

Was Bonaventure a Four-dimensionalist?

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One of the central debates in contemporary metaphysics is the debate about the persistence of substances through time. One of the most popular views in this debate is four-dimensionalism, according to which substances persist through time by having different temporal parts at different times.

Four-dimensionalism has gained in plausibility since the introduction of Relativity Theory, and of the spatiotemporal, eternalist, view of reality which it allegedly supports (Russell, *The Analysis of Matter*, 286; Gilmore et al., ‘Relativity and Three Four-Dimensionalisms’). Before the age of Relativity, four-dimensionalism was rarely discussed, let alone endorsed (Lotze, *Metaphysic*, Book 1, ch. 1; Helm, ‘John Edwards and the Doctrine of Temporal Parts’). However, Richard Cross has argued that four-dimensionalism was already discussed during the Latin high scholastic period. Moreover, he argued that Bonaventure went as far as to endorse this view¹.

It would be surprising to find out that a medieval scholar defended a revisionary view such as four-dimensionalism. The aim of this paper is indeed to show that such a reading of Bonaventure is false: Bonaventure was no four-dimensionalist.

The paper is divided into three parts. In the first part, I present the basic elements of the contemporary debate on persistence that are necessary in order to understand Cross’ conclusion. I then explain why some scholars in medieval philosophy, Cross included, believe that the very same elements were already discussed during high scholasticism. In the second

¹ Cross, ‘Four-dimensionalism and Identity Across Time’. The aim of Cross’ paper is to present this four-dimensionalist reading of Bonaventure together with a thorough analysis of its refutation by Henry of Ghent.

part of paper, I present Cross' case for a four-dimensionalist interpretation of Bonaventure. In the third part, I discuss five reasons to reject Cross' conclusion.

§ 1 Diachronic identity

Contemporary metaphysicians say that something persists if and only if it exists at various times. Socrates, for example, is something that persists through time, for there are at least two times – 450 and 400 BC, say – at which he exists. The Peloponnesian War, as well, is something that persists through time, for there are at least two times – 430 and 405 BC, say – at which it exists, or at which it is going on.

Persistence

x persists := x exists at different times

Both Socrates and the Peloponnesian War are therefore said to be things that persist through time. Do they persist in the same way? Intuitively, not. Indeed, the Peloponnesian War persists through time by having different parts at different times, namely the various phases of which the Peloponnesian War is composed. Such parts are at different times, and are called *temporal* parts of the War. This way of persisting, by having different temporal parts at different times, is called *perdurance*. The same way of persisting is, it is often said, enjoyed by time itself. In that case, temporal parts may be, for example, the succeeding years that all together form a century. On the other hand, how does Socrates persist through time? Intuitively, what exists of Socrates at any time of his life is not a part of him, but rather Socrates himself, in his entirety. Hence Socrates persists in a different way, not by being partly present at different times, but rather by being *wholly present* at each time of his persistence. This way of persisting is called *endurance*.

Perdurance

x perdures := x persists through time by having different temporal parts at different times.

Endurance

x endures := x persists through time by being wholly present at each instant of its persistence.

The theory of diachronic identity which takes these intuitive considerations at face value is usually called three-dimensionalism. According to it, substances, such as Socrates, endure, whereas events, such as my talk, and intervals of time, such as a day, perdure (Strawson, *Individuals*, 59f; Simons, *Parts*, 175; Lowe, 'Lewis on Perdurantism vs Endurance', 152; Mellor, *Real Time II*, xiii).

Three-dimensionalism

Substances endure, i.e. they persist through time by being wholly present at each instant of their persistence.

However, several contemporary metaphysicians are not three-dimensionalists. Several of them adhere to *four-dimensionalism*, whereby substances persist in the way in which events do: they perdure, they have different temporal parts at different times. According to this view, what exists of Socrates at each time of its existence is not the whole Socrates, but rather a part, a temporal part, of him. All such temporal parts are numerically different from each other, and Socrates may be taken to be the mereological sum of all such parts (Russell, *The Analysis of Matter*; Quine, *Word and Object*; Lewis, *On the Plurality of Worlds*; Sider, *Four-Dimensionalism*).

Four-dimensionalism

Substances perdure, i.e. they persist through time by having different temporal parts at different times.

Let us now pass to medieval philosophy. Were scholastic authors interested in the phenomenon of persistence? Did they think that there are different ways of persisting? Did they already make a difference between enduring and perduring, even though, possibly, under different names? Some scholars believe that the answer to all these questions should be affirmative. I will here make the case in favour of this conclusion. In a first step, I will introduce the medieval distinction between permanent and successive entities as it is canonically presented throughout the Latin high scholastic period. In a second step, I shall explore the possibility that such a distinction corresponds to the contemporary dichotomy between endurance and perdurance.

