

Temporality in epistemic justice

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Govert Valkenburg 

Department of Interdisciplinary Studies of Culture (KULT), Norwegian University of Science and Technology (NTNU), Trondheim, Norway

Abstract

Democracy requires some sort of exchange of knowledge between holders of different knowledge positions. The concept of *epistemic justice* brings the ability to know and the right to be recognised as a knowledgeable person under a scheme of justice. It problematises social conditions that potentially compromise the ability to share knowledge and thereby effectuate change and the possibility of being recognised as a knowing subject and being granted access to equitable means of producing knowledge. This paper engages with *temporal* aspects of epistemic justice. What role do temporalities play in people's possibilities to create knowledge and the way they create knowledge? What role does time play in the valuation and circulation of knowledges? How do hegemonic conceptions of time potentially make some knowledges circulate more freely than others? Since conceptions of time connect to specific forms of knowledge, hierarchies and speakabilities of temporalities form an immediate correlate of hierarchies of knowledge. By extension, such hierarchies feed into schemes of epistemic justice. Thus, democracy's duty to emancipate suppressed voices requires emancipating the times from which those suppressed voices speak.

Keywords

Epistemic justice, time, knowledge, temporality, epistemic agency

Corresponding author:

Govert Valkenburg, Department of Interdisciplinary Studies of Culture (KULT), Norwegian University of Science and Technology (NTNU), Trondheim 7491, Norway.

Email: govert.valkenburg@ntnu.no

Introduction

All people have knowledge. However, this is not to say that all people are equally recognised in their capacity as a knower, nor is it to say that all people are granted a fair amount of means to develop and acquire knowledge. The production and circulation of knowledge are not necessarily equally accessible to all. Rather than any unfair distribution of talent, this paper is about the fairness of distributions of means to realise intellectual talent. In this paper, I explore how such knowledge circulations and the fairness of those circulations relate to conceptions of time. Time pervades our knowing. It structures our ways of knowing by providing one of the main classifications of how we order events, and it is something that we relate to: we know time in particular ways. Nevertheless, not all ways of understanding time and performing time are equally accepted. How do such inequities in the circulation of knowledge and unequal admissibilities of versions of time relate?

The concept of *epistemic justice* (Fricker, 2007)¹ has been developed to thematise the circulation of knowledge as something that can happen in just and unjust ways. Epistemic injustice happens if people and their knowledge are denied recognition on grounds detached from any fair evaluation of the knowledge or if people are limited in their possibilities to develop knowledge on other grounds than their natural abilities. Epistemic injustice compromises the fundamental conditions for a person to develop valuable knowledge and be recognised as capable of meaningful thought. To deny a person's ability to produce, own and share valuable knowledge is to deny one of the necessary conditions for the person to be respected and to have self-respect. At its core, the problem of epistemic injustice is a problem of human dignity.

Epistemic injustice is not to be mistaken for simple denial of particular knowledge or the truth thereof, even if such denial happens unjustly. Simply stating 'you are wrong' or 'your knowledge is neither accurate nor relevant' might not necessarily be an instance of epistemic justice, even if it happens on arguably wrong grounds. People can, in fact, be wrong or put forth irrelevant knowledge. They can also be wrong in validating knowledge, regardless of whether they are in under-privileged positions. Also, validating knowledge and disagreement on that validation is an everyday element of our cognitive lives, and one may at times draw the shortest straw. Hence, this paper is not about an argument for unconditionally emancipating all sorts of knowledge, thus opening the door for fake facts and the like. Here, I am only interested in structural unfair power dynamics that play out in knowledge evaluation, particularly dynamics related to time.

Time is a central element of our ways of knowing, and its relation to epistemic justice and the basic conditions for being recognised as capable of thought merit further analysis. As Barbara Adam (2004: 22) writes, 'any new perspective on the world entails a reconceptualisation of the temporal relations involved'. However,

as not all concepts of time enjoy the same social recognition, it follows that knowledges tied to less common forms of time are less likely to be recognised as valid. Thus, the owners or producers of such knowledges may not be recognised and acknowledged as having valuable knowledge. That is to say, the hegemony of time may interlock with structures of epistemic hegemony. Conversely, recognising a person as capable of intelligent thought requires recognising that the person is able to make sense of time and that the time underlying their structure of thought is acceptable.

In this article, I will explore the role of time and time conceptions in the production, circulation and use of knowledge, and how prioritising ways of knowing time *de facto* prioritises ways of knowing. I will first provide a brief account of epistemic justice. I will then explore notions of time and how they relate directly to the elements of epistemic justice and the social dynamics of knowledge circulation. Finally, I will carry this further by considering that time is, in crucial senses, *multiple* and what this means for how we can politically deal with this.

Epistemic justice

Miranda Fricker's book *Epistemic Injustice, Power & the Ethics of Knowing* (2007) generally counts as a foundational work on epistemic justice, be it in the form of its antonym. She discusses two primary forms in which epistemic injustice may occur. First, *testimonial epistemic injustice* is done when a person is withheld any credentials such that their account of affairs is considered lower in credibility. Such denial of credentials is often a consequence of prejudice. An example is when sex workers are denied the possibility of giving an account of their work practice as a work practice and instead are rendered victims, not professionals, by both policy and media coverage. This victimisation deprives them of any opportunity to explain how they make sense of their situation. In many cases, they would do so in more balanced terms and often more favourable than an account of only victimhood (Lobo et al., 2020). Generally, such testimonial injustice may take the form of either wilful rejection or a less deliberate failure to recognise the speaker's knowledge *qua* knowledge (Wanderer, 2012).

