

# *Augustine's Ambivalence About Temporality: His Two Accounts of Time*

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At the close of his discussion of time in Book 11 of the *Confessions* (397–401), Augustine abandons his empirical inquiry for an impassioned prayer. He writes:

Behold, my life is a dispersion and a distraction. . . . I have been fragmented in times, the order of which I do not know; and my thoughts and the inmost viscera of my soul are torn apart with tumultuous change; until the day when I shall flow together into You, purified and made molten by the fire of your love (*Conf.* 11.29).<sup>1</sup>

As this passage suggests, Augustine's attitude toward time is profoundly ambivalent. On the one hand, time scatters and distracts the soul intending toward eternity, so that it loses sight of true Being and turns away from God. Working in the Neoplatonic tradition, Augustine associates time with all that *is* not, in the fullest sense of the word: with impermanence, mutability, materiality, and even, by a certain slippage, with sin.<sup>2</sup>

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1. "Ecce distentio est vita mea. . . . At ego in tempora dissilui, quorum ordinem nescio, et tumultuosis varietatibus dilaniantur cogitationes meae, intima viscera animae meae, donec in te confluam purgatus et liquidus igne amoris tui" (*St. Augustine's Confessions* [1912; Cambridge, Mass.: Harvard University Press, 1979], 2:279–280). All citations are to this edition; all translations are mine.

2. For differing views on time and sin in Augustine's thought, see Henri Marrou, *L'Ambivalence du temps de l'histoire chez saint Augustin* (Paris: Vrin, 1950), pp. 71–75 *passim*; Jaroslav Pelikan, *The Mystery of Continuity: Time and History, Memory and Eternity in the Thought of Saint Augustine* (Charlottesville, Va.: University of Virginia Press, 1986), pp. 30–32; R. Teske, *Paradoxes of Time in Saint Augustine* (Milwaukee: Marquette University Press, 1996), pp. 28–31; and Teske, "'Vocans Temporales, Faciens Aeternos': St. Augustine on Liberation from Time," *Traditio* 4 (1985): 36 n.13. For neither Plotinus nor Augustine is matter (time) a sufficient cause of evil or sin; see Lloyd Gerson, *Plotinus* (London: Routledge, 1994), pp. 197–98; and John M. Rist, *Augustine: Ancient Thought Baptized* (New York: Cambridge University Press, 1994), pp. 103–4.

On the other hand, Augustine, as a Christian, holds that all things created by God, including time, are good. Time, moreover, is the singular medium of redemptive history, preeminently the Incarnation, and the condition of the soul's progress toward salvation. Of this progress, made possible by the Mediator, Augustine writes: "We turn ourselves towards Him temporally . . . in order to remain with Him eternally. For He Himself at a certain moment of time was 'the Word made flesh'" (*De Trin.* 7.3.4–5).<sup>3</sup> Originally arising in his bringing together of the Neoplatonic and Judeo-Christian traditions, Augustine's ambivalence about time produces a constant tension in his thought.<sup>4</sup>

It is in the larger theological context of this unresolved ambivalence—which may well have inspired his repeated inquiries into temporality—that I wish to locate Augustine's two accounts of time.<sup>5</sup> His first account is psychological or interior. In the brilliant meditation of *Confessions* 11, Augustine argues that time is to be found in the measuring mind. As he concludes, time is a distention or extension of mind (*distentio animi*), a sort of temporal "stretching" of the rational soul produced by the mental operations of remembering, attending, and anticipating. This first account is subjective in the sense that Augustine locates time in the mind (*animus*) or consciousness of the subject, whose ability to measure intervals is prior to and independent of any observed physical motion. To take an extreme example of this position: in his early treatise *On Genesis against the Manichees* (388–389), Augustine argues that the interval "day" could have existed before the creation of the sun, just as cave-dwellers unable to observe the heavens can nevertheless calculate temporal intervals (1.14.20).<sup>6</sup> The psychological account of *Confessions* 11 is not without antecedents in ancient

3. Augustine, *The Trinity*, trans. Stephen McKenna (Washington, D.C.: Catholic University of America Press, 1963). On Christ as Mediator (1 *Tim.* 2.5), see *De Civ.* 9.15. This paper will not discuss Augustine's account of sacred history, which—insofar as we can agree that history *exists*—seems the least problematic of his models of time. See the classic study of R. A. Markus, *Saeculum: History and Society in the Theology of Saint Augustine*, rev. ed. (Cambridge: Cambridge University Press, 1988).

4. Most commentators agree that rigidly opposing Augustine's Neoplatonism and Christianity creates a false antithesis. On tension between action in the temporal world (*saeculum*) and contemplation, see Rist, *Augustine*, pp. 200–2.

5. The bibliography on Augustine's views of time is long. These selected major studies emphasize the place of his discussions in ancient thought and Christian theology: John Callahan, *Four Views of Time in Ancient Philosophy*, rev. ed. (Westport, Conn.: Greenwood Press, 1979); Etienne Gilson, *The Christian Philosophy of Saint Augustine*, trans. L. E. M. Lynch (New York: Random House, 1960); Jean Guitton, *Le temps et l'éternité chez Plotin et Saint Augustin* (Paris: Vrin, 1959); Marrou, *L'Ambivalence*; Gerard O'Daly, *Augustine's Philosophy of Mind* (London: Duckworth, 1987); A. Solignac, "Notes Complémentaires," in *Les Confessions*, vol. 14 of *Oeuvres de Saint Augustin* (Paris: Brouwer, 1962); Richard Sorabji, *Time, Creation and the Continuum* (Ithaca: Cornell University Press, 1983); Rist, *Augustine*.

6. *Saint Augustine on Genesis: Two Books on Genesis against the Manichees* 1.14.20, trans. R. Teske (Washington, D.C.: Catholic University of America Press, 1991), p. 69.

thought, but it is not taken up by later medieval thinkers; nor is it developed elsewhere by Augustine himself.<sup>7</sup>

Augustine's second account of time, which proves to be an enduring influence throughout the Middle Ages, concerns the physical world. In an important thread running through his many discussions of creation, from the earliest treatises on Genesis to the *City of God* (413–426), Augustine unambiguously associates time with matter, motion, and change. As this account emphasizes, time began *with* creation and is a consequence of it. As Augustine explains in his *Literal Commentary on Genesis* (401–415), “With the motion of the creature, time began to run its course. It is idle to look for time before creation, as if time can be found before time” (5.5.12).<sup>8</sup> Since in eternity there is no change, and since time depends on motion and change, time cannot precede creation; the world was made *with* time (*De Civ.* 11.6).<sup>9</sup> As this argument suggests, Augustine's account of time in the physical world develops in the larger cosmological consideration of material *and* spiritual creation, the “earth” and “heaven” of Genesis 1:1. Representing a discrete strand of thought, his physical account of time will consistently emphasize material mutability and formal change; for example, the time of the physical cosmos is characteristically described as “the movement of the creature from one state to another” (*De Gen.* 5.5.12; *Conf.* 12.6–8).<sup>10</sup> Augustine will frequently turn to this physical account of time both to distinguish between stable eternity and ever-changing temporality and to deny the possibility of temporality antecedent to creation.

7. O'Daly, *Mind*, p. 157; Sorabji, *Time*, p. 30. As H. Chadwick, trans., *Saint Augustine: Confessions* (Oxford: Oxford University Press, 1991), p. 230n., notes, “Augustine's discussion of time contains many echoes of . . . Platonists, Aristotelians, and Stoics.” See n.42, below.

