

Perspectival Tenses and Dynamic Tenses

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Abstract

As far as our experience goes, we live in a dynamic present. Those two phenomenal features of experience – presentness and dynamism – are obviously connected. However, *how* they are connected is not obvious at all. In this paper, I criticise the view according to which the former can explain the latter, which I call *sophisticated representationalism*. My criticism will be based on an ambiguity in the notion of tense found in the philosophical literature, that between the perspectival understanding and the dynamic understanding of tenses. The distinction is not just of independent interest, but it has a role in providing indirect evidence for the claim that the feeling of passage of time should be understood in non-representationalist terms.

Keywords. Tense, Experience of the passage of time, A- and B-theory

1 Introduction

As far as our experience goes, we live in a dynamic present. We live in the present, because all our accessible experiences are temporally located in the present; and the present we live in is dynamic, because we feel it as shifting towards the future and receding away from the past. How we should understand the connection between those two features of experience – presentness and dynamism – is not obvious. As a first approximation, presentness pertains to what our experiences represent, while dynamism to how our experiences feel to us. If – as certain philosophers believe – our mental episodes (perceptions, recollections, imaginations and the like) possess their distinctive *phenomenal character* in virtue of possessing a *representational content*, an obvious

option comes to mind: the feeling of time passing is the phenomenal character, call it E_T , that our experiences have in virtue of representing things from the perspective of the present – that is, in virtue of representing things in a *tensed way*. I call this view *sophisticated representationalism*; in what follows I will focus on it and argue that it is false. I distinguish three further positions, which I will only briefly address and dismiss. *Naive representationalists* believe that the feeling of the passage of time is a “worldly” representational feature of the content of our experience, like being red or yellow. *Reductionists* take the experiences of change and motion to be in some sense responsible for our sensation of passage. *Deflationists* maintain that there is no distinctive phenomenological character of the passage, but only an intuitive grasp of the ordinary belief that time passes¹.

My criticism of sophisticated representationalism will be based on an ambiguity in the notion of tense found in the philosophical literature, that between the perspectival understanding and the dynamic understanding of tenses. Although the ambiguity has been rarely explicitly discussed, and the distinction elaborated, to my knowledge, I take it to be of independent interest. Separating the perspectival aspect from the dynamic aspect of tensed representations help us to understand that there is no explanatory connection between representing things from the perspective of the present and representing reality as dynamic. More precisely, there is no reason to think that a perspectival representation of the temporal dimension in and of itself be dynamic². This is important, since even philosophers disagreeing with the theory that I am criticising here, and with very diverse views on the nature of temporal experience and the cognitive mechanism underpinning it, seem to agree that the connection between the dynamic flavour of experience and the fact that in some sense we represent things as present is tight³. Finally, although the main aim of this paper is negative, my criti-

¹A fourth position, *attitudinalism*, is discussed in the last section as a variant of sophisticated representationalism.

²Although it may be that any dynamic representation of reality requires being centred on a “now” and hence being perspectival. Thanks to an anonymous referee for having pointed out to me that nothing in the paper rules out this possibility.

³See, e.g.: “Reflection on the qualitative character of [...] experiences [of temporal features of reality] suggests that events occurring now have a characteristic property of *nowness* responsible for a certain special “feel”, and that events pass from the future to the present and then into the past.” ([30, Paul 2010]); “To explain what makes experience distinctive, the thought goes, we have to bring in the idea that experience makes the *presence* of certain phenomena manifest to us, where this involves characterising experience in tensed terms.” [15, Hoerl 2009: 13]; “One is told that we feel time pass or that the present is sensed as

cism of sophisticated representationalism is meant to provide indirect evidence for an alternative, non-representationalist, account of E_T .

2 The phenomenology of the passage of time

It is difficult to talk about the the phenomenology of the passage of time without assuming some theoretical understanding of it (e.g., as a sensation with a certain character, or a perception with a certain content). What I will call the neutral characterisation (NC) of the experience of time passing is based on the idea that we have an intuitive grasp of the ordinary *belief* that time passes, and that we can refer to the *experiential base* of this belief – namely, to that aspect of our phenomenology that has an essential role in forming it:

(NC) E_T is that aspect of our experience *in virtue of which* we have the ordinary belief that time passes

NC is neutral in the sense it does not presuppose or entail an answer to the phenomenological question (PQ) about the nature of the experiential base of the ordinary belief in the passage of time:

(PQ) How should we account for E_T ?

However, NC is *not* neutral in two respects at least. Firstly, it presupposes that the ordinary belief is about the passage of time as some “purely” dynamic phenomenon, which should not be identified with temporal but “qualitative” phenomena, such as change or movement. Secondly, NC is not neutral in taking the experiential base of the special[...] ([4, Callender 2008]); “It is [...] difficult [...] to account for the sense in which some experiences are known to be *occurring*, or *present*, as opposed to *not* occurring, or *absent*” ([2, Balashov 2005: 296]); “Does our impression of the flow of time, or the division of time into past, present and future, tells us nothing at all about how time *is* as opposed to how it merely appears to us muddle-headed humans?” ([9, Davies 1995: 275]); “I have spoken of the fact of passage in terms of the present or now.” ([38, Schuster 1986: 695]). [25, Mozersky 2006] distinguish the fact that “the present is experientially privileged” from the fact that “as we interact with the world it appears as if time, in some non-metaphorical sense, passes”, but he also seems to think that the account of those two facts should go together. On the connection between the present and consciousness, see [23, Meyer 2015].

belief as a feature of experience in a *strict* sense, namely as a feature of our occurrent mental episodes, rather than of experience in some *broad* sense, namely as a feature of our common sense narrative about reality⁴.

