

Experiencing timelessness and the phenomenology of temporal flow

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Abstract: Our conscious experience seemingly involves the subjective sense or feeling of the passage of time. However, in recent years, several authors have denied that such an aspect or feature of experience can be found. If the experience of the flow of time exists, it remains elusive and intangible. My aim here is to try to pin it down. For this purpose, I will investigate acute disturbances of normal temporal experience that accompany deep meditative and psychedelic states. I will argue that these experiences of altered temporality provide phenomenal contrast cases to ordinary passage phenomenology, allowing us to establish the existence of the latter and making it amenable to theorizing.

Keywords: altered states of consciousness; eternalism/presentism; A-theory/B-theory; global states of consciousness; flow of time; psychedelics; phenomenal contrast; meditation.

Introduction

This paper centers on the idea that conscious experience involves, as part of its phenomenal character, the sense of the flow of time, of relentless movement of becoming and fading. Recently, this seemingly platitudinous claim has become an object of critical scrutiny. A number of authors have attempted to establish whether the feeling of temporal passage can be identified with or reduced to a (subset of) intentional content of conscious perception. This body of work suggests a negative conclusion. For reasons that I will discuss later, the phenomenology of temporal passage resists the attempts to reduce it to an experience of continuous qualitative change, succession, motion, or to how people perceptually track the identities of objects across time (see Torrenco 2017; for related discussions, see Balcells 2019; Braddon-Mitchell 2013; Deng 2019; Frischhut 2013; Hoerl 2014; Prosser 2016). Perhaps the experience of flow is something *sui generis*, separate from those intentional contents. If so, it remains intangible and elusive. Or maybe it is simply a mistake to think that there is such an experience in the first place.

Carefully reflecting upon my own experience, I am strongly inclined to think that it involves an admittedly elusive, dynamic aspect that constitutes the feeling of the passage of time. Of

course, my personal introspection-based convictions can only go so far as evidence. Here, I will aim to try to put a pin on the relevant experience by employing a sort of phenomenal contrast argument. That is, I will try to establish plausible phenomenal contrast cases in which (1) the ordinary experience of temporal passage is radically altered to the point of altogether disappearing; (2) the relevant contrast to ordinary experience cannot be attributed to factors that we could mistake for the experience of temporal flow (for example, it cannot be accounted for by the changes to perceptual contents related to change or motion). Let us call such contrast cases “experiences of timelessness”. Establishing the existence of such exotic experiences should indirectly demonstrate that ordinary phenomenology does involve a sense of flow. Perhaps this way, we could bring the ordinary flow phenomenology to a clearer view so that we may get on with the business of theorizing about what it is.

But how can we establish convincing cases of conscious states that lack the sense of the passage of time? Can we even comprehend what it would be like to undergo such states? I propose that plausible candidates for experiences of timelessness can be found if we extend the search space to cover territories that have been largely uncharted by analytic philosophy¹, namely non-ordinary states of consciousness of the sort induced by long-term meditation practice or ingesting psychedelic compounds.

The plan is as follows. In section 1, I summarize why the flow phenomenology resists being reduced to perceptual content and use this as a guide for further discussion. In section 2, I discuss the notion of global states of consciousness and how they can be used in phenomenal contrast arguments. Section 3 investigates experiences of timelessness associated with meditation and psychedelic use, arguing that they constitute plausible contrast cases to the ordinary experience of flow. In section 4, I sketch out how such considerations can (1) inform the debate over the source of the commonsense metaphysical beliefs about temporal passage and (2) guide hypotheses regarding the nature of the ordinary experience of flow.

1. The search for the phenomenology of temporal flow

The trickiness of the problem at hand stems from the fact that although it may seem self-evident that we experience temporal passage, the concrete nature of this experience tends to

¹ There are some early but clear signs that this state of affairs may be changing. See: (Letheby 2021; Lyon 2023; Metzinger 2024). For emerging philosophical work on non-ordinary temporal phenomenology (of the “timeless” sort, in particular), see (Frischhut 2024; Pan 2023, Ch. 3; see also Wittmann 2018).

evade our attempts to catch it introspectively and describe it. Here, I want to focus on a particular and recently influential strategy of specifying the experience of temporal flow.² Following other authors, I will call this approach “reductive” (Hoerl 2014; Torrenco 2017). The core idea is that we experience temporal passage because our conscious perception represents it or represents its intentional objects as undergoing such passage. Put differently, the experience of temporal passage constitutes a subset of the intentional content of conscious perception. Given this general assumption, the next step is to specify the relevant content, that is, content with which the experience of passage can be identified or to which it can be reduced. The natural candidates include contents related to qualitative change, motion, succession, duration or contents representing the objects of perception as persisting through change. In this section, I will summarize the main arguments that underlie the growing consensus that this content-reductive approach is a dead end. However, my overarching aim is positive. I want to treat the failure of the reductive strategy as instructive: by showing where *not* to look for passage, it can indirectly guide the search for a more plausible account.

The core problem with the reductive projects is that they seem descriptively inaccurate. In particular, they fail to pick out the relevant contents in a way that accurately distinguishes between the experiences that involve the phenomenology of passage and ones that do not (see also Torrenco 2017). If flow phenomenology is reducible to a particular kind of content, then an experience lacking this content (or appropriately modified with respect to this kind of content) should count as an experience that lacks the subjective flow of time (or one in which such flow is significantly altered). This is just not the case for the plausible candidate contents.

Take the classic slogan that we become acquainted with the passage of time when we focus on the visibly moving hand of the clock as opposed to the one that looks static. A straightforward rebuttal here is that despite not visibly moving, the latter hand is also experienced as undergoing temporal flow. Or, the experience of the static hand has the same dynamic temporal character as the experience of the moving hand. The relevant experiences simply do not differ in terms of the phenomenology of *temporal passage*.

This simple observation extends to other types of content to which one might want to reduce the phenomenal passage. Suppose one opts to claim that an experience lacks the sense of temporal flow if it represents change in a way that lacks smoothness or continuity of an appropriate kind. That is, an experience without subjective flow would consist of a succession

² Throughout this paper, I use expressions such as “phenomenal flow”, “sense of temporal passage”, “feeling of passage”, “subjective flow” or “experience of temporal flow” interchangeably.

of discrete snapshots abruptly following one another. However, the problem of descriptive inadequacy reappears, as experiencing a sequence of discontinuous snapshots can be easily thought of as involving phenomenal flow: time subjectively flows even when our visual world becomes disjointed under strobe lights. Yet another position might draw the relevant line by focusing on the different ways in which conscious perception tracks the identities of its intentional objects over time (this idea is inspired by Shardlow 2023, although this author does not espouse it). For example, it might be claimed that we perceive processes as perduring (i.e., as having temporal parts), while we perceive objects as enduring (i.e., as fully existing at each moment). However, again, the difference between experiential perdurance and endurance is not equivalent to the difference between an experience that contains phenomenal passage and one that does not. Think of seeing a person kicking a ball (a process arguably represented as perduring) on a background consisting of a solitary mountain (an object experienced as enduring). While you may perceptually track the identity of the kicking and the mountain differently, it would be inadequate to say that this amounts to some significant difference in the *temporal* flow of the relevant parts of the experience.