8. “Factae itaque creaturae motibus coeperunt currere tempora: unde ante creaturam frustra tempora requiruntur, quasi possint inveniri ante tempora tempora” (*De Gen.* 5.5.12). *La Genèse au sens littéral*, ed. P. Agaësse and A. Solignac, vols. 48–49 of *Oeuvres de Saint Augustin* (Paris: Brouwer, 1972). My translations are indebted to J. H. Taylor, trans., *Saint Augustine: The Literal Meaning of Genesis*, 2 vols. (New York: Newman Press, 1982).

9. The view that time and the cosmos began together may be traced to the *Timaeus*, which Augustine understood to mean that the world had a (temporal) beginning (see *Tim.* 28b–c, 38b; *Enn.* 3.7.12). He writes: “[The world] had a beginning, as Plato clearly admits, although some believe that he was not expressing his real opinion” (*City of God* 12.13, trans. Henry Bettenson [New York: Penguin Books, 1967], p. 486). Most early Platonists understood *Timaeus* 28b–c and 38b to mean that the origin of the world is causal, not temporal (thus Calcidius); see F. M. Cornford, *Plato's Cosmology* (1937; New York: Bobbs Merrill, 1975), pp. 24–27; and Sorabji, *Time*, pp. 268–72. On Philo as Augustine's source for this reading of Plato, see Sorabji, *Time*, p. 234. According to Pierre Courcelle, *Late Latin Writers and their Greek Sources*, trans. H. E. Wedeck (Cambridge, Mass.: Harvard University Press, 1969), pp. 168–80, Augustine read Cicero's translation of the *Timaeus* and did not make use of Calcidius.

10. “[Tempus est] creaturae motus ex alio in aliud . . .” (*De Gen.* 5.5.12).

In the considerable critical literature on Augustine and time, most modern commentators have focused on *Confessions* 11, thus suggesting that Augustine gave primacy to his subjectivist or psychological account.<sup>11</sup> More recent interpretation, however, urges a broader perspective. Augustine's views on time have been reexamined, for example, by James McEvoy, who argues that "Augustine would wish us to accept that 'time' refers to at least two different things, the one physical, the other experiential."<sup>12</sup> In an influential reassessment of Augustine's writings, Gerard O'Daly has argued that *Confessions* 11 does not give a definition of time, but instead investigates how the passage of time is measured by the mind.<sup>13</sup> To these critical reevaluations it may be added that, while the terms "psychological" (or "experiential") and "physical" have a sound basis in *Confessions* 11–12, and have proved important in modern discussion, for Augustine time is most simply conceived as the modality of finite creation. As Etienne Gilson has observed, *tempus* is his sole term for the world of becoming.<sup>14</sup> In consequence—as has been seen—Augustine's account of time in the physical world is developed in a larger cosmological context. Time depends on the change to which all things, whether mental or physical, are subject: "For if there were no motion of either *a spiritual or corporeal* creature . . . there would be no time at all" (*De Gen.* 5.5.12; my emphasis).<sup>15</sup> Taking as a starting

11. See, for example, Guitton, *Le temps*, Gilson, *Christian Philosophy*, Sorabji, *Time*, and O'Daly, *Mind*, who discuss both views of time but take *Conf.* 11 to be definitive. This focus on subjectivism may reflect the lively interest of some modern philosophers (e.g., Bertrand Russell, Ludwig Wittgenstein) in *Conf.* 11.

12. James McEvoy, "St. Augustine's Account of Time and Wittgenstein's Criticism," *Review of Metaphysics* 38 (1984): 547–77. That time is associated with both the physical world and the perceiving soul is similarly the view of, for example, Solignac, "Notes," Hugh Lacey, "Empiricism and Augustine's Problems about Time," in *Augustine: A Collection of Critical Essays*, ed. R. A. Markus (Garden City, N.Y.: Doubleday, 1972), pp. 280–308, and Rist, *Augustine*. Lacey finds an "apparent incompatibility" between "the subjectivist strand [which] relates to the measurement of time" and "the objectivist strand [which relates] to time itself." Teske, *Paradoxes*, tries to reconcile the two accounts by adducing the Plotinian World Soul; Rist, *Augustine*, p. 83 n.75, refutes this theory.

13. O'Daly, *Mind*, pp. 152–54. Gerard J. P. O'Daly, "Augustine on the Measurement of Time: Some Comparisons with Aristotelian and Stoic Texts," in *Neoplatonism and Early Christian Thought*, ed. R. H. Blumenthal and R. A. Markus (London: Variorum Pub. Ltd., 1981), pp. 171–79. Similarly, Chadwick (p. 230 n.19) notes that *Conf.* 11 has affinities with the skeptical view that the question, "What is time?" is unanswerable. He adds, "At least, Augustine does not answer it."

14. Etienne Gilson, "Notes sur l'être et le temps chez saint Augustin," *Recherches Augustiniennes* 2 (1962): 205–23.

15. "Motus enim si nullus esset uel spiritalis uel corporalis creaturae, quo per praesens praeteritis futura succederent, nullum esset tempus omnino" (*De Gen. ad Litt.* 5.5.12). It is thus inaccurate to associate "cosmological" time with the physical universe alone—since it depends also on the motion of angels and human minds—and confusing to speak of such time as "objective."

point the readings of McEvoy and O'Daly, I will examine the hypothesis that Augustine's two accounts of time—in the mind and in the physical world—are compatible and complementary.

This hypothesis may be explored in the early treatise *On Music* (387–391), where Augustine himself provides a model that appears to accommodate both the psychology and physics of time. *On Music* examines the operations of the perceiving soul, taking as example the well-known evening hymn by Ambrose of Milan—the same “Deus creator omnium” which in *Confessions* 11 illustrates the passage of time.<sup>16</sup> In *On Music*, Augustine shows perception to be a purely psychological process, an activity of soul which conveys reliable information about the sense-world.<sup>17</sup> In effect, his two thought-experiments with Ambrose's hymn appear to construct similar models of the soul's activity in relation to the world: whether hearing iambs in *On Music* 6 or measuring their duration in *Confessions* 11, the soul that acts upon sense impressions is attentive to and affected by its own operations. If these models are in fact analogous, then the mind's measurement of time can be viewed as an act of perception, ending in cognition. And indeed, in *Confessions* 12.8—an account of the time of the physical world—Augustine makes clear that he views time as an object of perception. As he writes: “[T]ime can be perceived and measured [in the mutability of matter], for times [*tempora*] come into being [*fiunt*] by the alterations of things as their forms are varied and turned.”<sup>18</sup> Yet here, as in similar passages, Augustine's characteristic use of the passive voice makes it difficult to assess the precise relations between the world and time, and time and mind. We do not know in what sense the alteration of things can be said to make time, where the time made by this formal change is located, or whether the time associated with material mutability is the same as the time said to be measured in mind (cp. *Conf.* 11.27).<sup>19</sup>

In turning again to Augustine's discussions of time, therefore, I want for the moment to put aside the distinction between psychological time and the time of the physical world—since in themselves these categories tell us little about the *relations* of mind, world, and time—and distinguish rather between the two sorts of inquiry, ontological and epistemological, with which Augustine develops his views. The famous question of *Confessions* 11, “What then is time?” (*Conf.* 11.14), clearly belongs to an inquiry of the first sort. It emerges from his meditation on the ontological opposition between time

16. *St. Augustine on Music*, trans. R. C. Taliaferro, in *Saint Augustine: The Immortality of the Soul and Other Works* (Washington, D.C.: Catholic University of America Press, 1950).

17. On the reliability of sense perception, see O'Daly, *Mind*, pp. 95–96.

18. “[I]psa mutabilitas apparet, in qua sentiri et dinumerari possunt tempora, quia rerum mutationibus fiunt tempora, dum variantur et vertuntur species . . .” (*Conf.* 12.8; Augustine here considers unformed matter and change).

