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ORIGINAL ARTICLE







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Retrieving Heidegger's temporal realism

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Abstract

Early Heidegger argues that a "homogenous space of nature" can be revealed by stripping away the intelligibility of Dasein's everyday world, a process he calls "deworlding." Given this, some interpreters have suggested that Heidegger, despite not having worked out the details himself, is also committed to a notion of deworlded time. Such a "natural time" would amount to an endogenous sequentiality in which events are ordered independently of Dasein and the stand it takes on its being. I show that Heidegger was indeed committed to such a temporal realism even though his treatment of these issues is somewhat scattered and pulled in different directions. In the course of my reconstruction, I renew an interpretation of Heidegger that stresses Dasein's thrownness into nature and I answer William Blattner's powerful interpretation of Heidegger as a failed temporal idealist who was unable to derive the sequentiality of ordinary time from Dasein's non-sequential originary temporality. Heidegger did not attempt to derive sequentiality; instead, he understood it as a built-in feature of the natural universe by which Dasein's activities are constrained. World-time turns out to be a co-production of Dasein's non-sequential originary temporality and the endogenous sequentiality of events in nature.

INTRODUCTION

Anyone who seeks to defend an interpretation of Heidegger as a temporal realist faces a number of daunting challenges. The first is how to define "temporal realism" in a suitable way. With the phrase "Heidegger's Temporal Realism," I mean to attribute four claims to early Heidegger: (a) the events in the natural world are ordered in a before/after sequence; (b) the before/after relation obtains independently of the temporality peculiar to human existence or Dasein. In order to capture such a sequence of natural events and to coin a phrase analogous to Heidegger's "homogenous space of nature" (BT 147/112)—the "deworlded" space of "pure dimensions" (BT 145/110) devoid of Dasein-relative inflections such as yonder and here—I will refer to the *endogenous sequentiality* of the "movements of nature" (Heidegger 1985, p. 320; GA 20: p. 442).² From here, it follows that (c) the endogenous sequentiality of events in nature is not derived (and is not meant by Heidegger to be derived) from Dasein's nonsequential originary temporality; rather, (d) the composite intertwining of the endogenous sequentiality of events in nature and Dasein's originary temporality gives rise to the linear sequence of meaningful moments that Heidegger calls "world-time": the succession of datable, significant, public, spanned "nows" that characterize our everyday getting around in the world. In other words, world-time is a *co-production* of Dasein's non-sequential originary temporality and the endogenous sequentiality of events in nature.³

Heidegger himself did not directly provide the argument needed to establish such a co-production claim. However, one can be reconstructed within the space of his overall view. By drawing upon productive tensions and undeveloped insights in his early conception of nature, we can discern in the background of Heidegger's thinking an intimation of Dasein's exposure to a realm of natural events, events ordered in their own endogenous sequence, that exceed, constrain, and condition everyday being-in-the-world, and indeed that co-enable the emergence of world-time. To show this will require first clarifying some dimensions of the debate between realist and idealist readings of Heidegger's early philosophy and renewing a strand of the realist interpretation that highlights Dasein's *thrownness into nature* (Section 2). Furthermore, retrieving Heidegger's temporal realism calls for formulating a response to what remains the most comprehensive and persuasive reading of Heidegger as a temporal idealist, namely that of William Blattner (1999, 2004). After reconstructing and raising some doubts about Blattner's interpretation, in particular his contention that Heidegger tried and failed to explain the sequentiality of ordinary time on the basis of the non-sequential originary temporality of Dasein (Section 3), I go on to provide an account of Heidegger's temporal realism. For Heidegger, the natural universe unfolds as an endogenously sequential ordering of events that Dasein can study through natural science and by which Dasein is constrained in its everyday activities (Section 4).

2 | AN APPROACH TO THE PROBLEM OF IDEALISM IN EARLY HEIDEGGER

2.1 The question concerning the "independence" of the occurrent

Heidegger's temporal realism is connected with his ambition for his ontology of human existence (and its peculiar temporality) to be consistent with the findings of natural science and the goal of physics to uncover the laws of motion of the universe.⁶ Heidegger regards physics as involved in what he calls "the legitimate task of grasping the occurrent in its essential unintelligibility [unverständlichkeit]" (BT 194/153). Now, precisely what to make of the notion of occurrentness [Vorhandenheit] is part of what is at stake in the question of Heidegger's realism or idealism. It is difficult to say much about this notion of occurrentness without directly plunging into an interpretive quagmire.

One way to start is by pointing out that Heidegger identifies occurrentness with the understanding of being taken for granted by the substance ontology he finds in both Descartes and Kant.⁷ When presenting the notion of occurrentness and arguing that it cannot account for the holistically inter-defined phenomena of Dasein's familiar world, Heidegger quotes Descartes's definition of "substance": "By substance we can understand nothing else than an entity which is in such a way that it needs no other entity in order to be" (BT 125/92). So occurrentness (substantiality) has something to do with a way of being that is defined by a kind of independence. Heidegger's contention that the tradition of Western philosophy, especially since Descartes (if not Plato), has been possessed by this narrow understanding of being—the "ontology of the substantial"—is well known. One major burden of Heidegger's "existential analytic of Dasein" is to show the inadequacy of substantiality or occurrentness for the purposes of doing an ontology of human existence. The understanding of being as occurrentness, Heidegger argues, is incommensurate

with the mode of being of Dasein-that entity whose defining characteristics are that it lives in an understanding of being and that it has its own being at issue or at stake for itself [geht um sein Sein]. Nor is occurrentness capable of capturing the mode of being of the available [zuhandene] tools and equipment that Dasein makes use of in order to carry out the projects that are characteristic of its identity. Available entities are, instead, defined by their functional role (Haugeland, 2013) or involvement [Bewandtnis] in human life and by being interconnected with other equipment in an encompassing "involvement-whole" [Bewandtnisganzheit], which is itself part and parcel of the space of shared intelligibility of Dasein's "world" (in Heidegger's technical sense), and which is accordingly "tied up" [festgemacht] with Dasein's identity (its "for-the-sake-of-which") or the stand that it takes on its own being, on who and how it is going to be (BT 160/123).

Heidegger accepted occurrentness as a legitimate ontological characterization of the mode of being of natural entities, at least as they are revealed and studied by modern natural science. However, the ontological status of natural entities encountered by Dasein in its everyday world, rather than in the laboratory or through the methods of natural science, is tellingly ambiguous in Heidegger's account-a point I will return to below. On Heidegger's reconstruction, the methods of modern science involve a process of "deworlding" (BT 94/65): a means of accessing natural entities such that they can be revealed in their causal properties and as moving according to laws of motion that have nothing to do with the ontological structures involved Dasein's taking a stand on its being.⁸ The latter are what Heidegger calls the "existentialia" as distinct from the "categories" of substance ontology: "Existentialia and categories are the two basic possibilities for characters of being. The entities that correspond to them require two different kinds of primary interrogation respectively: any entity is either a 'who' (existence) or a 'what' (occurrentness in the broadest sense)" (BT 71/45).9 Accordingly, Heidegger construes the Kantian categories as the ontological structure of occurrent nature (rather than as the conditions of the representability of nature), and he endorses Kant's argument in the Paralogisms chapter of the Critique of Pure Reason that the categories fail to apply to human existence:

Kant is wholly right when he declares the categories, as fundamental concepts of nature, unsuitable for determining the ego [Ich]. But in that way he has only shown negatively that the categories, which were tailored to fit other entities, nature, break down here. (Heidegger, 1988, p. 145; GA 24: 206)

What does all of this mean for how we should understand "the legitimate task of grasping the occurrent in its essential unintelligibility" (BT 194/153)? 10 In History of Concept of Time, Heidegger characterizes "the occurrent in its essential unintelligibility" as "nature in this extreme sense of the entity as it is discovered in physics," removed from the context of everyday intelligibility (i.e., "deworlded"), and revealed "only insofar as it is determined by laws of motion which remain invariant, unaltered, always the same for every possible approach and regard under which the consideration of nature is placed" (Heidegger, 1985, pp. 217-218; GA 20: pp. 298-299). This way of revealing nature and natural processes is not a naïve empiricism. To grasp nature in this way, that is, as it is and as it moves independently of Dasein and its world, and to formulate laws for mathematically capturing the regularity of these motions, involves adopting and rigorously observing nature in light of a certain understanding of the being of nature, namely the ontology of occurrentness as refined into the "mathematical projection of nature":

In this projection something constantly occurrent (matter) is uncovered beforehand, and the horizon is opened so that one may be guided by looking at those constitutive items in it which are quantitatively determinable (motion, force, location, and time). Only 'in the light' of a Nature which has been projected in this fashion can anything like a 'fact' be found and set up for an experiment regulated and delimited in terms of this projection. (BT 413-414/362)

At this point, a question poses itself and the problem of idealism in early Heidegger begins to come into relief. Is this understanding of occurrentness in light of which natural entities and their motions are revealed as independent of Dasein a projection that is solely "contributed" by Dasein (as Kant took the categories to be contributed by the subject)? In other words, is Dasein itself the sole ground of occurrentness? If so, then we would have a form of idealism. But, if occurrentness is an understanding of being that is a way of making sense of Dasein's embroilment in and exposure to natural events and entities that exceed and condition it, events that have their own sequential ordering and entities that have their own causal properties, then we would have a form of realism.