Let us then begin with the distinction between permanent and successive entities. Even though the history of this distinction is yet to be carefully charted, we can observe that during the Latin high scholastic period the distinction becomes canonical and is regularly put to work in a homogenous fashion throughout that period. In this context, it should be clarified that “permanent” does not mean existing forever, nor does it mean existing for a significant amount of time. The distinction between permanent and successive entities is rather a mereological one. Permanent entities are such that they can have all their parts together, i.e. at the same time, whereas successive entities are such that they cannot have all their parts at the same time, but they must have different parts at different times: when the earlier part is, the later part is not, and vice versa². A canonical example of a successive thing is a measure of time, i.e. a day. A day is composed of parts, namely the hours of a day. Such parts are not all together at the same time: when one is, the other is not. Permanent entities, on the other hand, are such that they *can* have all their parts at the same time. A stone, for example, is a permanent entity, because, in principle, a stone could have all its parts at the same time³.

It is difficult not to experience the temptation to see a correspondence between the medieval notion of succession and the contemporary notion of perdurance. Indeed, in light of the semantic content of the two notions, successive and perduring entities are both such that they cannot have all their parts at the same time. They must have different parts at different times. And when an earlier part is, the later one is not, and vice versa. And it is also difficult not to experience the temptation to see a correspondence between permanence and endurance. Both permanent and enduring things, unlike successive and perduring ones, do not need to have such earlier and later parts, but are such that they can have all their parts at the same time.

If we are not to resist this temptation, we shall conjecture that the dichotomy between endurance and perdurance is no contemporary discovery, but it is simply the reappearance in contemporary clothes of the good old distinction between permanent and successive entities, that was put to work everywhere during the high scholastic period.

² An overview of the distinction, as well as of how it is understood in this period, can be found in Pasnau’s *Metaphysical Themes* (691).

³ The two examples are taken from Burley’s *De Primo et Ultimo Instanti* but either of them can be found in several authors of the same period.

Authors of this period indicate as examples of successive entities both measures of time – such as days, hours, and weeks – and changes of substances – such as running (Pasnau, *Metaphysical Themes*, 691). On the other hand, canonical examples of permanent entities are in the category of substance, such as the already quoted stone, or as a human being (Pasnau, *Metaphysical Themes*, 691). In light of these examples, and if the previous conjecture is accepted, we should conclude that, as a rule, Latin high scholastic authors were three-dimensionalists. For they believed that substances are permanent, and hence endure, whereas times, as well as changes – a class of entities nowadays included in the larger category of events – perdure.

The conjecture that the contemporary distinction between endurance and perdurance corresponds to the medieval distinction between permanence and succession points to several intriguing lines of inquiry. One line of inquiry concerns the question to what extent the correspondence holds, if at all, or if it should be rejected as yet another unfruitful instance of philosophical anachronism. A second one concerns the question whether contemporary philosophers have developed the distinction between endurance and perdurance in an independent way, or whether it is possible to trace a historical connection between the contemporary debate and the medieval one – in that connection, it may be fruitful to remark that Roderick Chisholm, when speaking of perduring entities, uses the term *ens successivum* (sic) and traces this terminology back to Augustine and Aquinas (Chisholm, *Person and Object*, 98, 212). A third line of research concerns the question whether medieval authors developed concepts, theories or arguments that are as yet unknown to the contemporary scholar and that can be of use in the contemporary debate on persistence. I leave these promising paths of research, all still to be charted, for future work.

§ 2 Cross on Bonaventure

We have previously remarked that, as a rule, Latin high scholastic authors were three-dimensionalists. For they believed that substances were permanent, and hence endured, i.e. that they persisted through time by being wholly present at each instant of their persistence. As a consequence, a fourth and intriguing line of research is whether there are exceptions to this rule, namely whether some medieval scholars conceived of the possibility of, or even endorsed, the view that substances are successive entities, a view which would correspond to contemporary four-dimensionalism.

It would be surprising to find out that medieval scholars defended a revisionary view such as four-dimensionalism. Surprising as it might seem, this is exactly the thesis of a paper by Richard Cross, according to which Bonaventure endorsed the four-dimensional view of persistence. Given the significance of its conclusion, the paper has been the object of some discussion⁴.