19. Similarly, Rist, *Augustine*, p. 81, asks: “Granted that there is some connection between time and physical objects, what is the nature of that connection?”

and eternity, and is pursued in his discussion of various apparent paradoxes. The present is said to exist only by virtue of constant movement towards non-being; and neither past nor future appears to exist at all (*Conf.* 11.14–20).<sup>20</sup> As Augustine concludes, time must be referred to mind: “[There is] a present of past things, a present of present things, a present of future things. For these three things are in the soul, and I do not see them elsewhere” (*Conf.* 11.20).<sup>21</sup>

From this point, the inquiry of *Confessions* 11 becomes increasingly epistemological. Having dissociated time from the movement of bodies (*Conf.* 23–24), Augustine turns inward to ask, “How does the mind know and measure time?” and, equally important, “What are the spiritual consequences of these processes?” *Confessions* 11 is thus both an account of the measurement of time—as O’Daly and others have argued—and a study of the temporality of the human mind. And as I have suggested, this temporality is an occasion for grave ambivalence, on the one hand leading to God, on the other to spiritual distraction and inquietude. In considering Augustine’s inquiries into time, I am concerned first with the consequences of his creationist ontology for the relations of time and eternity. Then, bringing his early work on sense perception (*On Music* 6) to bear on his account of measuring time (*Conf.* 11), I argue that the psychological and physical accounts of time are compatible. I further suggest that time is not dependent on mind: the temporal successiveness of the world is ensured at creation and by God’s continuing governance.

## I. THE ONTOLOGY OF TIME

Augustine’s ontology of time is noteworthy for its departure from Plotinus. If in earlier writings he sees time as an “image” or “vestige” of eternity (cp. *Tim.* 37d; *Enn.* 3.7.11), from the *Confessions* forward, he will stress the radical contrast between the two.<sup>22</sup> This opposition between time and eternity—the starting point of inquiry in *Confessions* 11—finds a basis in his reshaping of

20. The ontological discussion of *Conf.* 11.14–20 has also been read as presenting a linguistic issue. Following J. M. E. McTaggart, some commentators argue that “past,” “present,” and “future” are token-reflexive terms; see, for example, O’Daly, *Mind*, p. 155; C. Kirwan, *Augustine* (London: Routledge, 1989), p. 180.

21. “[S]ed fortasse proprie diceretur: tempora sunt tria, praesens de praeteritis, praesens de praesentibus, praesens de futuris. Sunt enim haec in anima tria quaedam, et alibi ea non video” (*Conf.* 11.20).

22. For Plato, the infinite motion of time imitates the abiding being of “the ever-enduring nature” (*Tim.* 38b–c). On time as an image of eternity in Augustine, see *De Gen. Lib. Imp.* 13.38; *De Mus.* 6.11.29; O’Daly, *Mind*, p. 152. As O’Daly observes, Augustine (unlike Plotinus) does not derive his account of time from eternity as a *paradigma* or model, but from observation.



Neoplatonic ontology.<sup>23</sup> First, from the Platonists Augustine adopts the notion of an ontological hierarchy. In a Plotinian universe, each level of being is filled, the manifestation of plurality from Unity producing a descending continuum or hierarchy of being:

All things which exist, as long as they remain in being, necessarily produce from their own essences [*ousia*], in dependence on their present power, a surrounding reality . . . [which is] a kind of image of the archetype from which it was produced.<sup>24</sup> (*Enn.* 5.1.6)

Similarly, Augustine too proposes a hierarchy of being—but one caused by the creative work of the God Who Is (Ex. 3.14). In insisting upon creation *ex nihilo*, he introduces a disjunction between the modes of being of Creator and creature:

God is being in a supreme degree [*summa essentia*]*—he supremely is*—and therefore he is immutable. He gave being [*esse*] to the things he created from nothing, but it was not his own supreme being [*summe esse*]. To some he gave being in a higher degree [*esse amplius*], to others in a lower [*minus*], and thus he ordered natures according to their degree of being.<sup>25</sup> (*De Civ.* 12.2)

Thus, between the absolute being of the Creator and the contingent being of the creature, is interposed an infinite ontological gap—“un abîme ontologique insurmontable et une différence absolue.”<sup>26</sup> Whereas for Plotinus all spiritual beings belong to the same order as intellect, for Augustine the continuum of being is interrupted. The eternal and unchangeable na-

23. It is not possible here to do justice to the complexity of Augustine's ontology or to his indebtedness to Plotinus. See, for example, Gilson, *Christian Philosophy*, pp. 197–224; A. Solignac, “Notes Complémentaires,” *Les Confessions*, vol. 13 of *Oeuvres de Saint Augustin* (Paris: Brouwer, 1962), 682–95; and Solignac, “Notes” 14:572–84. See also the important reinterpretation of Emilie Zum Brunn, *Saint Augustine: Being and Nothingness*, trans. Ruth Namad (New York: Paragon House, 1988).

24. Trans. Gerson, *Plotinus*, p. 23, who argues that for Plotinus the creativity of the One operates instrumentally (A causes B, B is the instrument of A's causal activity). This causal series, he writes, does produce “ontological and causal gradation of being” (pp. 23–32, p. 237 n.52).

25. *La Cité de Dieu*, vol. 35 of *Oeuvres de Saint Augustin*, ed. B. Dombart and A. Kalb, p. 154: “Cum enim Deus summa essentia sit, hoc est summe sit, et ideo immutabilis sit: rebus, quas ex nihilo creavit, esse dedit, sed non summe esse, sicut est ipse; et aliis dedit esse amplius, aliis minus, atque ita naturas essentialium gradibus ordinavit.” Augustine adds that Lat. *essentia* translates Gk. *ousia* (*De Civ.* 12.2). On *esse*, see Gilson, “Notes,” pp. 205–23.

26. Solignac, “Notes” 14:604. On creation *ex nihilo* and the consequent “unique gap” between God and his creatures, see also Rist, *Augustine*, p. 256. For Plotinus, in contrast, the human mind and soul are extensions of the hypostases (O'Daly, *Mind*, p. 1).

ture of God exists in a manner “far different” [*longe aliter*] from beings made from nothing and thus subject to change (*De Gen.* 5.16.34; *De Civ.* 12.1).<sup>27</sup> In such an ontology, eternity and time are irrevocably opposed. Time is not an inferior modality of being in a continuously descending hierarchy, as for Plotinus, but itself a creature made from nothing (*De Gen.* 5.5.12). As Augustine makes clear in *Confessions* 11.11, the mutability of time (*numquam stans*) is in direct opposition to the abiding stability of eternity (*semper stans*).<sup>28</sup>

Second, Augustine’s concept of a timeless eternity is clearly indebted to Plotinus’s account of Intellect, which “abides in the same in itself and does not change” (*Enn.* 3.7.3; cp. *Conf.* 11.13).<sup>29</sup> In contrast, Augustine departs significantly from Plotinus’s account of time, which, originating in the procession of the hypostases, implies the sort of ontological continuum he rejects. Plotinus associates time with the mediating activities of Soul, whose “unquiet power” impelled it to make the sensible world in imitation of the intelligible world. When Soul “falls” to the world of the senses, it transfers to successiveness that which Intellect holds in stable simultaneity and unity. This “fall” produces time, “the life of Soul in a movement of passage from one way of life to another”—that is, the life of Soul considered in its successiveness or disparateness (*Enn.* 3.7.11).<sup>30</sup> As Plotinus explains, because time must exist as an image of eternity, “the spreading out [*diastasis*] of [intelligible] life [in discursive thought] involves time” (*Enn.* 3.7.11). Just as the sense-world is a disintegrated communication of intelligible being, so time is a dispersed version of eternity. It differs in degree but not in kind. In contrast, for Augustine time and eternity are opposed and “not comparable” (*incomparabilem*; *Conf.* 11.11). Time is the ontological consequence of creation *ex nihilo* and the distinguishing feature of finite creation—“[une] trace de néant originel.”<sup>31</sup> Indeed, the opposition between time and eternity provides the structure for what has been called Augustine’s “metaphysics of conversion.”<sup>32</sup> In the act of turning toward that

27. “Quamuis ergo illa aeterna incommutabilisque natura . . . longe scilicet aliter, quam sunt ista, quae facta sunt . . .” (*De Gen.* 5.16.34). On creation *ex nihilo* and change, see *De Civ.* 12.1; on the falling away of sin in things made from nothing, see *De Civ.* 14.13; see esp. Gilson, “Notes.”

