

Time, Grounding, and Esoteric Metaphysics

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Abstract: This paper is about the relation between naturalistically motivated and other critiques of grounding on the one hand, and similar critiques of the contrast between A- and B-theoretic views of time on the other hand. I start by considering the non-unity objection to grounding and corresponding objections to the A/B contrast, arguing that even the combined dialectical upshot of these in the case of time would not be quite what it is in the case of grounding. I then sympathetically discuss the objection that grounding, especially as a primitive notion, is not intelligible and part of ‘esoteric’ metaphysics; this objection turns out to be just as serious in the case of the A/B contrast. The question then arises whether grounding may be needed to draw the A/B contrast in the first place, so that the esotericism of the latter is simply due the esotericism of the former. I answer this question in the negative. Finally, I comment on the costs of esotericism in both cases and indicate directions in which philosophy of time might profitably look for responses to the challenge.

1 Introduction

The analytic metaphysics literature sometimes has a dynamic of its own. It can show a certain inertia, leading to some distinctions sticking around for no good reason. It can also produce a flurry of attention to a topic that doesn’t deserve it. Critics of the notion of metaphysical grounding tend to think this notion has received more attention than it deserves (see references in (Koslicki, 2020)). Critics of temporal metaphysics tend to think the distinction between dynamic and non-dynamic, of A- and B-theoretic models of time, is one that is sticking around for no good reason (see e.g. (Maudlin, 2018), (Callender, 2017)).

The notion of metaphysical grounding is much more general than that of robust temporal passage (as posited by A-theorists and denied by B-theorists).¹ After all, the former is a tool for metaphysics as a whole whereas the latter is a posit within temporal metaphysics in particular. Nonetheless, it is interesting to consider how the critiques compare and relate to one another. Insofar as they are each persuasive, are they persuasive for similar reasons? What is the relation between temporal metaphysics and grounding? What should it be?

Both critiques (that of the notion of grounding and that of the A/B debate) can be motivated by appeal to a broadly naturalistic stance. By a “broadly naturalistic stance” I here mean one that values continuity with the aims, results and methodology of the natural sciences and views with suspicion any claims to the effect that there are “distinctively philosophical modes of inquiry or characteristically philosophical routes to knowledge”

¹ In this paper, I equate ‘dynamic’ with ‘A-theoretic’ and ‘non-dynamic’ with B-theoretic, and I use the term ‘A/B contrast’ as an umbrella term encompassing various more specific contrasts, such as those in temporal ontology. What’s at issue is an opposition between models of time that posit “robust” temporal passage (in the sense of Skow) and those that deny it. However, in Sections 2 and 5 I discuss views that do not fit this schema, such as Tenseless Passage views that seek to locate dynamicity within the block universe view; this is flagged explicitly.

(Stanford, 2016, p. 93). For example, in James Woodward's provocative and memorable dialogue "Interventionism and the Missing Metaphysics", Professor Metafisico, Ph. D., repeatedly demands of him to pay attention to considerations involving grounding, while Woodward himself remains unsure throughout "just what grounding consists in" (Woodward, 2014). Somewhat similarly, in Ch. 13 of his book *What makes time special?*, Craig Callender asks philosophers of time to "move past" the ABCs of time, explaining that he "moves[s] away from some of the analytic categories commonly in use not to be difficult but rather in the firm belief that this is the way forward in philosophy of time" (Callender, 2017, p. 290).

Now, there are in fact a variety of different kinds of critiques of grounding on offer, many of which are rather less broad-brushed than Woodward's, which target the specific motivations to posit and investigate a relation of grounding rather than the motivations to posit a relation of grounding along with truth-making and a grab-bag of other metaphysical notions. Meanwhile, the notion of temporal passage plays a central but also multiply ambiguous role in the confrontation between analytic metaphysics of time and more naturalistic approaches to philosophy of time. For both these reasons, it is not obvious from the outset how best to think of the relation between (critiques of) grounding and (critiques of) the A/B debate. This article examines aspects of that relation.

Sections 2 and 3 consider two central objections to grounding, namely that the notion is not properly unified, and that it is not intelligible, and ask to what extent similar objections arise in the case of the A/B contrast. Section 4 discusses whether grounding is needed to formulate that contrast in the first place. Section 5 then comments on the upshots of these sections, and in particular on the costs, both for grounding and for the A/B contrast, of belonging to 'esoteric' metaphysics.

2 Unity

What does it mean to say that *x* obtains in virtue of, or because of, *y*? Friends of grounding see this as a question about the metaphysical cement relation of the universe, the logical and structural features of which are of prime importance for metaphysics, and indeed for philosophy. But is there in fact such a relation to be investigated? Are there good reasons to posit it, or do the typical motivations misrepresent the power and scope of existing metaphysical tools and overestimate the degree to which putative grounding phenomena are unified?

