

The Envious Instant: Material Conditions of Truth in Thomas Bradwardine

Long before his all-too-brief tenure as Archbishop of Canterbury, Thomas Bradwardine spent his formative years untying logical knots at Oxford. The knottiest of those knots were to be found in semantic paradoxes like that of the well-known liar who says, “I am lying to you right now.” In order to unweave these tangled threads, Bradwardine made use of an unloved instrument from the medieval logicians’ toolkit: the *ut nunc* consequence.¹ Often translated as ‘matter of fact’ consequence, this logical maneuver involved the supposition of a contingent premise which may not hold ‘absolutely’ (*simpliciter*) or in every case. Bradwardine embraced the *ut nunc* consequence as central to his understanding of how the truth of propositions may be judged in relation to their contingent premises. By relating insolubles like the Liar’s Paradox back to contingent, material states of affairs, he was able to push past the limits of paradox and ground truth anew in an apprehension of the facts of the matter—at least, as of now (*ut nunc*).

While Bradwardine’s idiosyncratic reliance upon the *ut nunc* has already been established, there remains work to be done on how this dependence of logic on temporality relates to the theological account of time we meet in his *De Causa Dei contra Pelagianos*. One central claim there is that human matters can perhaps be understood in terms of temporal instants, whereas God must not be so measured, dwelling as He does in the simultaneity of an “instantaneous presentiarity,” which Bradwardine dubs the “*simultas* of the temporal instant.”² While *simultas* here presumably means sheer *simultaneitas*, it is tempting (for this reader, at

¹ My understanding of the use of the *ut nunc* consequence in medieval logic is indebted to the work of Stephen Read, Edith Wilks Dolnikowski, Eleonore Stump, and Catarina Dutilh Novaes. See especially: Stump, “Topics: Their Development and Absorption into Consequences;” Dutilh Novaes, “Logic in the Fourteenth Century After Ockham;” and Dutilh Novaes & Read, “*Insolubilia* and the Fallacy *Secundum Quid et Simpliciter*.”

² *De Causa Dei*, III.51.

least) to want to see in this passage a possible pun.³ God's atemporal eternity, by embodying the instantaneous simultaneity that our present moment aims for but falls short of, might be said to provoke a situation of *simultas*—in the classic sense of “envy” or “strife”—between its true presence and our feeble pseudo-present. Regardless, our next move must be to unearth Bradwardine's underlying philosophy of this present instant, which allowed him to place embodied temporality at the core of both his logic and his theology.

Before we come to Bradwardine's direct treatment of temporality, we should first make clear how he puts *ut nunc* consequence to work in his *Insolubilia*. This is easier said than done, given that the very intent of that text is to hurl itself into the enigmatic corridors of logical paradox. Without getting too tangled up in those puzzles, then, we will have to try to excise the precise operation of *ut nunc* consequence from the wide-ranging body of Bradwardine's text. The main goal of the *Insolubilia* is to untie the knots we tend to stumble upon as we try to disentangle the logical threads of our language. The knots that rankle Bradwardine the worst tend to be “semantic paradoxes:” enigmas woven into the very fabric of our language. “I am lying to you right now,” says the liar. Taken strictly as a linguistic utterance, this sentence would seem to serve only as fodder for an all-night study session the night before a Philosophy 101 exam. As the student pulls their hair out trying to force the paradox to make sense, they only find themselves tumbling further and further into hair-splitting confusion.