28. Cp. Augustine’s prayer: “Pater meus aeternus es; at ego in tempora dissilui . . .” (*Conf.* 11.29). That the opposition of time to eternity finds a basis in Augustine’s ontology does not, of course, imply opposition between Creator and creature. Augustine holds that “man’s nature was created good by God; but was made changeable by him who is changeless, since it was created from nothing. And so the will . . . can turn away from good to do evil” (*De Civ.* 15.21).

29. Plotinus, *Enneads*, trans. A. H. Armstrong (1967: Cambridge, Mass.: Harvard University Press, 1980), 3:303–5.

30. Gerson, *Plotinus*, pp. 121–22. As he notes, “[T]he creation of soul and time is just their dependence on the One”; the procession of the hypostases is eternal.

31. Gilson, “Notes,” p. 213.

32. Originating with Etienne Gilson, this expression is developed by E. Zum Brunn, *Saint Augustine*, pp. 74–94, who views the dilemma of the soul poised between being and nothingness as inseparable from the metaphysics of creation.



which immutably *is*, the temporal creature, recalled by God's goodness, at length perceives its own dissimilitude (cp. *Conf.* 7.10): "C'est le temps qui permet de sentir cet écart."<sup>33</sup> Time is thus both opposed to eternity and itself undeniably real—as Richard Sorabji writes, "with its distractions, all too real."<sup>34</sup>

Fundamental to Augustine's thought is the premise that time cannot exist without change—the notion of "empty time" would not be admissible to him.<sup>35</sup> As we have seen, this change is of two kinds: "For if there were no motion of either a spiritual or corporeal creature, by which the future moving through the present would succeed the past, there would be no time at all" (*De Gen.* 5.5.12). According to Augustine's reading of Genesis in *Confessions* 12, there are two created things which, lacking change, do not participate in time. The angels or spiritual creation (the "heaven" of Gen. 1:1) immediately turn and adhere to God in beatific contemplation, thus transcending change and time; and unformed matter ("earth") remains as it were "below" time, in its undifferentiated formlessness unable to support change, and so without motion or time.<sup>36</sup> In a difficult passage in the *City of God*, however, the angels—which in the *Confessions* are described as "mutable without mutation" (12.12)—are said to participate in temporality. Angels have existed always and thus in all time, for without them time would not exist: "[Y]et their movements, through which times pass [*peraguntur*], move from the future into the past; and therefore they cannot be coeternal with the Creator" (*De Civ.* 12.16).<sup>37</sup> In developing a theory of history in *City*, Augustine argues that God has always had a (temporal) creation subject to his eternal sovereignty (*De Civ.* 12.16; cp. *De Trin.* 5.16.17). His consequent modification of his teachings—that time began with the movement of the angels, "before the creation of the sky"—is congruent with his views on mental motion and time.<sup>38</sup>

In contrast, formless matter can never sustain change or time. For

33. Guitton, *Le temps*, p. 138. On conversion in Augustine and Plotinus, see esp. Guitton, *Le temps*, pp. 127–45; and Solignac, "Notes" 13:682–95.

34. Sorabji, *Time*, p. 30

35. On Sydney Shoemaker's essay, "Time without Change," *Journal of Philosophy* 66 (1969): 363–81, see Sorabji, *Time*, pp. 75–78; see also Don Lodzinsky, "Empty Time and the Eternality of God," *Religious Studies* 31 (1995): 87–95.

36. On unformed matter, see esp. *Conf.* 12.6–9, 12.11–13, 12.15; 12.19. Augustine modifies Plotinus's concept of matter, but does not clarify how that which lacks form exists. On spiritual creation, see, e.g., *Conf.* 12.11–13; 12.15; and A. H. Armstrong, "Spiritual or Intelligible Matter in Plotinus and St. Augustine," in *Augustinus Magister* (Paris: Etudes Augustiniennes, 1954), pp. 277–83; Solignac, "Notes" 14:592–98.

37. "tamen eorum motus, quibus tempora peraguntur, ex futuro in praeteritum transeunt . . ." (*De Civ.* 12.16).

38. Augustine's teachings on angels and time vary with context. Here he argues that time, supported by angelic motion, exists during the first three days of creation (*ante caelum*), but not in measured intervals. The argument is congruent with *De Gen. ad Litt. Lib. Impf.* 1.3.8, where time begins with angelic motion; but not

Augustine *materia informis* is an ontological conundrum, a created thing so dissimilar to God that it scarcely exists. As he will argue, matter and form were created simultaneously, coming into being together as do voice and word, or sound and song (*De Gen.* 1.15.29; cp. *Conf.* 12.29). Indeed, according to Augustine's mature teaching, God created all things at once—matter, form, and the works of the six days—some actually and some potentially, in a single atemporal instant. On the one hand, Augustine's doctrine of creation *simul* systematically eliminates all temporality from the six days of the Genesis narrative, thereby safeguarding divine immutability and ensuring a sharp and irrevocable separation between time and eternity. God made temporal creation all at once, without Himself being subject to time (*De Gen.* 4.35.56). On the other hand, with his theory of causal reasons, Augustine meticulously provides for the subsequent orderly development of created things in time according to divine will.<sup>39</sup> All things unfold temporally according to the intelligible "reasons" implanted incorporeally in corporeal things at first creation (*De Gen.* 4.33.51–52). The time of the created world, both spiritual and material, is therefore associated not simply with movement and change, but, as Augustine writes, with "[change] according to the ordered successiveness of things established by God, who governs all he created" (*De Gen.* 5.5.12).<sup>40</sup> For time itself "moves according to the numbers received atemporally at creation" (*De Gen.* 4.33.52).<sup>41</sup>

## II. THE EPISTEMOLOGY OF TIME

In *Confessions* 11, the well-known psychological account of time, Augustine's argument turns precisely on the issue of time and physical movement. Implicitly engaging earlier views of time—although we do not know precisely with which discussions he was familiar—Augustine's analysis of the solar day demonstrates that time is not the movement of celestial bodies, or any other

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with *Conf.* 12.15, where spiritual creation *precedes* time; nor with *De Gen. ad Litt.* 4.29.46, where the angels atemporally apprehend a simultaneous creation. As Augustine taught creation *simul* when *City* 12 was composed (c. 417), the "days" of Genesis cannot be temporal; rather, I would suggest, he makes a logical division between the first three and final three days. The passage shows that (1) the two cities originate, with the angels, at the start of time; (2) time is not dependent on celestial motion; and (3) spiritual motion alone can support time. Of course, the nature of angelic time is unknowable; see Sorabji, *Time*, p. 31–32.

39. On the doctrine of causal reasons, see *De Gen. ad Litt.* 4.33.51–52, 5.7.20, 6.6.10; and *De Trin.* 3.9.16.

40. "Cum [tempus] sit creaturae motus ex alio in aliud consequentibus rebus secundum ordinationem administrantis Dei cuncta quae creavit" (*De Gen. ad Litt.* 5.5.12).