Jessica Wilson argues that there are neither terminological, nor metaphysical, nor formal reason to posit a "big-G Grounding relation" to unify a plurality of specific "small-g grounding relations", since it is these specific relations that are actually doing the work when it comes to understanding matters involving metaphysical dependence ((Wilson, 2014); see also (Koslicki, 2015)). The specific relations in question include type and token identity, the functional realization relation, the part-whole relation, the causal composition relation, the proper subset relation, and others. The problem, as Wilson sees it, is not that grounding is general. Her critique does not hang on "general worries about general metaphysical notions" (Wilson, 2014, p. 553). Rather, the claim is that grounding (that is, Grounding) is *too* general to do the work it is supposed to do. That is, the worry is not just that talk of grounding leaves further interesting metaphysical questions unanswered, but that it leaves unanswered precisely the questions it is designed to answer, and to answer

better than non-grounding metaphysical tools. As a result, grounding lands the metaphysician in a kind of methodological paralysis. What allows metaphysicians to do their work is knowledge of metaphysical details, and grounding is too coarse-grained to provide these. For example, in order to be in a position to assess claims about the metaphysical dependence of the mental on the physical, more information is needed than a bare claim that the mental is grounded in the physical. By itself, that claim is compatible with a variety of different positions on the issue, including both reductive and non-reductive forms of physicalism and maybe even eliminativism about the mental.

Wilson compares grounding with causation, and with the various more specific relations involved in particular analyses of the nature of causation, such as ones involving counterfactuals, nomological relations, or transference. Here, she suggests, there are good terminological, metaphysical and formal reasons to think that the general relation (of causation) unifies these more specific relations. The more specific “small-c” relations are all referred to as ‘causal’, they have similar formal features, and they are also metaphysically unified in that they tend to bring with them metaphysically significant presuppositions about the causal relata, such as their distinctness, their existence, and the efficacy of the cause. None of these reasons obtain in the case of grounding. Call this the non-unity objection against grounding.

Is there a corresponding problem besetting temporal metaphysics? I’m equating the contrast between dynamical and non-dynamic models with that between A- and B-theoretic models. But should these be equated, and to what extent is each of these even unified in itself? And if the answers to these questions turn out to be ‘no’ and ‘not very’, then does that pose a problem? If so, why?

The B-theory treats all times as metaphysically on a par. The ‘now’ is no more special than the ‘here’. It isn’t the site of dynamicity/passage/becoming/flow, it is merely one temporal location among many. A B-theorist thinks temporal reality at the fundamental level is best described in terms of a B-series of events standing in temporal relations to one another, whose defining characteristic is precisely that it does not change over time. My writing this tenselessly precedes your reading this by a certain temporal interval, and that tenseless fact does not change over time. A-theorists, by contrast, posit just such a dynamic process of passage, understood in various different ways. Some time is metaphysically privileged in some way, for instance by being the latest time, and that privilege is transferred as time passes.

One could certainly raise non-unity objections about this. For one thing, the crux of the A/B contrast as I’ve described it is that there needs to be a principled way of deciding what kind of vocabulary is not tenseless and thus not allowed in the fundamental description of temporal reality according to the B-theory. That is, there has to be something that unifies A-vocabulary. Clearly, terms like ‘(near and far) past’, ‘present’, ‘(near and far) future’, belong in this category; these are the terms McTaggart himself uses to define the A-series of events. Also in this category are tensed verb forms, as well as expressions like ‘now’, ‘later’, ‘two days ago’, ‘this century’, ‘in a minute’, and so on. But what does the ‘and so on’ encompass? Brad Skow grapples at length with this difficulty and suggests that the list may well be infinite (Skow, 2015). One suggestion he considers is that A-vocabulary is all the vocabulary whose presence in a sentence prevents the sentence from having a stable truth-value that doesn’t change over time. But, he says, which sentences are like that will differ from theory to theory (Skow, 2015, p. 12).

Callender's discussion in *What makes time special?* implies the stance that while something like the distinction between the A- and B-series is important in linguistics, cognitive science and developmental psychology, that between A- and B- (and C-)theories has only led to methodological stagnation. Callender is as little invested in metametaphysical questions about whether or not these are genuinely distinct positions as he is in first-order questions about which of these positions should be endorsed. Whether or not A- and B-theories are genuinely distinct, thinking about which series is fundamental or which times exist etc. is not fruitful, because these notions provide very little by way of explanatory power. We shouldn't talk about B-theoretic time, because that would unnecessarily restrict our explanatory resources. "Relativistic time (and spacetime) is a lot richer than the net of all earlier than and later than relations." (Callender, 2017, p. 302) And we shouldn't talk about A-theoretic time, because that would give us far too narrow a view of what needs explaining when it comes to temporal experience.