A common way to understand phenomenal characters in general is to appeal to representationalism, *viz.* the following thesis:

(Rep) The phenomenal characters of experiences are identical to, or supervene on, their representational contents⁵.

Rep entails that E_T supervenes on some feature of the representational content of experience. Let me call *worldly* any phenomenal character E_F that corresponds to the “what it is like” to have a mental episode with a content that represents the world as having feature F . For instance, the phenomenal character E_{RED} connected to the “what is like” to see something red is worldly, because the visual perceptions that possess E_{RED} represent the world as containing red stuff. According to a *naive* version of the representationalist account of the experience of the passage of time, E_T is a worldly phenomenal character, and it supervenes on a feature of the content that represents the passage of time by representing the world as possessing a certain purely dynamic feature T .

If we deny that our experiences are systematically wrong, naive representationalism entails that we perceive, or “track” (i.e., we are in some form of reliable cognitive contact with) T . Now, I take [35, Prosser 2013] to have provided convincing arguments against the possibility of perceiving or tracking T , and thereby against naive representationalism. Yet not all hope is lost for a supporter of **Rep**. Firstly, our experience may be systematically wrong in what represents after all. If so, our experience as of passage is a *perceptual* mistake. This is the form of representationalism that I call *re-*

⁴Someone may disagree with this restriction, for instance by taking the belief to arise *exclusively* from comparisons between beliefs, memories and expectations (something along those lines is argued in [3, Braddon-Mitchell 2013]). I am not considering this option in this paper. Suffice here to notice that it is a form of deflationism, in that it does not recognise a specific phenomenal character of pure passage, and I have argued against deflationism in [42, Torrenco 2017].

⁵See [7, Crane 2009] and [5, Chalmers 2004]. The thesis is often called *intensionalism*, which is also the label for a (related) view on temporal experience in the “specious present” literature, as opposed to *extensionalism* (see [8, Dainton 2008], [29, Phillips 2014], and [16, Hoerl 2013]). I will not discuss the issue of intensionalism *vs.* extensionalism here.

ductionism. According to it, E_T is induced by experiences of qualitative change and movement, which do not require T being a feature of reality. I have argued against reductionism in [42, Torrenco 2017], and so I won't discuss this option here⁶. A second alternative is to “sophisticate” the representationalism principle by allowing *ways* in which a certain content is represented to have an import for the phenomenal character of experience. If tenses are features of the content of our mental episodes, one may think of characterising E_T by appealing to the “tensedness” of the contents of our mental episodes (i.e., to their being tensed). In particular, E_T may be thought of as the “what it is like” to have a mental episode with a tensed content representing a (brief) succession of events⁷.

Since sophisticated representationalism does not hinge on the possibility of perceiving or being in some cognitive contact with an alleged feature of reality T , even if Prosser's arguments are sound (as I think they are), they do not impinge on it⁸. Indeed, sophisticated representationalism bears similarity with traditional “B-theoretic” accounts of how the appearance of passage is compatible with the tenet that passage isn't real – for instance, Mellor's influential explanation of the feeling of passage as a consequence of accumulating memories of tensed beliefs with a constant temporal orientation⁹. However, B-theorists had usually shown deflationist attitudes towards the feeling of passage, or at least they had targeted issues that have more to do with how attitudes and beliefs connect with our experience in a broad sense, rather than phenomenology¹⁰. What I am considering and criticising here is rather the possibility of accounting for a feature of occurrent mental episodes (i.e., experience in the *strict* sense) in terms of the way our experience represents. More specifically, my polemical target is the view that it is in virtue of the fact that the content of our experiences are tensed, and thus *represent* things from the point of view of the present – “just arrived”

⁶See also [16, Hoerl 2013] for further arguments against this position.

⁷Terminological caveat: if you think of the content of a mental episode e (e.g., a perceptual experience) in *propositional* terms, then the claim that e has a “tensed content” does *not* entail (but it is compatible with) the claim that its content is a *tensed* proposition; the tensed aspect of the content may be encoded at the level of the Kaplanian character ([17, Kaplan 1989]). More on this later on in the text.

⁸I'm referring to Prosser's argument to dismiss naive representationalism, but I am aware that the dialectic in Prosser's paper differs from the one here: Prosser is arguing against the possibility of exploiting a representationalist account of the experience of the passage of time to support realism of the passage of time, rather than criticizing naive representationalism *per se*.

⁹[22, Mellor 1998]; see also [26, Oaklander 2004]. A different approach is in [10, Deng 2013].

¹⁰A similar thought is in [36, Prosser 2016: 161-2].

from the immediate past and “directed” towards the future – that they *feel* dynamic to us. In the next section I give my main argument against such a view¹¹.

To anticipate, there are two “natural” ways of understanding the notion of tensed representation, depending on whether one applies it to the linguistic or the experiential sphere, respectively. As indexical features of linguistic representations, tenses encode perspectival information about the temporal dimension, and in that they are analogous to spatial indexicals, which encode perspectival information about the spatial dimension. As elements of the representational content of the experience of the temporal dimension, tense represent the temporal dimension from a point of view that “moves” as time goes by, and are thus understood as containing a dynamic element¹². My main point will be that – regardless of whether it is true or not that our experience represents the temporal dimension in a perspectival manner – it is not *in virtue of* perspectival elements that our experience has a dynamic flavour.

