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MORE TEMPORAL PROPERTIES, MORE TEMPORAL PROBLEMS: A REPLY TO MONTMINY AND RUSSO

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ABSTRACT

In a recent article, Montminy and Russo (M&R) (2024) defend a perdurantist solution to *forward-* and *backward-looking* cases of Johnston's Personite Problem (2016, 2017),[1] specifically addressing the issue of compensation for *personites*—non-maximal fusions of R-interrelated person-stages that overlap with a perduring person, the maximal fusion of those stages—by appealing to a revised understanding of temporal properties within a perdurantist framework. In this paper we address an overlooked problem with M&R's account:[2] when applied consistently, it yields a counterintuitive grounding overdetermination (*overgrounding*) of temporal properties. The problem becomes especially vivid in fission scenarios that are followed by fusion.

Keywords: perdurantism; personites; compensation; temporal properties; overgrounding.

[1] See Kovacs (2022) for this classification.
[2] Noonan (2025) has presented a different challenge to M&R's account of temporal properties, arguing that coincident animal fusions related by the animal unity relation—which differs from the psychological continuity relation (the R-relation) assumed by M&R and most perdurantists—would still not be compensated. However, he does not address the problem with M&R's account that we are going to discuss.

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1. Temporal Properties in a Perdurantist Setting: Montminy & Russo's Account

Andrew Montminy and Martin Russo's (M&R, 2024) focus on Johnston's Budapest case as an illustration of the Personite Problem.[3] Mark, a perduring person prudentially chooses to self-sacrifice by enrolling in a Hungarian language course in preparation for an upcoming trip to Budapest. His goal is to fully immerse himself in the experience by mastering the language. The learning process is arduous and demanding, but after completing the course, Mark achieves fluency. When he eventually visits Budapest, he is rewarded for his effort by thoroughly enjoying the trip and engaging meaningfully with the locals in their language (Johnston 2016, 212; 2017, 7-8).

In a perdurantist framework,[4] many personites overlap with Mark throughout the entire process. However, some overlap with him only during the language course, sharing in the hardship of learning without enjoying the subsequent reward. Conversely, others overlap only during the trip, benefiting from speaking Hungarian without having contributed to the effort of learning it. So, one might ask whether personites that do not exist by the time Mark is in Budapest could still be compensated, and whether those that do not exist during the language course could still be said to have contributed.

M&R argue that this may be addressed by reflecting on how *time-indexed properties* are instantiated in Perdurantism. Standardly, person-stages instantiate properties *simpliciter* at the times they exist, and the continuant that includes them instantiates corresponding time-indexed properties. For example, Mark's person-stage existing at time *t*, when he is in Budapest, speaks Hungarian *simpliciter*; as a result, Mark instantiates the property of speaking-Hungarian-at-*t*, grounded in the stage's property (M&R 2024, 682-4; see also Hawley 2002, 37-40, and Tullio 2026, 7, n. 12).

What M&R emphasize is that this should also hold for personites of Mark that include the relevant stage—but also, as we will shortly see, for those

[3] See also Zimmerman (2003), Olson (2010) and Taylor (2013) who each independently raised concerns similar to Johnston's.

[4] See Lewis (1983) for a classic presentation of Perdurantism, and, *inter alia*, Russo (2022), Tullio and Soriani (2024), and Soriani (2026)—which also deals with the Personite Problem for Perdurantism—for more recent assessments.

personites that are merely R-related (psychologically continuous)[5] to that stage, even if they do not include it and cease to exist before Mark arrives in Budapest or come into existence only afterward. In this view, the first kind of personites (those ending before *t*) have the time-indexed property of *futurely-speaking-Hungarian*, grounded in the R-related stage that speaks Hungarian *simpliciter*; the second kind (those beginning after *t*) have the time-indexed property of *previously-speaking-Hungarian*, grounded in the same way (2024, 683-4).

To further clarify, and following M&R, we distinguish among time-indexed properties by referring to those directed toward times other than the present as *temporal properties*—a subset of time-indexed properties that are not present-directed but either future- or past-directed (2024, 681-4).