Something like the non-unity objection has even been raised specifically with respect to presentism, which is roughly (or allegedly) the view that only the present exists. This is particularly striking given that presentism is, on the face of it, a paradigmatically familiar A-theoretic position, the view held by Putnam's "man on the street" (Putnam, 1967), whose clash with relativity theory has been widely proclaimed. However, contrary to received wisdom, Jonathan Tallant and David Ingram argue that the flourishing recent metaphilosophical literature on how best to formulate presentism is based on a mistake, namely the assumption that the various positions going by the label 'presentism' are in fact unified in some philosophically interesting way (Tallant & Ingram, 2021).

A slightly different non-unity objection would be that while the 'dynamic/non-dynamic' and 'A-theory versus B-theory' contrasts are each substantial, equating them obscures the most attractive spot in metaphysical space. Thus, there is a family of positions that in some way seek to locate dynamicity *within* the block universe/B-theory. (I call these Tenseless Passage (TP) views.) These might, for instance, claim that succession and/or temporal perspective, already is dynamic. Interestingly, defenders of this approach can be found on both sides of the trenches between analytic metaphysics of time and naturalistic approaches to philosophy of time.² (I return to TP in Section 5.)

Each of these non-unity objections is potentially serious. Yet, even their combined upshot would not be quite what it is in the case of grounding. If there is no *one* relation of "Big-G Grounding" to investigate, but only lots of already thoroughly studied small-g relations, then several prominent projects about grounding, such as ones concerned with the logic of grounding, would seem to lack a subject matter. By contrast, the large-scale distinction between dynamic and non-dynamic models of time does not fulfil quite as substantial a function. Admittedly, the idea of such a contrast drives much metaphysical theorising about time. It is also helpful for classificatory purposes and often allows one to better understand a given new, or partially new, model of time. That is, when encountering a novel metaphysical proposal for how to think of some (spatio)temporal aspect of the world, it can be helpful to be told which 'side' (A or B) it is on. But the merits of investigating each model in its own right does not, strictly speaking, depend on the substantivity of the global distinction. Tallant and Ingram concede as much in the case of presentism, when they say that the problem is not so much mere variation in 'presentist' positions, but the specific

² Examples include, but are probably not limited to (Savitt, 2002), (Dieks, 2005), (Dorato, 2006), (Maudlin, 2007), (Harrington, 2009), (Deng, 2013), (Oaklander, 2015), (Mozersky, 2015), (Ismael, 2016), (Fazekas, 2016), (Arthur, 2019), (Rovelli, 2019), (Saudek, 2020), and (Leininger, 2021).

ambitions of the literature built on the claim that there is a presentist core to be captured (“Let a thousand flowers bloom!”). Moreover, Skow’s worry that there may be no theory-neutral way to specify what counts as “A-vocabulary”, could perhaps be dealt with by pointing out that while different models will put the precise dividing line (between A/B, dynamic/non-dynamic) in different places, there are plenty of reasonably clear cases.

Having said that, Callender’s critique would, if successful, cut deeper than this. Unlike Tallant and Ingram’s, it uses an extremely broad brush to target just about any metaphysical machinery that has been (or may yet be) used in this vicinity. In fact, it seems to target the very impulse to deal in a global metaphysical distinction between models of time at all: whether or not there is a substantive distinction to be made between A- and B-theories, for instance, Callender’s point is that making use of it is methodologically ill-advised, because these global distinctions tend to give rise to big, unanswerable philosophical riddles, rather than small, tractable scientific questions.

But the dialectical significance of even the most cutting non-unity objections to the A/B contrast still differs from that of the non-unity objection to grounding, because the role of unification is not the same in the two cases. The dynamic/non-dynamic contrast functions as an ever-present heuristic and fodder for the metaphysical imagination regarding time. If there is no large-scale contrast to be had here, or if the contrast is in some way suspect as a basis for theory-building, then that is significant and potentially bad news for temporal metaphysicians. But precisely because the contrast always hovers in the background, it is not immediately clear what the implications would be of doing without it. Certainly the rationale for investigating metaphysical models of time would have to be reframed, and perhaps in some cases reconsidered. But this reflection would itself shed metametaphysical light on philosophy of time. (More on this in Section 5.) By contrast, if there is no unity among “small-g grounding relations”, and if such unity would in any case not constitute sufficient reason to posit an additional “Big-G Grounding relation”, then the upshot for certain projects, such as those concerned with the logic of Big-G Grounding, is simply that they lack a subject matter.

3 Intelligibility

The intelligibility of ‘grounding’, especially when the term is taken to be primitive, in the sense that it cannot be defined in terms of other, better understood notions, has been questioned by many. Chris Daly (Daly, 2012) provides an extended argument against its intelligibility; Alex Oliver maintains that “[w]e know we are in the realm of murky metaphysics by the presence of the weasel words “in virtue of”” (Oliver, 1996). Similarly, Thomas Hofweber distinguishes between ‘esoteric’ and ‘egalitarian’ metaphysics and insists that the “most common way to be an esoteric metaphysician in practice is [...] [to] rely on a notion of metaphysical priority” (Hofweber, 2009a, p. 268), such as grounding.