Another way to state the problem with the reductive view is that relevant contents do not seem sufficient to capture the feeling of the passage. Take again the idea that one could reduce the sense of time flowing to (say) perceptually representing motion/change. Perception represents the world as containing objects that shift properties and spatial locations over time. For example, visual experience can represent an object as being red at location x_1 at t_1 and as being yellow at location x_2 at t_2 . But characterized this way, the relevant content represents an “at-at” sort of change or movement (“B-theoretic” change; see also the discussion in section 4.1 below). This intuitively misses precisely the “animated” or “flowy” aspect of the experience, which is present in addition to merely representing the object as having different features/positions at different times (see Prosser 2017, p. 185). Here, proponents of the content-reductive view might refine their position by claiming that, instead of simply representing successive states of the world (for example, representing an object as being at location x_1 at t_1 , a then, at t_2 , representing this object as being in x_2), the brain samples information over time and then creates an integrated representation of successive states, such the location of an object at t_2 is represented as dependent on or resulting from its location at t_1 (see the “filling in” view expressed in Paul 2010). Still, insofar as we consider the conditions of accuracy (i.e. the intentional content) of such representations, they remain straightforwardly stateable in “at-at” terms. Hence, it seems that the elusive (and intuitively “A-theoretic”, see section 4.1) temporal aspect of experience remains unaccounted for under the content-reductive view.

The lesson I take from all this is that instead of raising a white flag, a proponent of temporal flow phenomenology should continue the search by moving beyond content-reductive approaches. Consider a useful distinction, due to Hoerl (2023), between empiricist and rationalist approaches to understanding the phenomenology of temporal flow. The empiricist approach aims to identify subjective flow with “specific deliverances of our experiential faculties” (Hoerl 2023, p. 2), among which are intentional contents related to change, motion, duration, persistence, or succession (hence, content-reductive approaches count as empiricist in this sense). In contrast, rationalism views the flow of time not as arising from experience, but instead as being integral to having a subjective perspective on reality (what this means in the present context will be clarified in section 4.2). My suggestion is that despite the apparent failure of content-reductive views, the rationalist route of understating passage phenomenology remains open.³

An analogy with the experience of selfhood can serve as a tentative guide here. It is plausible to say that the commitment to the existence of selves has its roots in ongoing conscious experience. People believe in the existence of selves (at least partly) because they experience themselves as *subjects* of conscious states. However, the relevant experience is notoriously hard to pin down introspectively and characterize. All we seem to be able to access are conscious states, but their *experiencer* eludes the attempts to make it a focal point of introspection. That

³ Proponents of the content-reductive account may still claim that there is some way, thus far overlooked, to make this position workable. Indeed, I do not think that what I have said here is sufficient to rule this out decisively. For example, one might claim that passage phenomenology can be reduced to several types of content, with no single type of content counting as *the* passage phenomenology (as suggested by an anonymous reviewer). I remain skeptical. Suppose we take the subjective flow to require a combination of different contents at once, i.e. we sense the flowing time insofar as our experience, at once, includes contents representing change, succession, motion, persistence and duration. But then we end up with an excessively restrictive account that is even more open to counterexamples than the ones that identify subjective flow with just one type of content. We might go in the opposite direction and explain subjective flow in terms of a disjunction of possible contents. The claim would be that we sense the flow of time insofar as our experience represents change, or succession, or motion, or persistence, or duration, etc.. However, this raises the question of what is common between all states that possess either of those contents, such that we might identify it as the phenomenology of flow (see Torrenco 2017, who discusses this problem in more detail). Because every disjunct, taken separately, is susceptible to criticisms raised in the main text, this presumed common element remains elusive. Furthermore, as will transpire in section 3.2, there are cases of conscious states that represent at least some contents that feature in the disjunct and yet plausibly count as states that *lack* the sense of the flow of time. To sum up, although I cannot fully rule that there is a viable content-reductive account, I think there are strong reasons to doubt it.

is, the subject never manifests as *part* of the experienced world, including the mental world revealed when we turn our focus inward (Hume 1739/2007; Sartre 1936/2004; Wittgenstein 1921/2001).

However, this does not have to amount to denying that there is a distinctly selfhood-related aspect of phenomenology that reliably gives rise to the belief in a self. Perhaps what we need is a more nuanced account of what this aspect is. For example, the self might be implicit in experience as its pre-reflective background: not an object experienced (or content represented) but a quality of for-me-ness attached to every experience through which the experience seemingly revolves around an (invisible) center point (see Sartre 1936/2004; Zahavi 2005).⁴ Another idea that has been developed is that the sense of self is implicit in the interpretative processes through which the experiential world is “constructed” out of sensory or cognitive building blocks. Buddhist philosophers have claimed that subtle mental “contractions” or acts of craving create an illusory sense of persisting self (see Albahari 2006; Prest, Berryman 2024). Another proposal is that the experience of selfhood is rooted in how the sensory and cognitive contents are integrated or bound together (see Hohwy, Michael 2017; Ismael 2016; Letheby 2021). Regardless of which option one opts for, the history of theorizing about the experience of selfhood might be instructive in the present context. It shows that the spectrum of viable theories may be larger than it might initially seem. Perhaps, just like in the case of self, it is simply a mistake to treat the phenomenal passage of time as an *object* of experience, that is, something identifiable with a (subset of) the intentional content (this would be an empiricist view of subjective flow, in accordance to Hoerl’s aforementioned distinction). Instead, the

⁴ Importantly, the suggestion here is *not* that the problem is solvable just by categorizing the sense of temporal flow as an aspect of experience that contributes to its phenomenal character but does not consist in the (subset of) intentional content of this experience. Take the proposal that the feeling of temporal flow belongs to the category of a *phenomenal modifier* (Torrengo 2017). A phenomenal modifier constitutes an “adverbial” mode of experience. For example, the experiences of seeing an object vividly and seeing it blurrily may be equivalent in terms of content but differ in *how* this content is given in experience (i.e., vividly versus blurrily). Perhaps subjective temporal flow is a kind of phenomenal modifier: it consists in a manner in which content is represented in experience, not in the content itself. This might be right. However, this sort of move cannot stand as a full, theoretically satisfying story. We can readily introspect and then conceptually state the difference between an object being perceived vividly and blurrily. But there is no obvious introspectively traceable modifier of experience that we could identify as phenomenal flow. What does it take exactly for an experience to be tainted or modified *dynamically*? What does such a temporal modification of an experience consist in? And what would it take for an experience *not* to be thus modified? A more concrete proposal about the relevant phenomenology seems to be required if we are to answer such questions.

experience of temporal flow might be implicit in how contents are represented (but see note 4) or in the formal or interpretative operations through which the mind weaves together a representation of reality. This would count as an instance of a rationalist treatment of subjective flow.

2. Phenomenal contrast across global states of consciousness

Even if we grant that the spectrum of possible accounts of phenomenal flow has not been fully explored, the debate is currently stuck at an impasse. Some will claim that the feeling of time flowing is self-obviously ingrained in conscious experience. In response, skeptics will rightly notice the inability to single this feeling out and specify it. A natural way to achieve progress might lie in appealing to the method of phenomenal contrast. Take a conscious experience that involves the sense of temporal flow. Now, focus on an experience that is otherwise phenomenologically just like the first one, except it lacks the sense of temporal flow. If no example of the latter sort of experience can be easily found, then imaginatively modify the first experience in a way that yields a state that matches the phenomenal character of that first experience in all aspects except the feeling of passage. The existence of such contrast should count as evidence in favor of the claim that there is a phenomenology of passage. To characterize the latter, we might proceed by focusing on and carefully describing what it is that a passage-involving experience has but is lacking in the contrast case.