Second, *hermeneutic epistemic injustice* is done when a person is withheld the cognitive resources to make sense of a social situation. For example, this happens when arguments are voiced about a salary gap between women and men in a particular industry or company, while the incumbents reply that the rules and salary schemes are just the same for men and women, so there cannot be any such gap. This appeal to fair rules limits any explanation to (arguably legitimate) differences in career stage, which means gender-related differences cannot be discussed. If the reality of these differences is denied, then any explanation becomes meaningless. Effectively, people are deprived of the possibility to

explain it. Fricker (2007: 148–149) herself provides the example of Wendy Sanford. Sanford could not make sense of her postpartum depression and kept blaming it on herself as an abnormality for which she carried responsibility. Only when she learned more about the phenomenon through interaction with peer groups discussing women's medical and sexuality issues did she understand that it happens to other women, too. At that moment, she first acquired the intellectual tools to make sense of it. Only then could she stop blaming herself for it.

Fricker's account of epistemic injustice thus concerns power unjustly exercised *over* processes of knowing. In contrast, the account by Steve Fuller (2007: 24–29) of epistemic justice is connected more directly to the power exercised *through* knowledge and knowing. He develops this into two possible underlying conceptions of knowledge. First, knowledge has the potential to dissolve power. Knowledge can serve as a tool to break domination. Second, knowledge engenders power. Knowledge can serve as a tool to achieve domination. Either way, Fuller observes that even though knowledge and power are conflated, the production of knowledge and the distribution of power have usually been discussed as if they were radically different things. Power is treated as something readily available to be wielded, whereas knowledge needs to be established before it can be used. Arguing against this separation, Fuller proposes repairing this asymmetry and understanding both power and knowledge as not simply being there (or not) at our disposal but instead as assets that need to be acquired or created before they can be used. Therefore, notions of ethics, as the question of 'how to use power', and notions of epistemology, as the question of 'how to know', should also be thought of as belonging together. For this reason, epistemic justice cannot suffice with only looking at the possibilities to develop knowledge and the recognition as a knowing subject. It also needs to account how the inextricable tandem of knowledge and power structures operates. As I will argue, time is often one nexus where power and knowledge entangle.

Hermeneutic and testimonial injustices are potential impediments to political freedom (Fricker, 2013). Such freedom requires the ability to contest domination, which is impossible if one either lacks access to the arena where contestation is possible, or is deprived of the intellectual tools to do so. Thus, the potential of knowledge to defuse power can become compromised: both the construction and the abolition of power through knowledge are in themselves acts of power.

The conflation of knowledge and power makes such considerations pertinent to questions of how to arrange fair institutions. Bohman (2012) discusses that democratic institutions should constitute safeguards against domination, where domination is understood as the limitation of choice. In the specific case of epistemic justice, a limitation may come about as the limitation of communicative and epistemic statuses. By extension, epistemic justice is not only an individual virtue but also an institutional one that provides the basis for membership in a political community. As will be discussed in the following sections, the

constructed nature of time shows many of the characteristics usually attributed to institutions; many forms of time *are*, in fact, institutionalisations. Therefore, it is vital to think about how the times that structure social practices are, in fact, supportive or detrimental to specific ways of knowing.

If we talk of dominant forms of knowledge, then *science* as the Western, Enlightenment-grounded ideal form of knowledge comes to mind. While science is not one monolithic thing, we can safely assume that a relatively stable imaginary of science as a highly structured and reliable endeavour to create true knowledge provides one of the gold standards for how knowledge is evaluated in society. When science is considered the prime source of knowledge, this contributes to the othering of other knowledge systems and hierarchising and ultimately destroying those (De Sousa Santos, 2014; Visvanathan, 2009). This is, amongst others, visible as the everyday prerogative for experts to create policy-relevant knowledge (Egert and Allen, 2017), but it appears in many more forms. This hegemony of Western scientific knowledge appears potentially as both testimonial and hermeneutic injustice. Briefly put, the testimonial part is when people are denied the right to speak if their way of presenting knowledge is too far detached from scientific presentations. The hermeneutic part is if the pool of concepts available to a person is dominated by scientific concepts, causing the person's concepts to appear meaningless to the person themselves. The import of this is not to be underestimated: epistemic justice is not only a matter of warranting the possibility to develop and share knowledge but also a matter of warranting sufficient means to acquire trust in one's own means of knowledge production, that is, intellectual self-trust (Jones, 2012). Given this hegemony of the scientific imaginary, a similar hegemonic role can be assumed for linear clock time as the dominant imaginary for time. Along these lines, linear clock time sways the evaluation of knowledge and knowers.

At this more profound level, the connection between ways of knowing and the exercise of power makes that epistemic justice cannot be seen apart from identities and how politics is conducted upon them. Pandey and Sharma (2021) explore such identity politics: epistemologies and ways of validating and presenting knowledge are tied to people's identities and whether or not these identities are respected. They discuss examples of how initiatives of participatory decision-making impose specific, hegemonic or otherwise taken-for-granted identities on the participants of the process. Identities that do not comply with such standards fail to acquire recognition. Pandey and Sharma observe that knowledge circulations are hampered in case of identity misfits. These exclusions may not be visible, certainly not to the perception of hegemonic actors. When this happens, subordinate actors can only resist such imposed identities by withdrawing from all decision-making. If that happens, people holding subordinate identities and knowledge systems do not receive due attention in the political processes that

pretend to include them (see also [Valkenburg et al., 2020](#)). The meaning of temporalities and time conceptions to identities is thus a crucial aspect to address.