According to Hofweber, the egalitarian approach takes metaphysical questions to be accessible i.e., intelligible to everyone and couched in everyday, ordinary terms. By contrast, the esoteric approach takes them to involve special, distinctly metaphysical terminology and thereby to be accessible only to those who have mastered this terminology. Hofweber thinks that a clearly absurd version of esotericism would hold that metaphysics investigates what is metaphysically the case as opposed to what is merely the case, without recognizing any connection between these matters, and without saying anything more about what

‘metaphysically the case’ means. But he also thinks this version is actual, and that friends of grounding rely on this kind of approach to metaphysics, whether intentionally or not. Call this the unintelligibility objection against grounding.

Now, one might object to the distinction between egalitarian and esoteric metaphysics by pointing out that often, central terms of metaphysical debates actually lead a kind of double-life, being apparently at home in everyday usage but also moonlighting as technical terms. In fact, one could argue that what often happens is that metaphysicians’ interest in these terms is to a large extent motivated by their everyday significance, and yet the end result of metaphysical enquiry is to transform them into technical ones.

But Hofweber in effect acknowledges this in the case of grounding, and he thinks it’s a bait and switch. We are all familiar with cases where one thing intuitively is more basic than another. The esoteric metaphysician, says Hofweber, misleadingly presents this as reason to think that a notion of metaphysical priority (“PRIOR in a metaphysical sense”) is *also* intelligible and familiar. Since the demarcation criterion for esotericism is whether the questions one is trying to answer (as opposed to just the answers one defends) involve special metaphysical terms, Hofweber’s charge amounts to this: the questions the esoteric metaphysicians contend to be answering are couched in everyday terms, but the questions they are actually answering are couched in terms of their technical lookalikes.

Hofweber too points to a contrast with causation as well as other nearby notions. The notions of causal order, of conceptual dependence, and of counterfactual dependence, says Hofweber, are familiar from everyday life, and even if it isn’t easy to say exactly which roles they play in ordinary thought, they do each play such roles. Not so with the notion of grounding (along with fundamentality, metaphysical priority, ultimate, etc.). Thus, when Kit Fine describes realist metaphysics as centrally concerned with what is (metaphysically) real, and says that questions of ground are so central to this branch of metaphysics that “little of the subject would remain” if “considerations of ground were abolished” (Fine, 2012), one may well wonder how this would impact those outside the confines of that particular branch of metaphysics. In Hofweber’s words, “[e]soteric metaphysics never sounded so exclusive.” (Hofweber, 2009a, p. 270)

Does this charge carry over to the question of whether time really passes? Hofweber actually briefly mentions it, though perhaps only in jest:³

“The freedom from the facts in esoteric metaphysics opens the door for many metaphysical views to be reintroduced that were long gone. I can’t wait for the first metaphysician to come out and defend that everything is water. [...] Water is the most fundamental of all things. [...] Our ontology contains only water. It nicely goes with a process metaphysics. It supports our intuitive judgment that water is an especially important liquid. It is perfectly understandable: I mean it in Thales’ sense! Maybe it even gives rise to the final explanation of why time flows. And the next one will defend *priority aeroism*: the view that everything is ultimately air. (The final explanation of why time flies!) A new golden era, or the dark ages all over again.” (Hofweber, 2009a, pp. 273-274)

The concern is that esoteric metaphysics “appeals to those [...] who deep down hold that philosophy is the queen of the sciences after all” (Hofweber, 2009a, p. 273), and who wish

³ What follows is not intended to imply any claim about what Hofweber’s own stance on the A/B debate is. One relevant fact may be that he classifies ‘Is change possible?’ as egalitarian (Hofweber, 2009a, p. 266); another may be that he doesn’t think there is a metaphysical problem of change (Hofweber, 2009b).

to secure for their metaphysical projects some degree of autonomy from relevant sciences. There are clear affinities here with Callender's charge that by focusing on such questions as which times *exist*, "philosophy of time hit upon the perfect response" to the "attack of indifference" it increasingly faced from both physics and psychology, and thereby "bought itself *permanent immunity* from the threats of science" (Callender, 2017, p. 296).

Prima facie, Hofweber's definition of egalitarian metaphysics as answering questions couched in everyday terms may seem to put debates about the question of whether time passes firmly on the egalitarian side. After all, spatial metaphors for time, including ones about temporal movement, are used in many languages. Not only are these metaphors widely used, but they are widely used in a way that suggests a close connection with what it feels like to live life as a temporal being. If I speak of a deadline approaching, or of the moments trickling by, I am in each case describing a familiar aspect of living. One might think the connection to ordinary usage is thus very straightforward. Metaphysics is interested in the nature of reality. Experience often puts us in touch with aspects of reality. Therefore, metaphysicians interested in the nature of time ask questions about time and temporal experience couched in these spatial flow metaphors: does time really pass or flow? Do we really experience time as passing, and in what sense, and if so, is that reason to think it really flows? And so on. Where's the esotericism in that?