41. *De Gen.* 4.33.52: "[H]os enim numeros tempora peragunt, quos cum crearentur non temporaliter acceperunt."

physical motion.<sup>42</sup> As he shows, the interval “day” remains the same whether the sun moves as usual, speeds up, or is miraculously at rest. First, he argues, the sun stood still for Joshua; yet the battle was fought during its own sufficient temporal interval (*spatium temporis*). This scriptural example divorces time from celestial movement—the relation of temporal unit to solar motion tells us nothing about time itself—and leads to the view that “time is a kind of extension” or *distensio* (*Conf.* 11.23). Second, he argues, although bodies move *in* time, their movement does not constitute time; moreover, the duration of both movement *and* rest is measured *by* time (*Conf.* 11.24; cp. *Enn.* 3.7.8). Third—and here, in turning to speech and sound, Augustine leaves behind examples of movement in space—we can compare long and short syllables, and so measure poetic feet.<sup>43</sup> But since syllables may be pronounced quickly or slowly, the mind does not possess an exact or invariable time-measure (*certa mensura*; *Conf.* 11.26).<sup>44</sup> Time thus seems to be a “stretching out” or extension of the mind itself (*Conf.* 11.26).

At this point, having abandoned the problem of physical motion, the inquiry of *Confessions* 11 becomes clearly epistemological: Augustine will be concerned with how the mind measures and is affected by time. For time is preeminently the dimension of the rational soul:

God placed spiritual over corporeal creation, because the soul is moved or changed only in time, but the body moves in both time and place. . . . Now, whatever moves through space necessarily moves through time; but not everything that moves through time must also be moved through space.<sup>45</sup> (*De Gen.* 8.20.39)

That is, the time of the physical world will always imply space; but the time of mind or soul exists independently from, and is ontologically superior to, space and bodily motion. Yet Augustine consistently emphasizes that the human being is a composite or mixture of two substances, spiritual and

42. O'Daly, *Mind*, p. 153. *Conf.* 11 echoes Plotinus's critique of Aristotle (*Enn.* 3.7.8–10) but does not address the view that “time is . . . only movement insofar as it admits of numeration” (*Physics* 219b2). Callahan, *Four Views*, p. 159, identifies the “learned man” of *Conf.* 11.23 with Plato; but, as Plotinus notes, Plato did not teach that celestial bodies *are* time, only that they mark the divisions of time (*Enn.* 3.7.12).

43. On oral reading as practiced in late antiquity, see Brian Stock, *Augustine the Reader* (Cambridge, Mass.: Harvard University Press, 1996), pp. 1–35.

44. That is, for Augustine, time is relative; the mind possesses no absolute time-standard; see McEvoy, “St. Augustine's Account,” pp. 571–72; O'Daly, *Mind*, pp. 159–60.

45. “Spiritalem autem creaturam corporali praeposuit, quod spiritalis tantummodo per tempora mutari posset, corporalis autem per tempora et locos. Exempli enim gratia per tempus mouetur animus uel reminiscendo, quod oblitus erat, uel discendo, quod nesciebat, uel volendo, quod nolebat; per locos autem corpus. . . . Omne autem, quod mouetur per locum, non potest nisi et per tempus simul moueri; at non omne, quod mouetur per tempus, necesse est etiam per locum moueri” (*De Gen. ad Litt.* 8.20.39).

corporeal; as he writes, the soul loves and wishes for body, as people naturally wish to live (*De Gen.* 7.27.38).<sup>46</sup> In consequence, his psychological account of time in *Confessions* 11—while holding in abeyance the problem of time and material creation—does not ignore the bodily senses or the external world. Thus Augustine’s central illustration, measuring time in the recitation of verse, takes its beginning from hearing sound in the sense-world.

The angels of *Confessions* 12 who transcend time in face-to-face knowledge of God offer an instructive epistemological model: always in the present, with no future to expect or memory to convey to the past, they never experience the distension that characterizes the human mind in time. Augustine’s psychological account of time, in contrast, concerns a rational soul, united to a body, by means of whose “messengers” it receives information about the sense-world, to be stored in memory and judged by mind (*De Gen.* 7.14.20). Significantly, in *Confessions* 11 we do not find an account of purely spiritual temporality, the soul “remembering what it had forgotten or . . . wishing what it did not wish” (*De Gen.* 8.20.39).<sup>47</sup> Instead, Augustine here describes the mental processes that occur as the four iambs of the verse “Deus creator omnium” are pronounced, heard, and measured (*Conf.* 11.27).

Insofar as the senses give accurate information, he observes, the mind perceives a long syllable to be twice the measure of a short.<sup>48</sup> But since any interval must be completed to be measured—in which case it will have ceased to exist—we measure not sound but the impression (*affectio*) of sound present to memory (*Conf.* 11.27). For as Augustine explains in his earlier treatise *On Music*, perception depends upon memory: just as a diffusion of light from the eye connects objects in spatial intervals (magnitude), so memory—“the light of time-intervals”—connects instants in temporal intervals (duration) (*De Mus.* 6.8.21).<sup>49</sup> The effectiveness of Augustine’s example—the recitation

46. Asking whether the soul is constrained to enter the body, Augustine writes: “Sed melius creditur hoc naturaliter uelle, id est in ea natura creari, ut uelit, sicut naturale nobis est uelle uiuere” (*De Gen. ad Litt.* 7.27.38); see *De Civ.* 10.29 (“the body is united with the soul so that man may be entire and complete”); *De Gen.* 10.12.20; and Rist, *Augustine*, pp. 92–100.

47. My account of Augustine’s views on soul draws upon *De Gen. ad Litt.* 7; see also *Conf.* 10. For *De Gen. ad Litt.* 8.20.39, see n.45, above.

48. “Quantum sensus manifestus est, breui syllaba longam metior . . .”; “fidenterque respondeo, quantum exercitato sensu feditur, illam simplam esse . . . (my emph.; *Conf.* 11.27). In *Contra Acad.* 3.11.24–26, Augustine argues that sense knowledge, as simple appearance, is infallible: the skeptic cannot refute one who says, “I know that this seems white to me.” For discussion, see Gilson, *Christian Philosophy*, pp. 40–41; O’Daly, *Mind*, pp. 92–105.

49. “Ut igitur nos ad capienda spatia locorum diffusio radiorum iuvat . . . ut ergo eorum effusione adjuvamus ad capienda spatia locorum, ita memoria, quod lumen est temporalium spatiorum, quantum in suo genere quodammodo extrudi potest, tantum eorumdem spatiorum capit” (*De Mus.* 6.8.21, in *Dialogues Philosophiques*, ed. Guy Finaert and F. J. Thonnard, vol. 7 of *Oeuvres de Saint Augustin* [Paris: Brouwer, 1947], p. 404). All citations are to this edition; translations are indebted to Taliaferro.

of Ambrose's hymn—lies in the fact that audible duration, unlike spatial magnitude, does not persist in the sense-world as an object of perception. As he remarks elsewhere, "both sound and its hearing . . . cease to be at the same time" (*De Trin.* 14.10.13). Clearly, then, the mind itself guarantees the extendedness or continuum needed for the process of measuring: as Augustine concludes, "In te, anime meus, tempora mea metior" ("In you, my mind, I measure times" [*Conf.* 11.27]). In effect, Augustine has transferred the ontological problem—the non-existence of past and future, the inextendedness of the present—to the epistemology of time: either the time which he measures is this present impression (*affectionem*) fixed in memory, he writes, "or I do not measure time" (*Conf.* 11.27).<sup>50</sup>