Time and the social circulation of knowledge

Time is inseparably connected to knowledge systems. Straightforwardly, time plays at least two potential roles in the constitution of knowledge. In the first place, time is the backdrop against which (at least a part of) our knowing happens. Is the canvas upon which it unfolds. Many things we know, we know in a particular time or timeframe. For knowledge of events and knowledge of rhythms and regularities, the connection to time is even self-evident. Also, time orders how people tell stories and convey knowledge. And through these stories, people order time ([Goodwin, 2002](#)). Thus, time has an epistemological status: it bears meaning for our theories of knowledge and ways of knowing. Second, time is itself an object of knowing. It circulates in our knowledge, and we construct and manipulate it. We theorise it, but we also fix specific meanings of time by the knowledge we consolidate. This is the ontological status of time: its place in theories of being. These ontological and epistemological roles of time, as what structures knowing and as what is known, serve in this section to explore how time relates specifically to testimonial and hermeneutic forms of epistemic injustice.

Time is thus both a constituent of social life and produced through social life. This simultaneously foundational and contingent position renders it a primordial site for the exercise of power. The power-wielding role of time has been a central topic in critical thought. In the thought of Elias, as explained by [Nowotny \(1992: 427\)](#), time is primarily a relational symbol by which groups connect multiple trajectories of change. The power to choose which symbols are chosen precisely and which changes are connected is a vital asset in defining those groups themselves. Defining the symbols a group thinks by, in effect, defines the preferred epistemology of the group. As [Portschy \(2020\)](#) argues with Foucault, time is eventful and relational. In this relationality, time orders the sequence of events and defines simultaneity and co-presence. Time is an example of what Foucault calls 'dispositives': institutional and cultural structures that afford and constrain action, thought and knowledge. As one of those structures, time is dispersed through the whole body of social life. There is thus a fundamental relation between time and power ([Portschy, 2020: 395](#)).

Some forms of time spring to mind that appear as dominant and connected to dominant forms of knowledge. In a modern framework, linear, quantifiable time is dominant in science-oriented forms of knowledge, which is, in turn, the preferred form of knowledge for technocratic regimes. This linearity and quantifiability are also fixed by its strong position in capitalist production management and commodification of time ([Adam, 2003](#); [De Sousa Santos, 2014](#); [Porter, 1995: 22](#)).

Capitalist time is essentially commodifiable, which implies both linearity and measurability. In a study on time management applications, [Strzelecka \(2021\)](#) explains how the strictly managed work time in capitalist settings imposes a strict organisation of the work practice and how people's mental capacities such as memory and emotions function. Here, temporality is simultaneously an ontological and an epistemological entity, despite its pretence of being contextless and neutral. Apart from being linear, time has a negative value ([Rommetveit, 2022](#)) in that it is a cost that should be minimised; speed is what is to be pursued. Linear time is also highly congruent with the logic of prediction and pre-emption ([Aradau and Blanke, 2016](#); [Pellizzoni, 2022](#)), which are distinctly capitalist and modernist ways of knowing the future.

At the same time, the assumption that development from circular time to linear time characterises the development from tradition to modernity has been reckoned overly romantic and unfounded ([Gell, 1992](#); [Shove et al., 2009](#)). Indeed, enough notions of temporal circularity exist, also in contemporary, modern situations. For example, [Blue \(2017\)](#) focuses on the rhythms of modern social life. Also, in modern societies, as well as arguably everywhere else, performance and ritual are vital constituents of practices, and these can hardly be thought to exist without some form of repetition. This repetition is also a quintessential element of the learning processes in these practices ([Mamidipudi, 2016](#)). Thus, despite the seeming dominance of linear time, there is, in fact, a diversity of times, which makes time's relation to epistemic justice equally multiple and hence complex.

Striking a balance between the untenable extremes of social-reductionist and realist notions of time, works in social practice theory ([Blue, 2017](#); [Blue et al., 2020](#); [Shove, 2009](#)) show how time is productive and produced by social life. This makes time multiple, idiosyncratic, and coordinated and negotiated. Where different times come together at the intersections between practices, negotiations take place. The right timing becomes a matter of competence and procedure ([Shove et al., 2009](#)). In this light, time and space are best understood as entangled in the lived experience of 'timespace' ([Schatzki, 2009](#)), which is not the backdrop to activities but rather something that coincides with activity and is, in fact, a central feature of it. It is at once individual and key to the organisation of social life and indirectly to the organisation of both individual and collective knowledge.

The skills required to achieve synchronicity and which are vital to the successful conduct of practices, serve as a mechanism of inclusion and exclusion. [Czarniawska \(2004\)](#) uses the notion of 'kairoic time' for things happening *at the right time* which comes with a particular understanding of autonomy and independence from the time schedules imposed by practices. It is a matter of autonomy whether or not we can arrange our times such that things happen at the right time. However, what the right time is, depends on what time matters, or is made to matter, just as much. Such dynamics determine to what extent we can choose our modes of reaction, and to the current argument, this means primarily:

what cognitive modes we can mobilise. In a more generic sense, synchronicity as simple 'correct timing' in time regimes is a matter of power and cognitive power at that.