Alas, the esotericism is in the details. The trouble is that the intended contrast between dynamic and non-dynamic views of time cannot be formulated at the level of everyday language and thought. If the question of whether time passes was intended to be understood in the everyday sense, to mean for instance merely whether some clock has ever been observed to indicate first one time and then other, or something similar, then no one would deny that time passes, not even B-theorists.

One complication that arises at this point is that B-theorists sometimes say that they find the question about whether time really passes unintelligible, and describe themselves as B-theorists because they do not wish to deal in talk of temporal passage. Historically, this strategy is also aligned with motivations for the B-theory arising from McTaggartian arguments for the conclusion that the A-series is contradictory. But the fact remains that the kind of passage at issue, which is posited by A-theorists and denied by B-theorists, is not one that bears any straightforward relation to everyday temporal talk. Instead, what we have here is a highly theoretical contrast couched in specialized vocabulary.

Is this something to comment on from the armchair? Isn't it a job for, say, experimental philosophy of time? The latter is a field with an extremely rapidly expanding base of interesting data. Take, for instance, Andrew Latham, Kristie Miller and James Norton's result that in their target population of U.S. residents, around 70% of people were found to have an extant theory of time that more closely resembled a dynamic (A-theoretic) view than a non-dynamic (B-theoretic) one (Latham, Miller, & Norton, 2021). By "extant theory of time", they mean the theory of time that people "deploy" or use in moments of reflection, such as when asked about time in a survey. Although this study (like other similar ones) focuses most directly on the differential *endorsement* of A versus B-theoretic views by the general population, it may also be thought to bear on the prior question of whether the general population *has* views about the metaphysical nature of time. Indeed, in (Latham, Miller, & Norton, 2020), Latham et al describe the above-mentioned study as providing empirical evidence that people have a tacit theory of time, or a tacit representation of the temporal nature of the world. By a "tacit theory of time", they mean a theory that may be less determinate, and/or less complete, and/or less consistent than any philosophical

theory, but that nevertheless can be more similar to some philosophical theories (e.g. various A-theories) and less similar to others (e.g. the B-theory). Individuals may not be able to articulate their theories of time fully, but the theories are there, in nascent and under-specified form.

If all that is meant by this is that people are in fact disposed to respond to these surveys in the ways reported, then that's clearly true, and interesting in its own right. What appears to be happening is that people are being prompted to do some temporal metaphysics in these surveys. After all, the vignettes could be drawn directly from an introductory metaphysics textbook ("In Universe C, past objects no longer exist, and future ones do not yet exist"). However, one upshot of this is that contrary to what one might have thought, it's not clear how these studies could provide evidence as to whether or not the questions being posed are esoteric. The experimenters are couching them in the same terms that metaphysicians generally couch them in. Therefore, whether these are everyday terms, or what their relation to similar looking everyday terms is, is unlikely to emerge from these kinds of experiments.

In fact, often an assumption is made at the outset about that relation. Again, this is understandable, since it is common practice in the metaphysical literature. For example, in (Latham et al., 2020, p. 4), the authors note that "someone's agreement that things seem to be as described by a range of moving time expressions partially constitutes them reporting having a phenomenology as of passage", and vice versa. In other words, agreeing to statements like "it feels like I'm moving through time", or "it feels like the future is moving towards me" is stipulated to be part of what it is to report having an experience as of passage in the A-theoretic, metaphysical sense. This is to equate the meaning of moving time/ego metaphors with A-theoretic content, and thus to assume that everyday statements like "my birthday is approaching" are A-theoretic statements. To be fair, the authors explicitly refrain from this step in the case of the ordinary statement that time passes, but only because they take it to be *neutral* between A- and B-theoretic models (since it may mean no more than that it is now later than before). This too is to view the ordinary statement in exactly the same light as the metaphysical statement that time passes, which requires supplementing with "really" or "fundamentally" (or "in the A-theoretic sense") for just this reason.

Of course, these kinds of studies do, amongst many other things, demonstrate that the idea of time's really passing, of its undergoing a continuous *sui generis* change, and the opposing idea of a non-dynamic block universe, are highly imaginatively accessible. But while the images inspire the metaphysics, the two are not identical. Much technical machinery is needed to formulate positions in the intended ways. Key notions (e.g. "tensed", "tenseless", "complete description", "existence", "temporal location", "presentness", "true simpliciter") have to be given precise characterizations before any evaluation of views can be attempted, and there are legitimate questions even over these starting points.

Thus, just as Hofweber's passing reference implies, the A/B contrast is indeed esoteric. Any sober lessons to be drawn from esotericism have to be faced in this case just as much as in the case of grounding. I return to the question of which lessons these might be in Section 5.

