

Hume on Time and Steadfast Unchanging Objects

Todd Ryan (Trinity College) and Jani Hakkarainen (University of Tampere)

For Hume time or duration is essentially related to change. More specifically, the idea of a particular duration just is the idea of a number of different objects occurring in succession. According to Hume, our idea of time “can plainly be nothing but different ideas, or impressions, or objects dispos’d in a certain manner, that is, succeeding one another (T 1.2.3.10; SBN 37).”¹ Hume maintains that we cannot derive the idea of time without a “*perceivable* succession of changeable objects (T 1.2.3.7; SBN 35)”. In making this claim, Hume means to rule out both the possibility of deriving the idea of time from no objects whatsoever as well as of deriving it from perceived, but unchanging objects. Thus our idea of a particular duration is simply the idea of a succession of different objects. As Don Baxter nicely summarizes the view, our idea of time is “the idea of any succession qua succession”.²

Of course, not every object is in a constant state of flux. One of the most distinctive—and puzzling—features of Hume’s account of time is his insistence that because the idea of duration cannot be derived from unchanging objects, it cannot be correctly applied to them. As a result an unchanging object cannot “ever be said to have duration (T 1.2.3.11; SBN 37).” For Hume, not only is it impossible for there to be time without succession, but strictly speaking no unchanging object can be said to endure. Nevertheless, Hume recognizes that unchanging objects can coexist with temporal successions. Thus, if I stare at a blank wall while listening to a melody, the different auditory impressions, as members of a succession, occur in time. By contrast, my perception of the wall is unchanging. Therefore, although it coexists with a temporal succession, my perception of the wall does not itself endure—it has no duration. Hume calls invariant objects such as my perception of the wall “steadfast and unchangeable” (T 1.2.3.11; SBN 37).³ Such objects are *steadfast* because they remain in existence even as the objects that compose the coexistent successions come into and go out of being. They are *unchanging* because unlike the successions with which they coexist, the steadfast unchanging object (SUO) undergoes neither internal variation nor movement.⁴ In sum, a steadfast object is an unchanging object that coexists with a temporal succession without itself having duration.

However, this account of steadfast objects is highly puzzling. For if an SUO cannot properly be said to endure, how are we to understand its coexistence with temporal successions? Or to put the question another way, how can a durationless object coexist with each successive stage of an enduring entity? In this paper we shall explore Hume's theory of steadfast, unchanging objects and their relation to time. As a means of sharpening the issue, we shall first consider Hume's rejection of one common philosophical account of the relation between unchanging objects and time. We shall then turn to Hume's discussion of the vacuum and our idea of fictitious distance as a possible model for understanding steadfast unchanging objects.

Time as the Measure of Rest

One important clue to understanding Hume's account of SUOs is provided by his own statement of the implications of his account of time. As we have just seen, Hume takes it to be a consequence of his account of time not only that there can be no time without succession, but that steadfast, unchanging objects have no temporal duration. Hume acknowledges that this latter assertion conflicts not only with our ordinary, untutored beliefs about time, but also with the "common opinion of the philosophers" (T 1.2.3.11; SBN 37). Just what Hume takes the received view of the philosophers to be is hinted at near the close of the section, where he observes: "By what fiction we apply the idea of time, even to what is unchangeable, and suppose, as is common, that duration is a measure of rest as well as of motion, we shall consider afterwards (T 1.2.3.11; SBN 37)." Now given that Hume uses the terms "time" and "duration" interchangeably, we can understand him to be attributing to these philosophers what he takes to be the erroneous view that time is the measure of rest.