Bradwardine's approach to this situation would be pull out his Alexandrine sword and cut straight through the Gordian knot of the semantic paradox. He does so by placing these language games back into an ontological framework that makes reference to the material, temporal

³ Of course, this reader might simply want to see too much. Dr. Mark Thakkar at the University of St. Andrews has pointed out the fact that *simultas* would simply have meant “simultaneity” in Bradwardine's fourteenth-century Latin. The classical meaning appears to have dropped out by then.

conditions of utterances. In Bradwardine's terse late scholastic prose, the semantic paradoxes find themselves forced back into the embrace of actual existence. "A true proposition is an utterance signifying only as things are," contends Bradwardine, while "a false proposition is an utterance signifying other than things are."⁴ Paradoxical claims, which present themselves as both true and false at the very same time, would have to semantically point to contradictory states of affairs in the real world. Yet since this real contradiction is impossible—in a way that linguistic contradiction is not 'impossible'—the paradoxical utterance simply signifies "other than things are." And because Bradwardine has defined falsehood as this very "signifying other than things are," the semantic paradox can simply be taken as false. Properly speaking, it is not the case that the paradox signifies two simultaneously contradictory states of affairs at once; rather, it is the inability of the paradox to signify two such states at once that indicates its falsehood—not simply its ambiguity, but its falsehood. Alexander swings down his sword upon the knot, and it is cut.

Bradwardine's ontologizing of truth-statements is elegant, albeit almost brutal in its simplicity. It was not necessarily embraced as authoritative by readers then or now. But the moves made by Bradwardine as he reduces propositional statements to the material conditions of their truth remain striking. One such related move made by Bradwardine here has to do with the previously mentioned "*ut nunc* consequence." Throughout the *Insolubilia*, Bradwardine makes reference to two modes of consequentiality: *ut nunc* and *simpliciter*.⁵ The latter can be rather uncontroversially rendered as "simple" or "absolute" consequence. It has to do with whatever

⁴ *Insolubilia*, 6.2; cf. Read, 14-15.

⁵ This distinction is not, of course, his invention. See, e.g., Walter Burley, *De Puritate*, 3: "First therefore I assume a certain distinction, namely this one: One kind of [consequence] is simple, another kind is as-of-now (*ut nunc*). A simple [consequence] is one that holds for every time. For example 'A man runs; an animal runs.' An as-of-now [consequence] holds for a determinate time and not always. For example 'Every man runs; therefore, Socrates runs'. For that [consequence] does not hold always, but only while Socrates is a man." The online Stanford Encyclopedia of Philosophy does an impressive job glossing this statement of Burley's.

follows necessarily, regardless of temporal or local conditions. *Ut nunc*, on the other hand, has been translated in a number of distinct ways. Quite often we find it as “matter of fact.”⁶ A more literal version might be “as now” or “as of now.” The suggestion here would be that the material conditions of truth, which Bradwardine makes the arbiters of semantic coherence, have for him an inescapably temporal component.⁷ If we want to find out what logically follows in any given case, we have to look at how things are in a particular moment in time.

Recall the liar’s paradox: “I am lying to you right now.” Perhaps our confusion about the meaning of this utterance lies not only in the “lying” part, but also in the “right now” part. “I have lied to you in the past;” that kind of statement would seem to be less controversial. But it is the immanence, the now-ness, the simultaneity of the liar’s claim to be lying that makes this particular paradox so infuriating. But the trap that has been set by this invocation of the “now” can also be undone by turning to Bradwardine’s use of the *ut nunc* consequence. Other medieval logicians might think that the *ut nunc* consequence looks defective next to consequence *simpliciter*.⁸ Yet, for Bradwardine, considering these paradoxes ‘absolutely’ is only one possibility. The real way forward lies in putting the paradoxes back into their temporally constrained material conditions—into states of affairs as they “now” are. The semantic content of the liar’s paradox does not consist merely in an abstracted version of that content, stripped of all contingent conditions. Instead, the full meaning of the paradox can only be appreciated in light of its situated, this-worldly consequences—its *ut nunc* consequences, in other words. If the liar tells me he is lying in this very moment and turns out to be telling the truth, it follows that he is

⁶ On such translation issues, see Read, 15-16.

⁷ This is indicated not only by the *Insolubilia*, but also by Bradwardine’s *De Continuo*, discussed further below. See Dolnikowski, *A View of Time*, 128: “Time, therefore, is a prerequisite for all physical continua whether successive, as with motion, or permanent, as with space.”