Alas, the deadlock over passage phenomenology arguably stems precisely from the fact that applying phenomenal contrast, in this case, borders on the impossible. It seems that the sense of time flowing is so pervasive in the everyday experience of a (neurotypical) person that a timeless conscious state is difficult even to conceive. As pointed out in the previous section, the sense of time as passing remains invariant under varying intentional contents of perception: it is there regardless of whether we experience change or not, whether we experience a smooth or abrupt succession of events, or whether we perceive an unfolding process or an enduring object. But I think this pervasiveness goes much deeper, as subjective flow is arguably invariant under varying modes of consciousness. That is, we not only experience passage when consciously perceiving but also when we experience emotions and moods, when we engage in episodic remembering or acts of imagination, when we mind-wander, or when we experience thinking in a way that involves purely cognitive phenomenology (assuming, of course, that there is such phenomenology). Temporal flow only truly disappears in dreamless sleep, along with conscious

experience itself.⁵ Furthermore, imaginatively simulating a conscious state that lacks flow phenomenology looks like an unfeasible task. As I type these words, I find myself utterly unable to imagine the same typing experience, only lacking the sense of unfolding in time.

Perhaps the lesson to take from this is that timeless experiences are impossible in a robust, metaphysical sense. This would amount to a broadly Kantian position that the sense of flowing time is a transcendental condition of the possibility of conscious experience as such. However, a skeptic might insist that a more parsimonious explanation of the apparent pervasiveness of flow phenomenology is that there is no such phenomenology in the first place. In fact, perhaps some readers of this paper, upon introspecting their own experience, would deny that they can discern anything like pervasive passage phenomenology. How could we settle the question of who gets the experience right? Thus, we circle right back to the problem of the missing phenomenal contrast.

There is, however, a different route that one might take. It starts with a conjecture: the range of possible phenomenologies outstrips, perhaps drastically, what is ordinarily available to a human being (see James 2008/1902 for the first influential exposition of such a view in modern psychology and philosophy). Perhaps the sorts of timeless experiences we seek reside in regions of phenomenal “state space” that lie beyond those normally occupied by humans. If so, we could accordingly extend the search for the relevant phenomenal contrast cases.

Now, how could we peer beyond ordinary human experience? We might speculate about conscious beings other than humans who enjoy timeless phenomenology as their default state. Perhaps sea sponges or oak trees have experiences that feel outside of the passage of time? The downside here, of course, lies in how problematic it is even to attribute conscious experiences to such systems (even if they cannot be ruled out a priori as subjects of experience; see Segundo-Ortin, Calvo 2021 for an example of relevant discussion). And even under the assumption that they are conscious, we have no way of establishing that what it is like to be them has a timeless phenomenal character of the right sort.

Another option could be to employ a structural account of consciousness (see Kleiner 2024; Lee 2022). That is, we could opt to rely on a theory that describes the structural facts about

⁵ It has been suggested that some residual form of conscious experience persists even during dreamless sleep (Thompson 2015; Windt, Nielsen, Thompson 2016). Interestingly, this proposed dreamless sleep experience might involve a deeply altered phenomenal temporality (Windt 2015), effectively constituting a potential contrast case of the sort I am searching for in the present paper. Nonetheless, I set the proposed dreamless sleep experiences aside here, as they remain an underexplored topic at this point, and instead focus on cases related to meditation and psychedelics.

conscious experience in a mathematically rigorous manner. Given such a theory, we might find that there is a possible phenomenal structure that corresponds to an experience with a timeless phenomenal character that could serve as an appropriate contrast case (even if humans cannot access this experience by *having* it). Currently, however, this sort of theory-driven inquiry remains a loose speculation, as we lack a sufficiently fleshed-out and evidentially supported structural theory of consciousness.

Luckily, there is another, more straightforward strategy to pursue. It only requires us to consider experiences that are accessible first-hand to human beings. This strategy involves widening the range of human phenomenal states under consideration. The crux is to notice that ordinary waking consciousness is not the only *way* of being conscious. That is, in addition to wakefulness, there are other *global states of consciousness* (see Bayne, Carter 2018; Fortier-Davy, Millière 2020; McKilliam 2020; Whitteley 2021).

To a first approximation, the notion of a global state of consciousness (GSC) is meant to capture distinct systematic phenomenal “profiles” that one’s overall experience can take. Shifting to a different global state feels like moving to a whole new phenomenal “paradigm” rather than experiencing a more local or incremental change. Examples of such global states, in addition to ordinary wakefulness itself, may involve lucid and non-lucid dreams, the vegetative state, psychedelic states (of the less intense, non-mystical variety), pure consciousness or mystical experiences (including more intense psychedelic states), depressive states or the experiences of psychosis.

A more technical way of characterizing GSCs is to say that they involve orchestrated shifts along different *dimensions* of conscious experience (Bayne, Carter 2018; Whitteley 2021). The relevant dimensions include:

- i. attention and cognition – for example, endogenous control of attention that accompanies ordinary waking state can be increased (meditation-induced states of mindfulness), reduced (non-lucid dreams) or altogether absent (vegetative state) in other global states;
- ii. self, space, time – for example, the ordinary experience of self with an open future may shift in depression (the feeling of being estranged from oneself and not being able to imagine one’s future) or be altogether absent in pure consciousness or mystical experiences;
- iii. opacity/transparency – for example, in a wakeful state, a person usually sees the world *through* conscious experience, but in a psychedelic state or a lucid dream, she

can render an experience *qua experience* an object of awareness (see Metzinger 2014; Lange, Grünbaum 2023);

- iv. sense of reality – depending on a GSC, a person may experience her visual world as more or less real (for example, the world may feel unreal to a person experiencing depression) or may attach a sense of reality to different sorts of content (for example, paradoxical contents can feel real or true in a dream or but not during waking);
- v. range of intentional contents – for example, some GSCs may involve an increase in the range of contents as compared to ordinary wakefulness (think of ever-changing, hallucinatory variations to perceptual content experienced on moderate doses of psychedelics) while others involve an impoverished range of contents (vegetative state) or have been described as contentless altogether (pure consciousness states – see Metzinger 2024; Ramm 2023).

Let us return to the problem at hand. The proposal is to find the relevant contrast to the normal experience of temporal flow by comparing experiences *across GSCs*. This, I think, is what could break the deadlock and drive the discussion forward. In the next section, I will discuss altered states of consciousness that involve profound shifts in the sense of (the lack of) temporal passage. Before I proceed, let me stress how casting the debate in terms of GSCs comes with certain theoretical advantages. First, it highlights how we normally experience ourselves and the world through one particular GSC (i.e., the ordinary mode of consciousness), and how our capacity to imagine possible phenomenal states may be constrained by this GSC, limiting us from appreciating other possible forms that experience may take. In other words, it helps to explain why the relevant phenomenal contrast is hard to conceive from the standpoint of the default mode of human experience.

Second, focusing on GSCs naturally leads us to expect the altered sense of time to be tangled up with other changes to phenomenology. That is, experiences of timelessness come as an aspect or facet of states that constitute more holistic changes to experience, which also include, for example, changes to the sense of selfhood. This raises an interpretative difficulty, as it may be difficult to find a contrast case that specifically targets phenomenal flow (i.e. an altered global conscious state whose phenomenal character matches some ordinary state in all respects *except* the subjective flow of time). However, I think the altered-global-states route is one worth trying despite the noisiness possibly involved. In fact, such complications may be theoretically revealing, as they may suggest that phenomenal flow shares a common mechanism with other aspects of ordinary experience, such that one cannot be altered without altering the other (see

section 4.2 for the possibility that the sense of time flowing may be related to the experience of being a self).