Many passages from the time period of *Being and Time* feed into an overall realist construal of Heidegger's ontology of the occurrent and the complementary conclusion that Heidegger understood mathematical natural science as enabling access to Dasein-independent entities of nature—for example:

[I]n dealing with this entity, nature in the widest sense, we understand that this entity is as something occurrent [Vorhandenes], as an entity that we run up against, to which we are given over, that for its own part always already is. It is, without our uncovering it, i.e., without our encountering it in our world. (Heidegger, 1988, p. 169; GA 24: p. 240)¹¹

Echoing this formulation, Heidegger writes in *Being and Time*: "Entities *are*, quite independently of the experience in which they are disclosed, the acquaintance in which they are discovered, and the grasping in which their nature is ascertained" (BT 228/183). In the *Metaphysical Foundations of Logic* lectures he states: "Entities are in themselves the kind of entities they are, and in the way they are, even if, for example, Dasein does not exist" (Heidegger, 1984, p. 153; GA 26, p. 194).¹²

Realist interpreters of Heidegger seize on such passages. Carman (2003, p. 159) summarizes what he labels as Heidegger's "ontic" realism as such: "Heidegger is a realist, then, in the sense that he takes occurrent entities to have a determinate causal structure independently of the conditions of our interpreting and making sense of them." Dreyfus's notion of Heidegger's "hermeneutic" realism includes the point Carman articulates and adds that Heidegger's overall picture involves an aspiration to account for certain background assumptions of modern natural science. In particular, according to Dreyfus, Heidegger's account "(1) spells out what everyday scientific practices takes for granted, namely that there is a nature in itself, and that science can give us a better and better explanation of how nature works, and (2) seeks to show that this self-understanding of modern science is both internally coherent and compatible with the ontological implications of our everyday practices" (Dreyfus, 1991, p. 254). ¹³

To severely compress a span of Heidegger's account in *Being and Time*, some of which I have already outlined in passing, the "ontological implications of our everyday practices" that Dreyfus has in mind include, among other things, the following two points: (a) that Dasein's everyday world is disclosed in light of the stand it takes on its being in the midst of a shared understanding of how "one" normally does things (in other words, Dasein's access to everyday, available entities takes place in terms of shared interpretive practices); and (b) that modern science is able to develop methods and practices for "deworlding" entities, that is, accessing them in terms of context-free features, causal powers, and natural kinds that have nothing to do with the stand Dasein takes on its being, or with its shared norms of everyday behavior.¹⁴

However, there are numerous passages and argumentative moves that can be taken in the other direction. These passages appear to establish that Heidegger's seeming-commitment to realism about Dasein-independent natural entities is, in fact, an empirical or "internal" realism stated within the scope of an encompassing transcendental or ontological idealism about the *being* of these natural entities (cf. Blattner, 1999, p. 246). Hence, immediately following a sentence I quoted earlier about the independence of entities from Dasein, Heidegger adds: "But being 'is' only in the understanding of those entities [namely, Dasein] to whose being something like an understanding of being belongs" (BT 228/183).

Occurrentness is, on this reading, an understanding of being or an "ontological framework" in terms of which Dasein encounters entities that show up as independent of Dasein. Experienced within that framework, occurrent entities are independent of Dasein, and they can be grasped and studied as such. However, all ontological frameworks depend upon Dasein, and so in the counterfactual absence or suspension of that framework (in the absence of

Dasein), the question of the independence of occurrent entities becomes meaningless (see Blattner, 1999, pp. 246-251, and Blattner, 2004, pp. 326-328). This does not mean that the entities depend on Dasein-Heidegger is not an "ontic idealist" (Blattner, 1999, p. 245, n. 25). It does mean, however, that independence as a defining characteristic of the mode of being of occurrent entities depends on Dasein. Lee Braver summarizes and endorses this interpre-

tation: "Heidegger's considered opinion is that as a mode of Being, occurrentness is as dependent on Dasein as any mode ... Paradoxically, Dasein-independence is itself Dasein-dependent" (Braver, 2007, pp. 193-194). Similarly, John Richardson asserts that "all of these passages [seeming to establish a commitment to realism] can be read as expressing a merely 'internal' realism, which is spoken within an understanding of being and leaves out the way entities depend on that understanding" (Richardson, 2012, p. 63, my gloss in the brackets; cf. Blattner, 2004, p. 332). 15

Strong and weak readings of Heidegger's conception of the "independence" of 2.2 entities from Dasein

These issues culminate in §43 of Being and Time where Heidegger specifically raises the question of the independence of entities from Dasein:

Of course, only as long as Dasein is, 'is there' being. If Dasein does not exist, then 'independence' 'is' not either, nor 'is' the 'in itself'. Such a thing is then neither understandable nor not understandable. Then also intraworldly entities neither are discoverable, nor can they lie in hiddenness. Then it can be said neither that entities are, nor that they are not. Nevertheless, it can now be said-as long as the understanding of being, and thereby the understanding of occurrentness are—that then entities will continue to be.

As we have noted, being (not entities) is dependent upon the understanding of being; that is, reality (not the real) is dependent upon care. (BT 255/212)¹⁶

Here, we have one of those deeply fascinating and frustrating passages in Heidegger that can be plausibly given a number of conflicting readings, depending on one's philosophical agenda and supplemental interpretive commitments. It has been taken as providing direct support both for the ontological idealist interpretation (e.g., Blattner, Braver) and for the hermeneutic or ontic realist interpretations (Dreyfus, Carman, Golob). Indeed, the passage reveals how Heidegger could be quite evasive or disrespectful of philosophical concerns connected with the dichotomy between idealism and realism. 17 Heidegger's treatment of the issues in this passage raises the question of whether he was in fact a failed realist who lapses into idealism, despite countervailing arguments and motivations. I will show that such a lapse can be avoided. Blattner provides a thorough reading of these issues, and since I go on to make the case for temporal realism in contrast with Blattner's interpretation, I will follow the movements of his account here.

According to Blattner, the passage shows that Heidegger holds a view analogous to Kant's distinction between transcendental and empirical standpoints. Such a setup is what enables Heidegger's realist-sounding commitments to be radically qualified as being asserted from within the empirical standpoint. Blattner contends that the empirical standpoint is marked by Heidegger in terms of how things are now, that is, granted that Dasein and its understanding of being exist. Given that Dasein is now, there obtains an understanding of occurrentness in terms of which the question about the dependence of entities on Dasein can be asked, and can be given a negative answer. This is empirical realism. As Blattner says, "From within the empirical standpoint we can think Dasein away and ask what would be the case in its absence" (Blattner, 1999, p. 249). Heidegger's transcendental standpoint is marked, according to Blattner, by his speculating about a then, a situation in which the conditions of possibility of this empirical standpoint-namely, Dasein and its understanding of being-do not obtain; instead, they are suspended. As Blattner says, "from the transcendental standpoint, we discover that without Dasein there would 'be' no being, and

hence no occurrentness, and that therefore there would neither be nor not be occurrent entities" (Blattner, 1999, p. 251).

Blattner himself recognizes and lays out an alternative reading of the passage in question. He calls it "the weak reading" because it takes the "independence" passage from BT §43 to be claiming something relatively trivial (as opposed to a philosophically weighty endorsement of empirical realism couched within an ontological idealism). The weak reading takes the "independence" passage at face value as simply asserting "a trivial dependence of a relational concept (independence) on Dasein and the trivial dependence of some of Dasein's activity (discovery, understanding, language) on Dasein" (Blattner, 1999, p. 241). Blattner immediately adds what he admits to be a rather contestable hermeneutic assessment: "It would be a most disappointing, interpretive result, if we had to ascribe such triviality to the passage."

Yet, from the perspective of a reader seeking to square Heidegger's positive remarks about the methods and findings of the natural sciences with his oft-repeated interest in preserving a realist's independence of natural, occurrent entities, the disappointing result would be if his realism turned out to be merely an empirical or internal realism, one that is couched within a temporal idealism and that sits uneasily with the assumptions of natural science regarding the observer-independence of its objects of study. For such interpreters, it makes better sense of Heidegger's overall view to accept a weaker reading of the "independence" passage from BT §43. From this angle, the passage is weaker only in the sense that, rather than supporting the bold temporal idealist reading, it fits with seeing Heidegger as an ontic or hermeneutic realist. In this vein, Dreyfus (1991, p. 257) reads the passage as saying: "If Dasein does not exist, things are not revealed as anything, even as occurrent." Carman (2003, p. 172) glosses the passage like this: "Heidegger's point, then, is simply that in the absence of our own ontological framework or vocabulary, we can say and think nothing at all. That should not be surprising, but neither is it trivial." "

The overall argument that Heidegger's supposed ontological idealism trumps and radically circumscribes his assertions about the independence of nature is of course deeply connected with the case Blattner makes for Heidegger's temporal idealism. This is because, on Blattner's reconstruction of Heidegger, occurrentness depends on Dasein because its characteristic mode of time—bare linear sequentiality as countable in the tickings of a clock—is supposed to depend on Dasein, to derive from Dasein's nonsequential originary temporality. ¹⁹ But, this interpretive strategy assumes that Heidegger was seeking to explain the sequentiality of events in nature in the first place. What if he was not? What if, on the contrary, Heidegger took sequentiality to be a given, natural constraint in terms of which Dasein must live and take a stand on it being? If Heidegger was not aiming to provide an explanation of the source of sequentiality, but instead took it for granted as a feature of Dasein-independent nature, then this would raise collateral doubts about the strong reading of BT §43, and about the idealist interpretation more generally, since, to repeat, the dependency of occurrentness (and thus the "independence" of entities) on Dasein is supposed to be by way of the dependency of sequentiality on Dasein's primordial temporality. In this context, it is worth remarking that Heidegger's relative lack of attention to the endogenous sequentiality of events in nature is indeed a rather surprising omission. As the discussion in the next section reveals, this omission is connected with a pronounced instability in his early views about nature.²⁰

In light of these considerations, it will be useful to take another preliminary turn in the dialectic before turning to the argument for Heidegger's temporal realism. I will revisit a line of interpretation that highlights Dasein's being thrown into nature, and for two reasons: first, it reveals telling tensions in Heidegger's view that clash with the internal realist interpretation; second, it contextualizes and corroborates my argument for seeing world-time as a coproduction of Dasein's originary temporality and the endogenous sequentiality of events in nature.