In speaking of the philosophers' opinion that time is a measure of rest, Hume is alluding to a standard element of the Aristotelian account of time. Aristotle famously defines time as the "number of motion in respect of the before and after".⁵ For the Scholastics, the phrase "number of motion" was generally understood to refer to measure, so that Aristotle's definition was commonly paraphrased as, "time is the measure of motion".⁶ There was a good deal of controversy within the tradition as to exactly how Aristotle's definition should be understood. However, the core idea was taken to be that time is relative to

motion—or in other words that a necessary condition of there being time is that there be motion. Now, because motion was understood broadly to encompass not only change of place (local motion), but any continuous change, this minimal reading amounts to the view that change or succession is a necessary condition of time.⁷ However, this naturally gave rise to the following question: if time is relative to, or a fortiori, reducible to motion, what are we to say of the temporality of objects at rest? Commonsensically, we take such objects to exist in time and to have real, measurable durations despite their lack of change. One might for example say that the broom has been in the broom closet for the last three hours. To accommodate this intuition, the Aristotelians maintained that time is also the measure of rest, albeit only indirectly (*per accidens*). A typical statement of the view can be found in Aquinas, who argues that:

time measures not only things that are actually changed, but also things changeable; hence it not only measures movement, but it also measures rest, which belongs to whatever is naturally moveable, but is not actually in motion.⁸

It is to this feature of the Scholastic account of time that Hume is alluding when he speaks of the “falsehood” that time “is a measure of rest as well as of motion”. Let us explore in a little further detail the Scholastic theory that Hume is rejecting.

For Aquinas, as for the Scholastics in general, rest is the privation of motion. That is, rest is the absence of change in a thing capable of it by nature. Time can be said to measure rest in so far as the unchanging object has a potential to motion. The suggestion, then, is that it is owing to an object’s capacity for change that time can be said to measure its rest or stasis. However, Aquinas himself gives little detail as to how exactly it is that time can measure the duration of changeless objects. More helpful in this regard is Duns Scotus. To accommodate the different temporal natures of motion and rest, Scotus draws a distinction between real time and privative time. Real time is simply the familiar Aristotelian time considered as the measure of change. Privative time is the time that can be said to measure rest. To illustrate his notion of privative time, Scotus bids us consider a “uniform immobile [i.e. unchanging] existence”. Despite the absence of change, Scotus insists, the object at rest has a kind of “privative” duration that can be measured by time. He writes:

even to this uniform immobile existence there corresponds a proper measure, which is time. And between any two imagined instants of this [privative] duration there could have been an interval of so much movement, and so, if we call time the measure of flow or motion, then this immobile [i.e. unchanging] existence would have a time period, although the flow of time would not be actual or positive but only potential and privative. Hence, if a mind aware of actual positive time were to use it to measure this period of uniform [privative] duration, it would know how long it was, namely, the positive extent of time that would have elapsed if time had been positive.⁹

Thus, according to Scotus, time is the measure of rest in so far as we can use “actual positive time” to measure a quiescent object’s potential changes, which Scotus calls its “privative duration”. In such cases, what we are doing is measuring the succession that would have occurred in the object had it actually been in motion. Not all Scholastics followed Scotus in drawing an explicit distinction between actual and privative time. Nevertheless, the general notion that the duration of static objects is indirectly measurable by time in so far as objects at rest are in a state of privation or potentiality to motion was widely accepted among Scholastic philosophers.

We can now see in what sense Hume objects to the “common opinion” that time is the measure of rest. For Hume straightforwardly denies that the idea of succession or time can be applied to steadfast and unchanging objects. However, as is his wont, Hume is eager to explain the psychological mechanism that leads us mistakenly to believe that unchanging objects have real duration. According to Hume, this “fiction” occurs because we have always present to the mind a succession of perceptions and, hence, the idea of time. As a result,

when we consider a steadfast object at five-a-clock, and regard the same at six; we are apt to apply to it that idea [of succession] in the same manner as if every moment were distinguish’d by a different position, or an alteration of the [steadfast] object. The first and second appearances of the object, being compared with the succession of our perceptions, seem equally removed as if the object had really changed (T 1.2.5.29; SBN 65).¹⁰

Contrary to Scotus' claim that "a mind aware of actual positive time" can use it to measure the stasis or rest of a coexistent unchanging object, Hume contends that our idea of positive time cannot be correctly applied to unchanging objects, but that we are deceived into thinking it can by the apparent temporal distance of the first and second appearances of the steadfast unchanging object.