4 Grounding and time

So far, I've asked whether central reasons to be critical of grounding also apply to the A/B contrast. Recall that the motivation to ask this arose partly from the recognition that both critiques can be motivated by appeal to a similar, broadly naturalistic stance. Now, one might wonder not only whether corresponding objections apply in each case, but also whether the critiques are related in some way. Specifically, if the A/B contrast is esoteric because it is about whether time passes *fundamentally*, then is its esoteric nature perhaps at least partly due to grounding's esoteric nature, and due to the notion of grounding in fact playing a central role in drawing the A/B contrast? Does it play such a role, and if so, does it need to? What is the relation between grounding and the A/B debate anyway?

Note that the question is not where and how grounding-related issues typically arise in the *adjudication* between A- and B-theories, such as with regard to presentism's much discussed problem with grounding truths about non-existent times. Rather, the question is whether and to what extent grounding and related notions are among the metametaphysical tools needed to draw the A/B contrast in the first place, by allowing one to define what the 'dynamic aspect that space lacks' might be and how time might have or lack it. The question is non-trivial because both the notion of grounding and (perhaps to a lesser extent) the formulation of the A/B contrast have evolved, and also because one's view of the relation between the topics depends on how one sees grounding's ability to subsume other metametaphysical tools.

Take, for instance, traditional formulations of the A/B issue. Start with Richard Gale's, which is still close to McTaggart's own. Gale describes the B-theory as the static view of time that excludes temporal becoming. (He takes this view to originate with B. Russell and to be endorsed by R. B. Braithwaite, C. J. Ducasse, A. Grünbaum, A. J. Ayer, W. V. Quine, N. Goodman, D. C. Williams, J. J. C. Smart, and R. D. Bradley.) According to Gale, the B-theory is based on the following tenet. The A-series of events, which runs from the past to the future, is reducible to the B-series of events, which runs from earlier to later, because A-determinations (past, present, future) can be analyzed in terms of B-relations (earlier than, later than) (Gale, 1967, p. 70). The central metaphysical notion here is that of reduction. One thing Gale means by this is linguistic reduction, or translatability of A-statements or tensed statements into B-statements or tenseless ones, without loss of meaning. Now, this particular translatability ambition ('old B-theory') fell out of favor with B-theorists. It gave way to the view that while tense is an ineliminable part of language, the truth-conditions of tensed bits of language are all tenseless ('new B-theory'). This was defended, for example, by (Smart, 1980), (Mellor, 1981), (Oaklander & Smith, 1994), and (Dyke, 2002). On this way of thinking, the central metaphysical notion demarcating the A/B contrast is that of tensed versus tenseless truth-conditions.

For some B-theorists, this issue then evolved into a question about tensed versus tenseless truthmakers. Thus, Hugh Mellor in *Real Time II* asks: "That is the question: are A-beliefs made true by A-facts, as A-theorists believe, or by B-facts, as we B-theorists believe?" (Mellor, 1998, p. 23) If there are changing A-facts, then time really passes; if there are only B-facts, it does not.

One idea that forms no part of any of these formulations, but which is often associated with the notion of grounding, is that of reality being stratified into levels or in some other way hierarchical. Of course, whether grounding is ultimately implicated in these formulations depends on whether grounding should be taken to subsume the

metametaphysical tools they rely on. For instance, some have argued that truth-making is in fact best understood as a species of grounding. Gonzalo Rodriguez-Pereyra argues that “the insight behind the idea of truthmakers is that truth is grounded” ((Rodriguez-Pereyra, 2005, p. 21); see also (Schnieder, 2006), (Correia, 2011)). However, this species of grounding involves a relation between truthbearers, such as propositions, and worldly items, such as facts, rather than a relation between worldly items on different levels of reality. This means that even if these authors are right and truthmaking is a species of grounding, a formulation of the A/B contrast such as Mellor’s would still not require the idea of a stratified temporal reality. (I’m grateful to one of the editors for this point.)

Other traditional formulations of the A/B contrast do rely on the idea of reality being stratified or layered but make sense of this layering in terms of metametaphysical notions that predate grounding. For example, Michael Tooley takes traditional A-theories to claim that tenseless facts are “logically supervenient” on tensed ones rather than vice versa (Tooley, 2000). Here, what’s at issue is not merely a relation between truth-bearers or beliefs on the one hand and worldly items on the other hand, but a hierarchical relation between different kinds of facts. Yet grounding does not seem to be needed to make sense of that relation.

