular situation in terms of justice or that might inform us about how such an evaluation of that situation can be legitimised.

In this, both descriptive and normative studies have a role to play. While social scientists are able to identify and contextualise the inequalities in the ongoing energy transitions, philosophers can help in articulating and systematising the normative criteria by which inequalities can be judged. In this, we should acknowledge the need to include a variety of methodologies and issues; if not, we would neglect the fact that energy justice covers multiple spatial and temporal scales [46–48]. In this, moral theories can provide frameworks that allow us to understand the moral ramifications of the distribution of costs and benefits and of value trade-offs. It may not be possible to develop frameworks that generalise energy justice over different cases and different scales. If scholars want to 'quantify' or 'measure' energy justice, they need to realise that frameworks that allow for that will reduce the ethical pluralism that underlies many of our judgments and that these frameworks *only* allow a case-specific validity.

With these considerations in mind, we can think about how existing frameworks *can* be applied in the study of energy justice. To start with, the tenet-based approach provides a clear categorisation of different kinds of injustices. This is very helpful in understanding and explaining why agents feel treated unjustly. For instance, we can think of a case in which residents feel treated unjustly because they do not receive compensation for living near a wind park, which is a distributive issue that can be solved by a financial arrangement. If these residents feel treated unjustly because they feel that their arguments are not taken seriously, suggesting a failure of recognition, financial compensation will be experienced as a bribe, only fuelling the feeling of injustice. Another framework that is proposed is that of the Capability Approach [49,50]. This approach is often seen as a theory of justice of some sort, but as the ethicist Ingrid Robeyns [51] writes, it is not so much a 'theory' but rather a 'flexible framework' that allows for normative guidance. In other words, the Capability Approach does not spell out what is just or unjust; it gives a direction in how to think about the well-being of people by giving minimal conditions for a good or full human life. It is a *starting point* for reasoning about justice and not an evaluative framework. The contextualisation of these frameworks helps out in using them in a way that does right to 'energy justice' conceived as a moral concept.

Moreover, we are convinced that both empirical and moral studies should feed into societal and political processes in which the different moral repercussions are turned into a subject of deliberation [52]. We believe that because of the fundamental descriptive and normative uncertainties that are intrinsic to the energy transition, the role of scholars cannot be to come up with recommendations, but it includes the development of insights that can be used as input for these deliberative processes [42]. In this understanding, justice is not straightforwardly equated with the eradication of inequalities, but with the development of frameworks that allow qualification and normative evaluation of the inequalities induced by the energy transition. These frameworks facilitate the pursuit of an energy system that converges on justice by constantly testing and renegotiating what we think is just.

CRediT authorship contribution statement

Udo Pesch: Writing – review & editing, Writing – original draft, Formal analysis, Conceptualization. **Nynke van Uffelen:** Writing – review & editing, Writing – original draft, Formal analysis, Conceptualization.

Declaration of competing interest

There is no conflict of interest to report.

Data availability

No data was used for the research described in the article.

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