However, in explaining our tendency to fictitiously ascribe duration to steadfast unchanging objects, Hume goes on to make a surprising concession. For, he explicitly allows that such objects are in fact susceptible of change during the period marked out by the coexistent succession. Moreover, he concedes that the unchanging object has the capacity to undergo the same number of changes as there are distinct moments in the coexistent succession. Returning to the example of the unchanging object viewed at 5 o'clock and again at 6 o'clock, Hume writes

To which we may add, what experience shews us, that *the object was susceptible of such a number of changes* betwixt these appearances (T 1.2.5.29; SBN 65; italics added).

Thus, Hume seems to grant the Scholastics everything they need, since he allows not only that the unchanging object is capable of change during the period marked out by the coexistent succession, but that it is capable of undergoing an *equal number* of changes as occur in the coexistent succession. But, we can imagine Scotus objecting, is this not to acknowledge that we can assign a number to the period of stasis of the unchanging object? And is this not precisely what measure consists in? Why then does Hume refuse to allow that time is the measure of rest? Has he simply misunderstood the Scholastic position?¹¹ Is their disagreement, then, a mere dispute about words?

It seems to us that the only plausible Humean grounds for rejecting the Scholastic view that time is the measure of rest is to reject the implicit basis for that view, namely that the steadfast and unchanging object is potentially divisible into temporal parts. Hume and the Scholastics agree that an unchanging object undergoes no succession and thus has no actual temporal parts. However, on Scotus' view, the idea of a succession serves to mark out potential temporal divisions in the unchanging object. It is for this reason that he can speak of such objects as having a kind of privative duration that can be measured by time. However, Hume seems to commit himself to the view that if an object is divisible, then it must have

actual, and not merely potential parts. Donald Baxter refers to this as Hume's Divisibility Assumption.¹² It follows from this principle that if a thing does not have actual parts, it is not divisible—not even potentially. Although Hume develops this view with regard to spatial extension, he explicitly treats the temporal case as parallel. So, Hume seems committed to the view that an object that has no actual temporal parts must also lack potential temporal parts; it is strictly indivisible. Thus, a plausible Humean ground for rejecting the Scholastic claim that time “is a measure of rest as well as of motion” is that that view presupposes that unchanging objects in so far as they are capable of change are divisible into potential temporal parts. And this, there is good reason to believe, Hume rejects.

Still, this is not altogether satisfactory. For, we need to understand how it is that Hume can at once affirm that the steadfast unchanging object is characterized by possible but non-actual succession—indeed, is such that we can count the number of potential changes—while at the same time maintaining that the SUO does not contain potential temporal parts. It is far from clear how these two claims can be reconciled. After all, if we hold with Hume that actual parts of time are marked out by successive changes in an object, it seems natural to understand potential changes in terms of potential temporal parts. Thus, by following Hume's own hints, our puzzle has deepened. To see how he attempts to resolve it, we must turn now to his account of fictitious distance and the vacuum.

Hume on Vacuum

To understand Hume's account of the “fictitious duration” that characterizes a steadfast object considered with respect to two different moments of a coexistent succession, we must first consider his corresponding discussion of our supposed idea of a vacuum.¹³ For Hume explicitly draws a parallel between the two cases and his discussion of the spatial case is much more extensive than the corresponding account of time. In each case Hume's aim is to defend his claim that we can form neither the idea of a vacuum—that is, the idea of a space without body—nor the idea of duration without actual change against three objections. Of these, the most important for our purposes, is the second. The objection is based on the traditional thought experiment in which we are to imagine God annihilating all the matter within a room without creating any new matter to take its place or allowing any motion in the

matter that remains. Consideration of the state of the room following the annihilation was taken by many to yield a coherent concept of vacuum.

