ST. AUGUSTINE ON TIME, TIME NUMBERS, AND

ENDURING OBJECTS*

(Pre-print draft version: forthcoming in *Vivarium*)

Abstract

Throughout his works, St. Augustine offers at least *nine* distinct views on the nature of time, at

least three of which have remained almost unnoticed in the secondary literature. I first examine

each these nine descriptions of time and attempt to diffuse common misinterpretations,

especially of the views which seek to identify Augustinian time as consisting of an un-extended

point or a distentio animi. Second, I argue that Augustine's primary understanding of time, like

that of later medieval scholastics, is that of an accident connected to the changes of created

substances. Finally, I show how this interpretation has the benefit of rendering intelligible

Augustine's contention that, at the resurrection, motion will still be able to occur, but not time.

Keywords

Augustine, time, Confessions, distentio animi, subjective time, infinite divisibility, world-soul

Introduction

Many investigations into Augustine's theory of time suffer from a fatal methodological

error, which is the assumption that the essence of Augustine's theory of time can be culled

exclusively from books XI and XII of the Confessiones, in isolation from Augustine's other

writings. This error is all the more remarkable when one considers that Augustine's most

* An earlier version of this paper was presented to the Third Annual British Patristics Conference in

Durham, England, 2010. I would like to thank the participants there who offered helpful questions, and

extended discussion of time does not occur in the *Confessiones* at all, but in the much earlier *De musica*, even if there the discussion is less metaphysical.

When one investigates a broader selection of Augustine's texts, one finds that Augustine offers at least *nine* distinct views on the nature of time, three of which have rarely been noticed at all in the literature, and the collection of which together may or may not be consistent. Augustine describes created time as (1) an infinitely divisible continuum, (2) a series of minimal temporal intervals, (3) composed of time numbers, (4) a non-extended present, (5) a distention of the soul (*distentio animi*), (6) subjective in nature, (7) the product of the world-soul or angelic motion, (8) an accident of an enduring substance, and (9) consisting only of past and future moments. I will first examine each these various descriptions of time, and attempt to diffuse common misinterpretations, especially of views 1 and 2, and views 4-7. Second, I will argue that these views can be made consistent under the definition of time as an order of accidental changes in created substances. Finally, I will show how this interpretation of Augustine's view of time has the benefit of rendering intelligible Augustine's contention that, at the resurrection, motion will still occur, but not time. Such a state of affairs will be possible because Augustine generally considers time to underlie only certain *kinds* of motion, namely, the addition and loss of qualities in created substances.

I. Time as an Infinitely Divisible Continuum

also an anonymous reviewer of an earlier draft of this paper, whose insightful criticisms immensely improved the thesis here.

¹ One sees this problem, for instance, in C. W. K. Mundle, 'Augustine's Pervasive Error concerning Time', *Philosophy*, Vol. 41, No. 156 (1966), 165-168, Hugh M. Lacey, 'Empiricism and Augustine's Problems about Time', *The Review of Metaphysics*, Vol. 22, No. 2 (1968), 219-245, James Wetzel, 'Time after Augustine', *Religious Studies*, Vol. 31, No. 3 (1995), 341-357, and the recent work of Thomas L. Humphries, Jr., 'Distentio Animi: praesens temporis, imago aeternitatis', *Augustinian Studies* 40:1 (2009), 75-101.

The first of the nine ways Augustine has been claimed to understand time is as an infinitely divisible continuum.² Augustine's earliest writings, which are preoccupied with Neo-Platonic and mathematical discussions concerning geometrical and physical divisibility, lend credence to this view.³ In his early writings, Augustine makes it clear that he believed that geometrical lengths, as well as corporeal bodies, are infinitely divisible, and that no final 'point' or minimum could ever be reached by a process of division (just as by adding one, a person cannot reach a final number in the natural number series).⁴ Augustine analogizes this reasoning concerning physical and geometrical lengths to time, and in *De uera religione*, argues that:

These [living things], on the contrary, which have an infinity of divisions, are not small in themselves, but in respect to other things, and most of all by comparison with the universe itself. Neither in the case of a space of time is the reason different; because, like all places, every extent of time has its half: however brief it is, every time begins, comes forward, and then ends. This is not possible unless temporal extents have a half at that place where they are divided, and through which they move to the end.⁵

Throughout his early works, Augustine reaffirms the claim that any temporal span, like any physical span, no matter how short, can be bisected an infinite number of times. He accomplishes this most often by giving the example of the pronunciation of a syllable, which, no matter how

² This is, for e.g., the definition of time ascribed to Augustine by Simo Knuuttila, 'Time and Creation in Augustine', in *The Cambridge Companion to Augustine*, ed. Eleonore Stump and Norman Kretzmann, (Cambridge, 2001), 111.