3. Experiences of timelessness

3.1. Preliminary remarks

The discussion to follow will focus on a particular kind of an altered GSC, usually referred to as a mystical experience (James 2008/1902; Stace 1960; Yaden, Newberg 2022) or an experience of pure consciousness (Metzinger 2024; Ramm 2023).⁶ The experiences that belong to this category are usually prompted by long-term meditation practice or exposure to large doses of psychedelic compounds (like LSD, mescaline, DMT or psilocybin), but in rare instances occur spontaneously. A thorough discussion of the phenomenology of mystical experiences is beyond the scope of this paper, so a rough sketch will have to suffice. The core of mystical states is that they are *radically* non-ordinary, breaking the core structures of normal human experience. Perhaps most strikingly, mystical experiences are *unitary* states in which the subject-object structure of consciousness may diminish or completely disappear, giving rise to an experience of “centerless” and boundless unity. Because of how different these sorts of experiences are from everyday states of consciousness, they are often thought of as characteristically ineffable (see Lyon 2023, Ch. 10 for an extensive discussion). At the same time, they possess a “noetic” quality in that they subjectively seem like self-verifying glimpses into the nature of reality or consciousness (or both).

Besides the subject-object division, another core structure of ordinary consciousness that becomes altered in mystical states pertains to temporal experience. In particular, these states can feel “timeless”, “outside of time”, or as though “transcending time”. This is an aspect of non-ordinary phenomenology that I will hone in on in the following subsections. Before I proceed with this, I want to make some preliminary remarks.

First, despite the general recognition of timelessness as an aspect of the phenomenology of mystical states, there are few psychometric or neurophenomenological studies aiming to target it *specifically* (but see Berkovich-Ohana et al. 2013). For present purposes, I will have to rely

⁶ Although mystical experiences and pure consciousness experiences may be phenomenologically distinct enough to warrant putting them in different categories, I will ignore this distinction here for simplicity. In the reminding part of the paper, I will refer to both as “mystical experiences”.

on existing studies of mystical experience as such (that is, studies that do not focus specifically on timelessness) and especially on introspective reports of such states, insofar as they reveal converging patterns related to an altered experience of time. However, the problem of describing the phenomenology of timelessness stems from sources deeper than the scarcity of empirical studies. Remember how elusive, hard-to-describe ordinary sense of the flow of time is, granted there is such a thing. It is only natural to expect subjective timelessness to be at least equally hard to capture in words. Hence, my aim here is to gesture at something that can only really be fully recognized experientially. Nonetheless, I think that the existing intersubjectively accessible material suffices to establish experiences of timelessness as plausible contrast cases to the ordinary experience of temporal flow.

Second, I will approach the introspective reports cited below charitably. The reports provided below are formulated after the relevant experience took place, so they are directly based on memories of such states and are thus accurate as long as relevant memories are accurate.⁷ Nonetheless, I will assume that they are what their authors intend them to be, namely reports that ultimately reveal the *phenomenal character of ongoing experience* that a person has had. Of course, it might turn out that such reports are best read as false memories, or as merely metaphorical or as expressing culturally biased cognitive or (mis)interpretations of the experience. However, the burden of proof considerations favor charitable interpretation until a convincing skeptical case is presented.

Third, before I present the relevant positive case, I want to start by mentioning aspects of altered states of consciousness that we should be careful *not* to confuse with the experience of timelessness. In particular, psychedelic-induced states sometimes involve significant alterations of subjective temporality, which nonetheless should not count as experiences of timelessness. So, a person under the influence of psychedelics may experience events as elongated or contracted in duration (subjective time dilation), experience an altered perception of succession

⁷ There is a deep and general challenge to the very idea that (accurate) memories of this kind are even possible. If the relevant states really do feel subjectively timeless (and sometimes feel selfless as well), how could they be integrated into one's autobiographical memory and thus described as having occurred in oneself at some specific time (see Fink 2020; Frischhut 2024; Gamma, Metzinger 2021; Millière, Newen 2024)? One plausible way out of this problem may rely on distinguishing the gist of the relevant experience itself from a separate mechanism of autobiographical self-attribution that acts only post-factum (see Fink 2020; Millière, Newen 2024). This view would allow for the experience to count lack the sense of flowing time (as well as perhaps involving the sense of self), and yet be possible to integrate into one's autobiographical memory. For sake of space, I have to set this issue aside in this paper.

relations between events, or even experience an altered perception of the directionality of time (see Shannon 2002, Ch. 14). Such experiences do not count as timeless in the present sense: although they involve modifications of the aspects of ordinary temporal experience, they do not amount to a complete *cessation* of subjective flow of time as such.⁸ Another class of psychedelic experiences that should be distinguished from experiences of timelessness are states that involve changes with respect to the sorts of intentional contents that have been previously ruled out as grounding phenomenal passage (see section 1). Psychedelic states may be accompanied by experiences of illusory movement, altered rate of change (i.e., objects being perceived as changing more or less rapidly than normal), or experience the morphing of objects into other objects, which may, in turn, affect how identities are tracked or represented in experience. Again, experiences of timelessness should not be confused with such alternations of perceptual content (see also the discussion in the following subsections).

3.2. No-passage experiences

My proposal is that existing evidence suggests that two types of experience of timelessness can be distinguished. The first type consists of experiences as of time not passing, or *no-passage experiences* for short. The second type includes experiences as of apprehending reality from an eternal or timeless vantage point, or *eternity experiences* for short. In this subsection, I will focus on no-passage experiences. One could say that when having a no-passage experience, a person no longer feels as if carried by the river of time: temporal passage comes to a halt, and the dynamic, “flowy” quality is lost from consciousness. That is, such experiences lack the

⁸ As noted by an anonymous reviewer, among multiple such types of altered experiences of time, one merits brief discussion here as being possibly tightly related to experiences of timelessness. These are the experiences of time *slowing down* or *speeding up* (see Droit-Volet, Chaulet, Dambrun 2018; Shannon 2002, Ch. 14). There are, I think, two possibilities here. On the one hand, such experiences might exist on a continuum with experiences of timelessness, where, say, a no-passage experience represents the culmination of a sensation of time gradually slowing down or speeding up (see Shannon 2002, p. 234–235). On the other hand, the experience of time slowing/speeding could stem from altered estimations or judgments of durations. Under psychedelics or during meditation, changes in attentional processes and the rate at which mental contents shift might lead individuals to estimate events as lasting longer or shorter than usual (see Droit-Volet, Chaulet, Dambrun 2018). This change would, in turn, be reported by subjects in terms of subjective time as either slowing down (if durations are rated as longer) or flowing faster (shorter durations). I think that this second interpretation, if true, would favor considering the slowing/speeding-time experiences as categorically distinct from experiences of timelessness. I will have to set this issue aside in the present paper.

sense of moving through an ever-changing series of subjective “nows” that can be juxtaposed with the past and future.

As the first clue that can help us make sense of no-passage experiences, consider psychometric tools used for measuring mystical states. Inspired by theoretical work (especially Stace 1960), the Mystical Experience Questionnaire includes items specifically related to an altered sense of time (Barrett, Johnson, Griffiths 2015). Thus, studies have revealed that subjects undergoing acute psychedelic experiences often score highly when asked about the degree to which they agree that they had an “experience of timelessness” or had a “sense of being ‘outside time’, beyond past and future” (see, e.g., Griffiths et al. 2006). These results converge with a more recent study on long-time meditators that deployed the Minimal Phenomenal Experience questionnaire (Gamma, Metzinger 2021; Metzinger 2024). This questionnaire includes three questions directly related to the experience of time: “Did you experience the passage of time?”, “Did you experience the duration of time as such?” and “Did you experience time?”.

