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ORIGINAL RESEARCH



If presentism is false, then I don't exist. On common-sense presentism

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Abstract

For many presentist philosophers, e.g. Zimmerman (Contemp Debates Metaphys 10:211–225, 2008), a central motivation in favour of presentism is that it is supposed to be part of common sense. But the fact that common-sense intuitions are indeed presentist is usually taken for granted (and sometimes also conceded by eternalists). As has been shown in other domains of philosophy (e.g. free will), we should be careful when attributing some supposed intuitions to common sense, and Torrengo (Phenomenology and Mind 12: 50–55, 2017) and Le Bihan (Igitur-Arguments Philos 9(1):1–23, 2018) have legitimately raised doubts about the assumption that common sense is presentist. In this paper, I take up this challenge and try to show that our common-sense intuitions do imply presentism. More precisely, the intuitions that I take to imply presentism are fundamental intuitions about our selves as conscious beings. The upshot is that presentism is so much embedded within our conception of our selves that if presentism is false, then I don't exist!

Keywords Presentism · Common sense · Personal identity · Unity of Consciousness · Existence simpliciter

In the debate between Presentists and Eternalists, it is common to hear the former claiming that their view is supported by common-sense intuitions, and presenting these intuitions as an argument or a reason (sometimes the main reason) to endorse Presentism. Such an argument is developed, for instance, by Zimmerman (2008) and

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is usually listed as the first motivation in favour of presentism (see Ingram & Tallant, 2022, Sect. 1; Ingram, 2019, pp. 39–43). We could summarize the argument as follows:

Presentist argument from common sense

- (1) The common-sense conception of time is presentist.
- (2) The fact that a certain proposition is supported by common sense gives it a certain epistemological privilege (a *prima facie* justification).
- (3) Therefore we have a *prima facie* justification for believing Presentism.

In response to this argument, an Eternalist could raise doubts about the second premise and consider that common sense has no epistemological weight whatsoever (in general, or for this particular issue). Or she could concede the conclusion, i.e. the *prima facie* justification in favour of Presentism, but claim that this *prima facie* justification is defeated *ultima facie* by other considerations (philosophical arguments, or scientific data, or perhaps a combination of both). These strategies are the most common among contemporary Eternalists, and they are compatible with conceding that premise (1) is true. Indeed, some Eternalists explicitly concede that their view requires a revision of common-sense intuitions (see for instance Petkov, 2006; Sider, 2001; Wüthrich, 2012).

Torrengo (2017) and Le Bihan (2018) adopt a different strategy: they raise doubts about the commonsensicality of Presentism itself. And these doubts seem at least methodologically prudent if we have in mind other philosophical debates in which the verdict of common sense was once thought to be obvious. Think, for instance, about the philosophy of Free Will: it was once thought as obvious, both by incompatibilists and compatibilists alike, that common sense at least was incompatibilist, and that the only question was to determine whether common sense was illusory or not on this matter. But a more careful examination, especially in experimental philosophy, has revealed that even this claim about common-sense intuitions in themselves was far from obvious, and that some empirical data could at least be interpreted as showing that common sense is rather compatibilist (see for instance Nahmias et al., 2006). In other words, the deliverances of common sense themselves can be difficult to establish and should not be taken for granted before careful examination.

In this paper, I will take Torrengo and Le Bihan's challenge seriously, and I'll try to defend that common-sense intuitions are indeed Presentist (premise (1) above). I will leave aside the rest of the common-sense argument and the question whether this common-sense intuition gives *prima facie* or *ultima facie* justification in favour of Presentism. In other works, I have tried to offer defences of (some version of) premise (2) (Guillon, 2017, 2020a, 2020b, 2023a, 2023b, 2023c). And my personal view, for what it's worth, is that Presentism does have *prima facie* (and probably *ultima facie*) justification. But I will say nothing to defend these further claims here. My only purpose here is to argue for the mere commonsensicality of Presentism.

¹ For other endorsements of the view that common-sense intuitions are presentist, see Bigelow (1996, pp. 35–36), McKinnon (2003, pp. 305–307), Markosian (2004, p. 48), De Clercq (2006, p. 386), Tallant (2009, p. 407) and Graziani (2023).



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Which strategy could we follow to establish that common-sense intuitions support or imply Presentism?

A first strategy, followed by Zimmerman, is to make a direct "appeal to our intuitions" about time. Zimmerman invites us to reflect on our intuitions and immediately recognize that "it is simply part of commonsense that the past and future are less real than the present" (Zimmerman, 2008, p. 221). A direct appeal to common sense is not likely to be convincing against interlocutors such as Torrengo or Le Bihan, who are raising doubts (legitimate doubts in my opinion) about common-sense attributions. One solution, in order to break the tie, is to do experimental philosophy about our intuitions or experience of time. Very recently, two teams of experimental philosophers have started doing such experiments. The first studies by Andrew Latham and Kristie Miller (Latham & Miller, 2023; Latham et al., 2021; Norton, 2021) seemed to suggest that our common experience of time (as opposed to our common representation of time) does not contain the element of "robust passage" (A-Theory) that many metaphysicians assumed. But the other team, led by Jack Shardlow and Christoph Hearl (Shardlow, 2023; Shardlow et al., 2021) interpreted a different set of data as an indication of the opposite conclusion (a robust passage phenomenology). It seems fair to say that, for this very recent debate, the jury is still out.² Also, the studies so far have focused on the dynamic vs non-dynamic debate, and not on Presentism as such (as opposed to non-presentist A-Theories).

A second strategy would be to appeal to common-sense intuitions bearing on other aspects of reality, that can be accepted in a non-problematic and non-question-begging way, and to show that these intuitions *imply* a Presentist picture.

The most famous version of this second strategy is the one suggested by Arthur Prior and the experience captured by the phrase "Thank Goodness that's over" (Prior, 1959, 1996). This kind of experience, according to Prior, allows to defend a presentist picture, based on our intuitions concerning mental events or conscious experiences, for instance a past headache (for which I thank Goodness that it be over rather than present).

Another version of this indirect strategy starts from our common-sense intuitions concerning the human self, i.e. intuitions about "the kind of thing that *I* am". Such a strategy could take its starting-point, for instance, in Laurie Paul's analyses, according to which the subjective experience of the self is as of an "enduring self" (Paul, 2017).

So far as our intuitions about conscious experiences, or about the self, have logical implications on the nature of time, they could be used as a non-question-begging way to establish indirectly that common sense is committed to Presentism. This is the strategy I will follow in the present paper, and I will combine the two versions of the strategy just mentioned. My main argument will rely on an analysis of our common-sense conception of the *self as a subject of conscious experiences*. Before I combine these two versions of the strategy (in Sect. 3), I will examine each one of them separately (the enduring self in Sect. 1, and the past experiences in Sect. 2). I will show why the two elements have to be combined in order to deliver a convincing argument in favour of the commonsensicality of Presentism.

² A survey of the data is offered in Deng (2017), Norton (2021) and Shardlow (2023). See also (Miller 2023, n. 12) for Miller's evaluation of their disagreement with Shardlow et al.



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This indirect strategy, in comparison with the direct appeal to intuitions about time, not only avoids the problem of question-beggingness. It has a second important advantage: it allows us to appreciate what is at stake in the apparently highly metaphysical debate about Presentism. If my arguments in this paper are correct, then our commonsense conception of Presentism is inseparably tied with our common-sense intuitions about ourselves as conscious beings. As a consequence, if we were to discover that our common-sense Presentist intuitions have to be revised, this revisionary move would also imply that we have to abandon the conception we commonsensically have of ourselves. If the common-sense Presentist intuition were only a direct intuition about the nature of time—like, perhaps, the common-sense intuition that heavier objects fall faster or that the earth is flat—revising it would only mean abandoning a piece of folk physics. This wouldn't change much in our lives and wouldn't be very surprising epistemologically (what weight has folk physics anyway?). But the consequences of a revisionary position, and its plausibility, are very different if what is at stake is our conception of ourselves. To put things bluntly, the conclusion of this paper will be that if Presentism is false, then I don't exist (at least not in the sense of myself that we all have from common sense). My conclusion here will only be this conditional, and I will not advocate in favour of the modus ponens or the modus tollens. But, clearly, seeing that this is what is at stake will place us in a different epistemological situation than if we were only confronted with the following choice: "if Presentism is false, then we have to abandon one piece of folk physics".

I have said that my argument relied on our intuitions about the self as a subject of conscious experiences (i.e. "the conscious self). More precisely, it relies on two intuitions that I will consider as common-sense intuitions. They are the following:

- (CS1) Identity over time: it is I, the same "I" or the same "self", who was conscious yesterday (for instance, having a headache yesterday) and am conscious today (for instance, thinking about maths today).
- (CS2) Unique consciousness: I have a unique consciousness (or: I am a conscious being with a unique consciousness).

Why do I say that these intuitions are part of common sense? A first reason is of course that they *seem* to me to be very strongly intuitive, and that I *expect* many readers to share them (whether or not they are presentists). Because of this, I'm inclined to make an "appeal to intuition", just like Zimmerman or others appealed to the intuitiveness of Presentism (or the passage of time) directly. But of course, it might be that my intuitions are idiosyncratic or theory-laden, and just like other appeals to intuitions, some work (some philosophical analysis and some experimental philosophy) needs to be done in order to confirm or undermine these expectations. In this regard, my indirect strategy (from intuitions about the self) has no advantage over direct strategies (from intuitions directly about time): both need some empirical support in order to confirm or undermine the supposed commonsensicality of the intuitions.

In this paper, I will not offer new results in experimental philosophy, nor will I give an extent defense of the fact that these intuitions are part of common sense. My purpose is rather to examine the consequences (for the metaphysics of time) of their being commonsensical. But let me briefly present some previous works that seem to



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suggest that it is at least reasonable to think that (CS1) and (CS2) are indeed commonsense intuitions and not merely idiosyncratic intuitions.