⁸ Read, 16, makes reference to an unnamed treatise on consequence written right around the same time as Bradwardine was writing. That other treatise stated quite plainly: “*nihil est consequentia ut nunc*.”

in contradiction with himself—not abstractly, not theoretically, but actually and materially in this very moment. The linguistic paradox collapses into an ontological impossibility and so disappears from view. As Bradwardine tells us, it is because the liar’s paradox allows itself to be positioned in a specific moment in embodied time that it leaves itself open to destruction. Considered abstractly, perhaps the paradox could be permitted to stand; but considered materially and temporally, the paradox falls in on itself. *Simpliciter*, the liar can speak his self-contradictions; but “as of now,” the liar falls silent.

What makes Bradwardine’s treatment of the liar’s paradox so different from the usual ‘introduction to philosophy’ textbook is his insistence on indexing truth-claims to specific moments of time. What matters is if a proposition signifies things as they really are ‘now,’ in a particular phase of time. Yet what does *nunc* mean for Bradwardine? Is he simply using the phrase *ut nunc* as a pre-packaged logical formula?⁹ Or does he actually care about all of the questions that have plagued notions of the ‘now’ throughout the history of the philosophy of time? Here we should not neglect the fact that Bradwardine was a good Augustinian—perhaps the best Augustinian of the fourteenth century. (Apologies to Gregory of Rimini!) Any committed reader of Augustine would be hard pressed to miss those passages in his corpus where he brings the present time in for relentless questioning. The debate about whether time was made up of discrete instants or was instead a seamless continuum predated Augustine, of course, but it was the Bishop of Hippo who gave that question its existential and theological weight.

⁹ One possible explanation for why Bradwardine is so much more in favour of the *ut nunc* than his contemporaries might lie in the fact that he is not terribly optimistic about the a priori powers of human reason to unlock truth in its fullest sense. He is a rigorous logician, yes, but he seeks to apply the rigors of logic to the theological truth conveyed in the first instance by Scripture. On this, see Leff, 34: “Truth, therefore, lies beyond the bounds of reason: it belongs alone to theology and the Scriptures.”

It should come as no surprise, then, that Bradwardine's corpus attacks the question of time from a number of different angles. In his technical works of mathematical ingenuity, like *De Continuo* and the *Tractatus de Proportionibus*, the Merton man threw in his lot against the atomists—i.e., those who would cut the timeline up into point-like chunks.¹⁰ And in magisterial works of theology—above all in the *De Causa Dei Contra Pelagianos*—he would found much of his argument for the prevenient sovereignty of divine grace on the radical distinction between God's timeless eternity and humankind's flowing temporality.¹¹ The obvious question that arises from all of this Augustine-fueled speculation is: did Bradwardine have an overarching view on the nature of time that bound together the realms of logic, mathematics, and theology? The question has been asked before, although not as often as one might have hoped. To ask it again is to stand on the shoulders of scholars like Stephen Read, Gordon Leff, and Edith Wilks Dolnikowski. While the specialist literature has a tendency to get lost in the disciplinary specificity of each of the polymath Bradwardine's many fields, here the goal is simply to start building a bridge from his logical emphasis on the now to his scientific defense of the temporal continuum and his theological defense of Augustinian grace.

If reading Bradwardine on logic tends to make the head spin, his mathematical and theological works should prove more attractive in their assertive clarity. Admittedly, a text like *De Continuo* is filled with high Aristotelian jargon and lovingly rendered calculations, but it

¹⁰ Crosby, 16, accuses Grosseteste of being the latest and greatest of the atomists, at least in Bradwardine's sphere. But the atomistic temptation recurs throughout intellectual history. The late medieval Latin debates themselves are indebted to Averroes' Aristotelian critique of Ibn Bajja's atomistic assumptions about time in his hugely influential accounts of physics.