It is precisely in referring the existence of time to the measuring mind that one discovers its negative effects. According to Augustine's psychological account of time, the soul regulates the measuring process by means of present attention or *intentio*. This is an activity of will, denoting the motion, tension, or concentration of soul that makes possible both sensation and cognition—"le dynamisme actif de l'âme en tant qu'elle 'se tend vers' les objets extérieurs ou vers elle-même."<sup>51</sup> As Augustine emphasizes, in measuring time the mind is the active agent: it expects, attends, and remembers (*Conf.* 11.28). In the recitation of a psalm, for example, *intentio* (*attentio*) or present attention is directed simultaneously towards the (non-existent) future in expectation and the (non-existent) past in memory.<sup>52</sup> At the start, expectation "is stretched over" (*tenditur*) the entire psalm; but as recitation proceeds, expectation diminishes while memory grows proportionately, "stretch[ing] over" (*tenditur*) the verses which have been recited. The present moment itself lacks extension (*spatium*); yet present attention is continuous (*perdurat*), conveying future things through itself to become past, and thus linking expectation and memory (*Conf.* 11.28). Hence the essential temporality of the mind, which is stretched (*distenditur*) in two directions, future and past; for the incorporeal soul, indivisible in space, is always

50. Similarly, to measure silence, we lengthen (*tendimus*) our thoughts to an interval as though a sound had occurred (*Conf.* 11.27; cp. *De Mus.* 6.3.4).

51. Agaësse and Solignac, *La Genèse*, 48:703. In *Conf.* 11.20, Augustine speaks of past, present, and future as *memoria*, *contuitus* (direct sight), and *expectatio*; in describing the measurement of time, he uses the terms *intentio* and *attentio* (*Conf.* 11.28–29). Operative in both perception and cognition, *intentio* may equally describe attention to the senses or a mental concentration that causes one to ignore the physical world (*De Gen.* 7.19.25; 7.20.26; 12.20.42). On *intentio* as the volitional power of animating soul, see *De Mus.* 6.5.9; as mental concentration ordering ideas in memory, see *Conf.* 10.11; as attention of will or mind in perception and recollection, see *De Trin.* 11; 15.3.5. See also O'Daly, *Mind*, pp. 84–85; Solignac, "Notes," 14:590.

52. *Intentio* is the mental *activity* unifying future, present, and past; whereas *attentio* may be viewed as permanence of consciousness in perceiving and measuring time. See Solignac, "Notes," 14:590; O'Daly, *Mind*, p. 85.

divided in time (*De Gen.* 7.21.27–28).<sup>53</sup> The expression *distensio animi* thus refers to the time of mind itself—for the soul’s extendedness makes possible the existence of past and future together in the present—and also, considered as a spiritual activity, quite literally describes the condition of the soul in perceiving and measuring time.<sup>54</sup>

And as we have seen, Augustine deplores this condition: “Behold, my life is distended . . . and I am torn apart in time” (*Conf.* 11.29). The concentration of the soul in measuring time is inevitably accompanied by diffusion and scattering. In attempting to escape what Etienne Gilson has called “the anguish of time and becoming,” the distended or distracted soul may seek unity through a second concentration, *intentio ad superiora*.<sup>55</sup> This movement directs the soul not toward future and transitory things—the objects of temporal expectation—but toward its eternal goal. “Not distractedly but intently,” Augustine writes, “not according to *distentio* but *intentio*,” the soul guided by the Mediator may briefly transcend time in contemplation of the eternal (*Conf.* 11.29; cp. *Phil.* 3.12–14).<sup>56</sup>

We have seen that, according to the epistemological inquiry, perception and cognition themselves create time in the measuring mind; and that for Augustine these mental operations find their beginning in the external world and the senses. Is it then the case that the time of mind coexists and coincides with the time of the physical world? To return to an earlier question: Is Augustine’s psychological account of time in *Confessions* 11 compatible with the several accounts of time in the physical world found in his commentaries on Genesis—accounts which emerge not from empirical inquiry and introspection, but from the interpretation of revealed truth? As I noted earlier, these questions are clarified by the final book of *On Music*, a study of sense perception—of the relations of mind and world—which develops a model of hearing analogous to that of temporal measurement.

53. With the notion of *distensio*, Augustine resolves the initial ontological paradoxes: past and future exist as *memoria* and *expectatio*; a long past is a long memory of past time, a long future a long expectation of the future; the inextended present endures as an *attentio* whose objects continually change.

54. For varying interpretation of the term *distensio animi*, see Gilson, *Augustine*, pp. 194–95, who views it as a “metaphor” for time; Guittou, *Le temps*, pp. 230–32, and Solignac, “Notes,” 14:589–91, who consider *intentio* (*distensio*) to be *activities* of mind; and O’Daly, *Mind*, pp. 153–54, who writes that *distensio animi* “cannot be a definition, but . . . evokes whatever accompanies . . . the cognitive act of measuring time.”

55. Etienne Gilson, *History of Christian Philosophy in the Middle Ages* (New York: Random House, 1954), pp. 592–93 n.23.

56. “[E]t a veteribus diebus colligar sequens unum, praeterita oblitus, non in ea quae futura et transitura sunt, sed in ea quae ante sunt non distentus, sed extensus, non secundum *distentionem*, sed secundum *intentionem* sequor ad palmas supernae vocationis, ubi audiam vocem laudis et contempler delectationem tuam nec venientem nec praetereuntem” (*Conf.* 11.29; my emph.). On *intentio ad superiora*, see esp. Guittou, *Le temps*, p. 237; on Augustine’s changing attitudes toward “Neoplatonic” vision, see Rist, *Augustine*, p. 200.



In *On Music* 6, as in *Confessions* 11, the soul is shown to be the active agent, working by appropriate direction of *intentio*. In hearing, as in measuring time, memory is found to be indispensable: "For any syllable, no matter how short . . . is stretched [*tenditur*] over some temporal interval" (*De Mus.* 6.8.21).<sup>57</sup> Most importantly, both texts posit similar models of the relations of exterior, interior, and superior things.

Thus, *On Music* examines the "number-traces belonging to time-intervals" (*vestigii numerorum ad moras temporum pertinentium*) in order to study the operation of the soul in relation to the sense world, the body it animates, itself, and God, "passing from corporeal to incorporeal things" (*De Mus.* 6.2.2). Using the hymn, "Deus creator omnium," Augustine distinguishes several classes of "numbers"—a complex term signifying rhythm, harmony, or proportion—which pertain variously to sound, memory, sense, voice, and natural judgment.<sup>58</sup> The so-called "sounding numbers" (*sonantes*), the rhythms and intervals of sound, belong to bodies in the sense world. These, Augustine makes clear, exist independently of perception: "For you won't deny the possibility of a sound's beating the air by the drop of liquid or the shock of bodies, with pauses and limits of this sort, and existing where no hearer is present" (*De Mus.* 6.2.2; one thinks of a water clock).<sup>59</sup> But since inferior body cannot act upon soul, the rhythms of sound do not *cause* sensation. Rather, agency resides with mind: in perceiving, the soul directs its attention to changes undergone by the body, and, affected by its own operations, acts upon itself to produce the "heard" or "reacting" numbers of sense (*occursores*; *De Mus.* 6.4.5–6.5.12).<sup>60</sup> Immediately imprinted upon memory, the "remembered" numbers (*recordabiles*) act as intermediaries, allowing the mind to grasp the heard numbers of sense; as they accurately replicate the heard numbers, "remembered" numbers reliably correspond to sounding numbers in the sense-world (*De Mus.* 6.2.3). In producing "voiced" or "ad-

57. Without memory, we would not hear at all: "Quamlibet enim brevis syllaba, cum et incipiat et desinat, alio tempore initium ejus, et alio finis sonat. Tenditur ergo et ipsa quantulocumque temporis intervallo. . . . In audienda itaque vel brevissima syllaba, nisi memoria nos adjuvet . . . nihil nos audisse possumus dicere" (*De Mus.* 6.8.21). Concepts of time basic to *Conf.* 11 appear in *On Music* 6; for example, all temporal measurement is relative (6.7.19); temporal intervals are infinitely divisible (6.8.21); rest as well as sound (motion) constitutes a temporal interval (6.10.26).