2.3 | Thrownness into nature

As my survey has shown, on an idealist reading of Heidegger, independence is a feature of occurrentness that depends upon Dasein. There are strands in Heidegger's thought, however, that militate against this paradoxical result. Heidegger sometimes presents occurrentness as an ontological category aiming to makes sense of Dasein's

discernment-sometimes dim, sometimes stark-of the fact that it is immersed amidst entities that are radically other than it. In other words, occurrentness can be seen as an understanding of being that attempts to capture Dasein's being thrown into nature, amidst entities that exceed and condition Dasein and its world, entities whose independence cannot plausibly be seen as somehow dependent upon Dasein and its understanding of being. Coming to appreciate this point about Dasein's thrownness into nature, however, requires working through some tensions in Heidegger's account. These tensions reveal that Heidegger struggled with how to accommodate Dasein's thrownness into nature within the overall framework of Being and Time.

By pressing this argument, I am renewing and extending a line of interpretation that is articulated in Fell (1992), Hoffman (2000), and Carman (2003). Dreyfus (1991) also draws upon this approach, but he is somewhat tentative about it, writing that "Dasein is presumably thrown into nature" (Dreyfus, 1991, p. 258, my italics). It is true that the textual evidence for attributing to Heidegger the view that Dasein is thrown into nature is rather dispersed and unfocused. Despite the fact that Heidegger had not focused these issues in Being and Time, the way he struggles with them there, and acknowledges them in some of the works immediately following, is illuminating.

Joseph Fell (1992) makes a convincing case that, after the publication of Being and Time, Heidegger busied himself with attempting to correct the impression left by his analysis there that nature has only a dependent mode of being. The following passage from a footnote in "On the Essence of Ground" (1929) is key:

Yet, if nature is apparently missing—not only nature as an object of natural science, but also nature in an originary sense (cf. Being and Time, p. 65 et infra)—in this orientation of the analytic of Dasein, then there are reasons for this. The decisive reason lies in the fact that nature does not let itself be encountered either within the sphere of the environing world [Umwelt], nor in general primarily as something toward which we comport ourselves. Nature is originarily manifest in Dasein through Dasein's existing as finding itself attuned [als befindlich-gestimmtes] in the midst of entities. But insofar as finding oneself [Befindlichkeit] (thrownness) belongs to the essence of Dasein, and comes to be expressed in the unity of the full concept of care, it is only here that the basis for the problem of nature can first be attained. (Heidegger, 1998, p. 370, n. 59; GA 9: pp. 155-156, n. 55)²¹

Two issues raised in this passage bear upon the theme of Dasein's thrownness into nature: the first has to do with Heidegger's remark that "nature in an originary sense"—which I take to be "undomesticated nature" (nature that is not subsumed into Dasein's familiar world)-is apparently missing from Being and Time; and the second has to do with the claim that nature is "originarily manifest" in Dasein's "finding itself attuned [als befindlich-gestimmtes] in the midst of entities." I will first briefly take up the second issue. I am going to pass over Heidegger's (rather misleading) assessment that nature as an object for natural science is also apparently missing in Being and Time, since I comment upon that theme in other contexts above and below. It is enough here to point out that he regarded originary, undomesticated nature as distinct both from the domesticated nature found in "natural products" (BT 100/70) or otherwise subsumed into Dasein's familiar world, and the "pure occurrent" nature accessed and apprehended by the deworlding practices of natural science. The job of natural science is to theoretically grasp nature (e.g., in its causal properties) but, as Heidegger's analysis shows, that refined activity of grasping depends and draws upon Dasein already finding itself thrown amidst and exposed to independent natural entities and events. Even though Heidegger never managed to frame things in quite this way in Being and Time, his overall approach would have allowed for doing so, and in subsequent essays he arrived more explicitly at such a view.

2.3.1 Originary nature as revealed in Dasein's being attuned

The emphasis Heidegger comes to place on nature being originarily manifest in Dasein's "finding itself attuned" is highlighted by Fell and the interpreters who follow him. They connect this point with Heidegger's expanded interest in the fundamental attunement of anxiety in the 1929 lecture "What is Metaphysics?" In Fell's interpretation, this intensified emphasis on what is revealed in anxiety is part of Heidegger's post-*Being and Time* attempt to allow for an encounter with originary nature and a realm of entities that are independent of Dasein's understanding of being. Recall that according to *Being and Time*, in the mood of anxiety "everyday familiarity collapses" (BT 233/189). In "What is Metaphysics?", Heidegger notes that the "nihilating" that takes place in this anxious collapse of significance "manifests those entities in their full, heretofore concealed strangeness as what is radically other—over against [*gegenüber*] the nothing" (Heidegger, 1998, p. 90; GA 9: p. 114).²² On the one hand, anxiety is a mood in which Dasein can find occasion to attempt to make sense of the dynamics and structure of its own sense-making; on the other hand, the defamiliarization of entities in anxiety reveals their excessive independence from Dasein, an independence that is normally obscured by everyday familiarity.

According to Dreyfus and Spinosa (1999), being shocked in a confrontation with defamiliarized entities enables the project of recontextualizing the entities in a theory that seeks to explain the regularity of their movements and causal properties. In line with this, Fell (1992, p. 70) quotes Heidegger's remark that "Scientific existence [wissenschaftliche Dasein] is possible only if in advance it holds itself out into the nothing ... Only because the nothing is manifest can science [Wissenschaft] make entities themselves the object of investigation" (Heidegger, 1998, p. 95; GA 9: p. 121). Heidegger is referring here to Wissenschaft in general, not Naturwissenschaft in particular. So his position is that the anxious revelation of entities in their otherness (which, as Withy, 2015 argues, is simultaneously a self-revelation of Dasein in its strange otherness as the entity who makes sense of entities) is a condition not only of natural science, but also of the human sciences (Geisteswissenschaften) such as economics, history, and anthropology (see BT 413/361), and of Heidegger's fundamental ontology itself (see Withy, 2012). How best to explain this connection between anxiety and the various modes of scientific inquiry is not a task I can take up here.

The point to underline for my present purposes is that Heidegger came to recognize that Dasein's thrownness into a realm of independent natural entities was insufficiently thematized in *Being and Time* and that in the essays immediately following he pursued this thrownness, seeing it in connection with scientific investigation, by way of an expanded and intensified conception of attunement. But this brings us back to the question about how to understand his remark that originary nature is apparently missing from *Being and Time*. As I mentioned, it turns out that Heidegger recognized but struggled to accommodate a revelation and mode of being of nature that is neither, yet, the pure occurrent entities accessed and studied in natural science, nor the domesticated nature that is revealed as part and parcel of Dasein's familiar world.

2.3.2 | The unstable place of nature in Being and Time

Why would nature be apparently missing from *Being and Time*? Heidegger explains that the path he took toward elucidating Dasein's existential structures focused on Dasein's finding itself engaged in the familiar "environing world" [*Umwelt*] of available tools whose significance is bound up with the stand Dasein takes on its being in pursuing the tasks assigned to it by its commitments and "for-the-sakes-of-which." Everyday available tools are those entities "toward which we comport ourselves," on the *Being and Time* analysis. Such a focus renders originary nature "apparently missing" because it does not provide an avenue of encounter with entities and natural processes whose way of being is not exhausted by or appropriately defined in terms of belonging to a familiar, environing world. Indeed, in the sections on "worldhood" and "environmentality" in *Being and Time* that Heidegger parenthetically refers to in the footnote from "On the Essence of Ground," nature most often appears as a domesticated nature, neatly enveloped into the intelligibility of Dasein's familiar world. Making notable use of scare quotes, Heidegger writes: "Hammer, tongs, and needle, refer in themselves to steel, iron, metal, mineral, wood, in that they consist of these. In equipment that is used, 'Nature' is discovered along with it by that use—the 'Nature' we find in natural products" (BT 100/70). Domesticated nature comes up in identifications such as the following: "The wood is a forest of timber, the maintain a quarry of rock; the river is water-power, the wind is wind 'in the sails'"(BT 100/70). At one point in *Being and Time*, Heidegger does evoke a direct, thrown encounter with undomesticated natural events: "The



occurrent, as Dasein encounters it, can, as it were, assault Dasein's being; natural events, for instance, can break in upon us and destroy us" (BT 193/152). In any case, by and large, Heidegger's qualification that undomesticated nature is "apparently missing" in Being and Time is fairly accurate.