¹¹ Bradwardine casts his own conversion in the light of this doubly prevenient grace; see *De Causa Dei*, I.35: "... before I had become a student of theology, the truth... struck upon me like a beam of grace, and it seemed to me as if I beheld in the distance, under a transparent image of truth, the grace of God as it is prevenient both in time and nature to all good deeds—that is to say, the gracious will of God which precedently wills that he who merits salvation shall be saved and precedently work this merit of it in him, God in truth being in all movement the primary Mover." Cf. Dolnikowski, *A View of Time*, 6. On the progressive maturation of Bradwardine's view of time, see *ibid.*, 148-150.

makes itself quite clear on the nature of the temporal continuum.¹² Taking a firm stand against the atomists, Bradwardine argues that time cannot be thought of as an agglomeration of discrete nows.¹³ Instead, it must be considered as a linear continuum. Reinforcing several ancient insights of Aristotle, he reminds us that the point must be understood on the basis of the pure line, not the reverse. A continuum like time must, furthermore, be understood as infinitesimally divisible.¹⁴

While human measurements of time must ascribe starting and stopping points (to, say, a motion), time itself is not made up of such points. Strictly speaking, there are no points—in space or in time.¹⁵ Taking things truthfully, there simply is no present instant.

In the *De Causa Dei*, meanwhile, Bradwardine aims to bring this anti-atomistic understanding of time to bear upon theology. Whereas the younger Bradwardine was happy to observe disciplinary boundaries within his various works, the mature polemicist wants to produce a more holistic account of the situation in which humankind finds itself. While he is happy to argue from authority when necessary, Bradwardine does not simply want to re-assert

¹² On this, see Dolnikowski, “*De Memoria*,” 198: “He assumed that time is an infinitely divisible continuum moving in a single direction from past to future. Within this larger continuum, smaller continua, such as the motion of an object, can be observed and measured. This understanding of time informed his treatment of proportionality, continuity, and acceleration.”

¹³ As Edith Dolnikowski argues in *A View of Time*, 124, he did this with meticulous precision: “Bradwardine tried in *De Continuo* to dismantle the atomists’ position by demonstrating the absurdity of their main principles. ... So mathematically meticulous was his procedure that he waited until Proposition 141 to state explicitly his thesis that a continuum cannot be composed of indivisibles.” Further meticulousness can be found in Dolnikowski, 125: “At the outset of the *De Continuo*, Bradwardine introduces his conception of time as a continuum in a series of definitions pertaining to continuous substances. ... Definitions nine and eleven establish time and motion as successive continua. Definition ten defines an instant as an atom of time.”

¹⁴ It is, in fact, a continuum made up of other continua. See *De Continuo*, Corollary to Conclusion 141: *Omne continuum ex infinitis continuis similis speciei cum illo componi*. Or: “Every continuum is composed from an infinite number of continua of similar type with itself.” The twenty-first century mathematician Dan Sloughter has done much to preserve these Bradwardinian arguments about continua and place them into conversation with those of Charles Saunders Peirce. Dolnikowski, *A View of Time*, 130, also summarizes the divisibility of time and how it relates to physical phenomena in the work of Bradwardine: “Bradwardine presents time as a successive continuum which can be divided infinitely into time-atoms or instants, which are themselves subject to further division. Time is the single continuum which governs all other physical continua including motion, space, and measurement.”

¹⁵ Compare this to Bradwardine’s general skepticism about the ascription of reality to geometrical terms in his final conclusion to *De Continuo* I: *Superficiem, lineam, sive punctum omnino non esse*. Or, namely, “That surface, line, or point do not have full existence.” Dolnikowski, *A View of Time*, 131, writes: “In Proposition 151, Bradwardine actually claims that ‘there are no surfaces, lines, or points at all.’”

Augustine (and Paul) against the creeping Pelagianism of his peers. He wants to show that a strong reading of Augustine on grace, which makes divine agency prior to human agency in every possible way, is in fact consistent with the lives we live within the cosmological continuum of time.