M&R's favorite option for accounting for temporal properties (2024, 682-3) is claiming that temporal properties obtain in virtue of a counterpart relation holding between the R-related stages of a continuant—which may be either maximal (a person) or non-maximal (a personite)—where the R-relation (psychological continuity) grounds personal identity over time. These stages, by being counterpart-related, can then be said to instantiate the relevant temporal properties. For example, a stage that is counterpart-related to a numerically distinct future stage that speaks Hungarian simpliciter may itself instantiate the temporal property of futurely-speaking-Hungarian *simpliciter*.

This approach is a perdurantist adaptation of the predication framework first developed by Sider (1996, 443-6; 2001, 200-1), and endorsed by stage-theorists, as M&R themselves note. The perdurantist can employ this framework because it shares the same ontological commitments as the Stage Theory.

Once it is granted that stages can instantiate temporal properties simpliciter in virtue of counterpart relations, the perdurantist can maintain that continuants also instantiate these properties derivatively, in accordance with the following principle:

[5] "R" denotes the *psychological continuity* relation between person-stages that perdurantists standardly invoke in articulating persistence conditions (roughly: the relation generated by overlapping chains of *psychological connectedness*, viz. appropriate links of memory, character, intention, and other psychological connections, see Parfit 1984). Later in the paper (§3), Rψ denotes a stronger relation: psychological continuity plus sufficiently strong psychological connectedness.

> **Temporal Counterparts**: A continuant W is futurely-G-at-t [previously-G-at-t] iff W has a stage at t which is futurely-G [previously-G] simpliciter in virtue of being counterpart related to a future [previous] stage, not included in W, which is G simpliciter.

As mentioned above, the term *continuant* can refer to either a person or a personite. A personite, relative to a given time, can instantiate a temporal property such as *futurely-speaks-Hungarian* or *previously-studying-Hungarian* (the principle is designed to accommodate both future- and past-directed properties).

Crucially, in this context, the counterpart relation is grounded in the R-relation that underwrites personal persistence. This ensures that a personite can instantiate temporal properties ultimately grounded in those of stages that (i) are not part of the personite itself and (ii) are counterpart-related to the stages it does include.

In this framework, person-stages can instantiate temporal properties *simpliciter*. Accordingly, the continuant instantiates the corresponding property in virtue of both the included stage and its counterpart stage that instantiates the relevant present-directed property *simpliciter*.

M&R emphasize that this is particularly significant for personites, which can thereby instantiate temporal properties such as *previously* or *futurely-being-compensated*, even if the compensation occurs outside their temporal span. The grounding comes from a stage not included in the personite, but R-related to one that is, which is itself compensated *simpliciter*. According to M&R, this framework offers the perdurantist a promising response to worries about personite compensation (2024, 683-5).

However, as we will show, Temporal Counterparts gives rise to untenable consequences when applied to variations of the standard fission scenario (Lewis 1983) that also involve fusion. Far from defusing the Personite Problem, M&R's account ultimately reinforce Johnston's original challenge.

2. Fission + Fusion = Overgrounding

To demonstrate that their account can also accommodate fission cases, M&R examine a variation of Johnston's Budapest scenario in which Mark, the perduring person, undergoes fission before his trip: the fission product

corresponding to the left branch, MarkL, travels to Budapest, while the one corresponding to the right branch, MarkR, does not.

To secure the desired result regarding compensation—namely, that only MarkL and his personites are compensated, while MarkR and his personites are not—M&R introduce a second condition to what we have dubbed as the Temporal Counterparts principle. In addition to (a) having a stage at *t* that futurely [or previously] receives compensation *simpliciter* due to the existence of an R-related later [or earlier] stage *S'* at *t'* that is compensated, condition (b) requires that *S'* be R-related to all of *W*'s stages:

> **Temporal Counterparts Revised**: A continuant W is futurely-G-at-t [previously-G-at-t] iff W has a stage at t which is futurely-G [previously-G] simpliciter in virtue of being counterpart-related to a later [previous] stage, not included in W, which is G simpliciter and R-related to all of W's other stages. (M&R 2024, 686)

Consider Mark-now, Mark's pre-fission stage at t_0. This stage is shared by both MarkL and MarkR. According to Temporal Counterparts Revised, MarkR does not futurely-receive-compensation-at-t_0. The reason is not merely that MarkL's and MarkR's post-fission stages fail to be R-related; rather, the decisive point is that none of the compensated Budapest-stages on the MarkL branch can serve as a ground for MarkR's future-directed compensation property, since no such compensated stage is R-related to all of MarkR's stages, as required by condition (b). Thus, although Mark-now may instantiate the temporal property of futurely-receiving-compensation simpliciter (in virtue of its relation to compensated stages), MarkR cannot inherit the corresponding property futurely-receiving-compensation-at-t_0 under the revised principle.