Time has thus both an epistemological and an ontological status. The very separation between ontology and epistemology correlates with the strictly modern imaginary of the separation between the knowing subject and the known object. Yet, temporalities are precisely one of those points at which this separation becomes permeable. Thus, the modern separation between ontology and epistemology pervades scholarship and serves as a form of othering that performs its own hegemony, as it enforces a denial of this permeability. This hegemony of modernist notions of time and its purifying (cf. Latour, 1993 (1991)) force on the separation between ontology and epistemology becomes clearer in confrontation with colonised and indigenous times. From its unmarked position, modern, capitalist time renders indigenous times 'historical' while modern time itself remains universal and contextless (Rifkin, 2017; Naim et al., 2021). This historicizing performs multiple violent operations. It defines the terms of coevalness in the most literal sense: indigenous times can exist in the modern present, but only insofar as they can be rendered in terms of that modern present. It also denies the historicity of the position of indigenous times in modern presents and the changes and developments that indigenous onto-epistemologies have gone through in confrontation with colonising modernity.

Furthermore, Rifkin (2017: 18–19) identifies several points at which indigenous temporal onto-epistemologies are othered and rendered inferior or even invalid in confrontation with modern ontologies and epistemologies. He mentions conflicting modes of periodisation, the role and presence of ancestors, how memories of dispossessions are organised and acknowledged, conflicting views of material legacies, and the passing down of memories and traditional knowledge, to mention only part of it. The very history of colonisation becomes part of the indigenous temporalities. And as Rifkin (2017: 26) puts it, temporal inscription or conscription is part of settlement dynamics. In a similar vein, as Freeman (2022) reflects, abuse of time power has been a feature of colonialism, where the homogeneous, empty clock time is abused through slavery, prisons and schooling. These practices violently enforce what time *is*, but this also directly determines what can be *known* and how. Similarly, analysing various activist groups and their conceptions of intergenerational environmental moral duties, Naim et al. (2021) see that the ontology of what time is, conflates with how such intergenerational duties are understood, known and carried to conclusions of specific action perspectives. Interestingly, Naim et al. observe that time is considered ontologically neutral in many analyses unless the temporality in question is indigenous.

For this reason, I will use *onto-epistemologies* when talking of constellations that defy the modernist purification between subject and object, and between

epistemology and ontology (cf. [Latour, 1993](#) (1991)). This resonates with [Fuller's \(2007: 24–29\)](#) point mentioned above that ethics and epistemology should be treated as being of the same kind. However, that diagnosis is not explicitly aimed at the othering of allegedly non-modern knowledge systems.

Time and testimonial injustice

Testimonial injustice can emerge as a consequence of time-related misalignments. A speaker can be attributed a smaller-than-fair amount of credibility because their temporal perspective does not align with the audience's perspectives. Or it can be because the speech act itself is 'timed' in a way that fails to synchronise with the temporal rhythms of the audience. I consider this last form not fundamentally different from the general potential to exclusion that emerges from the rhythms of practices and institutions ([Blue, 2017](#); [Czarniawska, 2004](#)), though it might produce an interesting analysis in specific cases. The first line of thought is more relevant for the current argument. Two things are needed for a case of testimonial injustice due to adhering to arguably wrong conceptions of time. First, it requires a misfit of conceptions of time. Second, the rejection of the speaker's knowledge contribution must be owing to the rejection of their temporal perspective, where this rejection of the temporal perspective must at the same time be unfair. That is to say, after all corrections for epistemic injustice, there must still be a principal possibility to say that a particular time perspective is nonsensical ([Holman, 2020](#)).

An example of such unfair rejection of a temporal perspective is given by [Warin et al. \(2019\)](#). They show how the Aboriginal and Torres Strait Islander Australians' indigenous take on epigenetic knowledge does incorporate knowledge that runs across generations and is not strictly tied to individual knowledge agents but rather to a community of knowers. The value of this way of knowing time and knowing bodies and illness across time is evident. Still, at the same time, it is clear from the account by Warin et al. that this way of knowing is not straightforwardly accepted by the national government and (Western-oriented) scientists. The indigenous epistemologies in question coincide with epigenetic ways of knowing, namely, locating important factors underlying health and disease in the individual's environment. However, it seems that this also opens further opportunities for colonial powers to reinforce their grip. The indigenous way of knowing time and situating the (healthy or ill) body in it remains subordinate, even if it appears initially as a contribution that all would value. This specific, indigenous way of knowing time is thus a valuable resource, yet needs emancipation to be recognised and survive.

Another example is provided by the emergence of the Anthropocene as a concept to discuss the current era. The notion captures the fact that, for the first time in global history, the influence of humankind on the physical properties of planet Earth at the planetary level have become significant and noticeable. These

developments span many generations and thus go beyond the typical time frames of conventional human politics. To grasp them, novel ways of time reckoning are needed (Briggle, 2021; Ialenti, 2020). However, as Delanty and Mota (2017: 25) point out, such epistemologies have hitherto not been appropriately incorporated into governance. This is because conventional understandings of politics and democracy are based on national and international systems that have emerged in the past two centuries and cannot incorporate such thinking. While this reasoning does not directly identify a subject to whom testimonial injustice is done, it clarifies that any subject speaking from an Anthropocene-rooted imaginary might face resistance in getting their testimony accepted and recognised as valuable. This is reminiscent of the argument made by Machin (2019) that policy time-frames mismatch the deep-time frames of ecological change in the specific situation of the *Anthropocene*. Such a diversity of times renders contestation and the subsequent acceptance of different knowledge frames and accompanying time frames a sheer necessity.