58. On *numerus*, see Finaert and Thonnard, eds., *Dialogues*, pp. 513–14; on the important relation of number and form, see O'Daly, *Mind*, p. 185, and *De Lib. Arb.* 2.16.

59. "Nam credo non te esse negaturum fieri posse, ut in aliquo loco aliquis sonus existat hujusemodi morulis et dimensionibus verberans aerem vel stillicidio vel aliquo alio pulsu corporum, ubi nullus adsit auditor" (*De Mus.* 6.2.2; cp. "stillae temporum," *Conf.* 11.2).

60. Of the relation between the senses and the world, Augustine writes: "This affection [of the ears touched by sound] is . . . the measure of the sound producing it. . . . Nor can it be except when its author, sound, is present, for it is like a trace imprinted in water" (*De Mus.* 6.2.3).

vancing” numbers (in the act of reciting; *progressores*), however, the soul may, quite independently of the external world, find regular time-intervals in the rhythms of pulse or respiration made by its own work in the body (*De Mus.* 6.3.4).<sup>61</sup> Finally, all numbers are found pleasing or displeasing according to “judicial” numbers (*judiciales*); and are further judged according to other “hidden” and immutable numbers—for even as it perceives temporal things, writes Augustine, the soul recognizes in itself superior and unchanging numbers given by God (*De Mus.* 6.10.25; 6.12.34).<sup>62</sup>

It may be objected that the beats and intervals described in *On Music* do not constitute time, but only regular change—and some kind of change, as Sorabji notes, is presupposed by both the psychological and physical accounts of time.<sup>63</sup> Yet Augustine does not make precise the relation between time and changing things, whether spiritual or material. Mutable created things are variously said “to suffer” (*patior*); “to be subject to” (*subdo*); or simply “to have” (*habeo*) time; conversely, temporal intervals (*tempora*) are said to be “passed through” (*perago, ago*) or “made” (*fit*) by the changing motions of material and spiritual creation.<sup>64</sup> The closest we can come to explaining the relations between time and created things is to say that time is supported or conditioned, but not produced, by the motion and change of creation. Time does not exist without changing things, whether spiritual or corporeal; yet time is itself a creature: God made together both time and “those things through whose motion time runs” (*De Gen.* 5.5.12; *De Civ.* 12.26).<sup>65</sup> But if Augustine does not fully develop his account, as some commentators have argued, his epistemological focus is clear: he wishes “to understand the nature and power of the time by which we measure,” and which itself is measured (*Conf.* 11.23).<sup>66</sup>

61. For accounts of the mental operations that prepare the time-intervals of future speech, see also *Conf.* 11.27 and *De Trin.* 15.7.13.

62. The perceptual model of *On Music* closely resembles the account of vision in *De Trin.* 11.9.16, where the *species* (form) of the body gives rise to the forms of sense, memory, and thought.

63. Sorabji, *Time*, p. 31 n.53.

64. See, for example, “nullam *patitur* vicissitudinem temporum” (of the angel; *Conf.* 12.11); “quo tempori *subderetur*, non haberet” (of formless matter; *Conf.* 12.12); “vices temporum *habere* non posse” (of formless matter; *Conf.* 12.19); “rerum mutationibus *fiunt* tempora” (*Conf.* 12.8); “Ubi enim nulla creatura est, cuius mutabilibus motibus tempora *peragantur*; tempora omnino esse non possunt . . . tamen eorum motus, quibus tempora *peraguntur*, ex futuro in praeteritum transeunt” (of angels; *De Civ.* 12.16); “in eis *agantur* vicissitudines temporum” (of formed matter; *Conf.* 12.12).

65. Cp. Rist, *Augustine*, pp. 81–83, who argues that “time is not a mere epiphenomenon of the physical world.” As I suggest, Augustine refers time directly to divine governance: “Quis enim alius creator est temporum, nisi qui fecit ea, quorum motibus current tempora?” (*De Civ.* 12.26).

66. See, for example, Lacey, “Empiricism,” 283, who argues that Augustine “lacked sufficient linguistic equipment to develop [his objectivist argument].” “Ego scire cupio vim naturamque temporis, quo metimur corporum motus . . .” (*Conf.* 11.23).

As a description of sensing sound, and, by extension, of measuring duration, then, *On Music* suggests the following about the relations of mind, body, world, and time: (1) time, insofar as it may be considered as intervals marked by natural rhythms—for example, the “sounding numbers” of falling drops of water—exists in, or is a feature of, the sense world independently of mind; (2) the bodily affections to which the soul attends reliably represent the duration of stimuli in the sense world, as do the “reacting” numbers of sense produced by the soul (nor can these affections and numbers exist without the stimuli); (3) the time of the sense world does not have a causal effect upon soul, which perceives in memory reliable impressions effected by itself (“remembered” numbers);<sup>67</sup> (4) except in cases of purely mental movement, time may be said to be perceived by the person, a mixture or composite of body and soul;<sup>68</sup> (5) “numbers” make mutability or changes of form perceptible and intelligible as time; (6) the measuring soul is the middle term in a characteristic Augustinian hierarchy moving from exterior to interior, and interior to superior—from sounding to rational to immutable numbers.

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A contemporary writer, M. F. Burnyeat, observes:

Nowadays, if a philosopher finds he cannot answer the philosophical question, “What is time?” or “Is time real?” he applies for a research grant to work on the problem during the next year’s sabbatical. He does not suppose that the arrival of next year is actually in doubt.<sup>69</sup>

I do not believe that Augustine had a need to “insulate” his ordinary judgments about the time of the world from the conclusions of his psychological analysis of time in this manner.<sup>70</sup> As I have suggested in reading *On Music*, his two accounts of time are both compatible and complementary: the measurement of time “stretches” the soul temporally in a manner

67. According to *Conf.* 11.27, to measure time is to measure the impression passing things make on the mind (*affectionem, quam res praetereuntes in [animo] faciunt*); as *On Music* makes clear, however, the soul itself effects the remembered numbers whose counterparts (*res*) exist in the world.

68. That is, the soul can perceive its own temporarily (e.g., in motions of remembering, forgetting, knowing, wishing) through self-observation alone.

69. M. F. Burnyeat, “The Sceptic in His Place and Time,” in *Philosophy in History*, ed. R. Rorty et al. (Cambridge: Cambridge University Press, 1984), pp. 225–54; cited by Gareth B. Matthews, *Thought’s Ego in Augustine and Descartes* (Ithaca, N.Y.: Cornell University Press, 1992), p. 175.

70. For the notion of “insulation,” see Matthews, *Thought’s Ego*, pp. 175–87, who argues that Augustine increasingly protected himself from the threat of philosophical skepticism with “a total confidence in divine revelation.”

proportionate to the perceived time-interval in the world. Thus, the psychological and physical accounts of time may be viewed as complementary aspects of cosmological order, the one describing spiritual, the other corporeal motion. As Augustine makes clear, however, the time of mind may also exist independently of the material world, as in the case of purely mental motion (e.g., in learning; *De Gen.* 8.20.39). It remains to be asked, conversely, whether the time of the material world may exist without mind, or whether it is the case that “before there was a human consciousness . . . ‘before’ and ‘after’ had no meaning”?<sup>71</sup>

In a well-known passage, Aristotle asks whether time (“the number of motion in respect of ‘before’ and ‘after’”) may exist without soul. He responds in the negative, for number cannot exist without someone to count, and only soul can count. He adds, however, that “if movement [of which time is an attribute] can exist without soul, and the before and after are attributes of movement, [then] time is these *qua* numerable” (*Physics* 219b1–5; 223a21–29).<sup>72</sup> As has been seen, Augustine conceives the problem quite differently. According to his commentaries on Genesis, the time of both physical and spiritual creation is guaranteed by God, who establishes the ordered successiveness of things—an inherent “before” and “after” independent of any observer—at first creation (*De Gen. ad Litt.* 5.5.12). In particular for Augustine, number is a trace of that Wisdom which confers form upon created things (*De Gen.* 4.3.7; cp. *Wisd.* 11.21).<sup>73</sup> Temporal “numbers” (to take a single instance) are “in” the world by virtue of eternal numbers, so that a tree grows, flowers, and bears fruit in “fixed time-measures” (*certis dimensionibus temporum*; *De Mus.* 6.17.57).