Temporal Counterparts Revised also delivers the correct result for personites existing pre-fission—specifically, those personites of Mark that exist before or up to Mark-now—since all of their stages are R-related to MarkL's stages, allowing them to instantiate the temporal property of futurely-receiving-compensation. In M&R's words:

> Given condition (b), it is not the case that MarkR futurely-receives-compensation-at-t_0. This is because no post-fission stage of MarkL that receives compensation is R-related to all of MarkR's stages. (*Keep in mind that MarkL's and MarkR's post-fission stages are not R-related to one another*.) By contrast, each of the post-fission stages of MarkL that receives

> compensation is R-related to all of MarkL's stages. We can thus truly say that MarkL will-receive-compensation-at-t_0. (*We lack the space to discuss fusion but recommend a similar treatment*). The same conditions (a) and (b) hold if P is a personite rather than a person. (M&R 2024, 686, emphasis ours).

However, it is precisely when fusion enters the picture that Temporal Counterparts Revised yields troubling consequences. Consider the same fission case as before, with one key addition: after MarkL goes to Budapest and is compensated, while MarkR stays home and is not, the two branches fuse back into a single continuant, Mark2. Mark2 has post-fusion stages that bear the R-relation to stages on both branches.

According to Temporal Counterparts Revised, Mark2 has the property of previously-receiving-compensation-at-t_2 because its post-fusion stage, Mark2-at-t_2, located at t_2, is counterpart-related to MarkL's compensated stages in Budapest, and the relevant compensated stage(s) that do the grounding work satisfy condition (b) for Mark2 (i.e., they are R-related to all of Mark2's stages). Now, if we assume a standard unrestricted reading of R as psychological continuity, then it is natural to take R to be symmetric and transitive across the fusion node. MarkR's stages are R-related to Mark2's post-fusion stages, and those post-fusion stages are R-related to MarkL's compensated stages in Budapest; so, by transitivity, MarkR's stages come out R-related to those compensated stages as well, making it at least prima facie available to M&R to allow MarkR to instantiate the property of futurely-receiving-compensation-at-t_0.

Allowing MarkR to acquire the future-directed temporal property in virtue of the fact that it later fuses with MarkL in Mark2 may be a welcome result, and it can be made coherent within M&R's framework. The real worry, in our opinion, is that the framework also appears to generate multiple independent grounds for one and the same morally loaded temporal property, thereby pressuring us to count certain moral events more than once. In particular, Mark2's having previously-receiving-compensation-at-t_2 can be grounded in (at least) two distinct ways: first, directly via Mark2-at-t_2's counterpart connection to MarkL's compensated stages in Budapest; and second, indirectly via Mark2's R-relations to MarkR's stages together with the transitive "bridge" that connects MarkR back to those very compensated stages. If grounds are not automatically collapsed, this yields a kind of double-grounding—and hence overgrounding—of a single morally salient claim: that Mark2, as well as the personites overlapping at t_2, are previously-receiving-compensation-at-t_2.

Consider also punishment, in a structurally parallel case. Suppose that, prior to fission, Mark commits a crime and is sentenced to five years in prison, but after fission only MarkL serves the sentence while MarkR does not. When fusion later occurs, the resulting continuant Mark2 has stages R-related to both branches. According to Temporal Counterparts Revised, Mark2 has the temporal property of previously-having-served-five-years because its post-fusion stage, Mark2-at-t_2, is appropriately related (via the counterpart machinery) to MarkL's punished stages, and the relevant punished stage(s) satisfy condition (b) for Mark2. Under the same unrestricted reading of R, MarkR's stages are R-related to Mark2's post-fusion stages, and those post-fusion stages are R-related to MarkL's punished stages; so, by transitivity, MarkR's stages come out R-related to the punished stages as well, making it prima facie available to M&R to allow MarkR to instantiate the future-directed property of futurely-having-served-five-years-at-t_0 (and related punishment-directed temporal properties). But, again, the deeper worry is that Mark2's post-fusion past-directed punishment property can be grounded in two ways: directly via its counterpart connection to MarkL's punished stages, and indirectly via its R-relations to MarkR's stages together with the transitive "bridge" that connects MarkR back to those punished stages.