For the intuition of Identity over time (CS1), the main doubt one might have is that maybe common sense is only committed to our retaining some kind of qualitative identity over time (or maybe some more complex relation of gen-identity, allowing us to count as "the same person" in *some* sense) but not to our keeping *numerical* identity. Indeed, some studies in experimental philosophy seemed to indicate that at least some important changes in our lives (such as Phineas Gage's famous example) were able to make a break in our "identity" (Strohminger & Nichols, 2015; Tobia, 2015). But more recent studies suggest that the notion of identity that is here at stake is just qualitative identity, and that when we test more specifically *numerical* identity, common-sense intuitions tend to maintain the "oneness" of the person (there being *one* person over time) in spite of the qualitative changes (Finlay & Starmans, 2022; Schwenkler et al., 2022).³

For the intuition of Unique consciousness (CS2), the most developed work on this topic is Tim Bayne's study about *The Unity of Consciousness* (Bayne, 2010). In this book, Bayne defends that human consciousness is unified (and necessarily so), in the sense that the various conscious experiences a subject has (such as hearing a siren while feeling a pain in the leg) "are co-conscious", i.e., they are "components of a more complex experience" which is the subject's "total state of consciousness" (or "phenonemal field") (Bayne, 2013). But more important for us is the thesis of the last chapter of the book which concerns not only the consciousness in itself (as unified) but the relationship between this unified consciousness and our conception of the human self. In this chapter, Bayne rejects two accounts of "the self" (the biological or animalist account and the psychological or Lockean account) for the same reason that both are compatible with the possibility of a single self encompassing several consciousnesses. The most obvious case is the one of the animalist conception: it is possible to have one and the same animal—a Cerberus—encompassing two independent streams of consciousness in two different heads (Bayne, 2010, p. 271; example taken from Van Inwagen, 1990b, p. 191). According to Bayne, we cannot describe such cases as situations in which there is one unique "self" and two distinct "consciousnesses" because this would not satisfy the "three [conceptual] roles that 'the self' or 'subject

³ One reviewer expressed the worry that the *negation* of our numerical identity over time might directly follow from two other common-sense intuitions: since it is part of common sense that I have different properties (including incompatible intrinsic properties) at different times (Intrinsic Change), and that two things that have different properties cannot be numerically identical (Leibniz's Law, LL), doesn't it follow (from common sense) that what "I" refers to at different times are at best qualitatively identically or genidentical (but nor numerically identical) entities? To this argument, I am inclined to respond that these two common-sense intuitions (Intrinsic Change and LL) can be interpreted or captured in ways that do not make them logically incompatible with what Schwenkler et al. have arguably discovered to be an intuition of numerical identity. The solutions of logical compatibility are classical in presentist treatments of the problem of temporary intrinsics, such as (Van Inwagen, 1990a): one solution is to consider the properties (relevant in LL) as time-indexed (such that being-bent-at-t1 is a property compatible with being-straightat-t2); the second solution is to consider the relation of having a property as time-indexed (in that case, LL should be formulated as follows: "if there is some time t such that x and y have-at-t different properties, then x and y are not numerically identical", and this reformulation raises no problem at all for the same individual—numerically the same—having-at-t1 the property being-bent and having-at-t2 the property being-straight).



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of experience' [...] ought to play" (Bayne, 2010, p. 269) in order to correspond to "our self-conception". In other words, describing the case of Cerberus as a case of (possible) mismatch between the number of selves and the number of consciousnesses "would be to revise our ordinary conception of the relationship between consciousness and the self" (*ibid*, p. 272). According to Bayne's analysis of the conceptual roles of "the self", our "ordinary" (common-sense) conception of the self is one according to which there is always and necessarily just one self for one consciousness. This is precisely what I am claiming when I say that (CS2) is a common-sense intuition.

Of course, the recent x-phi studies in favour of the commonsensicality of (CS1) need further investigation to be confirmed or undermined, and Bayne's analyses in favour of the commonsensicality of (CS2) can be disputed (and probably also need doing some x-phi that hasn't been done so far). But these first works already suggest that (CS1)'s and (CS2)'s commonsensicality is a serious hypothesis, serious enough for it to be legitimate to enquire the *consequences* that follow (for the meta-philosophy of time) if they are indeed commonsensical. My claim in this paper is that the consequences are very significant: that if (CS1) and (CS2) are indeed commonsensical then we have a novel and independent way to show that *Presentism* is commonsensical. But the take-home message of this paper is not, of course, that we should stop investigating (in x-phi) about *whether* they are commonsensical: on the contrary, the upshot of my argument is that we should enquire more about this serious hypothesis, precisely because of its significant consequences.

Indeed, if (CS1) and (CS2) are commonsensical, and if the argument of this paper is correct, then Presentism is not just part of some kind of "superficial common sense" (as is our naive physics). Rather, Presentism would be a consequence of the deep commonsensical conception of the *self*. And, as Tim Bayne puts it, "the self is a nonnegotiable feature of our cognitive architecture, and it is no more possible to think away one's own self than it is to think away one's own life" (Bayne, 2010, p. 294).

Some preliminary clarifications are required about the metaphysics of time. Presentism is a conception of time which is frequently associated with two others: the A-Theory of time on the one hand, and Endurantism on the other. But, as is well known, these three theories are not logically equivalent. Presentism is an ontological claim: it claims that only present things exist (past and future things don't exist). And it is opposed to Block Universe Theories (either an eternalist block, where past, present and future things exist, or a growing block, in which only past and present things exist). Endurantism is a claim about the identity of things over time: it claims that things that persist over time are wholly present at each time at which they exist. This is opposed to Perdurantism, which claims that things persist over time by having temporal parts. Finally, the A-Theory is a claim about the structure of time. It usually contains two aspects (not always clearly distinguished): first the existence of some form of objective privilege of the present (over the past and the future) and second the existence of an objective "flow" of time (from past to future). The A-Theory is opposed to the B-Theory, which denies both any objective privilege to the present and any objective phenomenon of the "flow" of time.

⁴ The three conceptual roles of the self are the following, according to Bayne (2010, pp. 269–270): the self is that which *has* the experiences (ownership role); the self is the *object* of first-person reflection (referential role); and the self is a *perspective* or point of view on the world (perspectival role).



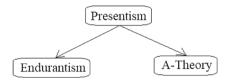
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What are the logical relations between these three theories, Presentism, Endurantism and the A-Theory?

It is widely recognized that the A-Theory does not logically imply Presentism. It is logically possible to construct a model of time in which the Universe is a 4D block with an objective flow of time (and a privilege of the present): this is the case in theories of the "Moving Spotlight" (Cameron, 2015) and in theories of the "Growing Block" (Broad, 1923; Tooley, 1997). But conversely, it seems that (under very modest assumptions) Presentism does entail the A-Theory. A form of Presentism which would deny the A-Theory would have to say not only that the past (and future) don't exist, but also that there is no flow of time such that they have been (or will be) objectively present and therefore existing. In other words, the past and the future in such a theory would have no connexion whatsoever with existence; they would be pure fictions or illusions, as in radical skepticism. If we set aside such a radical form of skepticism, any Presentist will be logically committed to accept the A-Theory.⁵

As for Endurantism, it can also be shown that Endurantism does not logically imply Presentism (though this is perhaps less widely accepted). An endurantist theory combined with a block Universe Theory would be one in which a persisting thing is wholly present at distinct spatio-temporal locations of the block. This may seem weird, but there are today strong defences of the possibility of multilocation (Gilmore, 2018, Sect. 6). This is why there doesn't seem to be a strict implication from Endurantism to Presentism. Conversely, it seems that (under very modest assumptions) Presentism does entail Endurantism. This is because a presentist denies the existence of any past and future things that might constitute the temporal parts of a perduring entity. Unless one is ready to defend that a perduring thing is made of parts (past and future) that are Meinongian non-existents, Presentism cannot have perduring things in its ontology.⁶

As a result, I will assume in this paper that Presentism is the stronger metaphysical view, which implies both Endurantism and the A-Theory, while conversely these theories do not imply Presentism. The following figure summarizes these logical relations.



⁵ The entailment from Presentism to the A-Theory is not universally accepted: Rasmussen (2012) proposes a model in which Presentism could be true without A-properties. Tallant (2012) responds that Rasmussen's model doesn't work, but proposes another model of non A-theorist Presentism. But Tallant himself recognizes in his (Ingram & Tallant, 2022, Sect. 1) that construing presentism as a version of the A-Theory is "typical".

⁶ Is Presentism compatible perhaps with *exdurantism* (or "stage theory")? Since ordinary objects, according to exdurantism, are identical to instantaneous time-slices, it seems that *these* could exist in the mere present of Presentism. But in fact the time-slices of exdurantism are a theory of what we are *talking about* in ordinary discourse; in terms of its *ontological* commitments, exdurantism is as much committed as perdurantism to four-dimensional objects and *these* are not compatible with Presentism. See for instance Hawley (2023, Sect. 2): "as stage theorists claim, the world is full of four-dimensional objects with temporal parts, but when we talk about ordinary objects like boats and people, we talk about brief temporal parts or 'stages' of four-dimensional objects."



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Given these logical relations, if Presentism is part of common sense, then so are Endurantism and the A-Theory. But conversely, showing that some common-sense intuitions commit us to Endurantism and/or the A-Theory does not suffice to establish the commonsensicality of Presentism. My purpose in this paper is to establish the stronger conclusion, i.e. that Presentism itself is part of common sense. And as we will see, a weakness of some strategies that I will criticize is that they only establish the commonsensicality of Endurantism and/or the A-Theory.

In Sect. 1, I will examine the strategy which relies on our common-sense conception of ourselves (but not of ourselves as *conscious* selves) and establishes the commonsensicality of endurantism. In Sect. 2, I will examine three arguments which rely on our common-sense conception of *conscious experiences* (for instance, the "past headache") and which try to establish the commonsensicality of various conclusions about time. The first two establish (in my opinion successfully) the commonsensicality of the past/future asymmetry and of the privileged present. Only the third argument tries to establish the commonsensicality of Presentism, but I will argue that this third argument has a dialectical weakness with its first premise. It is in order to solve this problem that I will propose a combination of both strategies, from our conception of the self and from our conception of conscious experiences. I will do this in Sect. 3, in which I will defend that our common-sense conception of ourselves as subjects of conscious experiences is incompatible with a Block Universe Theory, and therefore logically requires Presentism. In Sects. 4 and 5, I will respond to two objections.

1 Our common-sense conception of ourselves and endurantism

In this section, I am going to present a first classical strategy to establish the commonsensicality of a certain conception of time, relying on our conception of our selves.

In short, the argument says that I am a being who persists over time, and that the way in which I persist over time (according to common-sense intuitions) is endurance rather than perdurance.

The starting point of this argument is limited. First, the argument starts from a certain conception of our selves (or of human beings), but it doesn't give a particular importance to the fact that we are *conscious* beings—only to the fact that we are persisting beings. Second, it relies only on the first of the two common-sense intuitions mentioned in the introduction, namely the intuition of identity over time—the fact that I have a unique consciousness plays no role in this argument. The conclusion of the argument is also limited in its scope: it does not pretend to establish the commonsensicality of Presentism (the stronger thesis) but only of Endurantism.

In order to understand the argument, it is useful to remind the conception of objects opposed to endurantism, namely perdurantism. According to perdurantism, objects that persist over time do so by being "extended" in time (as well as in space), i.e. by having "temporal parts". A chair, for instance, if it is constructed at t1, still exists at t2 and is destroyed at t3, not only has spatial parts (legs, seat, backrest) but also "temporal parts" which constitute (when taken all together) a "four-dimensional worm". Some



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of these temporal parts are instantaneous slices, without any temporal thickness—for instance the slice of the chair at t2 exactly. Other temporal parts are themselves extended in time—for instance the section of the 4D worm between t1 and t2.