³ In particular, cf. the geometrical, ontological, and epistemological arguments of *sol*. IV and *an. quant.* VI–XIII.

⁴ ep. III, mus. V.12.25.

⁵ *uera rel.* 43.80, "quae rursus cum habeant infinitatem divisionis, non ipsa per se, sed in aliorum, et maxime ipsius universi comparatione tam parva sunt? Nec in spatio temporum alia ratio est; quia ut omnis loci, sic omnis temporis longitudo habet dimidium sui: quamvis enim sit brevissima, et incipit, et progreditur, et desinit. Itaque non potest nisi habere dimidium, dum ibi dividitur qua transit ad finem." *Patrologiae cursus completus (Series Latina)*, ed. *J.P Migne* (Paris, 1844-64), Vol. 34, col. 158. Hereafter cited as *PL*. All translations are my own. Abbreviations of Augustine's works follow those set forth in the *Augustinus-Lexikon*, ed. C Mayer, vol.1 (Basel, 1986).

quickly or slowly it is pronounced, admits of smaller and smaller temporal divisions ad infinitum.⁶

However, there are two main problems with the suggestion that time itself is an infinitely divisible continuum. The first is that this description of time at most gives us an attribute of time, not time's definition (since many things can be infinitely subdivided). The second problem, perhaps more important than the first, is that Augustine's arguments concerning infinite divisibility (both physical and temporal) are unclear as to whether the division is something already in the thing itself, or a judged division that lies in reason alone. For instance, did Augustine conceive of a temporal interval as being composed of an infinite number of *actual* parts (an actual first part, second part, third part, ... *ad infinitum*), or did he conceive of a temporal interval as a finite continuum with a *potentially* infinite number of divisions? In the latter case, the parts of a temporal continuum would not pre-exist the division performed by reason, as Aristotle believed was the case with magnitudes. In such a case, Augustine could have viewed time as extended, but as ultimately consisting of discrete minimal intervals capable of being divided by reason (i.e. theoretically), but incapable of being divided further in actuality.⁷

II. Time as Consisting of Minimal Time Intervals

Indeed, Augustine does offer the view that actual time may consist of a *physically* smallest moment (even if such a moment could be further subdivided by reason). This idea is suggested by Augustine in *De musica*, in the context of a discussion of meter and rhythm in Latin poetry. Here, Augustine accepts the idea of a minimal quantifiable numerical time as valid. He writes: "Then the ancients were not absurd in calling 'one time' a sort of minimum space

⁶ mus. VI.8.21, imm. an. III.3, VII.12.

⁷ Gerald O'Daley, in *Augustine's Philosophy of Mind* (Los Angeles, 1987), 21, asserts that Augustine commits a fundamental error in the *Confessiones* by attempting to find the present 'indivisible moment' through the recursive division of an infinitely divisible temporal interval that eventually reaches a final un-extended point of time. This reading of the *Confessiones*, however, is almost certainly mistaken, since Augustine, as we have just seen, is well aware of the impossibility of reaching a minimal part in any continuous interval or length by means of a geometrical bisection.

which holds the short syllable...",⁸ and proceeds to explicate the ways rhythm and meter are governed by such definite minimal times and proportion. Even so, Augustine is clear that the sort of minimal time by which we number the short syllable relative to the long syllable does not tell us how many temporal moments there *actually* are in a single syllable, since, as we have just read (and as Augustine tells us in the *Confessiones*), one may pronounce a short syllable either more or less slowly.⁹

Augustine goes on to give an account of how we are able to judge the distinction between the slower or faster pronunciation of a syllable that doesn't appeal to minimal times. We can judge temporal lengths, Augustine says, because we have a natural ability to *sense* the activity of 'judicial numbers' (*iudiciales numeri*). These numbers are hidden rhythmic forces in nature which not only allow us to measure the intervals of time that occur during a stretch of corporeal motion, but also in some manner keep those motions in rhythm. Our sense of these judicial numbers is both what allows us to judge other motions, and also what allows us to move our bodies in certain harmonious and equal movements at all. 11

However, these judicial numbers, Augustine tells us, while structuring the movements of animate things, are not to be identified with time itself. Augustine in fact goes out of his way to demonstrate why not. He argues that if we were to attempt to sound out the one to two syllable proportion of an iamb, making the first syllable equivalent in time to walking three paces, and then pronounce the second syllable in double that amount of time, we would be unable to judge accurately whether or not the second syllable was pronounced in exactly 'double' the time as the first, because our capacity to sense such rhymical proportions would have been exceeded by such

⁸ *mus.*, II.3.3, "Non absurde igitur hoc in tempore quasi minimum spatii, quod brevis obtinet syllaba, unum tempus veteres vocaverunt..." *PL* 32, col. 1102. In Taliaferro's translation, he suggests that this refers to the *prótos chrónos* of Aristoxenus, which cannot be divided by the thing in rhythm.