According to Hume, it would be wrong to say with the Cartesians that because there would be literally nothing between the walls following the act of annihilation, the walls must be in contact. Now, the opposite of being in contact is being separated. Therefore, if we reject the Cartesian solution, it would seem to follow that the walls will stand at some distance from one another. However, Hume agrees with the Cartesians that there can be no extension without matter. Consequently, Hume cannot allow there to be real extension in the room following the annihilation of the matter within it. Yet it would seem that, for Hume, distance supervenes on extended matter. So the question Hume sets out to answer can be stated as follows: how can the walls stand at a certain distance from one another given that there is no matter, and therefore no extension, between them?

The key to Hume's solution is to draw a distinction between two kinds of distance. The first, which we might call *real distance*, is the distance that characterizes actual physical extension. The other is distance without extension, which Hume refers to as "fictitious distance". The idea Hume offers of this fictitious distance is the idea of darkness, which he argues is not a positive idea, but the idea of a pure absence—more specifically, the absence of light.¹⁴ Hume insists that as a mere absence, our idea of darkness does not consist of actual parts and so cannot yield the idea of real distance, nor a fortiori, of space without matter.¹⁵

Hume next bids us consider the same darkness, but within which we now perceive two visible, non-contiguous points.¹⁶ According to Hume the darkness that lies between these points has two important properties. First, it yields to real extension—that is, the fictitious distance that lies between the two points can receive a visible extension of determinate length (say, three feet) without impulse or penetration. As Hume puts the point, the fictitious distance can be "converted into" real visible distance (T 1.2.5.16; SBN 59).

However, does this not imply that darkness is not a *fictitious* distance after all, but rather a real distance of determinate dimensions? Here we encounter the spatial analog of the same two worries that we earlier

raised concerning steadfast and unchanging objects. First, we might ask, how can the distance between two visible points in otherwise complete darkness be greater or smaller, if it is not composed of parts? Moreover, is not this fictitious distance at least composed of potential parts, given that we can insert into the gap, say, one three-foot body, three one-foot bodies, 36 one-inch bodies, etc.? Why then can we not say that this fictitious, invisible distance has potential parts?

Hume's answer is twofold. First, as we have seen the idea of darkness is only a negative idea, i.e. the idea of the absence of light. The idea of fictitious distance is quite literally the idea of nothing. More specifically, it is not the idea of spatial units arranged in a certain order so as to constitute a spatial extent. The fictitious distance has no dimensions, and indeed, no metrical properties whatsoever. For this reason Hume denies that the idea of darkness between two points of light is the idea of a vacuum, or extension without body, since it is "without parts, without composition, invariable and indivisible" (T 1.2.5.11; SBN 57). Darkness cannot be measured by real extension, for it has no real extent.

What then of its capacity to receive bodies of real determinate extent? Hume's second major claim, which he emphasizes repeatedly, is that the capacity of invisible extension to be "converted into" real, visible extension is known to us only by experience. Hume writes:

We find *by experience*, that two bodies, which are so plac'd as to affect the senses in the same manner with two others, that have a certain extent of visible objects interpos'd betwixt them, are capable of receiving the same extent, without any sensible impulse or penetration, and without any change on that angle, under which they appear to the senses (T 1.2.5.16; SBN 59. Emphasis added).

In emphasizing that it is only by experience that we find that fictitious distance is convertible into real distance, Hume's point is that there is nothing in our idea of darkness considered in itself that would allow us to know in advance that it is fit to receive, say, three feet of real extension and no more. And this is true even if we were to imagine the same two visible points separated by darkness with a yardstick stick lying directly under them and "spanning" the fictitious distance. In such a case, we are mightily tempted to think that we would be measuring the gap between the non-adjacent visible points. But, for Hume, this

is an illusion. It owes its power to our almost irresistible tendency to replace one similar idea with another. In fact, the gap has no real distance. If it did, we could compare our idea of it with that of the yardstick and thereby determine, merely by a comparison of ideas, how much real extension the fictitious distance can accommodate. But this is not the case. As Hume repeatedly insists, the precise length of visible extension that a given portion of darkness can receive is knowable only by experience. For, once again, our idea of darkness or fictitious distance is an idea of a thing without dimensions or metrical properties of any kind.