Similarly, if we consider ourselves human beings, for instance the human self Socrates, we can distinguish on the one hand the 4D worm (which is extended over the whole temporal period from 470 to 399 BC), and on the other hand the various temporal sections of this worm (some instantaneous, others with a certain temporal extension). But in such a picture, *what* exactly is (identical to) Socrates *himself*? The endurantist has two possible options here, which Peter van Inwagen calls "theory 1" and "theory 2". According to theory 1 (sometimes called "exdurantism"), there are in reality several distinct persons Socrates: each instantaneous slice of the 4D worm is a distinct person, even though there are between these distinct persons significant causal links which establish a relation of inheritance—a relation which is usually called, after Kurt Levin's terminology, "gen-identity". Socrates-on-march-1st-399 is not the same person as (is not identical to) Socrates-on-may-2nd-400. These two persons are "gen-identical" but gen-identity is not (numerical) identity. According to theory 2 (perdurantism in the narrow sense), there is only one person Socrates: the person Socrates is the entire 4D worm (from 470 to 399 BC).

The first argument we will consider is designed to reject the commonsensicality of theory 1 (or exdurantism). Here it goes:

Endurantist argument (version 1)

- (3) If exdurantism is true, then the past slice which is the self of exactly one month ago (and who was situated in Germany) is not identical to the present slice which is today's self (and who is situated in Spain).
- (4) I, myself, am today's self.
- (5) Therefore, if exdurantism is true, then it is not I, myself (the same self) who was in Germany last month and who am in Spain today (it is *someone else*, who is at best "gen-identical" with me).

Notice that this argument is not designed to show that exdurantism is *false*, only that it implies the negation of some common-sense intuition, namely the intuition of identity over time (CS1), and therefore that exdurantism goes against common sense.

Nevertheless, this first version of the argument is not enough to show that common sense is committed to endurantism because exdurantism ("theory 1") is only one of the two possible ways to have a four-dimensional conception of objects persisting over time. In order to raise doubts about the commonsensicality of endurantism, a defender of the four-dimensional conception could try to maintain that theory 2 (perdurantism in the narrow sense) is compatible with common-sense intuitions. If we adopt theory 2, then the fact that my time-slice of one month ago is distinct from my time-slice of today is no proof that there are two persons or two selves here—there is only one person, my self, who contains both slices. And therefore, the common-sense intuition of identity over time (CS1) is not violated. Therefore, theory 2, according to which I am the whole 4D worm (extended over time) might be compatible with common-sense intuitions.



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But is it? Granted, it is compatible (CS1). But is it commonsensical to conceive of human persons (my self for instance) as 4D worms, of which the present slice is just one part? This is far from obvious. One could plausibly argue that common sense is *also* incompatible with a conception of our selves as 4D worms. In which case, we could give a stronger argument against the commonsensicality of perdurantism in general (in both its forms).

Endurantist argument (version 2)

- (6) If perdurantism (in the wide sense) is true, then I am either a 4D worm (theory 2) or the present time-slice of a 4D worm, numerically distinct from past and future slices (theory 1).
- (7) the view according to which I am a 4D worm is against some common-sense intuition.
- (8) the view according to which I am distinct from the self of one month ago is against common-sense intuition (CS1).
- (9) Therefore, perdurantism in general goes against common sense (i.e. common sense is committed to endurantism).

In this argument, the weakest premise is, I believe, premise (7): does it really go against common-sense intuitions to say that I am a 4D worm? The sub-argument in favour of (7) would probably be the following:

The "wholly present" argument

- (7a) According to some common-sense intuition, I am *wholly present* wherever I am *now* (for instance in Spain)—i.e. *all my parts* are in Spain.
- (7b) If I were a 4D worm, then some of my parts would be situated where I am now (in Spain) and other parts of my self would be situated in other parts of the world (in Germany).
- (7) Therefore, according to some common-sense intuition, I am not a 4D worm.

In this sub-argument, premise (7b) cannot be challenged; and it is obvious that the argument is valid. But the defender of perdurantism (or rather, of the compatibility of perdurantism with common sense) could perhaps challenge premise (7a). This is precisely what David Lewis did, in his response to the "wholly present" argument⁷:

[Those who argue in this way] may think themselves partisans of endurance, but they are not. They are perforce neutral, because they lack the conceptual resources to understand what is at issue. Their speech betrays — and they may acknowledge it willingly — that they have no concept of a temporal part. (Or at any rate none that applies to a person, say, as opposed to a process or a stretch

⁷ Notice that Lewis considers the "wholly present" argument in a version that concerns, generally, all persisting objects (tables, trees, cats), not just human persons or selves. As long as common sense conceives of these beings as persisting over time in a similar way to human beings, the structure of the sub-argument (and of the endurantist argument, in version 2) will be exactly the same. In other words, the arguments we consider in this section do not rely on any specific characteristic of ourselves, human beings, such as our being conscious persons. All that is needed here is that we conceive ourselves as physical beings persisting over time, just like tables, trees or cats.



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of time.) Therefore they are on neither side of a dispute about whether or not persisting things are divisible into temporal parts. They understand neither the affirmation nor the denial. (Lewis, 1986, p. 203)

How does Lewis' objection work? It relies on the idea that common sense doesn't have the concept of a "temporal part". As a consequence, when common sense gives me the intuition that "all my parts are wherever I am now (e.g. in Spain)"—and Lewis concedes that there is such an intuition—this common-sense intuition cannot mean "all my parts, including my temporal parts, are in Spain", because common sense lacks this concept. The universal quantifier in this common-sense intuition ("all my parts") is implicitly restricted by the context (just like most universal quantifiers in ordinary language): the contextual restriction excludes temporal parts from the domain of quantification, and therefore only leaves us with a quantification over my present spatial parts (my limbs, organs, etc.). Now, if the common-sense intuition is only claiming that "all my [present spatial] parts are situated in Spain", then it is obviously compatible with perdurantism.

Notice that Lewis is not trying to defend that common sense *supports* perdurantism: he only defends that common sense is neutral. Since common sense lacks the concept of a temporal part, common-sense intuitions are unable to support either side in the debate between endurantism and perdurantism. If Lewis' objection is correct, it might still be true that common sense is incompatible with exdurantism (theory 1), but it's not against all forms of perdurantism, as it remains compatible with theory 2.

Is Lewis' objection successful against the "entirely present" sub-argument? I am not entirely sure that it is. One thing that could be said against his objection is the following: if common sense doesn't possess specifically the concept of a "temporal part", it does seem to possess the generic concept of a "part". This generic concept of part, which is possessed by common sense, can have many different species (spatial parts of a material objects, but also parts of abstract and atemporal entities, etc.) and it seems that the concept of "temporal part" is just one specification of the generic concept. As a consequence, common sense *can* give us the intuition that "*all* my parts are situated in Spain" (without restriction) and this proposition *logically implies* that "I have no temporal parts outside of Spain", whether or not I am able to conceive this further proposition.

For comparison, imagine that you ask someone who is blind from birth to put her hand in a basket and determine whether there are red billiard balls in it. Since she is blind from birth, she does not possess the concept "red", but she possesses the concept of a "billiard ball" and—after rummaging in the basket—she determines that there isn't a single billiard ball in it. It is obvious that this piece of knowledge that she just acquired *logically implies* that there is zero *red* billiard ball in the basket: even if *she* doesn't possess the concept "red", the proposition *she* came to know by perception implies that there is zero red billiard ball there, simply because "red billiard balls" is a species of the generic kind "billiard ball" (the concept of which she does possess). And the fact that she doesn't possess the concept "red" does not imply that her quantifications over billiard balls have to be contextually restricted to balls that are not red.



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Similarly, if common sense gives us the intuition that *not a single one* of my parts is outside of Spain, then this implies that not even *temporal* parts of my self can be outside of Spain, whether or not common sense possesses the concept of this species. The fact that common sense doesn't possess the concept of this species doesn't imply that all its quantifications over "parts" have to be contextually restricted to parts that are not temporal parts. As a result, it seems that common sense *can* give us an intuition the content of which *implies* the negation of perdurantism, whether or not common sense has the conceptual resources to formulate and consider perdurantism. If this is true, then the "entirely present" sub-argument stands good and does show that we have a common-sense intuition against theory 2 of perdurantism. Since it is clear that there is also a common-sense intuition against theory 1 (exdurantism), then we could validly arrive at the conclusion that common sense is committed to endurantism.

Whether or not we accept this response against Lewis' objection, the endurantist argument has two drawbacks.

First, it establishes (at best) the commonsensicality of endurantism. But we have seen that endurantism doesn't imply presentism (nor does it imply the A-Theory). And endurantism as such is not a theory of time itself (only of objects' persistence over time). Strictly speaking, this argument doesn't provide us with a common-sense theory *of time*.

Second, this argument would work just as well (and indeed, has been used) for common-sense objects that have nothing to do with human persons or selves—for instance for cats, trees, or even chairs, about which common-sense intuitions also seem to suggest that they are "wholly present" here and there, in front of the beholder (without having any "parts" elsewhere). The fact that the argument can generalize is not in itself a logical weakness, but it does suggest that we may not be using all the argumentative resorts that we could use if we focused specifically on our selves, and which could plausibly allow us to reach a stronger conclusion—in particular a conclusion that goes beyond mere endurantism. Even for the mere conclusion of endurantism, it seems plausible that we have much stronger reasons to deny that we are 4D worms, than we have for tables and chairs. These reasons and resources are not used in the versions of the argument we have seen so far. To take advantage of them, we will have to focus on the conception of our selves as conscious selves, which is what I will do in Sect. 3.

⁸ A reviewer suggested that the quantifier might be here restricted not to spatial parts (as opposed to temporal parts) but to *present* parts (as opposed to past and future parts), because the quantifier "all" would fall within the scope of the present tense of the natural language verb "are". If that is so, then even if it covers (by implication) the *present temporal* part (in addition to the present spatial parts), it will not cover past and future temporal parts, and therefore the intuition will not be in contradiction with my having past and future temporal parts in other countries. This rejoinder would be convincing if a verb's tense, having wide scope over the quantifier, always restricted its domain of quantification. But that is not always true in natural language, as we can see in the following sentence: "All presidents of the USA are, for some reason or other, now mentioned in the *Guinness World Records*." As a result, it seems at least arguable that common sense could have an intuition according to which "all my parts [absolutely all, without any restriction of tense or of any other kind] are in Spain".



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2 Three "Headache" arguments

Before we turn to the conception of our selves as conscious selves (which is my personal contribution in this paper), I want to consider three classical arguments from consciousness, which are not arguments from conscious *selves* but only from conscious *experiences* (or mental states). In this second section, no appeal will be made to our common-sense intuitions about *our* identity over time.