Bradwardine's expression of grace in terms of time relies upon two key claims, both of which are unmistakably Augustinian in character. The first is that divine eternity is not simply infinite duration, but true a-temporality.¹⁶ The relationship between God and the world can only be approached as the relation between a properly timeless Creator and an inescapably time-bound creature. The second underlying claim is that, if there are no real 'instants' in time, then all of our attempts to differentiate the 'present' from the past and the future are relative to the point of being defective. A full-blooded distinction between present time and future time would only make sense if there were objective instants to which we could point. But time, as Bradwardine had already argued ceaselessly in earlier works, is a pure continuum, in no way made up of instants, points, or point-like 'nows.'

On the basis of these two Augustinian pillars, Bradwardine seeks to undermine the usual ways of talking about divine foreknowledge, predestination, and grace. All of the fine-grained analyses of future contingency—from Aristotle's naval battle onward—actually turn out to be mostly irrelevant when it comes to making sense of divine grace. To some, it might seem quite logical to try to make predestination and robust free will go together by pointing to a brand of divine foreknowledge that would allow future human actions to remain contingent. But to

¹⁶ Leff asserts this again and again in his reading of Bradwardine. See Leff, 29: "the measurement by which God creates is outside time; He does in one eternal instant that which every other cause does in time." And 36: "God's Knowledge is eternal and immutable. As we have seen, the past, present, and future are in Him the ever-present instant. That which, in the created world, happens temporally, in Him happens constantly." Leff's language is a tad imprecise here. Can what is truly a-temporal be 'happening constantly?' That sounds infelicitous. But such are the risks when we try to use time-bound words to speak of something beyond the bounds of time.

Bradwardine—and, perhaps surprisingly, to the slightly later Lorenzo Valla—this turn to the philosophy of future contingents is at best a distraction.¹⁷ It relies on the sense that we can establish a secure distinction between (a) a present moment in which we have potential knowledge and (b) a future moment when that knowledge will turn out to be true or false. But, for a totally timeless God, such a distinction would of course make no sense. For Bradwardine, any attempt to ascribe to God a merely neutral foreknowledge of future contingents fails right away.¹⁸ In that claim, of course, Bradwardine is not alone. But where he becomes more idiosyncratic is in his insistence that the nature of time as a continuum means that it also makes no sense for we humans to think in terms of a ‘present moment’ and a ‘future moment.’ Slicing the timeline up into discrete moments like that would constitute the intellectual crime of temporal atomism, which Bradwardine could never countenance.¹⁹

In essence, Bradwardine accuses the Modern Pelagians of trying to colonize the future as a special zone for human freedom. On this model, God’s infallible knowledge would be

¹⁷ It remains, of course, a distraction that Bradwardine cannot quite shake. By Leff’s count, the *Doctor Profundus* spends about two hundred pages (p. 688-872 of the standard edition) addressing the ins and outs of the future contingency problem. See Leff, 103. Bradwardine’s three main enemies here are: (1) those who subscribe to impersonal determinism (Stoic fate or the doctrine of the so-called “Arabs”); (2) those who radically circumscribe God’s knowledge by making all of temporality behave contingently (true Pelagianism); and (3) those who try to moderately circumscribe God’s knowledge by making it apply only to the ‘completed’ past and present, leaving the future contingent and not quite known (Semi-Pelagianism). Yet the fourth, perhaps unspoken enemy would have to be the temporal atomists.

¹⁸ As Leff, 105, puts it: “he transforms the eternal instant in God to deny the future any independent existence. Where St Thomas was content to allow that God saw everything through His own essence which in no way necessitated what He foresaw, Bradwardine changes this neutral intelligence into active approbation: with him, what God foresees, He forewills. As a result, the future is as determined as the past and the present: it cannot not come about.” See Bradwardine, *De Causa Dei*, III.12-19, esp. 853: *Omne quod est quando est, necesse est esse, et quod fit et factum esse fieri et factum esse, et Deum velle sic esse*. And again at 864: *Item apud Deum est determinata scientia omnium futurorum, quia per causam determinatam, per suam scilicet voluntatem, per quam scit ea. ... Item Omnia sunt semper praesentia in aeternitate et intrinsice apud Deum...*