We can get a tighter grip on no-passage experiences by considering the following subjective reports (the first three quotes are from reports about psychedelic-induced states, and the remaining three are taken from reports of meditation-induced states):

It was an extraordinarily strong experience that touched me also intellectually. Among the strange phenomena was the sense of time stopping. Things were happening in my mind but the clock was not going ahead; the flow of time was not passing anymore. It was a total subversion of the structure of reality. (...). And I thought: “Well, it’s a chemical that is changing things in my brain. But how do I know that the usual perception is right, and this is wrong? If these two ways of perceiving are so different, what does it mean that one is the correct one?” (Rovelli, from: Higgins 2018)

Looking back, I was slipping into a natural and effortless meditative state that increased in depth. I was literally nailed into the moment. There was not even a chance of going off into the past/future or self-assuring thought patterns or any of these mind-made artifacts. I was experiencing true timelessness! The complete lack of mental noise (...) left nothing but the eternity of the present moment behind, which then

(...) “opened up” and became immensely spacious and palpable. (...) Sitting on the ground, I became physically and mentally very very still. As if I was immovable, indisturbable, static, solid like a rock (...) The coming and going of the natural world was observed, but from a place that simultaneously saturates and transcends all of it, it seemed.

(Erowid, report #114653
<https://www.erowid.org/experiences/exp.php?ID=114653>)

At this point in the trip I became something that I cannot put into words... I became atemporal. I existed without time... I existed through an infinite amount of time. This concept is impossible to comprehend without having actually perceived it. (Erowid, report #1979, <https://erowid.org/experiences/exp.php?ID=1979>)

First, self disappeared, then later time became all one, as in no present existing apart from past from future. Any sense of time disappeared; it was all here, now. (Metzinger 2024, report #3132, p. 250)

I was standing at a window and looking out to a tall bunch of grasses. It was a windy day and the grass was moving a lot. Then for some period, I coincided with these grasses. Their movement showed (or maybe better: was) the nature of time, the complete ungraspability of the present while at the same time there is nothing else, no past, no future, just this ungraspable now. (...) later, in reflection, there came the thought “I saw into the nature of time.” (Metzinger 2024, report #2798, p. 251)

The mechanism that senses time was absent. There was a sense of immediateness, without a center aware of temporality. (subject report from: Berkovich-Ohana, Dor-Ziderman, Glickshohn, Goldstein 2013, p. 4)

Beyond the fact that subjects report the lack of subjective flow of time, two recurrent themes should be highlighted. First, subjects stress that the experience in question is radically different

from the ordinary experience of time (“total subversion of reality”) and is such that it cannot be grasped from the ordinary standpoint (“impossible to comprehend without having perceived it”). Such statements speak in favor of the claim that we are dealing with experiences that starkly contrast with ordinary consciousness in terms of subjective temporality, indirectly confirming the presence of a properly “flowy” element in ordinary experience. Second, note that although they are often described by explicitly negating the applicability of a tensed vocabulary (“not even a chance of going off into the past/future”, “there is nothing else, no past, no future”), no-passage experiences are also sometimes expressed in terms of taking place “now” or “in the present moment”. This creates a tension: how can an experience be “beyond past and future” while also being tensed in the sense of taking place “now”? The apparent inconsistency is resolved by noting that the subjects use terms like “now” or “present” to gesture at an experience that does not undergo temporal movement. Hence, the point is that it is a temporally “static” present moment (“an eternity of a present moment”), described as “immensely spacious” or as not “existing apart from past or future”.

There is one further aspect of reports of no-passage experiences that requires attention. Notice that some reported experiences involve both a sense of lack of temporal flow *and* a perception of change or movement. Consider the report cited above in which a person is undergoing (what seems to be) a no-passage experience while also perceiving the *movement* of grass. Even more strikingly, there are occasional paradoxical reports of no-passage experiences that are nonetheless described as accompanied by a sense of the flow of time:

I felt a timelessness while also being completely aware of the movement of time. (Metzinger 2024, report #2303, p. 251)

Can such “timeless change” experiences (as Thomas Metzinger dubs them, see Metzinger 2024) really count as no-passage experiences?

Of course, the paradoxical nature of such reports may stem from the inherent ineffability of the underlying experiences. Still, I think there are two possible ways to make (at least to some degree) a clearer sense of what such reports may reveal about temporal experience. On one interpretation, there is some remaining experience of temporal flow, even in experiences that are otherwise described as being subjectively “timeless”. Perhaps temporal phenomenology is multifaceted or layered in that one layer of subjective flow can be peeled away while still leaving residual “deep time”. This interpretation would be in line with the notion that some core underlying sense of passage is necessarily involved in any conscious experience. If this is right,

it could weaken the case for no-passage experiences as constituting a basis for phenomenal contrast of the sort we are seeking here. That is, although these states might differ from ordinary consciousness by lacking an important aspect of subjective temporality, there would be another, underlying sense of flowing time that is present in both types of experience. The problem that this construal of timeless change experiences faces is how to explain reports of experiences that do *not* report a deeper level of temporal flow. It would be rather *ad hoc* and presumptive to postulate that even those experiences involve “deep time”, but subjects fail to notice it or report it.

However, there is an alternative interpretation which, if accurate, would be much more in line with the project at hand. On this construal, a person can have a full no-passage experience (that is, an experience altogether missing the sense of temporal flow) while retaining the capacity to perceptually represent *change* and *motion*. That is, a person can *perceive change outside of the flow of time*. Perhaps there is a pretheoretical tendency to think of perception of change as necessarily presupposing the experience of temporal flow (or even being identical to it). This tacit assumption might prompt some subjects to produce seemingly paradoxical descriptions of such experiences as both timeless and involving the sense of flowing time. However, the underlying phenomenology of such states, on this interpretation, actually lacks the phenomenal character of temporal passage.

The advantage of this second possible construal of “timeless change” experiences is that it is consistent with reports that do *not* mention any deep time. Also, this interpretation dovetails with the philosophical work discussed in section 1. There, I already noted the dissociation between the experience of temporal flow and the experience of motion or change, whereby the sense of temporal passage remains present in perceptual states representing unchanging objects. The present case would demonstrate that there is a double dissociation at play, as a person can consciously perceive change *without* experiencing the passage of time or without representing the respective change as taking place *in* flowing time. In other words, timeless change experiences would constitute cases of perceiving “at-at” (“B-theoretic”) change as opposed to dynamic or flowing (“A-theoretic”) change. Thus, we could think of a phenomenal contrast between experiences that are *matched* in terms of contents pertaining to change and movement (say, both experiences would involve perceiving blades of tall grass moving in the wind) but which *differ* in that one possesses a phenomenal character as of flowing in time while the other experience lacks this character. Although I think that general theoretical considerations favor this way of understanding the experiences of timeless change, I concede that further empirical work is needed to settle the issue.

3.3. Eternity experiences

We turn to the second type of timeless experience, the eternity experience. Consider ordinary conscious experience as revealing the world from an *egocentric temporal point of view* (see Ismael 2017). We ordinarily experience reality from the vantage point of subjective “now”. This is a center point from which we apprehend two horizons of non-occurring events. One horizon recedes into the past and is given to us in memory, while the other horizon extends into the future and can be apprehended through prospection. In eternity experiences, this temporal vantage point is replaced by an experiential (as opposed to merely theoretical or conceptual) *sub specie aeternitatis* outlook on the temporal structure reality. In such a state, one feels as though apprehending temporally disparate events from a perspective (or a non-perspective, see below) that seemingly discloses those events as eternally, simultaneously co-existing outside of the passing time. In opposition to ordinary experience, there is no center point *inside* time from which reality is revealed. Thus, no individual event is singled out as unique by happening in a “present moment”, as opposed to taking place in the past or future.