It is instructive to explore in some more detail the tensions that arise for Heidegger when he is drawn to recognize Dasein's relation to natural entities. Two examples in particular are revelatory: the cases of the wind and the sun. These examples show that Heidegger worked with an undeveloped insight into Dasein's thrownness into a realm of natural entities and events that exceed and condition it, and that, again, are appropriately construed neither as the domesticated nature encountered in Dasein's world, nor, yet, as the pure occurrent entities apprehended by natural science.

First, consider Heidegger's take on the south wind. It gets incorporated into a farmer's network of available tools, in this case, as a sign for predicting the impending onset of rain (BT 112/81). At the same time, Heidegger grants that the south wind is also "meteorologically accessible as something which just occurs [nur noch Vorkommende]," for example, as "the flow of air in a definite geographical direction" (BT 111/80). Heidegger goes out of his way here to deny that such "deworlded," occurrent wind is what we are given "proximally" in our everyday coping, becoming available as a sign for the farmer only by occasionally being "invested with a value" as "a sort of bonus" (BT 111/80). We can grant this point and still see, poking through in Heidegger's account, an encounter with undomesticated nature, the weather, distinct both from the meteorologist's objectified geographical processes and the farmer's familiarized and available signs. We see this in Heidegger's answer to an objection he entertains to his categorization of the wind's way of being as that of an available sign.

The anticipated objection points out that "that which gets taken as a sign [i.e., in this case, the wind] must first have become accessible in itself and been apprehended [erfasst] before the sign gets established" (BT 112/81). But, Heidegger stresses, one can accept that there is a way in which the south wind was "accessible in itself" [an ihm selbst zugänglich] without taking this prior accessibility as amounting to a detached apprehension of something occurrent (which the interlocutor's objection assumes is the primary way we encounter entities). Heidegger's issue here, then, is how to allow for such an encounter with the wind in the wild, so to speak. He thus affirms: "Certainly it [the wind] must in any case be such that in some way we can come across it [in irgendeiner Weise vorfindlich sein]" (BT 112/81). Here, we have one place in Being and Time where Heidegger comes close to granting that Dasein encounters and is thrown amidst not only available entities whose significance is already structured around its forthe-sake-of-which, but also undomesticated natural entities and events that exceed and are independent of this familiarity. These natural entities and events are, in principle, also available to detached scientific apprehension, as in meteorology, but that is not the only way they are revealed in their independence.

Heidegger's solution to the puzzle of the wind's way of being is uncharacteristically ad hoc and it casts light on why he would admit 2 years later that nature was apparently missing from Being and Time. He states that prior to being explicitly taken as an available sign and subsumed into a familiar context of equipment, the south wind was in fact already revealed as available equipment but somehow in a veiled way, as equipment that Dasein did not yet know how to use:

The question simply remains as to how entities are discovered in this previous encountering [i.e., prior to being subsumed into the context of Dasein's familiar world or involvement-whole], whether as mere things which occur [als pures vorkommendes Ding], or rather as equipment which has not yet been understood—as something available with which we have hitherto not known "how to begin," and which has accordingly kept itself veiled from the purview of circumspection. (BT 112/81, my brackets)

The context makes clear that Heidegger is at pains to deny that the wind is encountered "as a mere thing which occurs" and therefore that he does not regard this as an open question, but as settled in favor of the second disjunct. The proposal is that, prior to becoming available as a tool and subsumed into an involvement-whole, the wind (and, for that matter, its endogenously sequential relation to oncoming rain) is nevertheless encountered as a tool, just one that is not-yet-understood; as something available, just still—somehow—veiled in its availability. But it is not at all clear what to make of this proposal. It looks to be inconsistent with Heidegger's own definition of availability and the strict connection he makes between availability and circumspection (BT 98/69). Moreover, one must ask: is this solution supposed to generalize to other natural entities that do not yet have a place in an involvement-whole, for example, a lizard lying on a rock?

The awkwardness of this approach is reflected in, if not matched by, another case in which Heidegger recognizes but struggles to accommodate Dasein's being thrown into nature and amidst natural entities and events. Toward the end of Division II, Heidegger is embarked upon a discussion of the role that the movements of the sun play in enabling the emergence of the datability, publicness, and significance of Dasein's world-time. ²³ In a stretch of argumentation that I will draw upon again toward the end of this paper, Heidegger writes: "With the factical disclosedness of Dasein's world, Nature has been uncovered for Dasein. In its thrownness Dasein has surrendered [ist ... ausgeliefert] to the changes of day and night" (BT 465/412). The regularity of the changes of day and night and the "regularly recurring passage" (BT 466/413) of the sun set a rhythm by which Dasein's activities and its shared ways of making sense are coordinated and constrained in world-time. In §79, he writes:

'Then, when the sun rises, it is time for so and so'. Thus Dasein dates the time which it must take, and dates it *on the basis of [aus dem]* something [namely, sun and its regularly recurring movements] it encounters within the world and within the horizon of its abandonment to the world—on the basis of something encountered as having a *distinctive involvement* for its circumspective ability-to-be-in-the-world. Concern makes use of the 'being-available' of the sun, which sheds forth light and warmth. The sun dates the time which is interpreted in concern. In terms of this dating arises the 'most natural' measure of time—the day. (BT 465/412, my brackets and italics; Heidegger's quotation marks)

So, just as Heidegger found himself with the question of what to make of the being of the wind, now he finds himself confronted with the question of what to make of the being of the sun. Whereas in the case of the wind, Heidegger appealed to a latent "equipmental character" that was "still circumspectively undiscovered" (BT 112/81), in the case of the sun, he simply labels it as "being-available." At the same time, he displays conceptual discomfort with this choice in his use of scare quotes. In the passage under consideration, Heidegger also signals the awkwardness of referring to the sun as an available tool by characterizing it as having a "distinctive involvement [eine ausgezeichnete Bewandtnis] for [Dasein's] circumspective ability-to-be-in-the-world." Remember, involvement or functional role [Bewandtnis] is for Heidegger the mode of being of the available, and it implies belonging to an interrelated array of other available equipment in an ontologically prior "involvement-whole" (Bewandtnisganzheit). But what kind of tool would the sun be?

A readily available response is that the sun is a tool for telling and measuring time. After all, Heidegger points out that for Dasein to have access to a datable and public world-time "now" through which it can reckon with time (coordinate and arrange its tasks in sequential order), "it uses a publicly available *measure*" (BT 466/413). He immediately adds that "such measuring *requires something by which* it is to be measured—namely, a clock" (BT 466/413, my italics). The sun is a "natural clock," then, "something available which *in its regular recurrence* has become accessible in one's making present awaitingly" (BT 466/413, italics modified). Although Heidegger here omitted the scare quotes in this reference to the sun as "something available," there is a tension in his attempt to subsume the sun into the involvement-whole of Dasein's familiar world. In being a natural and publicly sharable measure of time, the sun's regular recurrence contributes an essential and asymmetrical enabling condition for the involvement-whole itself which is, per Heidegger's analysis, supposed to precede and subsume it as an item of equipment. As I discuss again in Section 4 below, the sun, and its pattern of day-night-day-night, manifests an endogenously sequential recurrence on the basis of which Dasein can share datable, significant "nows," coordinate its involved activities in world-time, and deal with available entities in the first place (world-time being the mode of time characteristic of Dasein's dealing



with the available within an involvement-whole). No wonder that Heidegger placed his characterization of the sun's "being-available" in scare quotes and referred to its mode of involvement as distinctive.

This example shows again that Heidegger had an undeveloped insight into Dasein's being-thrown amidst natural, independent entities and events that exceed, constrain, and condition its familiar world. In order to have fully embraced the temporal realism that his position was capable of and that I will reconstruct on his behalf, Heidegger would have needed to more fully embrace this natural dimension of thrownness (as he was drawn to do in "What is Metaphysics?" and "On the Essence of Truth"). He could have construed such natural thrownness as an encounter with independent entities and events manifesting their own endogenously sequential ordering, an independence that Dasein starkly confronts in the fundamental attunement of anxiety and systematically grasps by the deworlding practices of natural science.24

We can now return to the core issues pertaining to Heidegger's temporal realism. The point of the foregoing excursus, again, was twofold: first, to reveal the ways in which Heidegger took account of Dasein's being amidst a realm of independent natural entities and so to raise doubts about the empirical/internal realist interpretation of this "independence," and, second, to provide context and corroboration for the arguments I go on to make in the next sections where I show that world-time is a co-production of Dasein's originary temporality and the endogenous sequentiality of events in nature. If we can appreciate that Heidegger did not regard the sequential ordering of events as something he had to derive only from Dasein's originary temporality (but rather took it as a given constraint connected with Dasein's thrownness into nature), this further weakens the basis of the empirical/internal realist interpretation. For, on Blattner's version, this interpretation holds that the dependence of the occurrent on Dasein is explained by the dependence of sequentiality on Dasein's nonsequential originary temporality.