¹⁹ A programmatic statement of Bradwardine’s concerning future contingents can be found at *De Causa Dei*, p. 841: *Sic forte in Deo, ubi non est aliqua temporalis praecessio, sed causalis, si respiciatur ipsa Dei natura non in ratione agendi, et comparetur liberae voluntati hominis nuda ab actu antequam velit, verum erit dicere, Deum potest non velle quod vult: Si vero respiciatur ipsa divina natura in ratione agendi, et comparetur liberae voluntati hominis cum iam actu vult, verum erit dicere Deum necesse est velle quod vult, vel velle quod non vult. Impossibile est enim eum non velle quod vult, vel velle quod non vult. Quam distinctionem facit in nostro posse et actu prioritas temporalis hanc ibidem facit prioritas causalis et subiecti super quod reddit praedicatio diversa...*

circumscribed, even if ever so slightly, to the realm of the past and the present. The future would then be subject to at best a weak form of divine foreknowing, as opposed to a wilful foreknowing and predestining of the cosmic order. We modern Adams and Eves would be left free to frolic in the fountains of our own freedom, chasing after our own merit as we wade into an undetermined future. In these matters of grace, however, Bradwardine will brook no half-measures. Behind every William of Ockham lies a Julian of Eclanum. For Bradwardine, then, the eternity of God severely relativizes all of the hair-splitting distinctions we vainly posit within the temporal continuum. The fine-toothed comb of the temporal atomist shatters in the face of time's infinite divisibility. Gordon Leff put it nicely when he wrote that "Bradwardine's solution is to refuse to recognize any difference in this world which is not also in God. As a result, rather than acknowledge the problem of the future, he denies it."²⁰

Bradwardine, though a difficult author, strives for clarity. It would seem prudent to imitate him in this with the following propositions:

1. If time is a pure continuum, then, as Augustine also indicated, there are no true points in time.
2. If there are no true points in time, then all distinctions between phases of time are relative to materially conditioned human acts of measuring.
3. If temporal divisions are relative, then the distinction between present and future is relative.
4. If the distinction between present and future is relative, then relying on the debate over future contingents to solve the problem of divine predestination is inadequate,

²⁰ Leff, 108, citing Bradwardine, *De Causa Dei*, p. 841.

because the lack of distinction between present and future obtains certainly for a timeless God (and probably also for continuum-bound humankind).

5. If we cannot resort to future contingency to reduce the sovereignty of divine grace, then that grace remains sovereign over all so-called phases of time ('past, present, and future').
6. If grace is equally sovereign over all so-called phases of time, then, as Augustine again indicated, we are left with a strong doctrine of prevenient grace.

Taken systematically, this collection of Bradwardinian sentiments stands as a rigorous reinforcement and reinvigoration of an Augustinian worldview. Whereas many readers of Augustine leave his philosophy of time in one corner and his doctrine of grace in the other, Bradwardine seeks to demonstrate that the Augustinian destruction of the instant and the Augustinian account of prevenient grace mutually implicate each other logically.

Augustine himself, of course, never really got around to rendering his diverse views systematically coherent. That would most likely have been beside the point, for him. But Bradwardine is another breed. His corpus, at first discipline-specific and desultory, eventually turns into an endeavor in Augustinian cosmology. He places his anti-atomistic account of time at the core of his logic, his physics, and his theology. Doing so allows him to cut through the Gordian knots of semantic paradoxes and future contingents in a way that pleases few logic-choppers, yet still succeeds in leading abstract thought back to its roots in temporal, material conditions. For every knot cut, however, new opportunities for entanglement arise. It remains to be seen whether a rejection of temporal atomism can help us rethink logic, physics, and theology in a way that does not collapse back into our propensity to focus on the present moment. Even as

of now, the consequences of Bradwardine's systematic application of the Augustine account of time have yet to be determined.