To get a handle and what it might be like to undergo an eternity experience, consider two following reports of psychedelic-induced states:

When we take off from an airport at night, we are aware of individual runway lights flashing past in succession. But when [we] look down a little later, we see them all existing together motionless. It is not self-contradictory to say that the lights flashed past in succession and also that they exist together motionless. Everything depends on the standpoint of the observer. (...) Or take an analogy from reading. When we read something, we are aware of one word coming after another. But when we detach our minds from the sense of the words and look at the page as a whole, this impression fades, and we are aware that the words all exist together at the same time. (...) I believe that my dose of mescaline detached me so far from the current of events (...) that I actually stood outside the stream of time, and was aware of events of two o'clock and three o'clock as things existing simultaneously (...). (Mayhew 1961, p. 297–298)

It was revealed to me that everything which had ever happened or will ever happen across the entirety of this reality's timeline were all "me" and that I had existed for an eternity. (...) that human beings were trapped in an illusion of perspective which made it seem as if only the present physically existed. In actuality however, it was stated that all events past, present and future exist together and are continuously occurring within their individual time frames simultaneously. (Josie Kins, report available at: <https://www.effectindex.com/reports/my-second-experience-with-unity>)

It may be tempting to interpret eternity experiences as a particular kind of temporally *perspectival* experiences with uncanny intentional content. So, one might think of such states as (1) involving an egocentric temporal vantage point, (2) from this point, intentionally directed at content in which temporally distinct events are "squeezed" or superimposed, as though they all are happening "now". The analogies given in the first report cited above might suggest this reading: one switches from one perspective of individual lights flashing in succession to another perspective from which all the lights are perceived at once. However, I want to suggest that such visual analogies, albeit useful, are limited in conveying the truth about the phenomenology of eternity experiences. On the reading I want to suggest, the striking thing about such experiences is that they feel altogether temporally *aperspectival* or *centerless*. That is, these states completely lack the egocentric vantage point of the present moment from which reality is apprehended. They possess a no-point-of-view phenomenology. For example, as I am typing these words, I have the sense of being embedded as in a center of time – in a moment that is uniquely real, unlike events I encounter retrospectively or prospectively. I might *believe* that this writing-right-now moment is neither less nor more real than occurrences unfolding at other points in time – yet I cannot *experience* the world that way. In the eternity experiences, this aspect of privileging one particular moment as real (perhaps one might say: identifying with this moment) is absent. Instead, the sense of reality is evenly distributed across temporally distinct moments: there just no longer is a uniquely real temporal "center" to one's experience (or: there is no temporal center point with which one identifies).⁹

⁹ In this way, they arguably resemble selfless or non-dual states of consciousness that lack the subject-object structure and thus do not feel as if they revolve around a center point of self (see Letheby 2021; Metzinger 2024;

Now, it is fair to ask whether eternity experiences really differ from no-passage experiences. Existing psychometric tools seem too ambiguous to tease them apart. For example, both no-passage and eternity experiences could pass as involving the “sense of being ‘outside time’, beyond past and future”, which is an item from the Mystical Experience Questionnaire mentioned before. In drawing the distinction, I follow other authors who have previously hinted that we are dealing with two distinct types of experience (see Shannon 2002, Ch. 14 and the Subjective Effect Index available at <https://www.effectindex.com>¹⁰). I think the difference largely makes sense on the intuitive level. We can conceive of a no-passage experience that is not an eternity experience. Thus, a person may have an experience where subjective time stands still without having the experience of apprehending a temporal sequence of events as existing simultaneously outside of time. The opposite case of an eternity experience which fails to count as a no-passage experience may be harder to make sense of. However, it is not out of the question that one might undergo a conscious state that feels both *sub specie aeternitatis* in the relevant sense but nonetheless includes a temporally dynamic phenomenology. Anecdotal evidence suggests that in some eternity experiences, “while all moments are felt to be equally real, the directional flow of time is felt to be maintained, with the present always being the moment which is currently experienced” (Subjective Effect Index entry available at: <https://www.effectindex.com/effects/perception-of-eternalism>). Still, it should be again conceded that more empirical work will be required to substantiate the view that no-passage experiences and eternity experiences are indeed distinct (even if perhaps often coinciding). Notice, however, that if this is the case, it might mean that the *ordinary* flow phenomenology is correspondingly multifaceted, comprising multiple dissociable aspects or component parts (for example, a “flowy” aspect that goes missing in no-passage experiences and a “temporally perspectival” aspect that disappears in eternity experiences).

3.4. Timeless experiences and non-believers in the subjective passage

For those of us who tend to report having an all-encompassing experience of temporal flow, no-passage/eternity experiences, through providing relevant phenomenal contrast, can stand as

for a suggestion regarding a possible common mechanism underlying both experiences of timelessness and selflessness, see section 4.2).

¹⁰ The Subjective Effect Index catalogs types of subjective effects induced by psychedelic substances. It is a result of a “citizen” science project led by Josie Kins.

further evidence for a view we already recognize as plausible. However, I mentioned that the impasse over the existence flow phenomenology stems, at least in part, from the fact that some subjects – perhaps including multiple readers of this paper – deny that they find the sense of passage when introspecting their own experience. Could the phenomenal contrast between ordinary experience and the experiences of timelessness convince those subjects that the ordinary experience includes a phenomenology of flow? Could it convince those subjects that they may have overlooked something about their own experience? Suppose that a person who normally denies, on introspective grounds, the existence of subjective flow undergoes an intensely altered state of consciousness that involves no-passage or eternity experience (or both). There are three ways in which this may go.

First, upon encountering a no-passage/eternity experience, the individual might identify a clear phenomenal contrast to the ordinary experience with respect to the experience of temporal flow, thus acknowledging that passage phenomenology was present in their ordinary experience after all.

Second, it may be that there are significant individual differences in ordinary conscious experience, such that one part of the population experiences temporal flow and the other part lacks it altogether (perhaps people in this latter group will tend to deny that the passage of time exists at the level of their beliefs; see (Latham, Miller, Norton 2021) for empirical evidence that there indeed exists a minority of passage *non*-believers in the population). Hence, both groups are introspectively accurate with respect to *their* experience. The subject in our example belongs to the latter group. We may predict that a no-passage or eternity experience will feel consistent with how this person usually experiences time – this person might even have trouble understanding why some people describe this experience as deeply non-ordinary in the first place – thus providing no relevant phenomenal contrast.

Third, the person could recognize a contrast in *temporal phenomenology* between ordinary and no-passage/eternity experience, but deny that the relevant difference is accurately described in terms of the non-ordinary experience lacking the sense of *temporal flow*.

Now, I think there are reasons to be skeptical of the latter two scenarios, as they look to be at odds with how the relevant non-ordinary experiences are routinely described, that is, as radically different from ordinary temporal experience, with the relevant difference being related to lack of the experience of the passage of time (see preceding discussion). Hence, I think that the first scenario is the most likely at this stage of inquiry, provided we trust the relevant subjective reports.

Of course, it needs to be noted that the relevant phenomenal contrast hinges on an uncommon mode of consciousness unfamiliar to many, including phenomenal passage skeptics. However, I do not think that the fact that the relevant experience is uncommon could diminish its dialectical significance. For argumentative purposes, establishing the *existence* of phenomenal contrasts suffices. And even in the absence of easy first-person access to the relevant contrast (I do not think it would be responsible to advise philosophers interested in temporal phenomenology to begin experimenting with large doses of psychedelics), I think that psychometric and report-based evidence cited above is sufficient.