3 Perspectival Tenses

I have characterized sophisticated representationalism as the view according to which E_T is the “what it is like” to have a mental episode with a tensed content representing

¹¹It is somehow surprising that the debate on temporal experience has started to focus on the problem of accounting for the phenomenal character of the experience as of passage only since very recently ([30, Paul 2010] is seminal, and [36, Prosser 2016] is the first book-length treatment of it, and the issue is also discussed in [39, Skow 2015]). However, my depiction of the sophisticated representationalist is not a complete straw man. [1, Almäng 2014] argues extensively for the thesis that the content of our experiences is tensed. Although he is not explicit on this, he seems also to suggest that the experience of the passing of time is grounded on the content of experience being *tensed*. The work of [18, Kriegel 2015] can be used to formulate a related position, which I call *attitudinalism*, according to which the feeling of the passing of time is a feature of our attitude towards representational content – its *temporal directedness* towards the present. I discuss explicitly Almäng and Kriegel in the last section.

¹²This seems to be the idea behind the characterisation, in metaphysics, of the realist position with respect to the passage of time in terms of primitive tenses. The origin of it dates back to McTaggart and Broad, and has its standard formulation in [33, Prior 1962], [32, Prior 1968]; for more recent examples, see [6, Correia and Rosenkranz 2011], and [21, Lowe 2006], among others. I do not think that it is *incorrect* to qualify realism of the passage (or at least one version of it) in this way, but if one takes seriously the challenge from [14, Fine 2005] on how to distinguish a world containing genuine flow from a world with a “frozen” present (see also [19, Leininger 2015]), it becomes crucial to distinguish between the ordinary notion of tense as indexical feature of our language, and the “dynamically loaded” notion of tense as feature of the content of experience. (For an intelligent criticism of Fine’s point, see [40, Tallant 2013]).

a (brief) succession of events. The qualification “tensed” is crucial, since insofar as a representation of a succession is a representation of events standing in the relation of before-after, it is a tenseless representation of a succession. The same goes for a representation that contains time indices, such as that of an event e_0 occurring at t_0 and an event e_1 occurring at t_1 , with t_0 being before t_1 . Since tenseless representations are not, *in and of themselves* at least, representations of a dynamic reality, having an experience with a tenseless content representing a succession, in and of itself, would not amount to experiencing what it is like to feel time pass. However, if all it takes for a representation to be tensed is to represent the temporal dimension from a perspective within time, a tensed representation of a succession is *not* (in and of itself) a representation of a dynamic reality – or so will I argue in what follows.

There are at least three varieties of representational content that can be characterised as tensed: *linguistic* content, *attitude* content, and *experiential* content. I will not say much about the content of belief, desires and other attitudes, but just assume, for simplicity, that everything I say about the linguistic case substantially carries over to the attitude case. My focus will be the difference between the understanding of tense in the linguistic case and that in the experiential case. I want to exploit this difference to argue that the notion of tense is explanatorily useless to account for our experience of the passage of time.

The notion of tense as applied to linguistic content is familiar from the semantic treatment of indexical elements in natural languages. As an element of a linguistic representation, it is typically understood as what is responsible for the encoding of perspectival information, or more precisely the perspectival way the information about the temporal dimension is conveyed. I will use the label *tense⁻* (and its adjectival variant *tensed⁻*) to refer to this understanding of the idea of tense. More precisely,

I will say that a representation is *tensed⁻* or *perspectivally tensed* according to the following characterisation.

Perspectival Tense or Tense⁻

- (1) *Tensed⁻* representations are *perspectival* representations of the *temporal dimension*
- (2) *Tensed⁻* representations are *centred on the present*

(3) *Tensed⁻* representations are *oriented towards the present* (along the direction that goes from past to future)¹³

Few comments are in place. A representation is *perspectival* when it requires, for the evaluation of its correctness, taking into account the point of view from which it represents. In general, when we ask whether a certain representation is correct, we need to specify what it is that we take the representation to be a representation of. Roughly, this means that we have to specify a *target* for the representation, with respect to which the representation has to be evaluated as correct or not. If I show you a picture (a pictorial representation) of *San Marco* in Venice and ask you whether it is a correct representation of the *Palazzo Vecchio* in Florence, no matter how many actual details of *San Marco* are in the picture, it would still be an incorrect representation of *Palazzo Vecchio*¹⁴. Perspectival representations require not only a target but also that the *point of view* from which the target object is apprehended is taken into account, when evaluated as correct or incorrect.