The most famous example of such arguments is Arthur Prior's mention of a past "ordeal" (or painful conscious experience) about which one comes to think "Thank goodness, that's over" (Prior, 1959, 1996). Let's consider, for instance, a headache that I was having yesterday and is now over (I don't have it today, and won't have it tomorrow). Starting from this kind of example, we can in fact construct (at least) three different arguments, that are not always sufficiently distinguished, even though their precise premises and conclusions are significantly different. As we will see, the first argument tries to establish the commonsensicality of the temporal asymmetry between past and future (which is one aspect of the A-Theory); the second argument tries to establish the commonsensicality of the objective privilege of the present (another aspect of the A-Theory); and the third tries to establish the commonsensicality of the non-existence of the past (which is presentism properly speaking). In this section, I will argue that the first two arguments successfully establish their conclusion (aspects of the A-Theory). My only reason not to be satisfied with these arguments is that (like the argument of section I), they do not arrive at a sufficiently strong conclusion (the commonsensicality of presentism. As for the third argument, its conclusion would be strong enough, but I will argue that it suffers a dialectical defect and cannot successfully establish its conclusion.

2.1 The Relief Argument

The first Headache argument ¹⁰ focuses on the attitude of *relief* that we have when the headache is over, and on the fact that this attitude makes an essential distinction between what is past and what is present. According to Prior himself, the characteristic of the headache which allows me to consider it with relief is "the overness, the now-endedness, the pastness of the thing" (Prior, 1996, p. 50). In other words, what provokes (and rationalizes) the attitude of relief is the fact that the headache doesn't have the property of *being present* (doesn't have it anymore), which presupposes that this property of "being present" cannot be reduced to a mere indexical property, such as "being simultaneous with the time t of this enunciation". As Prior says it:

[The sentence 'Thank goodness that's over!' doesn't] mean 'Thank goodness the conclusion of that thing is contemporaneous with this utterance'. Why should anyone thank goodness for that? (Prior, 1959, p. 17)

¹⁰ This argument corresponds to Callender's interpretations 1 and 2 (2017, pp. 267–268).



⁹ Callender (2017, Sect. 12.1) has also observed that Prior's scenario could give rise to different arguments. His classification of the various possible arguments is different from mine, and has the drawback of missing what I take to be the specificity of (my) third argument below.

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In this first argument, the Headache scenario tries to establish the fact that (according to our common-sense conception of mental experiences) being present is an objective property of certain events or states, and more precisely that our common-sense attitudes presuppose an objective privilege of the present (over the past).

We could formulate the argument as follows:

- (8) The common-sense attitude towards a past headache is an attitude of relief, which would not be our attitude towards a present headache.
- (9) This difference in our attitudes (towards the past and the present) is justified only if the past "is less real" than the present.
- (10) Therefore common sense presupposes the view that there is an objective privilege of the present (at least over the past).

This argument, of course, is controversial. The most hotly debated question has to do with premise (9) and what is required for our attitudes (or emtions) of relief to be justified (or appropriate). 11 It seems to me that a plausible case can be made in favour of this premise, but even if that is possible its conclusion remains of limited purport. Granted, the objective privilege of the present is an important (and far from trivial) component of the A-Theory of time. 12 Therefore, the argument allows us to establish (successfully in my opinion) the commonsensicality of some non-trivial thesis in the metaphysics of time. Nevertheless, this element is not enough to conclude to the commonsensicality of presentism. This is so because presentism requires a very specific privilege of the present, namely the ontological privilege of being the only part of time whose inhabitants exist. One could imagine many other kinds of privileges for the present, distinct from this strong ontological privilege. For instance, one could defend an ontology in which there are different "degrees of existence", and argue that present things have a higher degree of existence than past (and future) things. This would be enough to justify the attitude of relief towards a past headache, because it would mean that my headache, being past (as opposed to present) exists "to a lesser degree". 13 Otherwise, one could also try to defend that the privilege of the present, though objective, is not ontological (not a matter of "existence") but rather qualitative. This is what happens in the Moving Spotlight Theory, according to which the property of being present is a certain characteristic which "illuminates" one after another the successive temporal slices of the 4D Block Universe, "somewhat like the spot of light from a policeman's bull's-eye traversing the fronts of the houses in a street" (Broad, 1923, p. 59). This characteristic of "presentness" might also be sufficient to justify our preference for past headaches (non "illuminated" ones) over present headaches (those "illuminated" by the "spotlight" of presentness).

¹³ See Smith (2002) for an ontology of time with degrees of existence, centered on the present.



¹¹ There is a vast literature on the question of the appropriateness of Prior's emotion of relief, with no emerging consensus (as far as I'm aware) as to whether it has strong commitments in the metaphysics of time. For opposing views, see for instance Bacharach (2022), Hoerl (2015), Macbeath (1983), Mellor (1981), Pearson (2018) and Suhler and Callender (2012).

¹² As we have seen above, a further requirement of the A-Theory is the objectivity of the phenomenon of the "flow of time". In principle, it could be logically possible to have a privilege of the present without there being any flow of time.

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The Relief Argument, in my opinion, plausibly establishes the commonsensicality of the objective privilege of the present, but it does not allow us to go further than this and to establish the commonsensicality of presentism.

2.2 The Asymmetry Argument

The second Headache Argument¹⁴ starts from a more precise analysis of the Headache scenario: if I am relieved by the fact that headache is *past*, it is not only because it is not *present* (anymore), but also because it is not *to come* (future). A headache that is still to come might not be painful right now, but it is unsettling and worrisome, and I won't be at peace and relieved before it is fully *over*. In other words, our emotional attitudes do not only privilege the present over other times (both past and future), but they also seem to privilege the future over the past (in some sense), which requires the existence of an *asymmetry* (real and objective) between past and future.

The argument can be presented as follows:

- (11) The common-sense attitude towards my past headache (relief) is not the same as the common-sense attitude towards my future headache (anxiety).
- (12) This difference of attitudes is justified only if there is a real and objective asymmetry between past and future.
- (13) Therefore, common sense conveys the conception of a real and objective asymmetry between past and future.

This argument, like the previous one, relies on an interpretation of the appropriateness conditions of our attitudes (or emotions) that seems to me to be persuasive. ¹⁵ But, like the previous one, its conclusion has a limited purport. The notion of an objective asymmetry between past and future is indeed an element of a metaphysics of time, but it is an element that is compatible with many different metaphysical models and, in particular, it is compatible with both presentism and the negation of presentism, i.e. a Block Universe Theory. Granted, the asymmetry of time is an element of an A-Theory, and if we combine this asymmetry of time with the objective privilege of the present established by the Relief Argument of the previous sub-section, we could plausibly argue that both arguments together establish the commonsensicality of the A-Theory of time. But this (even if it can be considered an interesting result in itself) would still fall short of establishing the commonsensicality of *presentism*: for all these arguments show, we could still believe that common sense is compatible with the Moving Spotlight theory of time, which is an A-Theory but is not presentist. ¹⁶

¹⁶ It is less clear whether the Growing Block theory is compatible with the common-sense intuitions revealed in these first two arguments. Concerning the common-sense intuition revealed by the first argument, the Growing Block theory doesn't have a ready explanation for our privileging the present over the past (preferring a past headache to a present one) since, according to this theory, past and present have the same kind and degree of existence. As for the common-sense intuition revealed by the second argument, the Growing Block theory does provide an objective asymmetry between past and future, but it is an asymmetry which gives the ontological privilege ... to the past over the future, and not the other way round. In the Growing Block theory, the past exists and the future doesn't. If we follow this ontological theory, it



¹⁴ This second argument corresponds to Callender's interpretation 3 (2017, 268–70).

¹⁵ Though see footnote 11 above for the different views about these appropriateness conditions.

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2.3 The "I'm not hurt" Argument

The third argument based on the Headache scenario is more ambitious and more interesting for our purposes, because it tries to establish the commonsensicality of presentism itself. The starting point of the argument consists in saying that if I am relieved (by the fact that my headache is past), it is because a past headache doesn't hurt at all.¹⁷ But what on earth is a headache that doesn't hurt? What is a pain that is not painful? What is an unpleasant experience that is not experienced? There seems to be a contradiction in terms here. As Zimmerman argued (in what is the clearest version of this third argument) "a painful headache cannot exist without being painful" (Zimmerman, 1998, p. 212). It is included in the essence, or at least in the concept, of a "headache" that whatever is a headache hurts. If a headache exists at all, then necessarily it hurts. If there is no hurt, there exists no headache. As a consequence, if my past headache doesn't hurt, it must be because it doesn't exist (anymore).

The argument can be formulated as follows:

- (14) According to common sense, my past headache doesn't hurt (anymore).
- (15) It is (logically or metaphysically) impossible for a headache not to hurt if it exists.
- (16) Therefore, common sense is committed to the view that my past headache doesn't exist (anymore).
- (17) If my past headache doesn't exist, then other past entities don't exist either (there is nothing special about my past headache).
- (1) Therefore common sense is committed to the non-existence of the Past (presentism).

At last, what we have here is an argument which purports to establish the commonsensicality of *presentism* (the first premise of the argument for presentism presented in the introduction). And the three premises of this argument, namely (14), (15) and (17) are, at least at first sight, plausible.

Nevertheless, it is probable that a perdurantist will find occasion to object to premise (14). What do we mean when we say that the past headache "does not hurt"? The perdurantist will probably respond that it *does* hurt: it hurts my temporal part that lies in the past (yesterday)! Our intuition in favour of (14)—he might insist—comes only from the fact that the past headache doesn't hurt *my present temporal part*, but this does not imply that it doesn't hurt *at all* (or that it doesn't hurt *anyone*).

The "I'm not hurt" Argument is not dialectically convincing, therefore, at least if it takes (14) as a basic premise, without further justification. Someone defending perdurantism—or the openness of common sense to such a theory—has conceptual resources to explain away the intuition in favour of (14) and maintain that, strictly

Footnote 16 continued

would seem more reasonable to prefer a future headache (a headache that doesn't exist) to a past headache (which *does* exist, just as much as the present one). Growing-Blockers might have solutions to maintain the commonsensicality of their view in the phenomena of relief and anxiety, but at first sight such a defence requires more complex argumentation than is the case with a Moving Spotlight Theory.

¹⁷ Of course, I might retain an unpleasant memory of the past headache, but in that case what is unpleasant is the memory itself, the experience of recalling a headache, and that experience is not an experience of headache, and doesn't have the same unpleasantness.



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speaking, my past headache *does* hurt. Since we have seen in the first section that the perdurantist conception of ourselves did not face a fatal objection, perdurantism might still be a defensible way to maintain (also against this new argument) that common sense is not committed to presentism.

However, we will see in the next section that a thorough consideration of the conscious experience of the human self (such as a past headache) does raise a problem against the perdurantist conception of our selves, because it raises against it a difficult question: if we say (as the perdurantist wants to say) that the past headache does hurt (because it hurts a past slice of the 4D worm), can we say that it hurts me (my self)? In responding to this question, the perdurantist faces a dilemma. If she answers "no", then she is in fact accepting theory 1 of personal identity over time (exdurantism), according to which I am only the present slice, existing only in a single instant, and we have seen earlier that this theory is clearly incompatible with common-sense intuitions (CS1). But if she answers "yes", she is saying something really surprising: she is saying that this headache hurts me ... but if it did hurt me, intuitively, I should be conscious of it! This counter-intuitive consequence is clearer if we make the scenario more precise and suppose that I have kept zero memory today (and no psychological trace) of yesterday's headache (which is undoubtedly a possibility). Here, the perdurantist, if she wants to say that I am a 4D worm (and not just the present slice) must say that this past headache which is completely forgotten hurts me, and this at least seems contrary to common sense, for reasons I will develop in the next section.