As Augustine later argues in his mature interpretation of Genesis, the temporal movement of creatures through time, fulfilling the proper function of each, is owing to the causal reasons whose “laws of numbers” are atemporally given at first creation (*De Gen.* 4.33.51–52).<sup>74</sup> If, as John Rist has claimed, for Augustine time is not mind-dependent but is “a kind of property of things, or better a formal concept or category of the physical universe,” this “category” is ultimately attested to by the revelation of Scripture.<sup>75</sup> According to Augustine’s interpretation, Genesis reveals that temporal successiveness is ensured at creation and by God’s continued

71. Gilson, *Christian Philosophy*, p. 195.

72. In *The Basic Works of Aristotle*, ed. Richard McKeon (New York: Random House, 1941), pp. 292, 299. For Aristotle on time and consciousness, see Sorabji, *Time*, pp. 90–97.

73. See Agaësse and Solignac, “Mesure, nombre et poids,” in “Notes Complémentaires,” 48:635–39. The example from *On Music* which follows represents an early formulation of Augustine’s theory of causal reasons.

74. *De Gen. ad Litt.* 4.33.51–52: “[Q]uod nunc uidemus temporalibus interuallis ea moueri ad peragenda, quae suo cuique generi competunt, ex illis rationibus insitis ueniat, quas tamquam seminaliter sparsit Deus in ictu condendi. . . . Hos enim numeros tempora peragunt, quos cum crearentur non temporaliter acceperunt.”

75. Rist, *Augustine*, p. 83.

governance: "He rested in order to create subsequently, by administering these things, the order of time and temporal things" (*De Gen.* 7.28.42).<sup>76</sup> But beyond this, the most that can be said of the time of the *physical* world is that it seems to be so.<sup>77</sup> In contrast, the mind is always intimately aware of its own temporality, whether in measuring time, seeking to know itself, or struggling to arrive at truth (*De Lib. Arb.* 2.6.55–57). Whereas God knows all things unchangeably, created beings know things successively in a manner that "distends" and makes ever more temporal the rational soul (*Conf.* 11.31). The problem is finally moral: the soul must freely choose how best to direct its *intentio*, for the mind is more dispersed by the fluctuating data of sense than by stable intelligibles.

In an important essay, H.-I. Marrou has argued that Augustine's ambivalence about time—on the one hand, the vehicle of redemption; on the other, of degradation and death—is the effect of original sin. "C'est l'existence du péché . . . qui donne au temps de l'homme son caractère sinistre," he writes.<sup>78</sup> This distinction between the time of nature and that of grace is basic to Augustine's view of history. As I have suggested, however, Augustine's ambivalence about time arises from still more primary ontological and epistemological considerations. From first creation, time proclaims the simultaneous being and non-being of things made from nothing (*Conf.* 11.4); from the first, the perceiving soul is by nature both concentrated and fragmented in time, experiences both *intentio* and *distensio* (*Conf.* 11.28–29).<sup>79</sup> Thus, each of Augustine's two accounts of time—in the world and in the mind—is separately shaped by a fundamental ambivalence about temporality. But as the two accounts differ in subject and method, this tension is variously *expressed*. The account of time in the physical world—emerging as it does from the interpretation of the revealed truth of Genesis—treats time as an aspect of divinely-ordained cosmic order.<sup>80</sup> Here, Augustine's ambivalence is ex-

76. *De Gen. ad Litt.* 7.28.42: "[S]icut non solum praesentia, uerum etiam futura fecit omnipotens et ab eis factis requieuit, ut eorum deinceps administratione atque regimine crearet etiam ordines temporum et temporalium."

77. See *Contra Acad.* 3.11.24. As O'Daly, *Mind*, p. 93, notes, errors occur from wrong judgment; sense-data simply "appear to be." Rist, considering the consequences of Augustine's view that the past does not exist, finds a "self-generated problem of scepticism" about the *continuing* knowledge of sensible particulars; see Rist, *Augustine*, pp. 45–48, 73–75.

78. Marrou, *L' Ambivalence*, pp. 62–75, *passim*.

79. On the prelapsarian soul and body, see Rist, *Augustine*, p. 112.

80. It may be noted that, in considering "the *meaning* of all sorts of statements whose *truth* is thought to be beyond doubt" (Matthews, *Thought's Ego*, p. 178), Augustine does not seek certitude regarding the physical world—" [i]n this work are more questions raised than answers found," he writes of his great commentary on Genesis (*Retractations*, cited in Taylor, *The Literal Meaning*, 1:4). Both the scientific approach and aporetic character of *On Genesis* work against genuine ambivalence (a strongly-held belief that something is simultaneously good and bad). On Augustine and ancient science, see John J. O'Meara, *Understanding Augustine* (Dublin: Four Courts Press, 1997), pp. 110–18.

pressed only indirectly—for example, in the development of the doctrine of creation *simul*, where anxiety about temporality shapes a complicated effort to distinguish irrevocably between time and eternity. In contrast, as has been seen, the psychological account of *Confessions* 11 is an empirical analysis of the measuring mind, an exploration of self marked by great spiritual anguish: “You, lord and father, are in eternity; but I am torn apart in time . . .” (*Conf.* 11.29). Here ambivalence expresses itself directly and affectively, in Augustine’s simultaneous longing to rise above time and his acknowledgment of—indeed fascination with—the temporality of the human mind.

Augustine’s first contribution to early discussions of time is surely his analysis of temporal measurement in the mind. Yet equally important is his treatment of the time of the physical world, which he views as both independently existent and congruent with the time of the mind. Augustine’s many discussions of the time of the created world, both spiritual *and* corporeal, moreover, urge reconsideration of the view that his sole focus was liberation from time.<sup>81</sup> For Augustine, the ontological opposition between time and eternity expresses itself as a constant tension between *intentio* and *expectatio*, the motions of the soul toward unity or fragmentation. Yet the cosmological time of God’s creation and continuing governance provides a foundation for the redemptive time in which Augustine prays to be “gathered up” or integrated (*colligar*; *Conf.* 11.29). For if the Mediator “has been made a road in time” (*De Trin.* 7.3.4–5), the distended soul intends *in* time to God: “secundum intentionem sequor” (*Conf.* 11.29). In such a model, where time mediates between that which *is* and that which is not—where *intentio* provides a corrective context for *extentio*—ambivalence is unresolved yet ultimately productive. For it is precisely in perceiving its own temporality and dissimilitude that the soul turns and redirects itself to God.<sup>82</sup> Augustine’s ambivalence about time gives time lasting value.

81. See, for example Gilson, “Notes”; and Teske, “‘Vocans Temporales, Faciens Aeternos’.”

82. See *Conf.* 7.10–16. As Solignac notes (“Notes” 13:691), the “region of dissimilitude” from which the soul turns to God may signify both ontological unlikeness (mutability and temporality) and spiritual dissimilitude (*sin*).