3 BLATTNER ON HEIDEGGER'S TEMPORAL IDEALISM

Retrieving Heidegger as a temporal realist requires facing head-on the strong and subtle interpretation of Heidegger as a failed temporal idealist presented by William Blattner (1999, 2004). On Blattner's interpretation, Heidegger is a temporal idealist in that he is committed to the view that both the sequence of "nows" that makes up the ordinary conception of time and the sequence of datable, significant, public, and spanned "nows" of world-time depend upon Dasein's originary temporality. The latter is the nonsequential form of temporality that characterizes Dasein's activity of taking a stand on its being: relating to the present in light of commitments for-the-sake-of-which one presses into the future, on the basis of how things already matter. It is by way of this temporal idealism that Heidegger defends, according to Blattner, a form of ontological idealism, whereby being (including the being of occurrent and available entities) depends upon Dasein (Blattner, 1999, p. 246; cf. Blattner, 2004, p. 331). Yet, on Blattner's reading, Heidegger is unable to show how world-time can arise from Dasein's non-sequential originary temporality. His temporal idealism therefore fails. There is not space here to review Blattner's complex account in detail, but the following brief sketch can set the stage for my alternative. The crux of the issue is: Whence sequentiality?

Blattner maintains that, according to Heidegger, "world-time can be interpreted as a modified version of originary temporality, what comes of originary temporality, if its features are sequential" (Blattner, 1999, p. 173). Moreover, "the imposition of sequentiality" must itself be "explained by originary temporality" lest Heidegger's argument for temporal idealism be incomplete (Blattner, 1999, p. 173). But originary temporality cannot itself explain sequentiality, as Blattner sees it. Blattner reconstructs an explanation for how the sequentiality of world-time could arise on the basis of originary temporality, and shows how it fails. According to Blattner, the sequentiality of worldtime is to be explained by Dasein's stand on its being, its self-interpretive identity or for-the-sake-of-which (which is associated with the temporal dimension of the originary future), generating a sequence of tasks. The problem for Heidegger's account, as Blattner sees it, is that the series of tasks generated by the for-the-sake-of-which will always underdetermine or presuppose the sequentiality it seeks to explain.

Roughly speaking, the generation of the sequence of tasks is supposed to happen by way of Dasein's pressing into the future through pursuing the tasks assigned to it by its for-the-sake-of-which. This is a form of time-reckoning ("fitting a multiplicity of tasks into a definite temporal sequence") that should impose "a structured, chainlike teleology on tasks" (Blattner, 1999, pp. 174–175).²⁵ In Blattner's example:

Brown writes on the chalkboard in order to clarify the spelling of a name, which she does in order to further her lecture, which she does in order to convey the course material, which she does in order to teach the students, which she does for the sake for being an educator. We have here an entire chain of in-orders-to, so that the tasks themselves serve in further tasks. (Blattner, 1999, pp. 174–175)

In such a scenario, the *terminus ad quem* of any given task is a further task to which it is purposively directed, which would amount to what Blattner calls an "iteration of the originary Present" (Blattner, 1999, p. 174). However, it turns out that the principle at work in the preceding example cannot succeed in establishing the right sort of sequentiality. The example sounds compelling only because it is artificially circumscribed. If we introduce other ends toward which Dasein may project itself and thus generate competing chains of tasks, we see that the sequentiality of Dasein's tasks cannot itself be explained solely by reference to the for-the-sake-of-which. For instance, if, following Blattner, we add into the example that Brown goes to the movies after lecturing, we are forced to recognize that the sequence "lecture before movies" is not itself imposed by any for-the-sake-of-which (Blattner, 1999, p. 181). Rather, as Blattner points out, this sequence "is only a result of having to fit several tasks into a given time sequence. But, of course, it is precisely the sequentiality of time that we are trying to explain" (Blattner, 1999, pp. 181–182).²⁶

The result, in Blattner's words, is that "there is a residuum of unexplained 'time-likeness' namely, sequentiality, in the sense of 'one-after-the-other-ness'" (Blattner, 1999, p. 184). Since world-time is what, as Blattner argues, emerges when originary temporality is modified by the imposition of sequentiality, Heidegger's temporal idealism—his argument that the ordinary conception of time (time as a sequence of empty "nows") is grounded in the originary temporality of Dasein—fails. In other words, insofar as Heidegger cannot explain sequentiality he fails at defending his temporal idealism. But, again, this impressive interpretation depends on a questionable assumption: that Heidegger was trying to explain or derive sequentiality.

The immense care Blattner took in carving out the hermeneutical terrain surrounding Heidegger's views on time leads him to articulate something akin to the position I attribute to Heidegger. Yet, Blattner considers this alternative position only to reject it as untenable:

This failure would, however, leave room for the possibility that world-time is actually a composite phenomenon That is, if originary temporality and ordinary time can be understood to be two distinct, independent phenomena, world-time could be interpreted as the product of imposing structures that arise out of originary temporality upon *ordinary time*, *which is already and independently sequential*. This would entail that without originary temporality, there would be no world-time, but ordinary time would remain, devoid of content, significance, and publicness. This is a comfortable position for a naturalist to hold. But Heidegger is no naturalist. (Blattner, 1999, p. 184, my italics)²⁷

I will defend the idea that Heidegger indeed was *not* attempting to derive sequentiality and that, rather, he held it to be a built-in feature and constraint of the sequence of events of nature that transpire independently of Dasein. I will show, in turn, that world-time is a co-production of Dasein's nonsequential originary temporality and the endogenous sequentiality of natural events. Thus, Heidegger did not fail to be a temporal idealist because he was not trying to be one in the first place. One can grant to Blattner that Heidegger was no naturalist, but one need not be a naturalist to maintain the above view.²⁸ One can be a "hermeneutic realist" in the sense I have been unpacking. Heidegger sees sequentiality as imposed upon originary temporality *not* by the iteration of the originary present, as Blattner (1999, pp. 173–184) argues, but by the fact that originary temporality is geared into the sequentiality of the

events in nature in which Dasein finds itself, an independent sequentiality on the basis of which Dasein, granted its originary temporality, discerns, reckons with, and measures different "nows."

4 | HEIDEGGER'S TEMPORAL REALISM

Heidegger's temporal realism can be elucidated by engaging with two issues: (a) the time-free movements of nature and (b) time-reckoning.

4.1 The endogenous sequentiality of the time-free movements of nature

Among the more enigmatic aspects of Heidegger's conception of time is his notion that the movements of nature are "time-free":

The movements of nature which we define spatio-temporally, these movements do not flow off 'in time' as 'in' a channel. They are as such completely *time-free*. They are encountered 'in' time only insofar as their being is discovered as pure nature. They are encountered 'in' the time which we ourselves are. (Heidegger, 1985, p. 320; GA 20: p. 442)

Heidegger is here operating with the assumption that there is some kind of sequential ordering in the movements of natural things, which, for reasons I will discuss shortly, he prefers to label as "non-temporal." To say that "the movements of nature are encountered 'in' time only insofar as their being is encountered as pure nature" is to summarize the themes from BT §69b, namely that modern physical natural science discovers "pure nature" not as a brute fact, but in terms of the "mathematical projection of nature" that enables nature to be uncovered as "quantitatively determinable" and thus measurable as to "motion, force, location, and time" in ways that reveal its regularities and causal powers (BT 414/362). Again, all of this is part and parcel of what Heidegger calls "the legitimate task of grasping the occurrent in its essential unintelligibility" (BT 194/153).

Hence, this concession that natural science takes measurements of the physical universe whose states transpire as a sequence does not imply that the deworlded "mathematical projection" of nature *imposes* sequentiality on an otherwise nonsequential domain; rather, it *exposes* a sequentiality that is there anyway. To call the movements of nature "time-free" is not to deny they have their own before/after sequential ordering. Indeed, the predictive power of this scientific projection of nature depends upon it being the case that the natural objects whose motions it measures move according to their own before/after endogenous sequence.

An initial indicator that Heidegger assumes that the movements of nature have their own endogenous sequentiality comes from a remark he makes about the theory of relativity in the 1925 lecture, "Wilhelm Dilthey's Research and the Struggle for a Historical Worldview" (in Heidegger, 2002). He writes:

This is one of the basic discoveries of the theory of relativity. Physical time is a one-dimensional, irreversible multiplicity of earlier and later moments. [Sie ist physikalisch eine eindimensionale nicht umkehrbar Mannigfaltigkeit des Früher und Später]. (Heidegger, 2002, p. 172)

What is striking for my purposes is Heidegger's reference to a sequentiality of earlier and later moments. Now, the extent to which Heidegger himself is adequately describing what the theory of relativity actually entails about time is not something I need to weigh in on here. It is enough for my purposes that Heidegger aspired for his conception of primordial temporality to fit with what he took physics to say about the sequentiality of events in the physical universe. Heidegger took this sequentiality of nature to obtain independently of Dasein's temporality. It is this physical

time, a bare sequentiality inherent to the movements of the physical universe that Heidegger opts to call "time-free movements of nature" in the closing sentences of *History of the Concept of Time*. Physical time is the endogenous, bare sequentiality of events and states of the universe that is grasped in the deworlding practices of natural science. Heidegger chooses in other texts and lectures not to call this "time" because he ends up reserving the characterization of "temporal" as a technical term, the "strict sense" of which he stipulates will refer only to Dasein's way of being (BT 472/421; cf. Heidegger, 2014, p. 92; GA 40: p. 90; Dreyfus, 1991, p. 259; Blattner, 1999, p. 217). In the Dilthey lecture where he allowed for a form of physical time, Heidegger thus did not keep to his "strict" terminological policy. When he does stick to it, he describes the movements of nature as "time-free."