The dilemma we are arriving at is an argument that combines considerations about the constraint of personal identity over time (seen in Sect. 1) with considerations about conscious experiences (seen in Sect. 2). It seems to me that this combination is necessary to establish successfully the commonsensicality of presentism. If we consider the human self only in her physical aspects (as in Sect. 1), we can show, at best, that common sense is incompatible with exdurantism, but it is not clear whether we can show that it is positively committed to endurantism, let alone presentism. If we consider the conscious experiences independently of their being experiences of a persisiting self (as in Sect. 2), we can probably show that common sense is committed to the A-Theory of time, but not that it is committed to presentism, because perdurantism remains dialectically open. But if we consider that it is the same self, identical over time, who is the subject of the various conscious experiences (pas and present), we will see in the next section that this rules out any perdurantist model, and only leaves open a theory of time that is not only an A-Theory, but also presentist.

3 The argument from the unity of consciousness

The argument I will develop in this section starts from the fact that the human self (as it is represented by common-sense intuitions) is on the one hand identical to itself over time *and* on the other hand a subject of conscious experiences. My purpose is to show that the combination of both characteristics is impossible if we reject presentism. If this conclusion is correct, then presentism would be, if not a direct intuition of common sense, at least a logical implication of more fundamental common-sense intuitions, and therefore a "commitment" of our common-sense conception of the conscious self.



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The argument will, once again, start from the scenario of a past headache, but I will add two important qualifications: first that this headache is a *violent* one (this is to avoid the possibility of a headache so mild that it might pass unnoticed by my consciousness) and second that I have totally forgotten this headache (so that it has left no trace in my present psychology).

Here is the initial intuition of the argument. According to the Block Universe Theory (the negation of presentism, either in the form of a Growing Block, or in the form of an eternalist Block), my past headache *exists*. But this seems contrary to common sense: it is not possible (according to common sense) that my past headache exists, because if it did *I* would be conscious of it (a headache is by definition a conscious event and since it is *my* past headache, if it were conscious to anyone, it would have to be conscious *to me*); but it is clear that *I* am not conscious of this headache (I *know* what is and isn't in my consciousness, and cannot be wrong about this, at least when it comes to a *violent* headache—and it's clear to me that such a violent headache *isn't* in my consciousness). Therefore (according to common sense) my past headache doesn't exist at all. In other words, common sense is committed to the view that only the present exists.

It is this argument that I will try to present now in a more careful way. (And in Sects. 4 and 5, I will address two important objections.)

It is important to keep in mind that the conclusion I am trying to establish is not presentism, but only the commonsensicality of presentism. Or more precisely: that our common-sense intuitions about our selves are logically committed to presentism. This conclusion could be presented in a conditional form:

- (18) If the common-sense conception of our selves is true, then presentism is true. Or conversely:
- (18') If presentism is false, then the common-sense conception of our selves is false.

Why do I say that conditional (18) is true? Following the intuition presented above, it is fundamentally because, according to my common-sense conception of my self, I have a unique consciousness and know full well what it contains: if my (unique) consciousness contained the past headache as an existing pain, *I* certainly would be conscious of it, and I'm not. Therefore, my past headache (in this conception) cannot exist.

This argument relies not only the common-sense intuition of my identity over time (CS1), but also on the common-sense intuition of the unity of consciousness (CS2). It will be important, therefore, to clarify what this second intuition amounts to.

The idea of the unity of consciousness is the idea that there is not, in the consciousness of one and the same person, different parts that might ignore each other, or be hermetic to each other: all the mental states or mental events that are present in the consciousness of a person are conscious *together*, or (to introduce a technical term) they are "co-conscious", because they are conscious *for* one and the same person. In other words, a consciousness is by definition a principle of *centralization* or *unification* of co-conscious experiences. In order to provide a definition of the concept of a consciousness, I will take the relation of "co-consciousness" as a primitive, characterized as follows.



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The relation of co-consciousness is reflexive, symmetric and transitive. In other words, it is an equivalence relation. Reflexivity: every conscious experience is co-conscious with itself. Symmetry: if a is co-conscious with b, b is co-conscious with a. Transitivity: if a is co-conscious with b, and b is co-conscious with c, then a is co-conscious with c. Since it is an equivalence relation, co-consciousness allows us to classify all conscious experiences in equivalence classes of co-consciousness. We can now define the countable word "a consciousness" in the following way:

- (D1) A consciousness is an equivalence class of the relation of co-consciousness. From this definition of "a consciousness", I would like to introduce a further definition, that of "a conscious being".
- (D2) A conscious being is a being which is endowed with a unique consciousness. This is equivalent to the following:
- (D2') A conscious being C is a being which has certain conscious experiences e1, e2, e3... eN, and such that all conscious experiences of C are co-conscious between each other.

The purpose of this definition is to distinguish clearly between what I call here "conscious beings" (which presumably includes ourselves, normal human beings, according to common sense) and on the other hand the kind of beings (real or imaginary) that are endowed with several consciousnesses or several centres of consciousness, as for example the three-headed dog Cerberus, and perhaps "divided brains" in the interpretation according to which the conscious experiences of divided brains would give rise to several consciousnesses in one and the same human being.

This definition of "a conscious being" can be used to reformulate in a simple way the second common-sense intuition mentioned in the introduction:

(CS2) Unique consciousness: I have a unique consciousness, or I am a "conscious being" (endowed with a unique consciousness).

A more vivid way to appeal to this common-sense intuition (according to which I am a "conscious being") might be the following: I am not a Cerberus! In the introduction, I have referred to Tim Bayne's work on the unity of consciousness as providing some reasons to think that (CS2) is indeed part of our common-sense conception of the self. This, of course, doesn't mean that this intuition is *true*—after all, we might discover empirically that all human beings are divided brains, for instance, and this would undermine the epistemic weight of the common-sense intuition (if it has any). My point, once again, is only that learning that we have several centres of consciousness would be a radical revision of common sense. Common sense does not represent our selves as divided brains, or as Cerberus: it represents our selves as having a unique and unified consciousness—whether this representation is accurate is a question beyond the scope of the present paper.

With these definitions at hand, we can now offer the argument in favour of the conditional proposition (18'). The argument will have the form of a hypothetical syllogism. And the scenario with which the argument is working is one in which I was having yesterday a headache (which I don't have anymore today) and I am thinking today about a piece of mathematical reasoning (which I wasn't doing yesterday).



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Argument of common-sense presentism (version 1)

- (19) If presentism is false, then the past exists.
- (20) If the past exists, then my past headache exists.
- (21) If my past headache exists, then it exists for a consciousness.
- (22) If my past headache exists for a consciousness, then it exists for *another* consciousness than the one for which my present mathematical thought exists.
- (23) If my past headache exists for another consciousness than the one for which my present mathematical thought exists, then either this headache doesn't exist *for me* (but rather *for someone else*), or I am a being endowed with several consciousnesses.
- (24) If my past headache exists for someone else than my self, then the common-sense conception of myself (as identical over time) is an illusion. (CS1).
- (25) If I am a being endowed with several consciousnesses, then the commonsense conception of my self (as a "conscious being") is an illusion. (CS2).
- (18') Therefore: if presentism is false, then the common-sense conception of the self is false. [from premises (19) to (25), by hypothetical syllogism.]

The first two premises of the argument are not problematic: premise (19) follows from the definition of presentism itself¹⁸ and premise (20) is only an application of the principle of the existence of the past to the particular case of my past headache (which has no reason to make an exception).

Premise (21) is more important: it is the fundamental premise, which we have already seen formulated by Zimmerman in Sect. 2.c, according to which it is in the nature of a headache to be a *conscious* experience. That is: if such an experience exists, it exists as a *conscious* experience, and therefore as an experience *for some consciousness*. ¹⁹

From these three premises, which can hardly be disputed, we could already draw an intermediate conclusion:

(26) If presentism is false, then my past headache exists for some consciousness.

The important question, once we reach this intermediate conclusion, is of course: for *which* consciousness does my past headache exist? For *my* consciousness? Or for someone else's? The purpose of premises (22) to (25) is to rule out the various possible answers to this question.

The role of premise (22) is to emphasize that, whoever the possessor of such a consciousness might be (myself or someone else), it must be observed that *this* consciousness cannot be the *same* consciousness (numerically) as the consciousness for which my present mathematical thought is conscious. This is so because my past headache and my present mathematical thought are not *co-conscious* and therefore,

¹⁹ Given our definition of a consciousness as an equivalence class of co-consciousness, every conscious experience is a member of some consciousness, since every conscious experience is at the very least co-conscious with itself.



¹⁸ At least if we set aside the "Shrinking Block" model, in which only the present and the future exist. To my knowledge, almost no one defends such a model (though see Casati & Torrengo, 2011).

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by definition of a consciousness as centralizing or unifying co-conscious experiences (an "equivalence class" of co-consciousness), it follows that they are not conscious *for the same consciousness*. If they are both existing for some consciousness, it must be for two numerically distinct consciousnesses. In other words, premise (22) is a direct consequence of the very concept of consciousness (as centralizing or unifying) plus premise (27):

(27) My past headache and my present mathematical thought are not co-conscious.

We could try to strengthen the intuition in favour of (27) by mentioning some characteristics of the scenario: if we are talking about a *violent* headache, and a *complex* mathematical thought, we could easily argue that the co-consciousness of the two is just impossible (psychologically). But in any case, this precise scenario is only one example of the obvious general possibility for some past conscious experience not to be co-conscious with some present conscious experience. When that happens, we *have* to say that the two conscious experiences pertain to two distinct consciousnesses.

With this new premise, we have established that the denial of presentism implies the existence of (at least) two distinct consciousnesses, one for my past headache and another for my present mathematical thought. Is this a violation of common-sense intuitions? Not directly, because this conclusion can still be interpreted in two different ways, and common sense might have different things to say about the two horns of the dilemma. A first possible interpretation is that these two distinct consciousnesses belong to two distinct persons or selves; the other possible interpretation is that, even though there are two distinct consciousnesses, both belong to one and the same person or self (*my* self). Premise (23) is just presenting these two interpretations as the *only* possible options. I cannot see any other plausible interpretation, once we accept the consequent of (22), and therefore I doubt that anyone would want to deny premise (23). So it seems that anyone who rejects presentism is bound to accept one horn or the other in this dilemma. And if both horns imply a revision of common-sense intuitions, then this shows that common-sense is incompatible with *any kind* of denial of presentism.