If those are genuinely distinct grounds in the intended metaphysical sense, then M&R face a familiar pressure point: either (i) the theory must supply a principled rule for collapsing distinct grounds into a single punishment fact, or else (ii) their framework will treat Mark2 (and personites overlapping it at t_2) as bearing, in effect, two punishment-histories (that is, two instances of the relevant past-directed punishment property), even though only one branch was punished. That is precisely the kind of overgrounding—and the associated risk of overcounting—that seems unacceptable given the normative roles that compensation and punishment are meant to play.[6]

3. A Possible Way Out? The Rψ-Relation

A possible move on behalf of M&R would be to employ a relation stronger than R (psychological continuity) for the purposes of Temporal Counterparts

[6] See Bliss (2023) for a detailed discussion of grounding overdetermination. Bliss's central focus is on cases in which a single fact is fully grounded in more than one way, and on how the phenomenon depends on how we precisify what it is for full grounds to be distinct. By contrast, the present discussion is concerned with whether M&R's framework yields multiple independent grounding routes for morally loaded temporal properties related to compensation/punishment.

Revised.[7] In particular, following the standard Parfitian distinction between psychological continuity and psychological connectedness—and the idea that what matters for survival may involve both—one might introduce a restricted relation Rψ, understood as psychological continuity plus sufficiently strong psychological connectedness.[8] The motivating thought is that mere "bridging" via a post-fusion stage should not automatically transmit the relevant relation across previously independent branches unless there is robust connectedness of the right sort, not merely continuity in the sense of being linked by some (psychological) chain. This suggests reformulating M&R's principle as follows:

> **Temporal Counterparts Revised (Rψ-version)**: A continuant W is futurely-G-at-t [previously-G-at-t] iff W has a stage at t which is futurely-G [previously-G] simpliciter in virtue of being counterpart-related to a later [previous] stage, not included in W, which is G simpliciter and Rψ-related to all of W's other stages.

On this restriction, the two-branch overgrounding described above is blocked. Mark2 and the overlapping personites at t_2 may still inherit the morally loaded temporal property (e.g., previously-receiving-compensation-at-t_2) via the compensated MarkL branch: the relevant compensated Budapest stage(s) on MarkL can serve as the ground because, given the post-fusion psychological profile, those stage(s) are Rψ-related to Mark2's post-fusion stage(s), and thus can satisfy condition (b) for Mark2. By contrast, Mark2 does not also inherit the very same property via an additional route that runs through MarkR. For that MarkR-mediated route to work, the same MarkL grounding stage(s) would have to become Rψ-related to MarkR's pre-fusion stages by way of the post-fusion "bridge"; but on the intended restriction there is no sufficiently strong connectedness between stages on distinct branches (at least prior to fusion), so the MarkR-mediated route is not licensed by condition (b). Thus, the strengthened requirement preserves the direct MarkL grounding while blocking the extra MarkR "bridge" grounding, thereby preventing overgrounding.

[7] This is offered only as an option on M&R's behalf, not as a modification we endorse.

[8] Belzer (2005) helpfully reconstructs Parfit's distinction between psychological continuity and psychological connectedness by treating strong connectedness as connectedness that exceeds a threshold: two stages are strongly connected iff there are "enough" direct psychological links (memory, intention, continuity of belief/desire, etc.) between them, where the "degree" of connectedness depends on the number and significance of such links and "enough" is fixed by some (inevitably somewhat arbitrary) cutoff. Because connectedness is scalar, any threshold for "sufficient strength" generates borderline cases, and Belzer stresses that Parfit's own illustrative proposal (e.g., "at least half" (1984, 206) the connections of a normal day) is best read as schematic rather than as a principled metric.