One difficulty confronting my interpretation is the fact that Heidegger construes the sequentiality of nature in terms of the "earlier" and the "later," both of which can be taken as Dasein-relative time determinations, as "here" and "yonder" are Dasein-relative determinations of space (see BT 136/103). My case would arguably be more clearcut if Heidegger had used "before" [Vor] and "after" [Nach]. Per Heidegger's own analysis discussed just below, "before" and "after" can more straightforwardly designate a neutral succession, an ordering with a direction, one that is not relative to Dasein. However, there is ample evidence to support a substitution here of "before" [Vor] and "after" [Nach] for the "earlier" [Früher] and "later" [Später] in the definition of physical sequentiality that Heidegger gives in his Dilthey text.

The first clue is the way Heidegger connects his notion of physical time to Aristotle's definition of time in the following paragraph: "Time, says Aristotle, is what is counted in motion with respect to earlier and later" (Heidegger, 2002, p. 172, translation modified).²⁹ Here, as he does at BT 473/421, Heidegger translates Aristotle's "proteron" and "husteron" as *Früher* and *Später*, respectively. Yet when Heidegger takes care to analyze Aristotle's conception of time in considerable detail in *The Basic Problems of Phenomenology*, we find him providing arguments in favor of translating "proteron" and "husteron," as he puts it, "by the indifferent before and after [das indifferente Vor und Nach]" rather than by *Früher* and *Später* (Heidegger, 1988, p. 241; GA 24: pp. 341–342). Accordingly, Heidegger goes on to use *Vor* and *Nach* instead of *Früher* and *Später* when he translates Aristotle's definition of time ("What is counted in motion with respect to before and after"), adding that this is the more "literal conception" (Heidegger, 1988, p. 246; GA 24: p. 348).

Heidegger writes, "Primarily, proteron-husteron means for Aristotle before and after *in the sequence* of places [*in der Folge von Orten*]. *It has a non-temporal sense*" (Heidegger, 1988, p. 247; GA 24: p. 349, my emphasis). In order to make sense of this, one could say that "before" and "after" express an ordering or sequence that is nontemporal (and has nothing to do with Dasein's originary temporality) but that does have a direction. Such a nontemporal, directional ordering is also exemplified in the way in which the natural numbers display an ordering that has a direction without being temporal: 1 before 2, 3 after 2 (1 vor 2, 3 nach 2). Thus, one can say that when a natural object moves, it traverses a before/after ordering of places. This can be understood as a "time-free" movement of a natural object. In essence, what this amounts to is an attempt to sustain and apply Heidegger's strict terminological stipulation about what is to count as "time," which is also the approach to this issue taken by Olafson (1987).³⁰ In a before/after relation, there are none of Dasein's temporal horizons; no privileged "now" from the perspective of which a future is approaching yet still outstanding while a past is always already receding and yet still shaping the present. Heidegger reserved the labels "time" and "temporal" for the latter and chose not to call the Dasein-independent, endogenous before/after sequence of events in the natural universe "time." This is why the movements of an object, which sounds like a change in location *over time*, can still, "strictly speaking," be made out as a "time-free."

4.2 | Time-reckoning and sequentiality

Further support for this interpretation can be found through an examination of what Heidegger calls "time-reckoning." This is the name Heidegger gives to our activity of sequentially arranging and engaging with tasks in time. According to Blattner's reconstruction, Dasein encounters world-time (the significant, datable, spanned, and public

"nows" of everyday life), by time-reckoning. In other words, Dasein's originary temporality gives rise to world-time because Dasein reckons with time. This proposal amounts to a reformulation of Blattner's other key interpretive point: that "word-time can be interpreted as a modified version of originary temporality, what comes of originary temporality if its features are sequential" (Blattner, 1999, p. 173). The question, again, is whence this sequentiality? With this, we come back to the thrust of Blattner's picture of Heidegger as a failed temporal idealist unable to explain how sequentiality can be generated simply out of Dasein's nonsequential originary temporality. As mentioned, my response to this is that Heidegger took for granted that the events and processes of nature have their own endogenous sequentiality, and that this sequentiality (not one generated by the iteration of the originary present, for example) is what enables the modification of Dasein's originary temporality into world-time, co-generating the requirement for time-reckoning. Thus, time-reckoning and world-time arise because of this intertwining of the endogenous sequentiality of the events of nature and the non-sequentiality of Dasein's originary temporality. Even though Heidegger himself did not press the case precisely in this way, he could have—and I will marshal on his behalf arguments in support of this approach.

It is instructive to review how Blattner formulates his main worry about Heidegger's position:

[T]he need for time-reckoning does not explain world-time itself. Time-reckoning ... is required in order to fit a multiplicity of tasks into a definite temporal sequence. This observation already assumes, however, that the time with which Dasein is dealing is sequential or successive time. (Blattner, 1999, p. 175, my italics)

Heidegger does indeed assume that the time with which Dasein is dealing is already sequential. That is, he does not try to derive sequentiality. Given the endogenous sequentiality of natural events, Dasein must reckon with time, which means that it must arrange the various tasks generated by its for-the-sakes-of-which into a linear time-line. With this in mind, let us return to Blattner's account. He writes:

Dasein reckons with time by arranging its tasks in time. Jones is an interpreter and a friend, which means that she is referred to the tasks of both abilities, say, being at this function and meeting Smith for lunch. In order to carry out both of these subsidiary tasks, Jones must arrange them in time. She cannot try to take care of both tasks simultaneously. They have to be placed carefully in the schedule, so that they are both doable. (Blattner, 1999, p. 139)

But there is no requirement to explain Jones's need to arrange her tasks in time only on the basis of Jones's being an originarily temporal being (a being who takes a stand on its being by pressing into multiple tasks associated with her for-the-sake-of-which). Rather, it is on account of her being an originarily temporal being whose life takes place in and is constrained by a natural universe where local events happen sequentially that she has to arrange her tasks in a sequential ordering. Jones is thrown into natural sequentiality. Another way to underline this point comes out by looking at a further example from Blattner:

Smith assigns himself to the task of dinner. His self-assignment further assigns him to the tasks involved in dinner: preparing or buying it, setting the table, sitting down to eat, and so on. This navigation from the task of dinner to the subtask, say, of putting a plate at each place on the table, is a good example of what Heidegger means by "reckoning" or "concern." (Blattner, 1999, p. 143)

While there is some leeway in exactly how the aforementioned tasks get ordered, the constraint of ordering in general, as well as certain facts of the precise ordering, is given by the way nature itself moves in a before/after sequence. It has nothing to do with Smith's originary temporality and the way his for-the-sakes-of-which select tasks that before he can eat a lentil soup for dinner, the lentils have to be boiled and the soup in question has to be generated in accordance with the laws of physics and chemistry, including, for example, that Smith has to ignite the gas in the stove *before* the water in the pot will get hot, which has to happen *before* the chemical reactions involved in breaking down the lentils and additional vegetables can happen. Similarly, the fact that Brown has to turn the ignition, then put the car into first gear, then lift up on the clutch while pressing the gas pedal so that fuel mixes with oxygen and creates a controlled combustion that propels her car forward so that she can arrive at the movie or the lecture on time does not derive purely from Brown's originary temporality. Such facts of the movements of nature constrain the way she is able to undertake the tasks assigned by the stand she takes on her being.

Finally, we can add one more range of reflections in support of the proposal that Heidegger took sequentiality for granted as a built-in natural constraint. As discussed in Section 2.3, it is significant that Heidegger introduces time-reckoning and world-time by reflecting upon the natural before/after recurrent rhythm of day-night-day-night. The sun's movements are an example of a sequential rhythm in nature that obtains independently of Dasein and constrains what Dasein can do *now*. Accordingly, in a passage I have already briefly commented upon, Heidegger writes:

Everyday circumspective being-in-the-world needs the *possibility of sight* (and this means that it needs brightness [*Helle*]) if it is to deal concernfully with what is available within the occurrent. With the factical disclosedness of Dasein's world, nature has been uncovered for Dasein. In its thrownness Dasein has been surrendered to the changes of day and night. Day with its brightness gives the possibility of sight; night takes this away. (BT 465/412)³¹

Heidegger goes on to lay out how the recurrent sequence of day-night enables the modification of Dasein's originary temporality into a sequence of world-time "nows" with the characteristics of datedness, spannedness, publicness, and significance. For present purposes, I will highlight again the remarks Heidegger makes about how the datedness and publicness of world-time are rooted in the natural rhythm of day and night:

The sun dates the time which is interpreted in concern. In terms of this dating arises the 'most natural' measure of time—the day. And because the temporality of that Dasein which must take its time is finite, its days are already numbered. Concernful awaiting takes precaution to define the 'thens' with which it is to concern itself—that is, to divide up the day. And the 'during-the-daytime' makes this possible. This dividing-up, in turn, is done with regard to that by which time is dated—the journeying sun. Sunset and midday, like the sunrise itself, are distinctive 'places' which this heavenly body occupies. Its regularly recurring passage is something which Dasein, as thrown into the world and giving itself time temporalizingly, takes into its reckoning. Dasein historicizes from day to day [tagtägliches] on the ground of its way of interpreting time by dating it—a way which is adumbrated in its thrownness into the 'there'. (BT 466/413, my italics)