4. Further issues: metaphysical beliefs about objective passage and hypotheses about mechanisms of phenomenal passage

4.1. Timeless experiences and metaphysical beliefs about the passage of time

In this remaining section of the paper, I will focus on what I think are two interesting applications of the preceding discussion. One application has to do with the debate over whether the ordinary phenomenology of temporal passage shapes our commonsense metaphysical view of time as undergoing flow. And the other one is related to how consideration of timeless experiences helps us make sense of the mechanisms that underlie the ordinary sense of flow. I address commonsense metaphysics of flow here, and then turn to the issue of hypothesis development in the next subsection.

So, consider the seemingly plausible claim that the phenomenology of temporal passage comes with metaphysical commitments. Because of the flowing *phenomenal* time, our experience purports to acquaint us with a *world* that is undergoing a temporal passage. If so, it could explain why certain metaphysical views about the flow of time seem to fit our common sense much better than others. In particular, ordinary experience seems to favor (1) the A-theory over the B-theory and (2) presentism over eternalism.¹¹

¹¹ There are multiple ways in which those theories can be expressed. Here is a simplified take on each, which should suffice for present purposes. According to A-theory, the temporal structure of reality is tensed, such that events which happen now are distinguished from ones that have happened in the past or will happen in the future. According to B-theory, the temporal structure of reality is tenseless, and events are solely ordered by the relation of coming after or before one another. According to presentism, only those events are real that take place in the moving window of “now”. According to eternalism, there is no metaphysically distinguished present moment, and all events are equally real regardless of where they are in the order of temporal succession.

However, the idea that ordinary experience is metaphysically loaded in this sense has been recently contested by multiple authors. For example, it has been noted that if the base structure of reality is B-theoretic/eternalist, then the view of experience as metaphysically loaded would imply that experience contains a fundamental illusion about the nature of time. But this latter notion turns out hard to make sense of (see Balcells 2019; Braddon-Mitchell 2013; Deng 2019; Frischhut 2013; Hoerl 2014). Perhaps experience is silent on the metaphysics of temporal flow after all. Perhaps the intuitive view of temporal passage originates from common misconceptions about experience or even from cognitive processes of a non-experiential kind (see Bardon 2023; Miller, Holcombe, Latham 2020).

Consider two interpretations of the claim that ordinary experience is metaphysically loaded with respect to temporal flow: (1) the claim that the sense of temporal flow comes with strict accuracy conditions such that this feeling can only count as accurate or true under an assumption that passage exists (i.e. the A-theory/presentism is true); (2) the claim that the sense of temporal flow is such that it explains people's psychological propensity to believe in the objective temporal passage. Note that the second claim is more modest than the first, as it leaves room for the possibility that people are wrong about the metaphysical accuracy conditions of their experience (it may turn out that the phenomenal flow is consistent with eternalism/B-theory, such that the relevant experience cannot count as inaccurate even under such metaphysics; see e.g. Paul 2010). Here, my aim is only to evaluate this weaker claim. I think that the consideration of timeless experiences favors the view that the sense of flow present in ordinary experience is responsible (perhaps in tandem with other factors) for the belief that time objectively flows.

Now, assume that, in line with the weaker claim, the ordinary sense of flow shapes the intuitive metaphysical beliefs about time. Further, assume that I am right in claiming that no-passage/eternity experiences contrast with ordinary experience by missing precisely the aspect of ordinary phenomenology which prompts people to espouse the intuitive metaphysics of temporal flow. Given this, we might predict that no-passage/eternity experiences would lead people to consider or even espouse alternative metaphysical views regarding temporal passage (or at least tend to interpret the "meaning" of such experiences along such lines). That is, if normal experience – by virtue of involving the feeling of temporal flow – tends to subjectively align with A-theory and presentism, then the experiences that lack this feeling may be naturally expected to (seem to) fit less intuitive metaphysical views.

I think that there are strong reasons to think that this prediction is confirmed: with deeply non-ordinary temporal phenomenology comes non-common-sense (B-theoretic, eternalist)

metaphysics of time. As mentioned earlier, mystical experiences possess a noetic force or a sense of reality. They are not merely experienced as exotic subjective feelings but as states that seem to disclose something about the nature of reality. I think that this general point applies to a new experiential orientation to time one may obtain in such a state. What I mean is that insofar as they involve no-passage or eternity experiences, such mystical states seemingly reveal something about the *nature of time*. Furthermore, what they seemingly reveal is revisionary with respect to the ordinary view. In particular, such experiences seemingly unveil (1) a reality in which the time does not flow, as is the case in no-passage experiences (corresponding to a B-theoretic view of time) and/or (2) a reality in which all temporally distinct events are equally real, as is the case in eternity experiences (corresponding to eternalism).

Beyond general facts about the noetic force of mystical experiences, two considerations support the notion that no-passage and eternity experiences come with metaphysical upshots. First, multiple subjective reports suggest as much. So, looking at the reports cited in this paper, we find subjects using expressions such as “It was revealed to me that...” to describe the experience or stating “I saw into the nature of time” when reflecting on the experience subsequent to having it. Second, metaphysical systems rooted in mystical experiences tend to treat the ordinary view of passing time as illusory, and instead treat ground reality as timeless or eternal in some sense (see Russell 1917/1986; Stace 1960). This suggests a link between mystical experience and revisionary metaphysical beliefs about time. Recent empirical work shows that acute psychedelic states can affect metaphysical beliefs (Timmerman et al. 2021). Although the beliefs about time in particular were not tested, it is not implausible to think that they, too, are sometimes revised in light of deeply altered conscious states – and that the relevant doxastic shift exhibits the tendency to endorse B-theory/eternalism.¹²

4.2. Developing hypotheses about flow phenomenology

The discussion so far aimed to present contrast cases to the ordinary phenomenology of temporal flow, thus establishing the existence of the latter. However, doing this does not yet

¹²Note that the point I am making here does not require that people always (or even often) shift their metaphysical outlooks on time in the face of timeless experiences. The claim is that such experiences would promote certain beliefs if they were espoused at *face value* by people who have them. But many subjects may opt not to align their beliefs with the face-value metaphysical content of their conscious experience. By analogy, consider a person who believes in B-theory/eternalism despite having *ordinary* conscious experiences that, when read at face value, purport to reveal reality as flowing in time.

reveal what the ordinary phenomenology of flow consists in. I want to suggest that investigating timeless experiences can help us make progress on this question. I will sketch out a hypothesis about ordinary passage phenomenology. Importantly, my aim here is modest and promissory. I intend to establish a proof-of-concept of the fruitfulness of the present approach rather than lay out a definitive and fully fleshed-out theory.

Let us start by taking a wider view of how timeless experiences may fit into recent theoretical developments in the cognitive sciences. In particular, I want to thread the discussion so far with two strands of work done within the Predictive Processing/Active Inference (henceforth PP/AI) framework. One line of inquiry is related to temporal consciousness, and the other pertains to how meditation and psychedelics affect information processing in the brain.