However, this move comes at a cost. First, it shifts the burden onto M&R to explain why the temporal-counterpart machinery should be keyed to Rψ—psychological continuity plus *strong* connectedness—rather than to the weaker R—psychological continuity—that is doing the central persistence work in their framework. Without such an explanation, the proposal risks looking like a mere patch: temporal properties are inherited by continuity when that yields the desired compensation verdicts, but inheritance is silently tightened to strong connectedness exactly when fusion threatens to generate the unwanted "bridge" results. Second, once Rψ is put into condition (b), one needs an independently motivated account of where the "strong connectedness" threshold is set and why it is normatively relevant to compensation and punishment; otherwise the restriction looks methodologically ad hoc, chosen to screen off the fusion counterexamples rather than to track any antecedently plausible constraint on temporal-property ascription.

More concretely: if R is strong enough to block cross-branch transmission in fission–fusion cases, it may also block—or at least complicate—precisely the forward- and backward-looking compensation and punishment attributions that motivated M&R's original appeal to Temporal Counterparts Revised. This is especially pressing for short-lived personites whose relation to the compensated or punished stage is plausibly continuous but not strongly connected.

Consider those personites that exist only during the Hungarian course: they are R-related but not Rψ-related to the compensated stages on the Mark-L branch, since by the time of the Budapest trip the direct psychological links back to their brief, course-bound mental life are few, weakened, or absent—the connection running mainly through long chains of intermediaries. A globally Rψ-based framework would therefore deny these personites the temporal property of futurely-receiving-compensation—precisely the result M&R's account was designed to avoid. The switch to Rψ thus cannot be made across the board: it resolves the overgrounding problem only at the cost of reinstating the original compensation problem for short-lived personites.[9]

[9] Consider a short-lived "course-only" personite P of Mark that exists only during the Hungarian course from t_0 up to (but not beyond) the fission time t_1 and then ceases to exist. After fission, only MarkL goes to Budapest and is compensated at t_B (enjoys the trip thanks to the fluency gained during the course), while MarkR is not; later the branches fuse into Mark2 at t_2. In such a case there is a perfectly good psychological-continuity chain (R) from P's last pre-fission stage to MarkL's compensated Budapest stage—via the usual overlapping chain of memories, intentions, and character links from pre-fission Mark into the MarkL branch and onwards—so P is plausibly R-related to the compensated stage. But

Conversely, if Rψ is weakened so as not to disrupt those intended applications, it may no longer block the fusion "bridge" phenomena. The upshot is that adopting Rψ threatens to trade one problem, overgrounding, for either (i) a loss of generality in the original solution, or (ii) an unattractive sensitivity of the account's verdicts to finely tuned, independently unmotivated choices about connectedness thresholds.

To recap, we do not claim that it is impossible in principle for M&R to supply a normative constraint linked to Rψ. It is conceivable that a positive account could be developed that both grounds the threshold for strong connectedness in something normatively significant—for instance, a theory of what degree of psychological integration is required for compensation and punishment to be fair—and calibrates that threshold carefully enough to satisfy the competing demands we have identified. However, we do claim that satisfying all three of the following constraints simultaneously is very difficult to see how to achieve: (i) the threshold must be high enough to block the fusion-bridge overgrounding; (ii) it must be low enough to preserve temporal property ascription for short-lived personites, thereby retaining the original solution's generality; and (iii) it must be independently motivated from antecedent normative considerations, not post-hoc chosen to screen off counterexamples.

Constraints (i) and (ii) are in direct tension, and the fact that any threshold for strong connectedness is inevitably somewhat arbitrary (see n. 8) suggests that constraint (iii) poses a serious additional challenge. We therefore take our objection to be stronger than a mere observation that M&R have not yet provided such an account: rather, we submit that the structural pressures on any such account are severe, and that the burden on M&R to show that the three constraints can be simultaneously satisfied is substantial.