Now, how is this meant to solve the problem? Hume believes that it allows him to say that our idea of fictitious spatial distance has no parts, not even potential ones, since it is the idea of nothing. Between the two visible points there is literally no thing which might be said to have potential parts.

Back to Time

Returning now to time, notice that Hume implicitly draws a series of parallels between the case of steadfast unchanging objects and the darkness or fictitious spatial distance we have just been discussing. In particular, Hume cites three features of steadfast objects that lead us—mistakenly—to apply the idea of time, or real succession, to them. Each of these features is an analog of the three circumstances that lead to a similar confusion in the case of fictitious distance. For our purposes, the most important is the second. This is the fact, as noted above, that we find by experience that the steadfast object was capable of undergoing an equal number of changes as there were distinct moments in the coexistent succession. Notice that as in the spatial case Hume emphasizes that “we find by experience” that this is so. Once again, Hume is claiming that our idea of fictional distance—in this case fictional *temporal* distance—has no dimensions or metrical properties. We cannot determine the number of possible changes a steadfast object might have undergone merely by comparing it with the coexistent succession. Rather, this can only be discovered by experience. Thus, it is a causal question as to whether this fictitious non-successive temporal distance can be converted into real successive duration and, if so, of what precise quantity. Hume’s suggestion, then, is that steadfast and unchanging objects are the temporal equivalent of darkness. Just as darkness yields no positive idea of extension, but merely the purely negative idea of the absence of

visible objects, so too a steadfast and unchanging object yields no positive idea of temporal distance, but merely the negation of successive duration. And just as we find *by experience* that the fictitious distance of darkness can be converted into a real extension of determinate dimensions, so too we find *by experience* that the fictitious temporal distance associated with steadfast objects can be (or at any rate, could have been) converted into real temporal extent—that is, it was capable of changing an equal number of times as the coexistent succession. But just as this does not imply that darkness is composed of parts, not even potential ones, so too Hume claims, the fictitious temporal distance is not composed of temporal parts, not even potential ones. It is on the basis of this feature of fictitious duration that Hume believes he can deny that time is the measure of rest as well as motion.

But does this really solve the problem? Has Hume succeeded in carving out a sense of temporal distance that is consistent with his other philosophical commitments? The suggestion is that thinking about an unchanging object as it coexists with a succession is like putting a ruler up to darkness. It gives only the illusion that one is measuring real temporal distance. The problem for Hume is that there seems to be an important asymmetry between space and time. In the spatial case, Hume can safely claim that darkness is simply nothing, because real extension is built up out of visible mathematical points, not regions of darkness. In other words, Hume can dismiss darkness as an unextended *nothing* because he has at his disposal an unextended *something* out of which extension can be composed, namely, visible mathematical points. However, in the case of time it will not do to treat a temporally unextended SUO as a mere nothing. For it is precisely out of such elements that all temporal successions are built. In this sense, the suggested parallel between darkness and SUOs fails, apparently undermining any prospect of accounting for potential change without potential parts by appeal to the alleged nothingness of the unchanging object. It would seem therefore that if Hume is to have any hope of accounting for the potential divisibility of steadfast unchanging objects without appeal to potential parts, it will have to be by drawing a distinction between the way such objects appear to our senses and what they are in reality. In this way, Hume might hope to ground their potential for change in certain real but unobserved features of the external objects themselves. This, however, is the subject for another paper.

¹ Following standard conventions, references to Hume's *A Treatise of Human Nature* will be given in the text in two parts. The first is the Norton and Norton edition (New York: Oxford University Press 2000), abbreviated as 'T' followed by book, part, section and paragraph numbers. The second is the L. A. Selby-Bigge edition, revised by P. H. Nidditch (Oxford: Clarendon Press, 1978), abbreviated as 'SBN' followed by page number.