In his paper, Cross is mainly concerned with one quaestio of Bonaventure's *Commentary on the Sentences* (*In Sent.* 2.2.1.1.3). The topic of the quaestio is whether spiritual creatures – such as angels and souls – have a permanent or successive durational measure. The duration of spiritual creatures, Bonaventure believes, is not time, but the *aevum* (*In Sent.* 2.2.1.1.1). In particular, unlike temporal creatures, *eviternal* creatures are not subject to change. Given that the durational measure of spiritual creatures is the *aevum*, the present question translates into the question of whether the *aevum* is permanent or successive. The received view was that the *aevum* is permanent, for *eviternal* creatures do not change, and succession implies change. Instead, in this quaestio, Bonaventure argues that the *aevum* is successive.

Notice that this conclusion does not necessarily imply that *eviternal creatures themselves* are successive. It may be that only their measure is, whereas they themselves are not. Moreover, notice that this conclusion does not necessarily imply that *all* substances are successive, for it concerns spiritual substances alone. However, Cross argues that there are three main reasons, to be found in the same quaestio, to believe that spiritual substances themselves have a sort of temporal parts. Moreover, he argues that the same three reasons apply not only to spiritual substances, but to substances in general. Let us now review his three reasons, and explain why they apply, if at all, to all substances. Cross' first reason consists in a direct quote from Bonaventure's quaestio:

If the whole existence [of an *eviternal*] is present, "being" and "having been" are not different. Therefore, whatever does not now exist, never existed; and whatever existed, now exists. But God cannot make what existed not to have been. Therefore, he cannot destroy an *eviternal*. But this is clearly false. Therefore [the whole existence of an *eviternal* is not present]. (*In Sent.* 2.2.1.1.3. 62a)

⁴ Cross, 'Four-Dimensionalism and Identity Across Time. Cross' paper has been quoted, for example, in Leftow, 'The Eternal Present'; Carter, 'St. Augustine on Time, Time Numbers, and Enduring Objects'; Pasnau, *Metaphysical Themes*, 394; Anfray, 'Le labyrinthe temporel'; Mullins, *The End of the Timeless God*; Varzi and Calosi, *Le Tribolazioni del Filosofo*.

In other words, God can destroy a spiritual creature. If its being were wholly present, this would be impossible. Hence its being is not wholly present (i.e. perdures). It should be clear that the same line of reasoning applies not only to spiritual substances alone, but also to substances in general, insofar as God can destroy them.

Cross' second reason consists in yet another direct quote from Bonaventure's text:

If the whole existence of an eviternal is simultaneous, and [its] whole duration lacks "before" and "after," then there cannot be longer or shorter [periods of existence]. In this case, it follows that the soul of Peter is in glory neither before, nor for a longer period than, the soul of blessed Francis [of Assisi]. But this is clearly false. Therefore [the whole existence of an eviternal is not simultaneous, lacking "before" or "after"]. (*In Sent.* 2.2.1.1.3. 62a)

In other words, some souls are in heaven for a longer period than others. If their being were wholly present, this would be impossible. Hence their being is not wholly present (i.e. they perdure). Once again, we may agree with Cross that, whether or not the argument works, it applies to all substances, insofar as some of them exist for longer than others.

Cross' third reason for holding that Bonaventure was a four-dimensionalist lies in his analysis of part of the respondeo of the quaestio. We may summarize Cross' Bonaventure in the form of the following argument containing three premises (which are more or less direct quotes from his article):

- (1) The relation of dependence on God is essential to every creature.
- (2) The relation of dependence on God is a process.
- (3) If a process is essential to x , then x is a process.

Therefore

- (4) All creatures are processes.

The idea here is that processes, such as reading, running or rumbling, have temporal parts. Hence, if substances are processes, they must have temporal parts. Once again, it should be clear that if this line of reasoning applies at all, it applies to all substances, insofar as all of them are creatures.

§ 3 Bonaventure was no four-dimensionalist

Cross offers three main reasons in favour of the surprising conclusion that Bonaventure was a four-dimensionalist. In what follows, I shall argue that Cross' surprising conclusion is too surprising to be true: Bonaventure was no four-dimensionalist. To this end, I offer five reasons.

§ 3.1 Reason 1

The first reason is that later in the same book of the *Commentary on the Sentences*, Bonaventure explicitly says that substances are not successive, but permanent entities (*In Sent.* 2.37 d. IV. 877a). One would expect a full-blown four-dimensionalist to say that substances are not permanent, but successive. It is implausible to believe it possible for Bonaventure to contradict himself so blatantly. Hence, he cannot be a four-dimensionalist.