Suppose we consider the first horn of the dilemma (there are two distinct consciousnesses for two distinct selves), then this implies that the human person or self is just an instantaneous temporal slice, distinct from all other instantaneous slices of the same 4D worm. The consequence of this hypothesis is that it is not *really myself* (the same self, the same person) who was having a headache yesterday and am thinking about mathematics today. We have seen in the introduction and in the first section of this paper that this conception was a direct violation of the common-sense intuition of personal identity over time (CS1). Premise (24) is just another formulation (in conditional form) of this requirement of common sense. If it is not *really my self* (the same person) who existed yesterday and today, then our common-sense conception of our selves is an illusion. Of course, some philosophers have defended that the common-sense conception of our selves is illusory precisely on this account. These philosophers are not in disagreement with my conditional point, i.e. that if we deny our real identity over time (exdurantism) then we are advocating a radical *revision* of common sense. This first way of rejecting presentism is indeed incompatible with common sense.



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What about the second horn of the dilemma (there are two distinct consciousnesses, but they are consciousnesses of one and the same self or person)? This way of rejecting presentism would not raise any problem for the common-sense intuition of our identity over time (CS1). In this hypothesis, it would be true to say that it is my self, the same self, who was having a headache yesterday and who is thinking about mathematics today. Even though we have established (at this stage) that these experiences are conscious *for two distinct consciousnesses*, the two consciousnesses would belong to the same self, i.e. to my self or my person, conceived as a being extended in time. We are encountering once again the perdurantist hypothesis according to which we are 4D worms, extended in time (and space), with temporal parts situated at different moments of time. In this framework, the two distinct consciousnesses would correspond to two distinct temporal parts of one and the same 4D self. And the question we have to address now is whether this model is compatible with common-sense intuitions or not.

In the first section of this paper, we have already encountered the question whether a perdurantist conception of ourselves, human beings, was compatible with common sense. And my conclusion was that, if we restrict our attention to the physical characteristic of human beings (which we share with many ordinary objects, animate or inanimate), the answer to this question was moot: David Lewis, at least, thought that common sense is neutral about whether we have temporal parts or not.

But the situation in this section is quite different: we are now considering the consequences of a 4D model on the conception of ourselves as conscious beings, as beings endowed with a consciousness. And in this new context, the perdurantist theory of the human self as a 4D worm implies that this self is a self with several distinct consciousnesses (since the conscious experiences of the different temporal parts of the worm are not co-conscious). This is how the consideration of the human self as a conscious self changes the game: it reveals that the perdurantist hypothesis (theory 2) is *committed* to representing the human self as a being which is home to several consciousnesses... and this theoretical commitment violates the commonsense intuition according to which we, (normal) human beings, are "conscious beings", endowed with a unique consciousness, as opposed to divided brains or Cerberus (CS2). According to this model, we would have to revise our common-sense view of ourselves and start thinking of ourselves as some kind of "temporal Cerberus", with as many "heads" (centres of consciousness) as we have temporal slices. Therefore, the second horn of the alternative maintains our identity over time, but in such a way that it violates the second fundamental common-sense intuition of unique consciousness.

One might try to respond here that the common-sense intuition of unique consciousness only precludes having several consciousnesses *at the same time* (the spatial Cerberus) but not having several consciousnesses at different times (the temporal Cerberus). After all, Bayne's own formulation of this common-sense intuition is that "it is metaphysically impossible for a subject of experience to have *simultaneous* conscious states that are not phenomenally unified." (Bayne, 2013, p. 207 emphrasis added). The problem with this response (according to which learning that I am a spatial Cerberus would come as a surprise, but learning that I am a temporal Cerberus wouldn't) is that it neglects the fact that the Eternalist (or the Block theorist more generally) is precisely the one who takes time to be "like space" (see e.g. Emery et al., 2020, Sect. 7), being



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just another dimension of the same 4D block. As a result, from the point of view of a Block Theory of time, a spatial Cerberus and a temporal Cerberus should not be relevantly different: being a spatial Cerberus or a temporal Cerberus would only count as two different ways of having several consciousnesses at different spatio-temporal coordinates within the same 4D worm that I am. If common sense is against one of them, and they are as similar as the Block theorist tells us they are, it is hard to see how the Block theorist's claim that we are temporal Cerberus would not also come as a surprise to common sense.

To summarize, the hypothesis that my past headache exists implies either that it exists for some past person which is not literally my self—and therefore I am no more than an instantaneous being, in violation of (CS1)—or that it exists for some other centre of consciousness within me—and therefore I am a kind of Cerberus, which is home to several centres of consciousness, in violation of (CS2). Premises (24) and (25) reformulate these two common-sense intuitions in a conditional form, and show that both horns of the dilemma (constructed by (23)) are violations of common sense.

From these premises, it validly follows that *if* presentism is false *then* some common-sense intuition about our selves as persistent subjects of conscious experiences—either (CS1) or (CS2)—is false. This shows in which sense common sense is *committed* to presentism: there is no way to reject presentism without violating our common-sense conception of ourselves. Or, for short: if presentism is false, then I don't exist.

We could summarize the gist of the argument as follows:

If presentism is false, then I am either an instantaneous slice with no past and no future, or a temporal Cerberus which is home to several consciousnesses. But according to common sense, I am neither an instantaneous slice nor a Cerberus. Therefore the denial of presentism violates common sense.

4 The tu quoque objection: the presentist Cerberus

In the last two sections, I will consider two important objections against the argument of Sect. 3.²⁰

The first objection concedes that the non-presentist models are committed to a multiplicity of consciousnesses, and defends the model in which these consciousnesses belong to one and the same person (second horn of the dilemma), but it points out that the presentist is *also* committed to a multiplicity of consciousnesses for the same (enduring) self.

Indeed, says the objector, the presentist is committed to saying that my past headache belonged to *some* consciousness (at least at the time at which I was experiencing it) and that my present mathematical thought belongs to *some* consciousness (now). But the presentist cannot say that these consciousnesses are numerically identical because, according to the definition of "a consciousness" that was provided, a consciousness is nothing else than an equivalence class of co-conscious experiences. Since these two



²⁰ I thank François Récanati for drawing my attention to these obejctions.

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experiences (existing or not) are not co-conscious, the equivalence classes to which they belong cannot be numerically the same. They *must* be two distinct consciousnesses.

At this stage, the common-sense presentist will probably want to object that the consciousness of yesterday (to which my past headache belongs) *doesn't exist* (it doesn't exist anymore). As a result, he might emphasize that he has preserved the intuition according to which I have a unique *existing* consciousness (the present consciousness, since all the past ones are non-existent).

But that is not enough to respond to the objection, because even if the presentist can say that I have *now* a unique consciousness, he must still concede that I have had (and will have) many other consciousnesses. In other words, the only intuition the presentist can preserve is the fact that I have a unique consciousness *at each instant*. But *this* intuition can also be preserved by the non-presentist! The non-presentist (growing-blocker or eternalist) can very easily maintain that the 4D worm that I am is home to distinct consciousnesses *only* along the temporal dimension, but that *at each instant* of time the worm has a unique consciousness (unlike the spatial Cerberus or the divided brains, who have distinct consciousnesses *at one and the same instant of time*). In this non-presentist model, it remains true that (for each one of its instantaneous temporal parts) the human self is endowed with a unique consciousness.

In other words, for presentism just like for non-presentism, I have several distinct consciousnesses at different moments of time and I have a unique consciousness at each instant of time. Therefore, there is no difference between presentism and non-presentism from the point of view of the multiplicity of consciousnesses. This kind of multiplicity may or may not violate common sense, but in any case it cannot offer a basis for discriminating between presentism and non-presentism.

This objection is significant, but it is important to notice that it is in fact just another version of the classical "triviality challenge" against Presentism in general, which argues that it is impossible to formulate the debate between Presentism and the Block Theory in a way that doesn't make the central presentist claim either trivially true or trivially false (see Deasy, 2019; Deng, 2018; Meyer, 2005; Mozersky, 2011, pp. 122–125; Sider, 1999, pp. 325–327; Zimmerman, 1998, pp. 209–210). And, as far as I am aware, any response to the classical challenge would offer an apt response to the presentist Cerberus objection. This paper is not the place for offering a full-blown defence of Presentism against the triviality challenge. In this section, I will only show how the classical presentist response to this challenge can be applied to the problem of the presentist Cerberus.

In order to see more clearly how the presentist Cerberus objection is a version of the triviality challenge, it will be helpful to reformulate it. The intuition that the common-sense Presentist is trying to formulate and to appeal to in order to rule out the scenario of a temporal Cerberus has been formulated as follows:

(CS2) Unique consciousness: I have a unique consciousness, or I am a "conscious being" (endowed with a unique consciousness).

This proposition says (a) that I do have a consciousness and (b) that I have no more than one. Let us focus on the second conjunct:

²¹ For further references, see Ingram and Tallant (2022, Sect. 3).



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(CS2b) It is not the case that there are a consciousness C1 and a distinct consciousness C2 such that both C1 and C2 are mine.

The objector's first contention is that the quantifier in (CS2b) is ambiguous between a tensed reading (CS2b-t) and a de-tensed reading (CS2b-d):

- (CS2b-t) It is not the case that *there are now* a consciousness C1 and a distinct consciousness C2 such that both C1 and C2 are mine.
- (CS2b-d) It is not the case that *there have been or there are now or there will be* a consciousness C1 and a distinct consciousness C2 such that both C1 and C2 are mine.

Once this disambiguation has been made, says the objector, it becomes clear that the common-sense Presentist has no way to make a distinctive claim—i.e. a claim that the Block Theorist cannot equally accept. If the intuition to which the commonsense Presentist appeals is (CS2b-t), then it is a trivially true intuition, which is not violated by the Block Theory and its temporal Cerberus: for even if I am a temporal Cerberus within a 4D Block Universe, it remains true (as long as I am not a *spatial* Cerberus) that there aren't *now* two (present) consciousnesses that are mine. Now, if the intuition to which the common-sense Presentist appeals is (CS2b-d) then, as long as he wants to maintain the identity of the self over time (contra exdurantism), this intuition becomes trivially false by his own lights: for the Presentist wants to maintain the truth of propositions such as "there has been a past headache and there is now a present mathematical thought such that both experiences are mine and they are not co-conscious", and this implies that "there has been a consciousness C1 and there is now a distinct consciousness C2 such that both C1 and C2 are mine".

Since it seems that (CS2b) has to be read either with a tensed quantifier or with a de-tensed quantifier, it follows that the common-sense Presentist has failed to uncover a common-sense intuition that would distinctively favour his view (against the Block Theorist's temporal Cerberus).

Let us see now the "triviality challenge" against Presentism—or rather against the possibility of formulating Presentism in a way that makes a distinctive and non-trivial claim. Presentism says that only present things exist. Or in other words:

(P) It is not the case that there is an x such that x is not present. 22

But, says the objector, in this sentence the use of the existential quantifier is ambiguous between a tensed reading (P-t) and a de-tensed reading (P-d):

- (Pt) It is not the case that *there is now* an x such that x is not present.
- (Pd) It is not the case that *there has been or there is now or there will be* an x such that x is not present.