² Donald Baxter, *Hume's Difficulty: Time and Identity in the Treatise* (London and New York: Routledge, 2009), 19.

³ To avoid confusion we must deal with a verbal peculiarity that runs throughout Hume's discussion of time. As we have just seen Hume is willing to allow that steadfast and unchanging objects are susceptible of change. Yet, he frequently characterizes such objects not as unchanging, but "unchangeable". Indeed, in the very framing of the question he says "By what fiction we apply the idea of time, even to what is unchangeable, and suppose, as is common, that duration is a measure of rest as well as of motion, we shall consider afterwards (SBN 37)." Hume's terminology can easily mislead, since it may seem to suggest that the issue concerns what the Scholastics would have called permanent duration. That is, non-successive duration. My suspicion is that Hume is using "changeable" to mean that which is characterized by actual variety. Some support for this may be found in the use of the word "changeable" to mean that which is qualitatively varied. Thus, Joseph's coat of many colors was sometimes referred to as a "changeable coat". But however that may be, we cannot understand Hume unless we read "changeable" as referring to things that show actual change or variety.

⁴ Technically, for Hume, no object can be said to endure, because duration requires change, and change destroys the numerical identity of objects. However, following Hume himself, we shall for the present speak loosely of objects undergoing change.

⁵ Aristotle, *Physics* IV, 220^a, 25-6.

⁶ Thus, for example, Aquinas affirms that "time is the proper measure of movement" [*tempus est propria mensura motus*] at *Summa Theologiae* Part I, Q 10, Art. 4, Reply to Objection 3 (New York: Benzinger Brothers, 1947), vol. 1, p. 43.

⁷ While Aristotle himself made clear that time, though relative to motion, cannot be reduced to motion, some Scholastics disagreed and took this further step.

⁸ *Ibid.*, 43.

⁹ Question 11, article 2. John Duns Scotus, *God and Creatures: The Quodlibetal Questions*, eds, Felix Alluntis and Allan B. Wolter (Princeton: Princeton University Press, 1975), p. 263.

¹⁰ In saying that the two appearances of the object seem to be "equally removed" as if the object had actually changed, we take it Hume means that they seem to stand at an equal remove—that is, at an equal temporal distance, from one another as if the object had undergone an actual succession.

¹¹ It is true that Hume characterizes his opponents as holding that time is "properly speaking" applicable to objects at rest, whereas the Scholastics claim that rest is measurable only *per accidens*. But this hardly seems sufficient to warrant the categorical rejection of the "common opinion of philosophers". Indeed, it seems more likely that Hume's reference to time being "properly speaking" applicable to unchanging objects is meant to draw attention to his own view which is that this is done by a kind of fiction—i.e. improperly.

¹² Baxter, 23-25.

¹³ For recent discussions of Hume's account of our idea of fictitious distance, see Miren Boehm, "Gaps in Hume's Vacuum" *Hume Studies* 38 (2012), 79-99 and Lorne Falkenstein, "Hume on the Idea of a Vacuum" *Hume Studies* 39 (2013), 131-168.

¹⁴ "'Tis evident the idea of darkness is no positive idea, but merely the negation of light, or more properly speaking, of colour'd and visible objects (T 1.2.5.5; SBN 55)." Unfortunately, Hume nowhere provides a full-fledged theory of negation. Thus, it is difficult to develop his account of negative ideas beyond what little can be gleaned from the passages at hand.

¹⁵ As Hume puts the point, "... 'tis not from the mere removal of visible objects that we receive the impression of extension without matter; and that the idea of utter darkness can never be the same with that of vacuum (T 1.2.5.; SBN 56)."

¹⁶ "'tis evident, that when only two luminous bodies appear to the eye, we can perceive, whether they be conjoin'd or separate; whether they be separated by a great or small distance; and if this distance varies, we can perceive its encrease or diminution, with the motion of the bodies" (T 1.2.5.10; SBN 57).