In this connection, there is at least one thing that can be said on behalf of Cross' interpretation. The two texts are taken from two different parts of the commentaries, namely the tractatio quaestionum and the so-called dubia. Maybe the dubia were written before the quaestiones. Maybe in the dubia Bonaventure was simply repeating the received view, and only later, when writing the quaestiones and considering the topic more carefully, he decided to argue against the received view. This line of defence is implausible for at least two reasons. The first reason is that after changing opinion, Bonaventure would have had the chance to read the quaestiones again, for example when lecturing on them, and hence would have corrected the dubium accordingly. In the critical edition, there is no mention of a variant of the text in which the claim that substances are successive has been modified in any way. Second, it has been argued by Distelbrink (*Bonaventurae scripta, authentica, dubia vel spuria critice recensita*) and Longpré ('Bonaventure') that the dubia were written only after the quaestiones, and not before them.

A second line of defence, suggested by a footnote in Cross (399, n. 27), consists in claiming that Bonaventure would have changed the definition of permanence, so to make it compatible with temporal parts. However, this radical change of meaning would be

surprising, and it would even be more surprising in light of the fact that Bonaventure does not spell this change of meaning out in the course of the *Commentary*.

§ 3.2 Reason 2

Robert Pasnau, in his *Metaphysical Themes*, mentions Cross' interpretation of Bonaventure and gives one reason why he remains unconvinced. He remarks that in the very same quaestio, Bonaventure seems to say that substances are wholly present. Indeed, speaking of spiritual substances, Bonaventure writes:

Therefore, even if they do have the whole being, however, they do not have the continuation of their being all at once. (In Sent. 2.2.1.1.3. 62b-63a)

This remark is promising. However, it needs reinforcement. For while what Bonaventure says in the first part of the quote may be taken to confirm that substances are permanent, what he says in the second part of the quote is at best confusing. What does it mean that spiritual substances have their being, but not the *continuation* of their being, 'totum simul'? Maybe it simply means that while angels are permanent, their durational measure, the *aevum*, is successive. This hypothesis requires making a sharp distinction between the angel itself, and its durational measure. Bonaventure himself, in the same quaestio, makes such a distinction:

The measure of the angelic duration is not the Angel himself; rather, it is different from the Angel, in the same way in which a measure is different from what is measured. However, a measure is truly within the genus of quantity, and as such is divisible, hence it has parts. (In Sent. 2.2.1.1.3. 62a)

Here Bonaventure distinguishes the angel from the measure of its duration, the *aevum*. The *aevum* is a measure, hence a quantity, hence it has parts. If this distinction is made, then the quoted passage acquires a clear meaning. The whole point of the quaestio is not showing that angels are successive, but rather that their measure is. And given that there is a distinction between the angel and its measure, the angel can be permanent while his durational measure can be successive. By the way, this interpretation is often endorsed in the secondary literature

(Porro, ‘Tempo e Aevum in Enrico di Gand e Giovanni Duns Scoto’, 106; Porro, ‘Angelic Measures: Aevum and Discrete Time’, 145).

§ 3.3 Reason 3

I take my second reason to be conclusive and yet not fully uncontroversial. For Bonaventure makes the distinction not in the respondeo or the solution of the difficulties, but rather in the *sed contra* section of the quaestio. One might object: points raised in the *videtur quod* or *sed contra* sections do not necessarily reflect the opinion of the writer. Still – and this is my third argument – this possible line of defence backfires significantly against Cross. For in fact the first two reasons offered by Cross in support of his interpretation, namely the two direct quotes from Bonaventure’s quaestio, are also taken from the *sed contra* section of the quaestio (s.c. 7 and 8). Once again, the arguments given at the beginning of the quaestio are simply aimed at introducing the topic to the reader. Hence, there is absolutely no reason to believe that they contain a faithful rendering of Bonaventure’s opinion. If any firmer conclusion on this problem is to be reached, we should look at the respondeo and the solution of the difficulties.

In what follows, I will show two things. The first one is that in the solution of the difficulties Bonaventure says something that clearly implies that spiritual substances do not have temporal parts. The second one is that Cross’ third reason in support of his interpretation is unsuccessful.

§ 3.4 Reason 4

The solution of the difficulties which grounds my fourth argument is the solution of the *videtur quod* 4. The argument of the *videtur quod* can be analysed as follows:

- (1) simple substances have simple properties;
- (2) spiritual substances are simple;

Therefore

- (3) the properties of spiritual substances are simple;
- (4) their durational measure (the aevum) is one of their properties;

Therefore

- (5) the aevum is simple.