Heidegger is explaining here how the regular sequential recurrence of the sun's natural light in alteration with the darkness of night make possible Dasein's dating of the day: "Now, during the daytime" or "Now, during night." Dasein's own temporality gears into this natural sequentiality. As I quoted above, Heidegger remarks that Dasein "dates the time which it must take and [it] dates it *in terms of [aus dem]* something it encounters within the world [i.e., the regular recurrence of the sun's passage and the rhythm of the day"]"(BT 465/412). This is, again, why Heidegger contends that the sun's revelation as a "natural clock" is a dimension of Dasein's very thrownness into the world. Heidegger's argument is that the publicity and datability of Dasein's world-time ("Now, it is time for us to work, later it is time to watch a movie") is grounded *both* in Dasein's primordial temporality (Dasein's "giving itself time temporalizingly") *and* in the way that primordial temporality can count on and coordinate itself according to regular recurrences transpiring independently in nature. Dasein's "dating" of a public now is *bound up with* such regular Dasein-independent, recurrences into the midst of which Dasein is thrown.³²



Moreover, what is happening now in nature is independent of Dasein's originary temporality and constrains the way Dasein orders its activities in time. Jones can only arrange his day so as to meet Smith later at sunset because there will be, independent of both Jones and Smith, a later "now" at which the sun will set. Smith cannot watch a lunar eclipse now because one is not occurring now. Brown has to see the drive-in movie at a later "now" because lightning has now forced management to shut down the theatre until after the storm. This point generalizes. The sequence of what is happening in nature, independently of Dasein, shapes and constrains what Dasein is able to do, imposing the requirement for ordering its activities in a certain way. Dasein's originary temporality engages a pregiven sequentiality of natural events that enable Dasein to relate to dated, spanned, public, and significant "nows." Both Dasein's temporality and the endogenous sequentiality of nature are involved here. World-time is a co-production of Dasein's temporality and the endogenous sequentiality of natural events.

5 CONCLUSION

In the foregoing, I have sought to reconstruct a version of temporal realism that is consistent with Heidegger's hermeneutic realism about the claims of natural science, but I have not ventured to assess here the extent to which the resulting view could be developed in such a way so as to contribute to current debates in the philosophy and physics of time. In many discussions provided by theorists writing for nonspecialists (Davies, 1995; Rovelli, 2018), the debate about whether or not time is a fundamental feature of the physical universe seems to assume that the time in question is the familiar, ordinary time from everyday human experience, rather than a deworlded time of bare succession. Following a hint from Rovelli (2018, pp. 138-139), we can think of this bare sequentiality as a "germ" of the more robust mode of time as it emerges in ordinary clock-time and world-time. In any case, my suspicion is that the Heideggerian conception of deworlded time, sufficiently developed, might be able to lend some clarity to this debate about the ultimate reality of time by showing how physicists and philosophers of physics could make use of the more austere notion of sequential ordering that is implied by Heidegger's deworlded time. I will not plunge further into such questions here, but I hope that others may take them up in the future.³³

ACKNOWLEDGMENTS

I originally imagined this paper as a work of co-authorship with Hubert Dreyfus. Bert had asked me to help him gather material for a proposed second edition of his 1991 book, Being-in-the-world: A commentary on Heidegger's Being and Time, Division I. The second edition was to involve a more systematic treatment of Division II of Being and Time. However, before we made much headway on the project, Bert's health had begun to decline and he was focusing his energy on teaching. So we revised the goal: we would aim to collaborate on one chapter presenting an answer and alternative to William Blattner's interpretation of Heidegger as a failed temporal idealist. I myself undertook the writing, drawing on regular conversations with Bert as well as a recording of lectures he gave on Division II at Berkeley in 2008. In particular, Sections 3 and 4 of the text here present material adapted from the final sessions of that 2008 course. I presented an initial draft of the paper at the American Society for Existential Phenomenology (ASEP) meeting in Berkeley in February 2017, but suspended work on the project in the wake of Bert's death in April of that year. Eventually, I decided to push through with completing the paper. While this meant bringing the work through subsequent expansions and refinements without his involvement, Bert was vital to the genesis and the overall substance of this work. In preparing the text, I benefited tremendously from detailed written responses to an earlier draft provided by William Blattner. Charles Spinosa's careful comments on both early and late drafts significantly improved the paper. The remarks from two anonymous referees for this journal helped bring the argument into both a better focus and a broader context. David Hoff was a huge help as our research assistant in the initial phase of the paper. I would like to thank Geneviève Boissier-Dreyfus, Mark Wrathall, and Joseph Schear for conversations and exchanges that enabled me to gain some clarity about how to proceed with publishing this text in Bert's absence. Additionally, I would like to thank the participants of the ASEP meeting at Berkeley in 2017 and Fernando Flores for stimulating conversations about the paper and its themes.

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ENDNOTES

- ¹ In a few important but speculative pages near the end of *Being-in-the-world*, Hubert Dreyfus (1991) gestures toward the kind of temporal realism I have in mind. Dreyfus defends the possibility that Heidegger recognized a "pure sequential ordering of events" (p. 259) that obtains separately from Dasein's existential temporality and world-time. Such a scenario would help the case for seeing Heidegger's early philosophy as "compatible with realism concerning the entities studied by science" (Dreyfus, 1991, p. 260). In n. 27 and n. 30 below, I comment on readings of Heidegger as a temporal realist sketched by Carman (2003) and Olafson (1987).
- ² I cite *Being and Time* (Heidegger, 1962) parenthetically as "BT." The page numbers are to the Macquarrie and Robinson translation, which I follow (sometimes with slight revisions) unless otherwise indicated, accompanied by the German pagination. I use "occurrentness" and "availableness" and their variants for *Vorhandenheit* and *Zuhandenheit* and their variants respectively. I also use "entities" instead of "beings" for "das Seiendes." For the other works from Heidegger that I refer to, I give the page number of the English translation followed by that for the Gesamtausgabe (GA) edition.
- ³ I mean here the same kind of "co-production" discussed by Dreyfus and Taylor (2015, pp. 93–94 and, more broadly, chapters 5 and 7).
- ⁴ For a brief round-up of other responses to Blattner, see n. 26 below. Heidegger's temporal realism needs to be retrieved not only from Blattner's compelling interpretation of Heidegger as a temporal idealist, but also from Heidegger himself, since his thinking about temporality, as Blattner points out, "involves divergent and conflicting lines of thought" (Blattner, 1999, p. 215). It is worth pointing out Heidegger's own vacillation on this point in the aftermath of publishing *Being and Time.* In 1928, he expressed his reservations as such: "The question of the extent to which one might conceive the interpretation of Dasein as temporality in a universal-ontological way ... is a question which I am myself not able to decide, one which is still completely dark to me" (Heidegger, 1984, p. 210; 1984, GA 26: p. 271; cf. Dreyfus, 1991, p. 259, and Blattner, 1999, p. 232).
- ⁵ In distinguishing the world wherein Dasein lives from the natural or physical universe, I am following Dreyfus (1991, p. 348, n. 1) who cites Heidegger himself making the distinction (see Heidegger, 1988, p. 165).
- ⁶ Of course, there are major ongoing disputes about the nature of time in physics, especially in relation to fields such as quantum mechanics and the theory of relativity, which I bracket in this paper. See Rovelli (2018) and Carroll (2010) for nonspecialist summary accounts of these debates. For an overview of how Heidegger's account of deworlded time relates and contributes to these debates, see Spinosa, Rousse, and Hancocks (n.d.). Although Heidegger refers to Einstein's work with respect (see Heidegger, 2002, which I touch on below), his brief discussion is not enough to establish how much of Einstein's conception of time he understood. It does, however, provide strong evidence that Heidegger held the work of the natural sciences, especially physics, in high regard and that he aspired for his conception of the temporality of human existence to be consistent with it.
- Dennis McManus (2012, ch. 3) has shown in detail how slippery the notion of "occurrentness" is, both in Heidegger's own writing and that of his commentators. McManus identifies no fewer than 36 glosses on the term *Vorhandenheit* in Heidegger's commentators, and he even adds a 37th himself (McManus, 2012, pp. 53–56 and pp. 195–196).
- ⁸ On "deworlding" [die Entweltlichung der Welt], see also BT 106/75 and 147/112. That deworlding is not a purely negative phenomenon becomes clear in the discussion just below. On this issue, see also Dreyfus and Spionosa (1999).
- ⁹ "Occurrentness in the broadest sense" presumably encompasses the available.
- With this notion of nature in its "unintelligibility" Heidegger is connecting with, yet reformulating, certain dimensions of the Neo-Kantian debate about the methods and subject matter of the natural as opposed to the historical sciences. For example, in the words of Heinrich Rickert, the phenomena of nature are "completely devoid of importance and meaning and therefore remain unintelligible [unverständlich]" (Rickert, 1962, pp. 20–21). However, Heidegger rejects and severely criticizes Rickert's reliance on the notion of "value" as that which distinguishes the intelligible, historical world from the natural universe, and he regards his own project of fundamental ontology as necessary for clarifying the scope and legitimacy of Rickert's essentially epistemological project, inherited from Wilhelm Windelband, of distinguishing the different logics of the nomothetic Naturwissenschaften and idiographic Geisteswissenschaften. For more on the relations between Heidegger and Neo-Kantianism, see Bambach (1995) and Gordon (2010, 2013).