Once this disambiguation has been made, says the objector, it becomes clear that the Presentist has no way to make a distinctive claim. If what he affirms is (Pt), then he is affirming something that is trivially true and which is also true in the model of

²² This translation presupposes of course a Quinean, i.e. quantificational, conception of "existence". As far as I can tell, a non Quinean conception of existence faces the same challenge and receives the same solution that I will present later. See the next footnote.



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the Block Theorist. And if he is affirming (Pd) then he is affirming something trivially false by his own lights: for the presentist wants to maintain the truth of propositions such as "there have been dinosaurs (even if there aren't now such things anymore)".

Since it seems that (P) has to be read either with a tensed quantifier or with a detensed quantifier, it follows that the Presentist has no way to make a claim that would be distinctive and avoid trivial truth and trivial falsity.

The presentist solution to this problem which, in the present state of the debate, reaches "near consensus" (Deng, 2018, p. 794) consists in saying that there is a third possible meaning for (P), which is neither the tensed nor the de-tensed reading of the quantifier, but rather appeals to a "tenseless" expression of existence (or "existence *simpliciter*"), a quantifier that just does not have tense built in.²³ (I will write this tenseless quantifier with small caps.)

(Ps) It is not the case that THERE IS an x such that x is not present.

This tenseless quantifier, according to standard Presentism, is not some ad hoc and mysterious invention: it is just the (absolutely unrestricted) quantifier of classical first-order predicate logic—the same unrestricted quantifier that is used for all ontological questions. The standard presentist claim is just that "even when the quantifier's wings are stretched as wide as they can be, no nonpresent things (that are still temporal things) are caught by it" (Deng, 2018, p. 795). *This* claim is distinct from both (Pt) and (Pd), and is neither trivially true nor trivially false.

It should be easy to see that this triviality problem is structurally similar to the problem of the presentist Cerberus, and that the solution to the former directly applies to the latter.

Once we have at our disposal the tenseless quantifier (expressing "existence *sim-pliciter*"), we can use it to offer a new possible interpretation of the common-sense intuition:

(CS2b-s) It is not the case that THERE ARE a consciousness C1 and a distinct consciousness C2 such that both C1 and C2 are mine.

This intuition is not trivially true: the Block Theorist, with her model of the temporal Cerberus, wants to *deny* it, because according to her what has existed and what will exist also exist *simpliciter* (my past and future experiences, and therefore my past and future conscisousnesses, are parts of her *ontology*, her theory of what THERE IS in the most unrestricted and tenseless sense of the quantifier). Nor is this intuition trivially false: if we adopt a presentist model then it is true that THERE ARE no such things as my past (or future) experiences (and consciousnesses), even though *there has been* (or *there will be*) such things. As a result, given the Presentist's ontology (his theory about what THERE IS unrestrictedly and without tense), it would come out true that all the experiences that THERE IS (or that exist *simpliciter*) and that are mine are co-conscious, i.e. that I HAVE *simpliciter* a unique consciousness.²⁴

²⁴ As long as I am not a spatial Cerberus or a split-brain, of course.



²³ As Deng mentions, there is some room for debate whether the solution that appeals to the "quantifier without tense" (Deasy, 2017) is equivalent to the solution in terms of "existence *simpliciter*" (Rea, 2003). One advantage of *existence simpliciter* (as opposed to tensed or de-tensed existence) is that it is a formulation that is compatible with a non-Quinean (non-quantificational) approach to the ontological debate. Apart from this difference, I will follow Deng (2018, pp. 794–795) in treating the two solutions as interchangeable.

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Here, the objector might complain that there is a relevant difference between the Presentist's response to the triviality challenge and the common-sense Presentist's response to the problem of the presentist Cerberus: while the Presentist only has to show that there is a *possible* meaning (for the Presentist claim) that is neither the tensed nor the de-tensed meaning, the common-sense Presentist needs to defend a stronger claim, namely that the reading of (CS2) in terms of existence *simpliciter* is not just "possible" but is precisely *the* meaning of the common-sense intuition. And the objector might have doubts that the common-sense intuition could be capable of having such a content. Is not "existence *simpliciter*" (or the meaning of the quantifier of classical first-order predicate logic) a *technical* meaning, unavailable to common sense?

Here again, I fully admit that further work in experimental philosophy (or conceptual analysis) would be required in order to confirm or undermine whether common sense has such an intuition. But, as earlier in the paper, I think we can already provide some plausible reasons to think that it does.

The first step in responding to the objector's skepticism is to use the classical manoeuvrer of comparing Presentism with Actualism in the metaphysics of modality. After all, the very notion of "existence simpliciter" was introduced by David Lewis in an attempt to respond to an equivalent triviality challenge in the debate between Actualism and Possibilism. The Actualist and the Possibilist (says Lewis) disagree in that the latter affirms that what *could* exist (but doesn't actually exist) exists *sim*pliciter, while the former considers that only what actually exists exists simpliciter. Or in other words, the Actualist affirms (and the Possibilit denies) that "everything is actual", where everything is taken to mean absolutely everything, with the unrestricted quantifier of classical first-order predicate logic. Interestingly enough, Lewis acknowledges that this "everything is actual" (which he denies, as a Modal Realist) is something to which "the spokesman for common sense" "adheres firmly" (Lewis, 1986, p. 99): "He thinks actuality is all there is; I disagree" (Lewis, 1986, p. 134). This acknowledged disagreement between Lewis and the "spokesman for common sense" is possible only if common-sense intuitions have a commitment about existence simpliciter (about "absolutely everything full stop"). And Lewis doesn't seem to have any problem attributing to common sense such a commitment. Maybe Lewis was a bit hasty here? Maybe common sense is unable to have any commitment concerning a proposition that contains the concept of "existence simpliciter"? If that were so, this would entail that common sense is unable to have a view in the debate between Actualism and Possibilism: common sense would be "perforce neutral", "on neither side of the dispute", because it would "understand neither the affirmation nor the denial". 25 And, as a result, we would be unable to account for the fact that Lewis's metaphysics of concrete possible worlds "flies in the face of common sense". Even Lewis himself wasn't bold enough to deny the conflict between common sense and his Modal Realism. Now, if common sense has sufficient conceptual resources to be able to endorse a commitment against the existence (simpliciter) of the non-actual, then it also has all

²⁵ This is what Lewis says about the neutrality of common sense regarding the debate between perdurantism and endurantism, as we have seen above.



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that is needed in order to endorse a commitment against the existence (*simpliciter*) of the past and the future.

Of course, saying that common sense "has the conceptual resources" to endorse such a commitment does not suffice to show that it *does* endorse this commitment. (After all, common sense could have an actualist intuition, and no presentist intuition: this is precisely what David Lewis believes.) But if that were so, we would have no way to account for the fact that the Eternalist's temporal Cerberus seems counter-intuitive to the spokesperson of common sense. And I have offered (in the previous section) some reasons to think that the Eternalist's temporal Cerberus *does* generate a conflict with common sense. (This is because the spatial Cerberus is *obviously* incompatible with common sense, in any plausible reading of (CS2), and because the Eternalist is the one who claims that, ontologically speaking, there is no difference between the spatial dimensions and the temporal dimension within the 4D Block, or within the 4D worm that I am.) If that is so, then it *must* be the case that the meaning of the common-sense intuition speaks against the temporal Cerberus; and (assuming the above response to the triviality challenge), the interpretation in terms of existence *simpliciter* is the best candidate meaning.

More experimental studies would need to be done in order to determine whether and why common sense (i) has an intuition against the model of the spatial Cerberus, and (ii) has the intuition that *if* space and time are just different dimensions (with the same degree of reality) within the same Block, then the temporal Cerberus is as bad as the spatial Cerberus. But it seems to me that we already have reasons to consider the affirmative answer as serious and plausible.²⁶

5 The ex falso sequitur quodlibet objection: is common sense logically inconsistent?

The second objection I am going to discuss now tries to show that the common-sense conception of the self—with its acceptance of both (CS1) and (CS2)—is in itself contradictory. Notice that if this is true, then the *conditional* conclusion of my Sect. 3 above remains true:

(18) If the common-sense conception of our selves is true, then presentism is true. But this conditional would be *trivially* true, in virtue of the necessary falsity of the antecedent and of the principle *ex falso sequitur quodlibet*. In other words, even though the conditional (18) would be true, the conditional with an opposite consequent would *also* be true, namely:

²⁶ As to the "why" question, I am inclined to think that these common-sense intuitions have a lot to do with what Bayne calls the "perspectival role" of our (common-sense) concept of the "self", namely that each self has a unique perspective: it seems clear that different "consciousnesses" (consciousnesses having experiences that are not co-conscious between each other) represent different "perspectives" on Reality. In that sense, it is true that even the common-sense Presentist has to accept that I have had other perspectives (than the one I am having now). But it is one thing to say that I have had and will have different perspectives; and it's quite another to say that I HAVE simpliciter distinct perspectives (each one being as real as the others in the 4D Block, each one being a part of what THERE IS, of Reality simpliciter). Perhaps the core commonsense intuition is that in order to count as a "self" something has to HAVE simpliciter a unique perspective. But this is just a suggestion for further empirical enquiry.



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(28) If the common-sense conception of our selves is true, then non-presentism is true.

Therefore the objection we are now considering could *concede* the soundness of the argument of Sect. 3, accept its conclusion... and yet point out that since (28) is also true, one could hardly use the truth of (18) as a first step in a *modus ponens* argument in favour of presentism (the common-sense argument presented in the introduction). Who cares what common sense says about our selves if its conception of the self is internally contradictory and generates an explosion of logical implications?

This objection is perfectly legitimate and important. If the common-sense Presentist wants to use (18) in a *modus ponens* in favour of Presentism, then she is committed to defending that common sense is not internally contradictory (at least concerning the intuition or intuitions that imply Presentism). If she wants to follow an epistemology of common sense (even a modest one that doesn't require the *infallibility* or *unrevisability* of common sense), such a philosopher will probably want to say that there is at least a presumption in favour of considering that common sense is not internally contradictory—unless the objector can prove otherwise. But the objection we will now consider tries to do precisely this: it tries to *show* that there is an internal contradiction between the common-sense intuitions that are supposed to "imply" Presentism (and therefore, that they "imply" it trivially, by logically implying absolutely anything).

The objection I have in mind would start from precisely the two common-sense intuitions that were appealed to in the argument of Sect. 3, namely:

- (CS1) Identity over time: it is I, the same "I" or the same "self", who was conscious yesterday (for instance, having a headache yesterday) and am conscious today (for instance, thinking about maths today).
- (CS2) Unique consciousness: I have a unique consciousness (or: I am a conscious being with a unique consciousness).

The objection consists in saying that (CS1) and (CS2) are logically incompatible. *This* is the reason why their combination can imply Presentism... just as much as it implies Non-Presentism and anything else. But pointing out this contradiction between (CS1) and (CS2) is enough to show that the common-sense conception of our selves, whether or not it has *prima facie* justification, has to be revised *ultima facie*—quite independently from the debate between Presentism and Non-Presentism. As a result, the revision of common sense that is contained in the Block Universe theory (Non-Presentism) might be a revision that we have to do anyway, for reasons independent from the Presentism / Non-Presentism debate.