Suppose for the sake of the argument that Bonaventure were a four-dimensionalist. He would have a simple answer to this argument, that is, the denial of the minor premise (2). If four-dimensionalism is true, spiritual substances have temporal parts, and hence, a fortiori, have parts and are not simple. However, crucially, this is not the way in which Bonaventure solves this difficulty. Instead of denying the minor premise, he argues in favour of a denial of the major premise (1). He writes:

To those who object that the properties of simple substances cannot be composite, we must say that this is true, if such property is composed of parts that are all at once; but in the present case it is not so; rather, of the aevum – just like of time – nothing exists other than the now. Hence duration can indeed be in simple and composite things; hence the duration of a seed of millet can have the same amount of extension than the duration of a mountain. (*In Sent.* 2.2.1.1.3. 63a-b)

In other words, it is not necessary to be complex in order to have a complex duration. A seed of millet is spatially simple, and yet can have a complex duration. Hence, simple substances can have complex, successive properties.

At this point it should be clear that Bonaventure is denying the major premise, instead of the minor one: something simple, such as angels, can have complex properties, such as a complex duration, the aevum. But if angels are simple, they do not have parts, and a fortiori they do not have temporal parts. The previously advanced and somehow canonical interpretation of Bonaventure is yet again confirmed: Bonaventure does not want to establish that angels have temporal parts, but rather that their duration does.

§ 3.5 Reason 5

Let us now tackle Cross' last reason for believing that Bonaventure was a four-dimensionalist. His argument was

- (1) The relation of dependence on God is essential to every creature.
- (2) The relation of dependence on God is a process.

- (3) If a process is essential to x , then x is a process.

Therefore

- (4) All creatures are processes.

In support of premises (2) and (3), and in support of the claim that by their means Bonaventure draws the aforementioned conclusion, Cross refers to *In Sent.* 2.2.1.1.3, concl. (2:62b). The respondeo section covers the whole page 62b. There, Bonaventure presents his answer to the question. The question was whether the *aevum* is permanent or successive. Bonaventure concludes that the *aevum* is successive, but that the succession of the *aevum* is somehow different from the succession of time. The latter implies change, the former does not. At this point, a question poses itself. How is it possible to have succession, to have before and after, without change?

In order to answer this question, Bonaventure proposes two analogies. The first one features a brook gushing from a spring, the second one features a sunbeam. In the case of a brook gushing from a spring, at each time there is new water; it is numerically different from the one that gushed at another time. The analogy with the brook gushing from the spring might suggest a view similar to four-dimensionalism. Indeed, the brook gushing from the spring is such that at each instant there is new water, and yet similar to the preceding water. Hence there is numerical difference across time, in the same way in which a four-dimensional entity has different temporal parts at different times. However, Bonaventure *denies* that this is the way in which eviternal creatures continue to exist. Once again, there are two possible analogies here: the one of the brook and the one of the sunbeam. The two cases are different from one another (*aliter egreditur rivulus a fonte, aliter radius a sole*). In a sunbeam, it is not the case that over time something new is emitted; rather, it continues because what is emitted continues (*radius a sole continue egreditur, non quia semper novum aliquid emittatur, sed quia quod emissum est continuatur*). So, in the case of the sunbeam there is no numerical difference over time. And this is the way in which eviternal creatures continue to exist: *sed in esse rei aeviternae quod primo datum est per continuam Dei influentiam continuatur*.

This opinion about the way in which a light continues to shine is, as far as we currently know, false. For over time a light source emits *new* photons. But we are of course not here discussing Bonaventure's competence in electromagnetism. What is relevant here is that he believes that the continuation of a sunbeam implies no numerical difference. And that between the two

possible analogies, the sunbeam analogy is the correct one in order to understand how it is possible to have succession without change.

In what follows, Bonaventure claims that eviternals need the continuous influence of God in order to exist – a claim which seems to confirm premise (1) of Cross' argument. However, the other premises do not find any place in the aforementioned page (nor in any other place in this quaestio, as far as I can tell).

Maybe Cross' point was not exegetical, but rather philosophical. Maybe four-dimensionalism is the conclusion that Bonaventure *should* have drawn on the basis of the fact that eviternal creatures keep existing only because of the continuous influence of God. If his point was philosophical, then I protest as a philosopher. By way of example, take premise (3). Here, 'process' means 'event', that is, something that happens, occurs, or takes place. It is plausible to believe that processes have temporal parts. It is far less plausible to believe that one way to be a process is to have a process as an essential property. A standard and plausible view of contemporary metaphysics is that substances alone are subject to processes. On the other hand, processes are not subject to further processes. A process requires a subject which endures through it, which is the subject of the process during each of its phases. However, processes do not endure, but perdure. Hence no process can be the subject of a further process (Dretske, 'Can Events Move?'; Mellor, *Real Time II*). If that is the case, then having a process as an essential property is no way to be a process at all.

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