To keep on elaborating on the example of a pictorial representation, compare a drawing *d* of *Palazzo Vecchio* that a sophomore of the Academia of Arts has done while standing in the nearby *Loggia dei Lanzi*, and an axonometric projection *d** of the palazzo in an architecture handbook. One way of distinguishing *d* from *d** is to say that *d* is perspectival in a way that *d** isn't. The correctness of the axonometric projection *d** depends on whether the drawing depicts the spatial lengths of the wall of *Palazzo Vecchio* as they are (given the convention of axonometric drawing and a scale): that is, it depends only on the target object of the representation, and no spatial point "from which" the picture is supposed to be taken needs to be specified. In contrast, the correctness of the perspectival representation *d* not only depends on the target object, but it requires that the position of an observer be specified: *d* is a correct representation of the palazzo as seen from *La Loggia dei Lanzi* (which is to its left), but is not a

¹³This feature is reflected in the formal treatment of the semantics of the past and future tense operators, where the truth conditions differ precisely with respect to the direction of the temporal series involved ([17, Kaplan 1989]). See also [14, Fine 2005]: "Suppose we provide a complete tenseless description of reality; we say what happens when, and in what order, but without any appeal or orientation towards the present time.", and [12, Dyke 2013]: "[...]grammatical tense is tied to the notion of deictic centre; a reference point relative to which events are located in time[...]"

¹⁴See [24, Moore 1987]. Note that if the content of the representation is understood in propositional terms the target "object" is a world.

correct representation of the *palazzo* as seen from *La fontana del Nettuno* (which is on its right).

At least certain perspectival representations are (partial) representations of *dimensions*, or more precisely of entities as they are located in a given dimension. What I call here the “spatial dimension” is the order of places as they are related by spatial relations, in which ordinary objects are located, and the “temporal dimension” is the order of moments as they are related by temporal relations, in which ordinary events, including our experiences, occur. Notice that the temporal relations that constitute the temporal dimension are the *tenseless* relations of earlier-later and simultaneity. However, as certain pictorial representations represent objects as they are located in space from the point of view of an observer located *within* the very same spatial dimension (for instance, as more or less distant from where the observer is), certain linguistic representations represent events in the temporal dimension from the point of view of an observer whose experiences are events that occur *within* that very same temporal dimension. Those are *tensed*⁻ (linguistic) representations. More precisely, in a *tensed*⁻ representation, events are represented as more or less far away from the present (condition 2 above), either in the direction of the past or in the direction of the future (condition 3 above). Hence, if a succession of events is represented from the point of view of the last one, the events are not represented (or at least not merely) as related by tenseless relations of being earlier/later, but rather as more and more further away from the present in the past direction.

Analogously to the spatial case, whether a *tensed*⁻ representation of an event *e* is correct or not depends on the point of view – i.e., the moment in the temporal dimension – from which it is taken to be a representation. This means that *tenses*⁻ can be semantically modelled as indexical ingredients of a representation, which are time-sensitive¹⁵. For instance, the sentence “*e* is past” (a linguistic representation of *e*) is a correct representation of *e* if we take it as a representation from the point of view of a time *t* that comes later than (the time of occurrence of) *e*, but it is not a correct representation of *e*, if we take a point of view that is contemporaneous with or precedes the occurrence of *e*.

A reason to suspect that *tenses*⁻ won’t give us dynamic representations can be individuated already at this abstract level of characterisation. Take the description of

¹⁵See [27, Oaklander and Smith 1994].

the spatial distances between the points along a line. If we translated it into, or we “superimpose” to it, a description of those relations from the point of view of one of the point in the line (the others being more or less far away from it in given directions), nothing starts “moving” in the description. Adding a perspective and a point of view does not amount to adding a dynamic element in the representation. The same goes for the temporal case: given that the tenseless relations that constitute the temporal dimension do *not* possess anything dynamic in themselves, adding a present moment and describing events as more or less in the past or the future of it does not bring in the picture a dynamic element¹⁶.

However, those considerations apply directly only to linguistic representations (and possibly to contents of attitudes), while sophisticated representationalism is a thesis about the representational content of our *experience*. In order for the above discussion of tenses⁻ to be relevant for a representationalist account of the dynamic aspect of our ordinary phenomenology, the notion should be applied not to linguistic descriptions but to the content of mental episodes. Now, it is not implausible to maintain that our experiences represent brief successions of events from the point of view of the present moment. For instance, visual perceptions represent not only things in space in a perspectival way, with entities located more or less far away from us in various directions, but also brief successions of events in a perspectival way, with events in the succession as more and more into the past.

If we accept this, it is straightforward how the notion of tenses⁻ can be use to characterise the perspectival element of the content of experience. Mental episodes with a tensed⁻ content are those representing the temporal dimension according to conditions (1)-(3) above. Notice also that, given that experiences e_0, e_1 , etc. with E_T are events in the same temporal dimension as the events that they represent, if their contents are tensed⁻, the correctness of their content depends on *where* they occur in the temporal dimension. As representational contents of experiences, tensed⁻ representations are “internal” representations, precisely in the sense that they (partially) represent the temporal dimension from the point of view of the dimension they occupy¹⁷.

Bearing this in mind, we can construct an argument *against* the conclusion that E_T is the “what it is like” to have a mental episode with a tensed⁻ content representing a succession. If we call sophisticated representationalism⁻ the construal of the position

¹⁶[14, Fine 2005], [20, Lipman 2016] and [4, Callender 2008] make an analogous point.

¹⁷See [37, Recanati 2007].

that entails that *it is in virtue of being tensed* that the representational contents of our mental episodes have a dynamic phenomenal character, the argument can be seen as a reductio of sophisticated representationalism. Here it is.

(i) Many contents of mental episodes are perspectival representations of the spatial dimension in the same sense in which tenses are perspectival representations of the temporal dimension (with a center and a direction), they represent both the temporal and the spatial dimension, and have a dynamic phenomenal character. [Ass.]