Being enabled to provide testimony is, amongst other things, a matter of receiving the audience's attention. Attention is essentially a temporal practice: the importance people attribute to a testimony changes over time, and typically things will fade out of our attention if they last longer, and experiences are built over time (Gardiner, forthcoming). Paying attention is also about 'giving time to a speaker'. Yet this time given must be filled with a certain quality, as we can listen but not take it seriously (Smith and Archer, 2020). Alternatively, attention can be directed at arguably wrong aspects of a speaker's identity, such as the alleged victimhood of the sex workers discussed above. This attention might, in turn, be a matter of actively making those aspects salient (Whiteley, in print), which often happens as a build-up over history; things become salient, not least if they are repeated enough. Thus, the account of reality with its temporal aspects is inextricably connected to exchanging and validating knowledge. Contesting the wrongs that result from harmful saliences would require questioning these temporal patterns, which, in turn, is not necessarily compatible with hegemonic, temporally informed epistemologies.

Time and hermeneutic injustice

Hermeneutic injustice potentially occurs if time-related knowledge is either reckoned nonsensical because of its time content or because time concepts are somehow withheld that are necessary to make the knowledge meaningful. Since practical situations are imbued with particular temporalities, they provide more resonating context to some conceptions of time than to others. In a practice where time is heavily policed because of the commodity value it is made to correspond with, an account of time in terms of the quality of experiences, or even the mundane concept of 'quality time' that people use to refer to events where other

values than making money are pursued, are hard to present as meaningful, or even rational for that matter.

Reckoning temporality is subject to power asymmetries (Gingrich et al., 2002). Time is subject to all sorts of constructions and hence to power influences. Thus, time is one possible site for hegemony to be enacted: some times may come to appear as natural and self-evident while others disappear or become suppressed. This may emerge to such an extent that those who depend on suppressed times no longer have access to the means needed to contest the dominant times. Suppressing knowledges predicated on subordinate times is a form of hermeneutic epistemic injustice. It deprives knowers of specific concepts they may need to make sense of social reality – their particular concepts of time.

An example of hermeneutic epistemic injustice is provided by the study on obesity by Felt et al. (2014). They approach the corporeal phenomenon of obesity from the different temporalities in which the phenomenon is enacted. They show how the imposition of particular temporal perspectives effectively deprives people of control over their lives and bodies. One such perspective is the ‘trajectory’ that linearises the development of obesity. It suggests that obesity develops in a fixed direction and seems remarkably independent of any specific causes of obesity. This perspective comes with specific responsibilities at specific points of the trajectory. Another perspective is the ‘temporality’, used by Felt et al. in a much more specific meaning than I do throughout this text. In this perspective, obesity is connected to contemporary life’s changing and accelerating rhythms. People arguably lose control over their lives and bodies, in contrast to the (idealised) past in which such control was possible. Finally, there is the perspective of ‘timing’, which refers to when things are urgent and possibilities to act occur. In this case, this proves a matter of ordering things at the collective, societal level primarily. These three classes of perspectives engender specific ontologies and epistemologies, as well as action perspectives and attributions of responsibility. People’s possibilities to *know* their own bodies in specific temporal perspectives are compromised. By their forcing power, such narratives impose ways of knowing obesity and render other ways of knowing nonsensical.

In a different example, Aradau and Blanke (2016) show how times can also be swayed directly to organise political power. They discuss how legitimacy for security regimes is created by constructing futures utilising big data. It is linear, quantified time that is prioritised and mobilised in specific ways to create security decisions. Big data helps the security actor colonise this linear time by making it measurable and connecting dots across time and space. Through the machinations of security technologies, specific ways of knowing the future and creating that future are prioritised, with compelling consequences for action in the present. Their example shows a taming of ‘aleatory events’, which are events in an uncertain future that are at best known in terms of their statistical parameters. This makes the future known in a specific way and the reliance on big data across time

and space makes contestation difficult. Here, excluding other ontologies and time conceptions appears instead as the hyper-dominance of one such ontology.

Krzywoszynska et al. (2018) show another case study of processes of democratic participation where temporalities connect to inclusion and exclusion at the level of groups, as distinct from individuals. In the case study, publics are defined by their shared perspective on the future. This is partly the consequence of the specific aim of the participatory processes, namely, the production of *future scenarios* and how to shape the future. At the same time, in the participatory process, some temporalities are enacted more dominantly than others. In effect, this enacts the public as strictly tied to a specific temporality. Such dominance of particular temporalities diminishes the potential for contestation from within alternative temporalities, whereas such contestation is, in fact, vital for democracy and participation. If these dominant temporalities defy the temporalities held by participants, they stand in the way for meaningful contributions to the discussion from these participants. In this case, hegemonic time defines the epistemic agency of actors and determines the object of cognition, which is thus a blend of hermeneutic and testimonial factors. The effective power dynamics here are of inclusion into the (micro)community of political engagement, conditioned by a specific enacted temporality as belonging to a specific public.