- ¹¹ I have drawn on the translation of this passage provided by Carman (2003, p.157). Dreyfus (1991, p. 255) also cites this passage.
- ¹² Braver (2007, p. 532, n. 21) does a helpful job at collecting many more references in Heidegger's writings from the late 1920s that support a realist interpretation.
- 13 In addition to Dreyfus and Carman, interpreters who see Heidegger's early philosophy as ultimately committed to a form of realism include Cerbone (1995), Hoffman (2000), Haugeland (2013, chs. 2 and 3), McManus (2012; 2017), McMullin (2013), and Golob (2014). Note that none of these interpreters take Heidegger's realism to be a form of "metaphysical" realism which, in Carman's (2003, p. 165) phrase, attempts "to derive the very intelligibility of entities as entities from their mere ontic structure, for example their causal interactions." On this point see also Cerbone (2005, p. 257), I cite some of the idealist interpretations of Heidegger in n. 15 below.
- In Wrathall's (2017, p. 12) gloss, Dreyfus's reading is hermeneutic "in the sense that he recognizes that our access to reality is grounded in interpretive practices, and he aims to spell out what those practices take for granted. But he is a 'realist' in the sense that he argues that the conditions of access to entities do not determine or constitute those entities as such." For more on how this hermeneutic realism connects with scientific deworlding practices, see Dreyfus and Spionosa (1999).
- ¹⁵ In addition to Blattner, Braver, and Richardson, Cristina Lafont (2000) offers further systematic reasons for seeing Heidegger as fundamentally committed to a form of idealism (in particular, a linguistic idealism in connection with what she takes as Heidegger's rigid dichotomy between the ontological/transcendental and the ontical/empirical domains). For his part, Peter Gordon (2010, 2013) emphasizes how early Heidegger was pulled in both realist and idealist directions in connection with the ways he was seeking to differentiate himself from the Neo-Kantian tradition. According to Gordon, while the question of idealism and realism ultimately remained an unresolved tension in Heidegger's early work (Gordon, 2010, p.233), the gist of the arguments point in the direction of "a species of transcendental idealism" (Gordon, 2013, p. 236), if not even a form of "subjectivism" (Gordon, 2010, p. 232).
- ¹⁶ I have used the translation of this passage provided by Blattner (1999, p. 238). However, I used Macquarie and Robinson's translation of the final sentence.
- ¹⁷ Cerbone (2005) and McManus (2012) provide thoughtful discussions of Heidegger's aspiration to overcome the traditional dichotomy between realism and idealism, an aspiration that partially explains why Heidegger's philosophy pulls in both directions.
- ¹⁸ Carman also calls into question Blattner's and Lafont's attribution to Heidegger of a transcendental standpoint that is cleanly separable from the empirical/ontical standpoint. According to Carman's convincing reading, Heidegger's phenomenology amounts to a denial that one can achieve "a speculative theoretical standpoint from which to say something intelligible about our relation to entities, quite apart from the conditions constituting our own finite existence" (Carman, 2003, p. 172). For a potent reiteration of this line of thought (a criticism of the view that Heidegger operated with a rigid dichotomy between transcendental/empirical or ontological/ontical), see Carman (2013).
- ¹⁹ Blattner (2004, p. 33) offers a succinct summary of this point.
- ²⁰ Heidegger's omission of a more detailed account of endogenous, natural sequentiality is arguably connected with his casual evasion of the bodily dimensions of Dasein's temporality and being-in-the-world (see BT 143/108). It would be a worthwhile project to inquire into what Merleau-Ponty could contribute to an investigation into these themes. For Merleau-Ponty, the body is a "natural myself" (Merleau-Ponty, 2012, p. 213) "which assures my insertion within the human world through my habitus, [but] only in fact does so by first projecting me into a natural world that always shines through from beneath the others-just as the canvas shines through from beneath the painting-and gives the human world an air of fragility" (Merleau-Ponty, 2012, p. 307, my insertion in the brackets).
- ²¹ Cited by Fell (1992, p. 67), Dreyfus (1991, p. 258), Hoffman (2000, p. 410), Carman (2003, pp. 194-195).
- ²² Cited by Fell, (1992, p. 69), Dreyfus, (1991, p. 258), Hoffman (2000, p. 405), Carman (2003, p. 193). I have used Carman's translation of the passage.
- ²³ Heidegger largely leaves out spannedness in the discussion of world-time in BT §80.
- ²⁴ It could be that other interpretations of nature, such as the romantic conception of nature that "stirs and strives" (BT100/70), are yet further possible ways in which Dasein registers and makes sense of its being exposed to a realm of nature and natural entities that exceed and condition it. On this, see also Fell (1992, p. 73).
- ²⁵ I will return to "time-reckoning" in Section 4.2.
- ²⁶ In recent years, a variety of arguments answering Blattner about the source of sequentiality have been offered, for example, by Fisher (2010), McMullin (2013), Zuckerman (2016), and Spinosa, Hancocks, and Glennon (2017), Each of these accounts attempts to show how sequentiality can indeed be derived from the dynamics of Dasein's primordial

temporality and existential structure (by appeal to phenomena such as "suturing," being-with, existential commitment, or the repetition of the moment of vision, respectively). None of these prior attempts to answer Blattner explores the possibility that sequentiality emerges from Dasein's intermingling with nature, which is the claim of this paper.

²⁷ Carman (2003) also endorses Dreyfus's (1991) argument for seeing Heidegger's views as consistent with the realistic assumptions of natural scientists and rejects Blattner's central thesis that Heidegger was trying to explain or derive sequentiality from Dasein's non-sequential temporality (cf. Carman, 2013, n. 8, p. 96). Accordingly, Carman argues that Heidegger holds just the view that Blattner here excludes. Carman's response to Blattner anticipates the overall direction of the case I will present in detail below. Expressing the point in terms of McTaggart's distinction between A-series (past-present-future) and B-series (earlier and later), Carman (2003, p. 174), writes:

Natural events do not flow or pass by in time, except with respect to Dasein's ecstatic temporality, which differentiates past, present, and future. Consequently, there is a *B*-series, an earlier and a later, in such events, but no *A*-series, no *time* in the sense of temporal flow to and from a privileged *now*: no approaching future, no present, no receding past. Even in the absence of Dasein and its temporal horizons, though, there are indeed 'movements of nature', and they do indeed occur in space and time.

As I will explain, drawing on Heidegger's reading of Aristotle, I suggest that we use "before and after" instead of "earlier and later" in order to label the Dasein-independent sequential relation.

- ²⁸ For a useful recent take on Heidegger's anti-naturalism see Suarez (2019).
- ²⁹ The translators had used "before" and "after" in the Aristotle quotation, but the German is Früher/Später.
- ³⁰ In a passage from Heidegger and the Philosophy of Mind, Olafson anticipates but does not develop the overall approach I have been pursuing:

It thus appears that Heidegger *could* hold that there is a 'nature-time' that is independent of *Dasein*, and that this time is to be understood in terms of a sequence of events (*Nacheinander*) that are ordered as earlier and later but do not have the character of past, present, and future. In the light of these considerations, one may even surmise that in saying there is no 'nature-time', Heidegger does not intend to deny that change and relationships of 'earlier' and 'later' are independent of the world and of *Dasein*. It may be that he is simply not prepared to call such a *Nacheinander* 'time' because he reserves the term for the world-time that presupposed the distinction among past, present, and future. (Olafson, 1987, pp. 98–99; cf. Carman, 2003, p. 174, and n. 27 above).

- ³¹ In a moment of rare attention to the conditions of Dasein's embodiment, Heidegger is here talking about natural sight, light, and brightness. He is claiming that the existential modalities of sight [Sicht], such as circumspection [Umsicht], considerateness [Rücksicht], and transparency [Durchsichtigkeit], as well as the existential "light" [Licht] of the "clearedness" [Gelichtetheit] and the clearing [Lichtung] of Dasein's world (see BT 187/146–147) depend upon and gear into the natural sequentiality of the day-night cycle.
- Someone may object that this reliance on the motions of the sun and the recurrent pattern of day-night is only true of so-called "primitive" Dasein. Anticipating this reaction, Heidegger himself points out that "advanced' Dasein has the 'advantage' of being able to turn night into day [e.g., with electric lighting]," adding that "similarly we no longer need to glance explicitly and immediately at the sun and its position to ascertain the time" (BT 468/415, my brackets). But Heidegger insists in the same passage that artificial clocks "must be regulated by the 'natural' clock," and he goes on to remark that natural science has provided access to a broader range of natural clocks: "Our understanding of the *natural* clock develops with the advancing discovery of *nature*, and instructs us as to new possibilities for a kind of time-measurement which is relatively independent of the day and of any explicit observation of the sky" (BT 468/415). I should add that, in this context, Heidegger is placing just as much emphasis on the way Dasein's originary temporality gives rise to the phenomenon of dating time, and so of using a clock and of discovering and relying upon a natural clock. Natural clocks, then, also depend on Dasein: "Temporality is the ground of the clock" (BT 466/413). Again, this is a feature of the co-production story I have been pursuing.
- ³³ See Spinosa et al. (n.d.) for exploration and development of these issues.

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