(ii) It is not in virtue of the way that these contents represent space (i.e., as being perspectival in the sense in which tenses are perspectival) that the corresponding mental episodes have a dynamic phenomenal character [Ass.]

(iii) Therefore, it is not in virtue of the way that these contents represent time that the corresponding mental episodes are experienced as dynamic – viz. it is not in virtue of being tensed that the mental contents of our mental episodes have a dynamic phenomenal character. [From (i) and(ii)]

Premise (i) states that certain experiences represent space in a perspectival way, which is centred and oriented. As we have seen, most visual experiences qualify as representations of the spatial dimension from a point of view and towards a certain direction. Besides, when we perceive short successions of events, it is plausible to maintain that visual experiences also represent the temporal dimension, and at any rate, this is the case if sophisticated representationalism is true. Finally, (i) states that all such experiences have a dynamic character, which is something we have been assuming all along. Premise (ii) requires a more elaborate defence. Suppose you are walking down the road, coming closer and closer to a streetlamp. You are moving in space, representing visually the spatial dimension from a perspective, and time seems to flow while you are doing so. But even if you are experiencing “spatially tensed” perceptions, your experiences do not lead you to believe that space in some sense “flows”. But if the way space is represented were responsible for the dynamic character of our experiences, then such a phenomenal character would lead to the belief that space – i.e., what is represented in that way – flows. Since it doesn’t, the way space is represented in our

perceptions cannot be what originate E_T .

The move from (i) and (ii) to (iii) is justified, although not purely on logical ground. Given that representing space in a perspectival way does not originate a belief in space flowing, it cannot be that representing time in the very same way is what originates the belief in time flowing. In other terms, if we represent space and time in the same perspectival way, and the way we represent time is responsible for generating the belief that time passes, then the way we represent space should be responsible for generating an analogous belief. But isn't, so it cannot be the fact that temporal succession are represented perspectively what originates E_T . To sum up, if the way time and space is represented is the same, namely in a perspectival format, then if the way space is represented does not originate a phenomenal ground for believing that space is dynamic, the way time is represented cannot be what originates E_T either. This is the reductio of sophisticated representationalism⁻.

4 Dynamic Tenses

There are several ways the above argument can be resisted. Firstly, it could be stressed that according to sophisticated representationalism⁻ it is the assumption that we represent *short succession of events* in a certain way (regardless of how we represent things in space) what explains why our experience have a dynamic ingredient. If so, then even if it is not *merely* in virtue of the way in which the temporal dimension is represented that our experience has E_T , it could be still in virtue both of this and the fact that what is represented is a succession of event – namely the temporal dimension rather than the spatial one. However, remember that reductionism is not a viable position (although I have not argued for that here). Hence, the representational contents of our experience of short succession *per se* cannot be what gives rise to E_T . Now, it is in principle possible that even though those two ingredients of our experience individually don't contribute to the experiential base of our belief that time passes, they do so *jointly*. Yet it's difficult to see how the account could go here. If the only contribute of tenses is to bring a perspectival element into the representation, then some substantive story has to be told about how this would suffice to turn the temporal but not intrinsically dynamic representational content into a content that give raise to the belief that time passes. One may insist that the succession is represented as possessing an intrinsically dynamic el-

ement T . But this would amount to turn sophisticated representationalism back into a version of naive representationalism, another view which we have excluded (although I have not argued against it here).

It is, of course, possible that the intrinsically dynamic element is not in the content (given that naive representationalism is false), but in the way the content is represented. In other terms, we represent time in a way that is *different* from that in which we represent space – a way that is intrinsically dynamic. If so, assumption (i) is false (although the last conjunct in it can be true): mental content represent the temporal dimension not (merely) through tensed⁻ representations. Since (i) is close to being a direct consequence of sophisticated representationalism⁻, this option is tantamount to abandoning it.

Now, one could think that this should not come as a surprise, since sophisticated representationalism⁻ was a red haring since the very beginning. When applied to the content of *experience*, tenses cannot be understood as uniquely encoding perspectival information. The idea behind exploring a non-naive version of representationalism was precisely that our experience represents the world from the point of view of an ever changing present, and thus in a way that is both perspectival and dynamic. But then we should ask how the two elements connect. The argument in the previous section have shows us that we represent the temporal dimension as dynamic *not merely* in virtue of representing it in tensed⁻ terms. Thus, the representationalist seem to have no other option than claiming that is a somewhat brute fact that the dynamic element is part of the perspectival representation. That is, what we need is to *add* an irreducible dynamic element into the perspectival tenses. What we get is what I call dynamic tenses or tenses⁺, which I take to be the “natural” way of understanding tenses when applied to experiential content.

Dynamic Tense or Tense⁺

- (1*) *Tensed⁺* representations are *perspectival* representations of the *temporal dimension*
- (2*) *Tensed⁺* representations are *centered on the present*
- (3*) *Tensed⁺* representations are *oriented towards the present* (along the direction that goes from past to future)

(4) Tensed⁺ representations are *irreducibly dynamic*

The dynamic element needs to be irreducible precisely because we need to add it to the perspectively tensed representations, and so it cannot be reduced to features (1*)-(3*)¹⁸. Claiming that we need tensed⁺ contents to represent the temporal dimension as dynamic is compatible with our also representing the temporal dimension as tensed⁻, since tensed⁺ representations are a subclass of tensed⁻ ones (those possessing an additional dynamic element). Hence, even if it is not in virtue of the fact that we represent time as tensed⁻ that we represent reality as dynamic (as I have argued), it may still be true that it is in virtue of the fact that we represent time as tensed⁺ that we represent reality as dynamic, and this is what accounts for E_T . In other terms, sophisticated representationalism⁺ may be true even if sophisticated representationalism⁻ isn't.