Why then might one think that grounding plays a role in the A/B debate? Recall Hofweber’s critique, in which he targets Fine’s distinction between ‘metaphysical’, as opposed to ‘mere’ or ‘apparent’ reality (Hofweber, 2009a). Fine takes this distinction to be central to many metaphysical disputes, including this one. In (Fine, 2005) and (Fine, 2006), he uses the distinction to offer his own reconstruction of McTaggart’s argument, which in turn underlies a fairly widely used classification of A-theoretic views into standard and non-standard, where one example of the latter is fragmentalism (roughly, the view that temporal reality is irredeemably incoherent). There is now a flourishing literature on fragmentalism and its promise as a solution to well-known physics-based and metaphysics-based problems facing the A-theory.⁴

Thus, Fine’s reconstruction and the accompanying classification of A-theoretic views has considerably influenced and widened the metaphysical landscape of positions on time. But it does not follow that grounding and Fine’s particular metametaphysical methodology is itself central to the debate. And there are reasons to think otherwise.

One obvious reason is the plurality of (both A- and B-theoretic) positions that do not rely on the Finean classification. But another is that even Fine’s reconstruction of McTaggart can be interpreted in ways that do not require his particular metametaphysical outlook. The reconstruction relies on the notion of a tensed fact, which the A-theorist will take to constitute temporal reality and the B-theorist will not take to constitute temporal reality. And while this may sound very Finean, the notion of temporal reality in play need not be Fine’s primitive concept of metaphysical reality i.e. reality as it is in itself, to be indicated by a primitive sentential operator (“in reality, it is the case that...”), and the question of what ground what need not be central to adjudicating between the resulting positions. Rather, all that is needed is the notion of a tensed fact that consists of more than just a tensed belief’s being true at a time, since all parties take some tensed beliefs to be true at times. The distinction between tensed versus tenseless truthmakers, and the notion of A-facts in Mellor’s sense for example already offered this. The principles Fine formulates on behalf of

⁴ See e.g. (Lipman, 2015), (Lipman, 2016), (Hofweber & Lange, 2017), (De Florio & Frigerio, 2018), (Torrengo & Iaquinto, 2019), (Iaquinto, 2019), (Iaquinto, 2020), (Torrengo & Iaquinto, 2020), (Lipman, 2020), (Iaquinto & Calosi, 2021), (Zhan, 2021), (Merlo, 2022), (Iaquinto & Torrengo, 2022).

McTaggart (Neutrality: the tensed facts are not oriented towards one time in particular, Absolutism: the constitution of reality is not relative to a time, and Coherence: reality is not irredeemably incoherent) can then be interpreted accordingly. Relatedly, there are defenses of fragmentalism (the A-theoretic position that results from the rejection of Coherence) that explicitly repudiate Fine's metaphysical framework (Lipman, 2018).

Overall then, there traditionally have been and still are ways of drawing the A/B contrast that do not, on the face of it, rely on the notion of grounding. If all these implicitly rely on grounding it should be possible to show that the alternative metaphysical tools they rely on are themselves best thought of as species of grounding. Even then, the question would remain whether these particular species of grounding are ones that involve the characteristic idea of a stratified or layered temporal reality. Thus, although both the A/B contrast and the notion of grounding belong to esoteric metaphysics, the esotericism of the former does not seem to have its root cause in the esotericism of the latter.

5 The challenge of esotericism

Of course, that not only leaves open but strongly suggests the possibility that the esoteric natures of 'what grounds what?' and 'does time really pass?' have a common cause, which quite simply lies in the fact that they are both the sorts of questions that tempt one to use specialized metaphysical vocabulary. Thus, the straightforward follow up question alluded to at the end of Section 3 arises equally in both cases: should anyone research these questions? If not, how should the relevant parts of metaphysics and philosophy be re-conceived?

It's fairly easy to get a sense of the kinds of undesirable consequences Hofweber (along with others) suspects esoteric metaphysics of having. It's not just that he thinks it runs roughshod over scientific advances and clings to outdated answers; it's that he thinks it myopically restricts itself to questions that are irrelevant to all but its own practitioners. As mentioned in Section 2, in the case of grounding there inevitably are whole philosophical projects, such as those concerned with the logic of grounding, whose legitimacy is thereby put into question. Admittedly, certain forms of naturalism see potential value in purely metaphysical projects even though these projects' use to philosophy of science and to science is not yet clear, because further down the line of scientific enquiry, they may, much like mathematical tools, become useful in those areas. Sometimes this may happen even with metaphysical projects for which such a development is hard to foresee in advance. However, in the case of metaphysical grounding, there does seem to be a real danger that the question ('what grounds what?') does not arise from within science or philosophy of science, but is rather generated from a place of starkly free-floating metaphysical enquiry. When Fine says that ground stands to philosophy as cause stands to science (Fine, 2012), he is effectively claiming a degree of autonomy to philosophy (and analytic metaphysics) that is bound to continually raise the threat of irrelevance.

This problem is just as serious in the case of the A/B debate, and a full articulation of how I think philosophy of time should respond to it goes beyond the scope of this paper. However, in the remainder of this section I want to outline the contours of the problem as I see it, and the directions in which I take promising solutions to lie.