Temporalities potentially have a qualitative and directional import for the production of knowledge. As Benda (2020) shows, academia's project-based and short-term organisation imposes a means-ends rationality to the scientific enterprise, which is more compatible with some research questions than others. This effect is more fundamental than mere acceleration or deceleration, terms in which talk of the consequences of academic projectification is often couched. Academic knowledge production is central to how contemporary societies conceive of their ideals of knowledge. Thus, the capitalist notions of time that come with the increasingly commodifying organisation of academia have a wide-ranging meaning for the cognitive resources that societies have at their disposal. It is straightforward that pushing these resources in particular directions is a potential for hermeneutic injustice.

The need for pluralism of time and knowledge

Underlying this argument so far has been the recognition that time is multiple. Indeed, in publications such as Goodwin (2002) and Felt et al. (2014), it is recognised that there are often multiple temporalities in one situation. Moreover, people mobilise multiple temporalities simultaneously. The co-existence of multiple temporalities need not lead to conflicts or friction, while people can be in sync with multiple rhythms (Adam, 1995; Hjärpe, 2022). Still, the coordination of multiple times is a site where power is exercised, negotiated and possibly contested, and where injustice may occur.

Knowledge is similarly multiple and subject to power relations and itself constitutive of power relations. In either realm, time or knowledge, hegemony can emerge. These hegemonies are likely to intersect. Given that the time on which people's knowing, doing and valuing are based might be a hegemonic one, it also defuses any intellectual contestation of other times. Taking the point seriously from [Fricker \(2013\)](#), that the possibility to contest is essential to political freedom, this raises the question of how we can secure a democratic accommodating of multiplicities of times.

Thus, if democracy wants to accommodate a multiplicity of knowledges, it will also have to accommodate a diversity of times. As [Visvanathan \(2009\)](#) argues, the worst that can happen to knowledges is if their founding infrastructures are destroyed or if the knowledges are ghettoised or hierarchised. The time an epistemology builds on counts as one part of such knowledge infrastructures. The less an epistemology's time fits with the hegemonic times, the lower this epistemology will be ranked in the hierarchy of ways of knowing. In a similar vein, [de Sousa Santos \(2014: 148ff\)](#) states that the Western modernist notion of scientific knowledge as a continuous (and hence temporal) process of progress leaves behind a trail of destructed epistemologies in its wake, which are unable to survive in the imposed hyperspeed of modern time.

This points at a lack of democratisation of time. The observation by [Adam \(2003: 75\)](#) that there is no governance of time is thus taken a step further. Suppose we understand governance as 'all structuring of action and interaction that has some authority and/or legitimacy' ([Rip, 2010](#), tracing the idea back to work by [Elinor Ostrom](#) on the self-organisation of groups). In that case, time's constructedness and political nature must be understood as forms of governance of time. The problem is thus not that there is no governance of time but that the governance of time is far from democratically sound. Suppose, with [Visvanathan \(2009, 2005\)](#), that the point of democracy is to be a theory of differences and that it, therefore, must accommodate different knowledges and pursue fruitful dialogue between different cosmologies. Then, there is also a point in seeking constructive encounters between different times. The idea is thus not to reclaim time by substituting current hegemonic times with other ones. Instead, it is to keep multiplicity of times open ([Sharma, 2022](#)).

In the connection between temporalities and epistemic justice, one challenge is accommodating a multiplicity of temporal ontologies to accommodate hermeneutic justice. Another is the need to accommodate a diversity of temporal modes of speaking and arguing to accommodate testimonial justice. This means that interventions to open up the speakability of temporalities may have to be targeted at both ontological and epistemological limitations. Moreover, given the modernity of the separation between those, we must remain open to these categories not being tenable in the first place, and a more holistic approach to accommodating temporalities is needed.

While the flexibility to move between different temporalities can be seen as a stronghold in dealing with temporal hegemony, it is also something that connects to privilege and a point at which inequity may play out. Not everyone may have the ability to switch between time conceptions and ontologies, certainly when identities depend on it. Identities, in general, can be vital for people's survival, as in the analysis by Pandey and Sharma (2021). Only those who are sufficiently secure otherwise can afford to switch between temporalities and ontologies. They can, for example, decide to comply with the ideas of an arguably modern identity if this is strategically prudent. Such flexibility of cherished ontologies and identities may even work as a self-reinforcing positional good in given cases: a privileged position may come with ontological flexibility, which, in turn, secures further privilege. And conversely, demanding ontological flexibility from under-privileged groups may contribute to their further marginalisation, as it deprives them of the scarce epistemic means they have. And finally, if one's knowledge frames are tied to non-modern temporal frames, this likely compromises one's belief that the knowledge will meet acceptance among modernist knowledge frames (Jones, 2012).

It is at this identification and defusing of hegemony that temporal epistemic must be pursued. Epistemic justice as such does not offer conclusive advice on which arbitration between positions can be based, but it does offer sensitivities for whether or not hegemonic structures impede the epistemic agency of persons in a debate or dispute. Only a comparative position that disavows the priority of either position possibly provides a higher ground from which a fair judgment can be made.

Conclusion

Social circulations of time have consequences for the circulations of knowledge. Times are *made* through social life and thus will be subject to power relations. Consequently, as times are part of the context in which knowing takes place, the political construction of time will have repercussions for the possibility to know and to be (recognised as) a knower. The sociality of time potentially interlocks with mechanisms of epistemic injustice at two points of connection. First, it may simply be the case that social structures reproduce a particular time hegemony. Second, this time hegemony may interlock with knowledge hegemony.