Now, nothing in my argument entails that mental contents that represent the temporal dimension in a perspectival way do not have a dynamic phenomenal character E_T . However, by refuting (i) the sophisticated representationalist has just gave up her best shot at providing an *explanation* of our experience of passage in terms of the way we *represent* the temporal dimension. Remember that I started with characterising the linguistic notion of tense as an indexical element of the representation that encodes perspectival information¹⁹.

I have then applied this perspectival notion to the idea of an experiential content. My main argument showed that the perspectival aspect of perceptual content *alone* cannot be responsible for our experience of the passage of time. The importance of this result is that while in applying the linguistic notion of tenses to mental content it is natural to cast upon it a dynamical “flavour” (namely to switch from tenses⁻ to tenses⁺), we are not thereby authorised to treat the merely perspectival element of an experience of the temporal dimension as all what there is to a dynamic phenomenology.

But how good is to stick to a form of representationalism, and to insist that the irreducible dynamic element is a feature of the representational content as is the perspectival one? Clearly such a dynamic element cannot be treated as an indexical – if that was the case it would be reducible to a perspectival element after all. Thus, the

¹⁸Is it reducible to other features? Maybe. If so, then “irreducible” above has to be understood as relative to (1*)-(3*).

¹⁹Although, among the grammatical concepts, probably there are temporal notions that refer to representations that encode information that may be characterised as dynamic, such as the progressive tense in English.

claim that the two aspects are “joint” in the mental content still leaves us in want of a theory of the dynamic element in our experience. This opens the possibility that the theory is of a non-representational sort. Since I do not deny that experiential contents have a dynamic flavour E_T (contra the position that I have labelled *deflationism*), a more promising strategy to account for it may be to treat it *separately* from the perspectival element in the temporal content of experience (if any) and in general from the representational features of experience. Rather than understanding E_T as pertaining to mental content, it could be seen as a modifier of how experience with temporal content feels, and which beliefs they can give rise to²⁰.

Although it is not my aim here to argue for this option, I think that the discussion of sophisticated representationalism has at least diminished the appeal of pursuing a representationalist approach to the PQ. At any rate, my aim here was to argue that resorting to a perspectival element of mental representations is of no explanatory help when it comes to the dynamic aspect of experience.

5 Dynamic Content vs. Dynamic Attitude

In a recent paper, Jan Almäng argues convincingly and at length that perceptual representations have tensed contents²¹. Almäng does not make the distinction between tensed⁻ and tensed⁺ (in fact, nobody does explicitly), but he seems to have in mind tenses as indexical elements of our perceptual contents, and so he is mainly concerned by the perspectival element of tenses. Still, he seems also to suggest that the experience of the passing of time is grounded on the content of experience being *tensed* – especially when he makes reference to the phenomenology of the passage at the very beginning of the paper. If so, he maintains sophisticated representationalism.

²⁰A full account of my proposal is in [42, Torrenco 2017]. See also [31, Perry 2013: 498], who compares (i) B-representations, eg. a calendar, which provides a map of the tenseless relations between the days of a year, (ii) A-representations, eg. a representation of the same order from the point of view of today (“In the middle of the chart there are three columns, labeled “Yesterday”, “Today,” and “Tomorrow.” There are additional columns to the left of these three, labeled “the day before yesterday,” and “the day before the day before yesterday,” and so on[. . .]” (p. 497).), and what he calls “dynamic representations”, which are constituted by “[t]he calendar, plus the magnet [a peg on today], plus *my practice of moving the magnet at midnight[. . .]*” (italics mine). The calendar plus the peg (and a direction) is enough to give us a tensed⁻ representation, but we need to *add* something (the practice to move the peg, according to Perry) to make the representation dynamic.

²¹Cfr. [1, Almäng 2014]

His argumentation starts by defending the premise that perceptual content always presents us with *processes* – that is, entities that are temporally extended by having temporal parts. Moreover, we are presented with processes *as* having a structure of temporal parts, namely as successions of temporal parts. The term ‘succession’ is ambiguous: it may allow a tensed reading or a tenseless one. More precisely, facts about successions can be tensed (I am for now talking only about tenses²²), like the fact that *I am experiencing red and I was experiencing green*, or they can be tenseless, like the fact that *I experience green at t_0 and I experience red at t_1 and $t_0 < t_1$* . Such an ambiguity is inherited also by the way a succession can be presented, namely in the way its structure is represented in perception. In Almäng’s terminology, we perceive external objects as having certain properties, namely as being presented through a certain mental content, and we *experience perceptions* (with a given content) as being in one way or another²². Almäng’s arguments aim at the conclusion that successions can be perceived as having a tensed structure (regardless of whether as objects of perception they have a tensed structure or not). More precisely, Almäng first argues that we experience perceptions as tensed, and then goes on to the further conclusion that the content of our perception is tensed. The point is important, as we will see, since even if Almäng wants to argue that the *content* of perception is tensed, this does not follow from the fact that we experience perceptions as tensed, unless some further assumptions are made – assumptions that he explicitly argues for.