Section 3 argued that the A/B contrast highly theoretical, and that that makes it part of esoteric rather than egalitarian metaphysics. At the same time, it is undeniable (as also

stated in Section 3) that the contrast, in all its various more specific, evolving formulations, is inspired by images that are highly imaginatively accessible and closely connected to both temporal talk and temporal experience. This is a peculiar state of affairs. It is arguably so peculiar that no straightforwardly partisan metametaphysical stance ('it's merely verbal!', 'no it isn't!') constitutes an adequate response. There was and still is good reason to have this metametaphysical debate (see e.g. the references in (Deasy, 2019)), but not because one side is clearly right. Rather, the reason to continue wondering what, if anything, is at stake (Deng, 2018), whether a position like presentism even exists as a unified position (Tallant & Ingram, 2021), and so on, is that the images behind the contrast are hard to side step, both in life and in scientific enquiry into time and temporal experience. This means that even naturalistically inclined philosophers of time need a response to the A/B opposition, and recognizing its esotericism is only a first step.

These claims require more support than I can provide in this paper; but here are three brief illustrations. First, consider again the stance that allies itself with the B-theory but also claims that the notion of (robust, A-theoretic) temporal passage is unintelligible. As mentioned in Section 3, this combination of attitudes has been fairly common partly through the association with McTaggartian arguments against the inconsistency of the A-series. It can also seem to have common sense on its side: if I have no idea what robust, A-theoretic passage is supposed to be, then that makes me a B-theorist, right? Albeit perhaps a B-theorist who doesn't care much about the A versus B debate? But this stance fails to recognize the metaphysically laden nature of the B-theory itself, which relies on just the same ideology as does the A-theory. The B-theory posits a temporal reality that does not contain temporal passage, in the same sense in which the A-theory posits such a process. This means that a properly deflationist view of the A/B debate is not as easy to come by as it may seem, especially if one also wants to be able to pose and address questions about the relation between time and temporal experience.

The second illustration follows on from the first. Consider again the naturalistic vision for philosophy of time offered in (Callender, 2017). As mentioned, the book is explicitly designed to outline a methodology for philosophy of time that allows it to "move past the ABCs", eschewing metaphysical machinery and accompanying questions about A-properties, tensed facts, the (non-)existence of other times, etc. Yet, even there, the As and Bs linger. Callender's project is to bridge the explanatory gap between "manifest time", our pre-theoretical understanding of time, and "scientific time", the understanding of time that science, especially physics, delivers. But the explananda he focuses on are paradigmatic A-theoretic features of manifest time, such as our sense of the future as open, of the present as special, and of time as flowing. And the explanatory need arises precisely because of the features B-time shares with physical time, namely that it includes none of these things. Arguably, the underlying problem here is again this tendency to conflate endorsing the B-theory and rejecting the A versus B debate.

As a third illustration, consider again the Tenseless Passage approach, which seeks to locate dynamicity within the B-theory (see Section 2). This is an importantly different, but in many of its versions also broadly naturalistic approach to questions about time and temporal experience. Arguably, TP tackles these questions at the right level, solving problems about temporal experience where they exist and dissolving them where they don't. In order to do this, TP needs to have a principled way of making sense of its central slogan, namely that there is dynamicity within the block universe: dynamicity in what sense? A proper response to this question requires awareness of the ways in which TP attempts to

shift rather than contribute to the first-order A versus B debate. It needs a metametaphysical dimension.

In short, the challenge created by the legitimate charge of esotericism is very much worthy of the attention of metaphysicians engaged in discussions of either grounding or temporal metaphysics. In the latter case, attending to the challenge is essential for moving philosophy of time in fruitful directions, even and perhaps especially by the lights of naturalistic philosophers interested in time.

6 Conclusion

I've compared and contrasted the notion of grounding with the divide between dynamic and non-dynamic (A- and B-theoretic) models of time, in order to see whether there are similarities between naturalistically motivated and other critiques of these two topics. I suggested that the non-unity objection has more bite in the case of grounding, not because non-unity objections cannot legitimately be raised about the A/B divide, but because unification plays a less central role there. I then sympathetically discussed the objection that grounding, especially understood as a primitive notion, is unintelligible to all but a few esoteric metaphysicians, and asked whether this charge carries over to the A/B contrast. I suggested that here the analogy is closer, because even though spatial flow metaphors for time are ubiquitous in many languages, there is a considerable theoretical distance between these ways of speaking on the one hand, and the A/B contrast on the other hand. I then asked whether the esoteric natures of grounding and that of the A/B contrast are perhaps even directly related, in that the former is largely responsible for the latter; this I answered in the negative. Grounding can, but need not, be utilized to formulate the A/B contrast. Finally, I commented on why esotericism is cause for concern in both cases, and sketched some directions in which philosophy of time might profitably look for a response to the challenge.⁵

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⁵ I'd like to thank the editors for very helpful feedback on an earlier draft.

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