The argument developed here has been that time conditions knowing and is hence amenable to critique if injustice emerges. Critical attention can be directed at how time is constructed and mobilised and how this provides access to ways of knowing. How are these ways of knowing admitted or rejected from relevant knowledge production and decision-making sites due to these constructions of time? And how do this inclusion and exclusion relate to taking people seriously

and allowing them to speak from particular identities? Ultimately, having power over time is having power over the definition of the relevance of knowledges.

Time, knowledge and social reality cannot be considered separate, and none has causal precedence over the others. They are entangled, and their entanglement makes that they are enacted through one another. That means that repairing relations of suppression in one domain will entail accompanying repairs in the other domains. We cannot emancipate knowledge without emancipating the accompanying temporalities. Neither is it possible without enacting the realities required by those knowledges and temporalities.

Any democracy needs to recognise a diversity of knowledge and accommodate epistemological and ontological differences among citizens. Temporal sovereignty is the central value here (Rifkin, 2017: 185). The current argument shows that recognising and accommodating a multiplicity of times should be a crucial ingredient of knowledge recognition, at least to the extent that dominant time frames may be favourable to some knowledges and not others. With Mouffe (2005; 2007), we can argue that consensus is not the value democratic politics should aim for, as it typically amounts to suppression of minority voices. Instead, we should cultivate diversity to preserve a society's capacity to contest and critique forms of hegemony. The current analysis shows that this holds even more for time hegemony (cf. Sharma, 2022).

How productive interaction between incompatible times could take shape in practice will be a topic for further inquiry. Recognising the need for it is the first step. By reflecting on what voices are unduly excluded, reflection on what temporalities are unduly excluded should be a concern of its own. Upon the long-standing tradition of sociology of time, it is perhaps even somewhat surprising that governance systems do not typically have any take on how time is to be governed, nor how time is a foundation of the interventions they make. The consequentialness of time for epistemic justice laid out here only adds further urgency to this.

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ORCID iD

Govert Valkenburg  <http://orcid.org/0000-0001-7045-9878>

Note

1. Even though Fricker mostly talks of the antonym, *epistemic injustice*, her work should be reckoned foundational to the literature on epistemic justice.

References

- Adam B (1995) *Timewatch. The Social Analysis of Time*. Cambridge: Polity Press.
- Adam B (2003) Reflexive modernization temporalized. *Theory, Culture & Society* 20(2): 59–78.
- Adam B (2004) *Time*. Cambridge, UK: Polity Press.
- Aradau C and Blanke T (2016) Politics of prediction: security and the time/space of governmentality in the age of big data. *European Journal of Social Theory* 20(3): 373–391.
- Benda L (2020) Inevitability, contingency, and the epistemic significance of time. *Time & Society* 30(1): 30–54.
- Blue S (2017) Institutional rhythms: combining practice theory and rhythm analysis to conceptualise processes of institutionalisation. *Time & Society* 28(3): 922–950.
- Blue S, Shove E and Forman P (2020) Conceptualising flexibility: challenging representations of time and society in the energy sector. *Time & Society* 29(4): 923–944.
- Bohman J (2012) Domination, epistemic injustice and republican epistemology. *Social Epistemology* 26(2): 175–187.
- Briggle A (2021) *Thinking through Climate Change: A Philosophy of Energy in the Anthropocene*. Cham: Palgrave Macmillan.
- Czarniawska B (2004) On time, space, and action nets. *Organization* 11(6): 773–791.
- de Sousa Santos B (2014) *Epistemologies of the South*. Justice against Epistemicide. Oxon UK and NY, USA: Routledge.
- Delanty G and Mota A (2017) Governing the anthropocene. *European Journal of Social Theory* 20(1): 9–38.
- Egert PR and Allen BL (2017) Knowledge justice: an opportunity for counter-expertise in security vs. science debates. *Science As Culture* 28(3): 351–374.
- Felt U, Felder K, Öhler T, et al. (2014) Timescapes of obesity: coming to terms with a complex socio-medical phenomenon. *Health (London)* 18(6): 646–664.
- Freeman E (2022) Time and Social Justice. *Time & Society*. DOI: [10.1177/0961463x211073563](https://doi.org/10.1177/0961463x211073563).