Given that our objects of perception are temporally extended, it is plausible to conclude that what we experience is also a sequence of perceptions. Thus, an experience of a perception of a succession is experienced as a succession of experiences. In particular, an experience of a succession of perceptions is experienced as a tensed complex, in which some perceptions are experienced as present and others as past²³. From this first conclusion, as I said, Almäng further argues that we perceive processes as tensed complex (with present and past parts) – that is, the content of our perception is tensed.

Almäng’s reasoning is based on the (plausible) assumption that if we experience a

²²Almäng’s terminology is slightly different from the one I have adopted so far. Rather than saying that we have experiences with a certain phenomenal character, he uses locutions of the form “experiencing a perception (or some other mental episode) as being so and so”. However, “experiencing a perception” in his idiolect does not mean having the perception as an intentional object, rather “*sui generis*, as something that we experience” ([1, Almäng 2014: 365]).

²³Importantly, the fact that certain perceptions are experienced as being (just) past is not to be confused with the fact that we may *remember* experiences having occurred in the past (even long ago).

perception as present, then we perceive its object as present as well (and the perception as simultaneous to its object). That is, the content represents the object (a part of the process that we are perceiving) as present. And an analogous reasoning applies to our experiencing a perception as past. Thus, a certain part of the process will be represented as present, and others as past. The idea is that the *content* of our perceptions, the way the object of perception is presented to us, has a tensed format: namely, it contains an irreducibly (temporally) indexical element. The reasons why the content cannot be reduced to a tenseless (non-indexical) one are well known in the literature, and have to do with the impossibility of explaining timely action by the sole attribution of mental contents without temporal indexicals²⁴.

Whatever one thinks of the move from experiencing a succession of perceptions as tensed to perceiving a process as tensed, I wish to draw attention here to an important difference between tensed⁻ perceptual content and tensed⁺ content. If the content of a perception represents a process with present and past parts, then it has a perspectival element, which is centered (on the present part), and has an orientation too. Such a tensed⁻ content can be correct with respect to a temporal point of evaluation. Now, it is well known from the semantics of indexicals that a temporal indexical can have a tenseless truth condition – that is, a tensed⁻ content of a perception can be correct relative to a time, even if the anti-realist regarding the passage of time is right²⁵. The situation is different if the process is represented not only in a perspectival format, but also as dynamic. If we exploit the semantics of indexicals to provide truth conditions for a tensed⁺ representation, the representational element that encodes the attribution of dynamism is bound to turn out to be incorrect, if the anti-realist thesis is true. In a sense, this is how it should be: an anti-realist on the passage of time does not think that the dynamic element of our experience is in any sense veridical. However, it is the dynamic element *only* that the anti-realist should not take as veridical. Perspectival elements (w.r.t. time) of representations do not represent reality correctly if they are understood to be *absolute* representations – representations that are not relative to a

²⁴See [28, Perry 1979], [22, Mellor 1998] and [41, Torre 2009]. Roughly, knowing that I have to catch a train at 12:00 won't motivate me to go to the station in time, unless when it is about 12:00 I think something like “*Now* it's time to go”.

²⁵As Almäng also notes, the irreducibility of the tensed element of the content has no bearing on whether the feature of reality or the fact that is represented is irreducibly tensed or not. For discussion and further references, see [11, Dyke 2003].

certain temporal standpoint – but this does not mean that they cannot be correct to court. As we have seen, they can be correct relative to a time in the temporal series (and incorrect relative to others). Yet the dynamic element – as a constituent of the content, even if general and not ordinary – can never be correct if the anti-realist position is correct; and unless we adopt some *as hoc* convention, the whole tensed⁺ representation is bound to turn out false no matter what the worldly facts are.

Thus, if the spirit of the proposal is to make use of the semantic machinery of indexicals to characterize the representational content that encodes the experienced dynamism of reality, it seems that we have hit a dead end – as it should be clear from the discussion in the previous sections. Almäng himself notes that the same indexical content can present us with different objects at different times; this explains how it may happen that we have a veridical experience in one context, while in another context an experience with the same content is illusory²⁶. But this is true only of tenses⁻ and not of tenses⁺. If tenses⁻ can be understood as the indexical part of a perceptual content, while this is problematical with respect to tenses⁺, then maybe the perspectival element and the dynamic element should part company with respect to the mechanisms that encode them as features of how we experience our perceptions. But how?

In a recent paper Uriah Kriegel has argued that the tensed element of temporal experience should not be understood as a characteristic of the content of our perceptions, but rather as a feature of our *attitude* towards perceptual content. Again, Kriegel does not distinguish between tenses⁻ and tenses⁺, but I take his proposal to be that – contra Almäng – tenses⁻ are an element of the attitude²⁷. He starts by noting that our experiences have a *felt temporal orientation*. In particular, occurring perceptions, as opposed to recollection, are oriented towards the present – they come with some sort of commitment to the object of perception being in the present. According to Kriegel, such a commitment is not a consequence of how the object of perception is represented in the content, but is rather “built into” our attitude towards the intentional content in occurring perceptions. In his terminology, perceptions do not represent something-as-present, but they represent-as-present something. It is in the very nature of perception,