⁹ conf. XI.26.33.

¹⁰ mus. VI.7. Augustine actually distinguishes four other types of numbers in mus. VI which are involved in perception: 'advancing numbers' (progressores numeri), 'reacting numbers' (occursores numeri), 'memorial numbers' (recordabiles numeri), and 'sounding numbers' (sonantes numeri), but the iudiciales numeri are the number which modify and direct the operations of the other sorts of numbers (cf. Ibid. VI.8.20). Also, vide infra, sec. III.

¹¹ Ibid. VI.8.

lengths of sound. 12 Augustine concludes from this that even the judicial numbers which judge time-intervals are themselves limited by time-spans. 13

The lack of support for a metaphysical version of minimal time in *De musica* may, however, be supplemented by another argument that Augustine gives in *De ciuitate Dei*, which seems to imply that Augustine does actually conceive time to be composed of minimal parts. There Augustine writes:

That space of time, which from one *initio* progresses and is limited by another *termino*, however great that extent may be, in comparison to that which has no beginning, I do not know whether [the former] would be better classified as a *minimo* or as a *nullo*. Hence, if from an end point [of time] the briefest *momenta* are taken away one by one, going backwards, the subtracted number, even if it is so large as to have no name, will be exhausted...[since] at some time that subtraction will lead back to a beginning.¹⁴

The first way one might be tempted to interpret this passage is to simply assert that time itself is being described by Augustine as an extended series of temporal moments which has an innumerably large, but finite number of parts. However, we cannot ignore the fact that what seems to be measured here is the limited time of an arbitrary *remembered* event and its changes. In this case, Augustine may here be arguing that, within a remembered series of events, we are able to use our normal sense of minimal 'times' (i.e. judicial numbers), or even an arbitrary length of time (e.g. a day) as a standard of measurement. By a process of determinate subtraction (not geometrical bisection), one would indeed reach a last 'extended' part of time that one could call the 'beginning'. However, in Augustine's example, it would not be a fundamental unit of time that would be reached, but rather the memory of the first part of *past*

¹² Ibid. VI.7.19.

¹³ Ibid. VI.7.18.

¹⁴ *ciu.* XII.12, "...illud vero temporis spatium, quod ab aliquo initio progreditur et aliquo termino cohercetur, magnitudine quantacumque tendatur, comparatum illi, quod initium non habet, nescio utrum pro minimo an potius pro nullo deputandum est. Hinc enim si a fine vel brevissima singillatim momenta detrahantur, decrescente numero licet tam ingenti, ut vocabulum non inveniat, retrorsum redeundo... quandoque ad initium illa detractio perducetur." *PL* 41, col. 360.

time that was reached by the proposed division. Thus, Augustine's argument is meant to show only that time had a beginning, and is finite, but it does not tell us what minimal intervals of time are themselves composed of; further, if such a last minimal part is like a geometrical extension, this last minimal part would still be *conceptually* (if not physically) divisible by a smaller measure. Both versions of the extended time thesis – time as an infinitely divisible interval, as well as time composed of minimal temporal parts – thus seem to describe the *effects* of time as they exist in memory, not time itself.

III. Time as Consisting of Time Numbers

A third, but relatively unnoticed description of time that Augustine gives (already hinted at above), can be found in his assertion that the changes of organic substances are governed by *time numbers*. This description of time seems to suggest, following Aristotle, that time is a type of number of motion or change. In describing the function of time in relation to the organic growth of a tree, for instance, Augustine writes:

Indeed, temporal numbers necessarily precede the place numbers of [growing] trees. For there is no kind of stem that does not join together, in dimensions of time, from its seed, and sprout up, and shoot forth into the air, and unfold its leaves, become strong, and bring out fruit, or, by the most hidden of numbers in the wood, [show forth] the power of the seed.¹⁵

Here, Augustine argues that time numbers somehow govern the changes of place numbers (i.e. where the parts in a physical body can be located at, or allowed to move into), suggesting that time serves a functional role in differentiating both the internal structure as well as the successive changes of organic objects, as if on a Cartesian graph. A similar argument concerning time numbers appears in *De uera religione*, when Augustine argues, "In the mother, through certain