- Fricker M (2007) *Epistemic Injustice. Power and the Ethics of Knowing*. Oxford: Oxford University Press.
- Fricker M (2013) Epistemic justice as a condition of political freedom? *Synthese* 190(7): 1317–1332.
- Fuller S (2007) *The Knowledge Book. Key Concepts in Philosophy, Science and Culture*. London: Routledge.
- Gardiner G (forthcoming) Attunement: on the cognitive virtues of attention. In: Alfano M, Klein C and Ridder Jd (eds) *Social Virtue Epistemology*. Londonsmi: Routledge.
- Gell A (1992) *The Anthropology of Time. Cultural Constructions of Temporal Maps and Images*. Oxford: Berg.
- Gingrich A, Ochs E and Swedlund A (2002) Repertoires of Timekeeping in Anthropology. *Current Anthropology* 43(August–October): S3–S4.
- Goodwin C (2002) Time in Action. *Current Anthropology*.
- Hjärpe T (2022) Measurable time is governable time: Exploring temporality and time governance in childcare social work. *Time & Society*. DOI: [10.1177/0961463x211059022](https://doi.org/10.1177/0961463x211059022).
- Holman B (2020) STS, post-truth, and the rediscovery of bullshit. *Engaging Science, Technology, and Society* 6: 370–390.
- Ialenti VF (2020) *Deep Time Reckoning. How Future Thinking Can Help Earth Now*. Cambridge, MA: MIT Press.
- Jones K (2012) The politics of intellectual self-trust. *Social Epistemology* 26(2): 237–251.
- Krzywoszyńska A, Matt W, Buckley A, et al. (2018) Opening up the participation laboratory. *Science, Technology, & Human Values* 43(5): 785–809. DOI: [10.1177/0162243917752865](https://doi.org/10.1177/0162243917752865).
- Latour B (1993 (1991)) *We Have Never Been Modern*. Cambridge MA: Harvard University Press.
- Lobo R, McCausland K, Bates J, et al. (2020) Sex workers as peer researchers - a qualitative investigation of the benefits and challenges. *Culture, Health & Sexuality* 1–16. Epub ahead of print 2020/08/04. DOI: [10.1080/13691058.2020.1787520](https://doi.org/10.1080/13691058.2020.1787520).
- Machin A (2019) Democracy and agonism in the anthropocene: the challenges of knowledge, time and boundary. *Environmental Values* 28(3): 347–365.
- Mamidipudi A (2016) *Towards a Theory of Innovation in Handloom Weaving in India*. Maastricht: Maastricht University.
- Mouffe C (2005) Feminism, citizenship, and radical democratic politics. In: Nicholson LJ and Seidman S (eds) *Social Postmodernism: Beyond Identity Politics*. Cambridge: Cambridge University Press.
- Mouffe C (2007) Artistic agonism and agonistic spaces.
- Nairn K, Kidman J, Matthews KR, et al. (2021) Living in and out of time: youth-led activism in Aotearoa New Zealand. *Time & Society* 30(2): 247–269.
- Nowotny H (1992) Time and Social Theory. Towards a social theory of time. *Time & Society* 1(3): 421–454.

- Pandey P and Sharma A (2021) Knowledge politics, vulnerability and recognition-based justice: public participation in renewable energy transitions in India. *Energy Research & Social Science* 71: 101824.
- Pellizzoni L (2022) Post-truth or pre-emptive truth? STS and the genealogy of the present. In: Rommetveit K (ed) *Post-truth Imaginations. New Starting Points for Critique of Politics and Technoscience*. London: Routledge, 65–85.
- Porter TM (1995) *Trust in Numbers. The Pursuit of Objectivity in Science and Public Life*. Princeton, NJ: Princeton University Press.
- Portschy J (2020) Times of power, knowledge and critique in the work of Foucault. *Time & Society* 29(2): 392–419.
- Rifkin M (2017) *Beyond Settler Time. Temporal Sovereignty and Indigenous Self-Determination*. Durham: Duke University Press.
- Rommetveit K (2022) Introduction. In: Rommetveit K (ed) *Post-truth Imaginations. New Starting Points for Critique of Politics and Technoscience*. London: Routledge, 1–30.
- Schatzki TR (2009) Timespace and the organization of social life. In: Shove E, Trentmann F and Wilk R (eds) *Time, Consumption and Everyday Life. Practice, Materiality and Culture*. Oxford: Berg, 35–48.
- Sharma S (2022) Undisciplined time studies. *Time & Society*. DOI: [10.1177/0961463x211073551](https://doi.org/10.1177/0961463x211073551).
- Shove E (2009) Everyday practice and the production and consumption of time. In: Shove E, Trentmann F and Wilk R (eds) *Time, Consumption and Everyday Life. Practice, Materiality and Culture*. Oxford: Berg, 17–33.
- Shove E, Trentmann F and Wilk R (2009) Introduction. In: Shove E, Trentmann F and Wilk R (eds) *Time, Consumption and Everyday Life. Practice, Materiality and Culture*. Oxford, NY: Berg, 1–13.
- Smith L and Archer A (2020) Epistemic injustice and the attention economy. *Ethical Theory and Moral Practice* 23(5): 777–795.
- Strzelecka C (2021) Time paradoxes of neoliberalism: How time management applications change the way we live. *Time & Society*. DOI: [10.1177/0961463x211059727](https://doi.org/10.1177/0961463x211059727).
- Valkenburg G, Mamidipudi A, Pandey P, et al. (2020) Responsible innovation as empowering ways of knowing. *Journal of Responsible Innovation* 7(1): 6–25.
- Visvanathan S (2005) Knowledge, justice and democracy. In: Leach M, Scoones I and Wynne B (eds) *Science and Citizens. Globalization & the Challenge of Engagement*. London: Zed Books, 83–94.
- Visvanathan S (2009) The search for cognitive justice.
- Wanderer J (2012) Addressing testimonial injustice: being ignored and being rejected. *The Philosophical Quarterly* 62(246): 148–169.
- Warin M, Kowal E and Meloni M (2019) Indigenous knowledge in a postgenomic landscape: the politics of epigenetic hope and reparation in Australia. *Science, Technology, & Human Values* 45(1): 87–111.
- Whiteley E (in print) Harmful Salience Perspectives. In: Archer S (ed) *Salience: A Philosophical Inquiry*. London: Routledge.