But why would (CS1) and (CS2) be contradictory? In order to generate a contradiction from these premises, it is in fact necessary to add a third proposition, a version of proposition (27) above, and to consider it as a third datum of common sense about the self:

(CS3) Non co-consciousness: My past headache (or some other past mental experience) and my present mathematical thought (or some other present mental experience) are not co-conscious.

If we accept that these three propositions are part of the common-sense conception of ourselves, then (according to the objector) it is possible to prove that the common-sense



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conception of the self is in itself contradictory. In order to show this, the objector will take (CS1) and (CS3) as premises and will deduce the falsity of (CS2). To simplify the sentences, I will use PH for "my past headache" and PM for "my present mathematical thought". Here goes the argument:

Argument of the incoherence of the common-sense conception of the self

- (CS1) It is I, the same self, who was conscious yesterday and am conscious today.
- (29) Therefore PH and PM are two conscious experiences *of the same self* [from (CS1)].
- (CS3) PH and PM are not co-conscious.
- (30) Therefore there are at least two conscious experiences *of a unique self* that are not co-conscious. [from (29) and (CS3), by existential generalization].
- (¬CS2) Therefore for a unique I, a unique self, there is more than one consciousness (more than one class of co-consciousness). [from (30)].

It should be clear that this new argument, though structurally different from the argument of the previous section (this one is trying to prove an internal contradiction within common sense), is nevertheless very closely linked to it, and that the same solution will also be applicable here. The solution lies in the distinction between tensed existence (or quantification) and existence *simpliciter* (or tenseless quantification). Once we have this distinction at disposal, we can see that proposition (30) is ambiguous between the two readings of the quantifier, the tensed reading and the *simpliciter* or tenseless reading. In the case of the tensed reading, if we want the existential generalization to be valid, we have to tense differently the quantifier for PH and the quantifier for PM, and we get (validly) the following proposition:

(30-t) *There has been* an experience x and *there is now* an experience y, such that x and y are two distinct conscious experiences of a unique self and x and y are not co-conscious.

As for the tenseless reading, there is only one possible translation since there is only one tenseless quantifier; this unique possible translation would read as follows:

(30-s) THERE ARE (*simpliciter*) at least two conscious experiences of a unique self that are not co-conscious.

And it is true that if this proposition (30-s) were established, we could draw the following conclusion:

(¬CS2-s) Therefore for a unique I, a unique self, THERE IS (*simpliciter*) more than one consciousness. [from (30-s)].

I have said in the previous section that such a conclusion, even in the specific reading of the existence *simpliciter*, would indeed go against the common-sense intuition (CS2). But can we draw this conclusion from (CS1) and (CS3)? It all depends on the possibility to establish (30-s), because (\neg CS2-s) does not directly follow from (30-t). In other words, the matter boils down to the question whether we can infer (30-s) from (30-t)—which, as we have admitted, is validly inferred from (CS1) and (CS3). And the response is that such an inference is not valid if Presentism is true. If Presentism is true, then the inference from "there is now an x such that F(x)" to



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"THERE IS (*simpliciter*) an x such that F(x)" is true, because things that exist now exist *simpliciter*. But if Presentism is true, then the inference from "*there has been* an x such that F(x)" to "THERE IS (*simpliciter*) an x such that F(x)" is *not* valid, because things that have existed need not exist *simpliciter* (some of them do not exist now anymore, and therefore do not exist *simpliciter*).

To sum up: it is possible to generate a contradiction between (CS1), (CS2) and (CS3) only if we take as a further premise that Presentism is false. In other words, there will be an internal contradiction within common sense only if common sense also contains the negation of Presentism... which is just the same as saying that, as far as our intuitions about the self—(CS1), (CS2) and (CS3)—are concerned, common sense is *committed* to Presentism. Is common sense both committed to Presentism and (inconsistently) having an intuition against it? That might be so of course, and I haven't tried to prove here the negative claim that common sense doesn't also have an intuition against Presentism. But even if that were so, the objection of this new section would still fail: the objection tried to show that the self-related intuitions that supposedly commit common sense to Presentism in fact do not commit common sense to anything because they are inconsistent between themselves. What I have shown is that they are not inconsistent between themselves. At worst they are inconsistent with some other commitment of common sense against Presentism; but in themselves, they constitute a consistent set, which positively commits common sense to Presentism. If anyone should want to establish that, through other routes, common sense is also home to a commitment (or direct intuition) against Presentism, it seems to me that the burden of proof relies on them to establish it, and I am not aware that this has been done so far.

I therefore maintain the tentative conclusion that common sense is (non trivially) committed to the truth of presentism, and could serve (in principle) as a first step in a *modus ponens* argument for the truth of presentism.

6 Conclusion

I have tried to show in this paper that common sense is presentist. Or, more precisely, I have tried to show that two important common-sense intuitions about our selves—namely the intuition of personal identity over time (CS1) and the intuition of the unity of consciousness (CS2)—logically imply presentism (and imply it in a non trivial way, i.e. they imply it without implying at the same time its negation and everything else because of some internal contradiction within common sense itself).

The qualification is an important one, because one might raise doubts about the existence of such a thing as "the common-sense conception or world-view", considered as an all-encompassing and coherent world-view. Maybe there is no such thing as a big picture of common sense. Maybe common sense is just a source of various independent and atomic intuitions, that have no common and holistic source. If that were the case, then realizing the "picture" of common sense would be a task left open for the common-sense philosopher (by collecting and then combining the various atomic intuitions). It would be a possible and relevant task, but of course it would not be the same as



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supposing the pre-existence of this big picture within common sense itself, from which we would only extract pieces and parcels according to our interests.

Do we have, within common sense itself, a big picture, or all-encompassing world-view? Or is there just a bunch of atomic and independent intuitions? I prefer to remain neutral about this question. What seems to me to be clear is that common sense delivers *at least* some intuitions such as (CS1) and (CS2). And we could choose to stipulate that, by "common sense", we will mean the whole set of such intuitions (whether they be initially unified in a big picture, or initially atomic and independent).

What I have tried to show is that these two intuitions (CS1) and (CS2) do in fact imply presentism (and non trivially so). This is an important step in the task of showing that common sense itself (the whole set of common-sense intuitions) logically (and non trivially) implies presentism. A *complete* proof of this conclusion would be more complex to offer: it would require us to show that, within this complete set of commonsense intuitions, there isn't a further intuition (CSX) such that (CS1), (CS2) and (CSX) taken together imply a logical contradiction. If there were such an intuition (CSX) within common sense, then the conclusion we should draw is that common sense itself is logically contradictory (or entails, all by itself, a contradiction), and therefore common sense as a whole would, of course, imply not only presentism but also its negation. I don't pretend to have proven that there isn't such a further commonsense intuition (CSX) which would render common sense itself contradictory. I have considered one possible route to try and prove a contradiction within common sense, and I have found it ineffective. Apart from that route which I have studied, I cannot think of any other plausible premises (CSX) that would generate the contradiction (within common sense itself). In the absence of a proof of self-contradiction of common sense, I maintain that an epistemology of common sense should give a presumption of noncontradiction in favour of common sense. That is why it seems to me reasonable to conclude (until anyone offers an argument to the contrary) that common sense as a whole implies presentism (and non trivially so).

This conclusion, once again, falls short of a defence of presentism. In order to offer such a defence, it remains necessary to make a case in favour of the second premise of the common-sense argument: it remains to be shown why a proposition supported by a common-sense intuition (or implied by common-sense intuitions) should have a special epistemological privilege of any sort—at least a *prima facie* justification. I have not undertaken this task here.²⁷

Nevertheless, I would like to end this paper with a reminder of the upshot of our present conclusion for the more substantial project of a defence of presentism. As already mentioned briefly in introduction, the precise way in which we establish the commonsensicality of presentism is not indifferent to the epistemological weight it will have in the substantial question. This paper has tried to show that presentism is commonsensical in a particularly strong and deep way: it is not commonsensical just in the superficial sense in which one might think that it is part of "common sense" that the earth is flat or that heavier objects fall faster—this kind of intuitions are just prejudices of naive physics, which occupy a very peripheral position in our system of beliefs and can be very easily revised and replaced. What is at stake here, with the

²⁷ See the introduction for references to earlier publications in which I do just this.



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common-sense intuitions (CS1) and (CS2), is the fundamental notion that we, human beings, have of ourselves as conscious beings; these are intuitions so fundamental that they are presupposed in any of our everyday activities and that it is probably impossible for a human subject (in good mental health) not to share them, ... and probably also impossible to revise them successfully (more than as a verbal pretence).

These intuitions are so fundamental that they very likely are part of what Keith Campbell, describing Jerry Fodor's conception of common sense, called "the Basic Observational Fragment of common sense" (Campbell, 1988, p. 170). In other words, these intuitions are directly embedded within (or logically implied by) the conceptual content of common perceptions (or introspections), to the effect that they provide "the ordinary vocabulary of practical life" (*ibidem*). In the case of (CS1) and (CS2), they seem to be embedded and presupposed within such mundane statements as "It was not my brother who had a headache yesterday: it was I." (for (CS1)), or "Thank goodness, this headache is over and doesn't hurt anymore." (for (CS2)). Now, as Campbell points out, if we define common sense in such a way that it includes "excusable but erroneous theoretical opinions [such as] that the earth is flat, for example, or that the heavens are maintained in motion by the impress of divine force, or that worms are spontaneously generated", then it is clear that this common sense will not carry much epistemological weight (premise 2 of the common-sense argument will be very weak). But if "we restrict ourselves to this special group of common sense judgments" which is "the Basic Observational Fragment of common sense", we have much stronger reasons to maintain that it "[deserves] high epistemic status" (ibidem). In other words, intuitions that are anchored to this "basic observational fragment of common sense" are very likely to receive some form of prima facie justification, even in the most modest and consensual forms of common-sense epistemology, including what Campbell calls the "third, or Fodorian phase" of common-sense meta-philosophy, which (according to him) has become fairly consensual since the 1980s (Campbell, 1988, p. 166).

As a result, the mere fact that we have anchored presentism not only to common sense (in a wide sense) but to our most fundamental intuitions about our selves as conscious beings will probably have significant consequences for the success of the second step of the presentist argument.

This is the upshot that the title of this paper is trying to emphasize. *Maybe* philosophy, or physics, offers significant arguments to revise common-sense presentism. But some caution seems to be warranted before we make such a revision, because "if presentism is false, then *I* don't exist". We could also use here Jerry Fodor's famous saying and adapt it to the question of presentism: "if it isn't literally true that [it is really *I* who lived my past and that I am not a Cerberus with several centres of consciousness] ... if none of that is literally true, then practically everything I believe about anything is false and it's the end of the world."²⁸

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²⁸ Fodor's famous quotations is about the reality of mental causation (Fodor, 1989, p. 77).



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