¹⁵ mus. VI.17.57, "Imo et arboris locales numeros, temporales numeri antecedant necesse est. Nullum est enim stirpium genus quod non certis pro suo semine dimensionibus temporum et coalescat, et germinet, et in auras emicet, et folia explicet, et roboretur, et sive fructum, sive ipsius ligni occultissimis numeris vim rursus seminis referat..." *PL* 32, col. 1192.

temporal numbers, [the child] is joined together into place numbers, in order that [the child's] limbs occupy their proper places."¹⁶

It is clear that Augustine at least conceives time numbers to be a formal, if not efficient cause of ordered (or rhythmic) change, in line with his general belief that all things participate in some sort of mathematical order. However, these time numbers do not seem to be able to be completely identified with time itself, since not all objects are governed by such organic means, nor does Augustine claim time to be identical to time numbers. At the most, time numbers appear to be a specific instance, working in organic bodies, of Augustine's more general thought that substances change by receiving or losing certain numerically determined forms in a certain order. This is, however, a first sure indication that time will serve an important, non-subjective role in carrying out order in nature.

IV. Time as a Non-Extended Present

The fourth, and probably most common way of interpreting Augustine's view on time, is to try to make sense of the discussion of time presented in the *Confessiones*, wherein Augustine seems to claim that existing time is both a *distentio animi* involving a present-memory of the past, a present-awareness, and a present-expectation of the future, and also a non-extended or indivisible present. Typically, interpreters try to bypass the contradictory nature of these two theses by novel linguistic approaches as to the meaning of *distentio animi*, ¹⁸ or by interpreting

¹⁶ *uera rel.* 40.74, "Iamvero in matre per certos numeros temporum in locorum numerum coaptatur, ut suas regiones quaeque membra occupant..." *PL* 34, col. 155.

¹⁷ trin. XV.16.25, Gn. litt. VI.8.13.

¹⁸ Humphries, op. cite, 77, gives an improbable analysis of this term, stipulating that *distentio* has for Augustine the signification of a "created (mind-independent), intrinsically sequential, non-extended reality of time." I think Humphries is close to correct in his assessment of Augustine's view of time itself, but incorrect insofar as this objective view of time cannot be derived from (and has little to do with) the term *distentio*.

Augustine's discussion of the necessity of memory and expectation in temporal measurement as implying a subjective view of time.¹⁹

Augustine introduces the difficulty of understanding time in *Confessiones* XI.14. After running through the paradox that past time cannot exist since it is no longer, and that future time cannot exist since it is not yet (theses that, strictly speaking, eliminate view 1 above), Augustine comes to the hypothetical possibility that perhaps it is the transitional present alone that really exists. He writes:

If, therefore, it is the present which makes time to be – a present which comes about only because it goes into the past – in what way do we say the present is, whose purpose for being, in order for it to be, is that it will not be, so that we know that we do not speak truly of time's 'existence', unless we mean that present time 'is' because it strives not to be.²⁰

Augustine's query about the present's metaphysical status should at least be clear as to what it does *not* mean. It contains no indication that the present is indivisible, or even that it is unchanging. The thrust of this passage is in fact the opposite of this, suggesting that time, even in the mode of the present, does not truly exist at all. From whence then has come the opinion that, for Augustine, the present is the only 'real' moment of time? This misunderstanding arises because Augustine switches from an ontological mode of argumentation in XI.14, to a metrical mode of argumentation in XI.15. Augustine uses the tentative explanation of the instability of the present in the former passage to introduce the problem of the *length* of time in the latter one, wherein Augustine states:

¹⁹ As, for example, in Danne W. Polk, 'Temporal Impermanence and the Disparity of Time and Eternity', *Augustinian Studies* 22 (1991), 63-82, John F. Callahan, *Four Views of Time in Ancient Philosophy* (New York, 1948), and Bertrand Russell, *Human Knowledge: Its Scope and Limits* (New York, 1948), 212.

²⁰ conf. XI.14, "Si ergo praesens, ut tempus sit, ideo fit, quia in praeteritum transit, quomodo et hoc esse dicimus, cui causa, ut sit, illa est, quia non erit, ut scilicet non vere dicamus tempus esse, nisi quia tendit non esse?" *PL* 32, col. 816.