²⁶“[...] tensed content functions just as any other indexical content. It is irreducible to tenseless content, yet it can have tenseless truth-conditions. Tensed content is constitutive of a function which takes as its value the context of the act of perception and yields certain conditions of correctness for that particular act of perception. ([1, Almäng 2014: 377])

²⁷[18, Kriegel 2015].

as an attitude towards an intentional content, to possess an orientation towards the present rather than the past or the future. Thus, the fact that perception is oriented towards the present (and memory towards the past), does not entail that perceptions represent objects as present. Note that if Almäng is correct that we experience perceptions as having a structure, with present-tensed and past-tensed parts, Kriegel's account must be modified (if retained). In particular, the attitude of perception has to be understood with a complex temporal orientation: it has to be partly presently-oriented and partly past-oriented. Let us say that, if the tensed aspect is in the attitude, perceptions are experiences as *focused* on a present, but with parts in the past, and plausibly also with a future-directed orientation²⁸. By “lifting” the tensed aspect of experience from the content of experience to the attitude, we get rid of any sense in which our perceptions are incorrect because they *represent* something as present. Indeed, in favor of his theory Kriegel tries to exploit the claim that it is a desideratum of any theory of temporal experience to avoid the need for an error theory with respect to felt temporal orientation. However, as we have seen, someone who puts tenses into the content has an independent way of explaining the correctness of tensed⁻ representation – by resorting to the semantics of indexicals. Hence, appealing to such a desideratum is not a reason for preferring tenses⁻ in the attitude rather than in the content, although it may be a reason for preferring tenses⁺.

Another reason Kriegel puts forward for preferring his view is that it seems phenomenologically more correct to characterize the attitude in virtue of its temporal orientation than to treat temporal orientation as a characteristic of the content. The idea is that perceptions are essentially, and intrinsically, oriented towards a present focus. This is what distinguishes them from recollections and other attitudes. In other words, a ‘perception’ with a past-oriented focus would not be a perception at all, but a different attitude (probably, a recollection). This is why, as Kriegel notes, it is in a sense trivial to say of a perception *e* that it is present-oriented: it is not in virtue of having a certain kind of content that *e* is present-oriented, but merely in virtue of being a perception.

Be that as it may, ‘temporal orientation’ is clearly a perspectival feature of experience and in itself does not encode any dynamism. Therefore, we still have to ask whether the dynamic feature that distinguishes tenses⁺ from tenses⁻ should be under-

²⁸Is the past-orientedness of the complex attitude typical of perceptions different from the past-orientedness typical of recollection? There are many difficult and interesting questions here. Luckily, we can leave them aside here, since nothing central to what follows hinges on them.

stood as encoded in the content, or as a commitment in the attitude. In other words, we still have to ask whether the view about the sensation of passage that I call *attitudinalism* – according to which the dynamic phenomenal character of our experiences is due to an element of the attitude – is correct²⁹.

To consider E_T as encoded in a representational feature of the content is less appealing; as we have noted above, we would be compelled to claim that, strictly speaking, virtually all our perceptions misrepresent reality. If the indexical and perspectival element of tenses can be modeled by using the semantic of indexicals, it does not make sense to claim the same for the dynamic element.

However, attributing it to the attitude does not seem to be optimal either. For one thing, what attitude is E_T supposed to characterize? The temptation is to attribute it exclusively to perception; after all, E_T is a feature of experience in the strict sense, which includes only presently occurring mental episodes. But while it is correct to say that a presently occurring perception is oriented towards a present focus, and a *presently occurring* memory is oriented towards the past, it seems wrong to distinguish them on the grounds that the first is dynamic while the second is not.

There are reasons to maintain that attitudes do not differ from each other because they are associated with different varieties of dynamism or a lack thereof. Different kinds of experiences may differ in their temporal structure. For instance, if Kriegel is right, a memory is an experience that is past-directed, while a perception is an experience that is present-directed. They differ in temporal structure by carrying different commitments with respect to the temporal location of their contents. But from this does not follow that such differences are reflected in differences in *all* their temporal phenomenal ingredients. There are surely many phenomenal characters that are temporal in some sense, and some of them can be constant in attitudes that differ in temporal structure. In particular, if – as we have assumed – there is a phenomenal character of the feeling of passage E_T , it is not at all implausible to take on as a working hypoth-

²⁹Kriegel's proposal is about the felt temporal orientation rather than the felt sensation of passage of time. Here I am extending it as an account of the phenomenology of passage, but I am not claiming that Kriegel's view is committal towards such an extension. Thus, what I call *attitudinalism* is not Kriegel's position but rather a position derived by an extension of Kriegel's position. I note here in passing also [13, Falk 2003], who maintains what it could possibly be described as a "tenseless" version of sophisticated representationalism, or a middle way between attitudinalism and sophisticated representationalism. Discussion of Falk's work on the fact of the arguments in this paper is matter of future work.

esis that E_T is a phenomenal character of all (or all but all) our experiences. If so, a presently occurring memory of the past is no less dynamic than a presently occurring perception – both tell us that time passes while we are experiencing them. Indeed, it seems that every experience displays the same dynamic character when it is available to us³⁰. If these considerations are correct, *attitudinalism* is not in a better shape than sophisticated representationalism³¹.

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³⁰Thanks to an anonymous referee for having pushed me to say more on this point. I have explicitly defended the plausibility of the working hypothesis that E_T is an ingredient of virtually all our experiences in [42, Torrenco 2017].

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