4. Concluding Remarks

To conclude, our objection is not that Temporal Counterparts Revised has been misapplied or applied in a tendentious way. Rather, once M&R's principle is applied uniformly—especially in cases involving fusion—it systematically generates the sort of counterintuitive overgrounding that our

P is not plausibly *strongly* psychologically connected, and so not Rψ-related to that Budapest stage in the threshold sense: by the time of Budapest, most of the direct psychological links back to P's brief course-bound mental life (direct memories, continuing intentions, occurrent attitudes distinctive of the course period) may be few, weakened, or absent, with the connection running mainly through a long chain of intermediates rather than robust direct links.

examples bring into focus. As a result, perdurantists who hope to solve the forward- and backward-looking problems for personites by appeal to Temporal Counterparts Revised must either supply further, independently motivated constraints on the relevant grounding/relatedness conditions, or else pursue a different strategy altogether.

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REFERENCES

Belzer, Martin. 2005. "Self-conception and Personal Identity: Revisiting Parfit and Lewis with an Eye on the Grip of the Unity Reaction." *Social Philosophy and Policy* 22 (2): 126–64. https://doi.org/10.1017/s0265052505052064

Bliss, Ricki. 2023. "Metaphysical Overdetermination." *Philosophical Quarterly* 73 (1): 1–23. https://doi.org/10.1093/pq/pqac018.

Hawley, Katherine. 2002. *How Things Persist*. Oxford: Oxford University Press. https://doi.org/10.1093/mind/112.445.146

Johnston, Mark. 2016. "Personites, Maximality and Ontological Trash." *Philosophical Perspectives* 30 (1): 198–228. https://doi.org/10.1111/phpe.12085

Johnston, Mark. 2017. "The Personite Problem: Should Practical Reason Be Tabled?" *Noûs* 51 (3): 617–44. https://doi.org/10.1111/nous.12159

Kovacs, David M. 2022. "Self-Making and Subpeople." *Journal of Philosophy* 119: 461–88. https://doi.org/10.5840/jphil2022119932

Lewis, David K. 1983. "Survival and Identity." In *Philosophical Papers* (Vol. 1), 55–77. Oxford: Oxford University Press. https://doi.org/10.1093/0195032047.003.0005

Montminy, Martin, and Andrew Russo. 2024. "On the Moral Problems Raised by the Existence of Personites." *Mind* 133 (531): 677–95. https://doi.org/10.1093/mind/fzae033

Noonan, Harold W. 2025. "The Personite Problem Remains: Reply to Montminy and Russo." *Inquiry: An Interdisciplinary Journal of Philosophy* 68 (10): 4165–175. https://doi.org/10.1080/0020174x.2025.2495645

Olson, Eric T. 2010. "Ethics and the Generous Ontology." *Theoretical Medicine and Bioethics* 31: 259–70. https://doi.org/10.1007/s11017-010-9148-7

Parfit, David. 1984. *Reasons and Persons*. Oxford: Oxford University Press. https://doi.org/10.1093/019824908x.001.0001

Russo, Andrew. 2022. "Worm-theoretic Persistence and Temporal Predication." *Southwest Philosophy Review* 38 (1): 227–36. https://doi.org/10.5840/swphilreview202238124.

Sider, Theodore. 1996. "All the World's a Stage." *Australasian Journal of Philosophy* 74 (3): 433–53. https://doi.org/10.1080/00048409612347421

Sider, Theodore. 2001. *Four-Dimensionalism: An Ontology of Persistence and Time*. Oxford: Oxford University Press. https://doi.org/10.1093/019924443x.001.0001

Soriani, Tommaso. 2026. "Moral Contingentism, Personites and Countermoral Worlds." *Synthese* 208 (61): 1–18. https://doi.org/10.1007/s11229-026-05725-4

Taylor, Adam P. 2013. "The Frustrating Problem for Four-Dimensionalism." *Philosophical Studies* 165: 1097–115. https://doi.org/10.1007/s11098-012-0009-2

Tullio, Emanuele. 2026. "A New Argument from Presented Experience." *Thought: A Journal of Philosophy.* https://doi.org/10.5840/tht20268365

Tullio, Emanuele, and Tommaso Soriani. 2024. "The Epistemic Objection against Perdurantism." *Synthese* 204 (3): 1–20. https://doi.org/10.1007/s11229-024-04758-x

Zimmerman, Dean. 2003. "Material People." In *The Oxford Handbook of Metaphysic*s, edited by Michael J. Loux and Dean Zimmerman, 491–526. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199284221.003.0017