Regarding temporal consciousness, existing PP/AI models align with a broadly Brentanian-Husserlian view. The crux of the Brentanian-Husserlian view is that each momentary experience has a tri-partite structure comprising a primal impression (a part of momentary experience that feels as immediate “now”), a retention (a part of momentary experience represented as just-past), and a protention (a part of momentary experience that consists in an anticipatory openness to about-to-occur future). Given this scheme, the felt diachronic continuity or stream-like nature of consciousness is accounted for in terms of an ongoing process in which primal impressions fade into retentions, and protentions become fulfilled by arising primal impressions.¹³ Now, PP/AI models cast perception and action as a process of predicting the sensory input, based on estimations of its (hidden) causes. This process is diachronically coherent because current estimates of the causes of the sensory signal are anchored in the estimates of immediately past causes and predictive estimates of the (most likely) causes that will come next. The core claim is that the brain does not process each moment as an isolated, discrete step but instead treats past and future elements as mutually informing (or “interpenetrating”) each other at each moment. So, the “current moment” estimate is affected by an “empirical prior” carrying an estimate of the immediate past, thus preserving influence over the present Bayesian update cycle and ensuring that past states contribute to the system’s current estimates (corresponding to retention). At the same time, the current moment inference leans into the future by estimating probable future hidden states based on current and past inferences (corresponding to protention). In this sense, the estimate of the current moment

¹³ Note that this applies even when no change is represented at the level of intentional *content* (for example, experience possesses a retentional-protentional structure as one perceives a static hand of the clock or hears a continuous, unchanging tone).

“reaches forward” by factoring in expectations about what is likely to occur, preparing the model to handle incoming sensory data. Regardless of differing technical details in how this story is phrased, the point is that it involves a computational analog to the retentional-protentional structure described by phenomenologists (see Albarracin et al. 2022; Bogotá, Debbara 2023; Hohwy, Paton, Palmer 2016; Wiese 2017; for a seminal predecessor of this work, see Grush 2005, 2008).

Another relevant strand of recent theorizing lies in PP/AI-based accounts of how psychedelics and meditation affect information processing in the brain. The PP/AI framework rests on a postulate that the brain stores (or: *is*) a generative hierarchical model of the causal structure that produces the sensory states of the organism. Different levels of the generative model track causes that arise at different spatiotemporal scales. In recent years, a number of authors have converged on the view that both psychedelics (see Carhart-Harris, Friston 2019; Letheby 2021) and meditation (see Laukkonen, Slagter 2021; Lutz, Mattout, Pagnoni 2019; Prest, Berryman 2024) work by *disrupting* the generative model across multiple levels of the hierarchy. In essence, psychedelics and mediation can effectively attenuate the influence of top-down cognitive structures (that is, the generative model or the “priors” it contains) on interpreting the causes of incoming sensory signals.

Here, we arrive at a hypothesis: timeless experiences result from an acute disruption of the mechanism responsible for the capacity to temporally synthesize experience by integrating (the computational equivalents of) primal impressions, retentions, and protentions. That is, in a mystical state elicited by psychedelics or mediation, one’s generative model can no longer integrate incoming information to form a diachronically coherent stream. The subjective time effectively becomes still, as one no longer feels as if the present is ongoingly fading into the past while keeping an open orientation towards the future (no-passage experiences). For a similar reason, given that the cognitive horizon stretching to past and future collapses, one is no longer capable of keeping a temporally centered viewpoint on reality. Arguably, if one retains the capacity to represent temporally distinct events in such a state, these events will appear temporally static or as if “eternally co-existing” (eternity experiences).

Crucially, this would also suggest that the good old Brentanian-Husserlian model, in its PP-based incarnation, already explains – or stands as a crucial ingredient in such an explanation – the sense of temporal flow that normally accompanies conscious experience. We experience the flow of time because the retentional-protentional structure of consciousness imbues phenomenology with a diachronically coherent, “stream-like” quality, in which subsequent experiences get interlinked in appropriate ways (this overall approach is in many ways similar

to ones developed in: Ismael 2017; Paul 2010). In other words, when we perceive the world, we perceive it *through* the temporally synthesizing activity of an internal model – and end up believing what we see undergoes temporal passage. Notice also how such a view is a unified explanation of both the ordinary experience of temporal flow and, *via* the model-disruption accounts of mediative and psychedelic states, the experiences of timelessness.

This view of phenomenal flow has two other interesting corollaries. One has to do with the suggestion made in section 1. Instead of being represented as a part of the content of perception, the subjective flow of time should be construed as present in experience by acting as a “formal” principle through which the manifold contents get bound together. Subjective temporal flow is not found *in* the world but is rather implicit in *how* the world, as our brains model it, is constructed. In other words, this approach is an instance of what Hoerl (2023) calls a “rationalist” stance on the nature of subjective flow. This way, it may also explain why the sense of temporal passage seems so introspectively inscrutable when one tries to make it an object of introspection.

The second corollary of the view is that it may explain why states of timelessness co-occur with other acute changes to experience, as a part of a *global* state of consciousness. This is presumably because, on the model-disruption accounts, mediation practice and psychedelics attenuate *multiple* high-level (“Kantian”) priors at once, so the experiential shift is naturally expected not to be confined to the experience of time alone.

In fact, this simple observation could serve as a fertile ground for theorizing about possible connections between aspects of the overarching structure of ordinary conscious experience. Remember the analogy between the sense of time and the sense of self, briefly discussed in section 1. Recently, a number of authors working in the PP/AI framework have posited that the experience of selfhood results from a predictive binding process (see Hohwy, Michael 2017; Letheby 2021, Ch. 7; Letheby, Gerrans 2017). Crudely put, the idea here is that the brain (1) integrates short-term body-related correlations in sensory signals to generate a “minimal” or “embodied” sense of self, and (2) integrates long-term sensory patterns by tying them under a “narrative” self. This process of imposing unity over a manifold of contents would break down in meditation or under psychedelics, giving rise to selfless or non-dual states of consciousness (see Letheby 2021; Letheby, Gerrans 2017). Now, note that such a proposal casts the minimal or embodied sense of self as a matter of attaining a *synchronic* unity – the sense of being an entity that has mental states at a time (see Letheby 2021, p. 52). One might now say that the present paper points to a process in which a series of such synchronic unities can be unified *diachronically* over short time spans (below the threshold in which a proper “narrative” or

autobiographical emerges), giving rise to the sense of a *temporally flowing* minimal self. If so, this could explain why selfless and timeless experiences tend to go together as parts of a single global state: they both result from the breaking down of basic integrative cognitive processes (this notion may be seen as a particular variant of a view initially expressed in Velleman 2006; for other relevant recent discussions, see also McKenna 2023; Young 2022). This may explain why many reports of experiences of timelessness highlight the changes to sense of self or identity (“I became atemporal”, “I coincided with the grasses”). This also suggests that there are limits to a methodology based on drawing phenomenal contrasts between experiences across different global states of consciousness. Because the sense of self and the sense of flowing time are so tightly entangled, perhaps one cannot have a conscious experience that acts as a contrast case to a normal waking state *solely* in terms of the subjective flow of time, without also contrasting with it in terms of the sense of selfhood.¹⁴

Conclusion

The subjective sense of the passage of time is elusive to the point where it has been plausibly denied even to exist. In this paper, I argued that the feeling of passage *is* a part of ordinary experience and suggested a new strategy for pinning it down. I discussed radically altered states of consciousness in which temporal flow is subjectively suspended – states that feel “outside of time”. I argued that these alternations of subjective temporality constitute phenomenal contrast cases to ordinary phenomenology, establishing that the latter involves the sense of passing time. I also showed how this approach might help us characterize the ordinary phenomenology of temporal flow, its underpinning information-processing mechanisms, and its relation to commonsense beliefs about objective temporal passage.

Literature

¹⁴ Again, what I have said here should be treated as an initial sketch, and open questions and potential problems should be noted. If both no-passage and eternity experiences stem from the breakdown of the same cognitive mechanism, how are we to account for the differences between them? If such experiences result from a disruption of such fundamental cognitive process required to attain diachronic coherence of one’s representation of the world, how can people undergoing those states represent change? Questions like these may require inventive solutions, or they may point to fatal flaws in the hypotheses laid out here. Here, I set them aside for future work.

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