If we understand time as that which is now unable to be divided into smaller momentary parts, this alone is that which is called the present; which, nevertheless, flies so suddenly from the future and into the past, that [this flight] could be extended by no delay. For if [the flight] be extended, it could be divided into past and future: the present, however, has no space. Where then is the time that we could call long?²¹

This passage is often taken to be an assertoric argument for the non-extension of present time, with the present being viewed on analogy to a Euclidean point. However, in context (regardless of whether Augustine views present time as having extension or not), this argument is rather a *reductio* which argues that *if* the present time is not extended, and only present time exists, then it is absurd to call time long (or short). Why is this the case? It is *not* on the basis that time may be a non-extended point that Augustine reasons that a present moment cannot be called long or short, or even because it is fleeing from future to past. Since Augustine has assumed a moment of time which cannot be divided into smaller *temporal* parts, of course it cannot therefore be temporally extended, since the notion of temporal extension logically implies smaller temporal parts. But if this were really the reason why time could not be long, Augustine's argument would simply be a tautology – it would not be an argument for time being a *punctum* or *instans*.

In fact, the passage suggests that Augustine is here conceiving of a physical time atom in the form of a minimal temporal part (or whole) which does not consist of further temporal parts.²² However, the reason why such a minimal part could not be predicated with length does not have to do with extension, but rather with *relation*. Augustine consistently affirms that predicates of size are *relative* to the things compared, since there is no thing that is long or short in itself, but only relative to another thing.²³ Augustine's argument is, if there is only *one*

²¹ conf. XI.15, "Si quid intellegitur temporis, quod in nullas iam vel minutissimas momentorum partes dividi possit, id solum est, quod praesens dicatur; quod tamen ita raptim a futuro in praeteritum transvolat, ut nulla morula extendatur. Nam si extenditur, dividitur in praeteritum et futurum: praesens autem nullum habet spatium. Ubi est ergo tempus, quod longum dicamus?" *PL* 32, col. 817. Cf. *mus.* II.3.3.

²² Cf. O'Daley, *APM*, 154.

²³ mus. VI.7.19, "quia nihil in spatiis locorum et temporum per seipsum magnum est, sed ad aliquid brevius; et nihil rursus in his per seipsum breve est, sed ad aliquid maius." *PL* 32, col. 1173. Aristotle affirms this thesis as well, stating that because definite quantities have no contraries, they can only be

moment of time, a time-atom called 'the present', then the present cannot be *compared* in length to any another existing temporal term. Therefore, it cannot be predicated with length predicates (i.e. long or short) at all. The problem of the length of time then is in fact a problem of relation – if time consists only of the present, to what can the singular present be related in order to measure its length?

V. Time as a Distentio Animi

As is well known, Augustine's solution to this measurement problem is to argue that time is measured through the impressions that things make upon our memory. This, however, is an *epistemic* solution about how *we* measure time, and while Augustine's epistemology is connected to his ontology, his epistemological account of measuring time does not, as we shall see, tell us much about his views on the nature of time itself. How then are we to explain Augustine's argument that the impressions of things being made on the memory as time passes is the measurable present of time?²⁴ Indeed, after giving his psychological explanation of measured time, Augustine tells us that, "Thus, either these [affections of objects on the memory] are times, or I do not measure times."²⁵

The answer, I think, as strange as it may first sound, is that Augustine thinks that it is the second half of this disjunction that is, strictly speaking, true. The reason for this is that Augustine claims that extension, either metaphysical or physical, is necessary for measurement.²⁶ If this is true, then for Augustine, the measurement of the singular present is impossible twice over. In the first case, given a *non-extended* present moment, there is literally nothing to be measured. In the second case, given a singular *extended* present moment (i.e. a time-atom), still there are no other *temporal* extended moments to compare it to. While many philosophers interpret Augustine as solving this particular paradox by arguing that our psychological processes encompass three

measured relatively to other quantities. Cf. *Categoriae* 5b17, "οὐδὲν γὰρ αὐτὸ καθ' αὐτὸ μέγα λέγεται ἢ μικρόν, ἀλλὰ πρὸς ἕτερον ἀναφέρεται..." "For nothing in and of itself is called either great or small, but [is called so] in reference to something else."

²⁴ conf. XI.27.36.

²⁵ Ibid. XI.27.36, "Ergo aut ipsa sunt tempora, aut non tempora metior." PL 32, col. 824.

²⁶ Ibid. XI.26.33.

present times, and this is supposed to give rise to the measurement of time itself, in fact, Augustine's argument does no such thing.

The paradox that Augustine gives is that if the present has no extension, it cannot be measured directly, but we do measure it, which means that either it does have extension, or we measure it indirectly. To claim that time has three modes of psychological presence in 'memory', 'attention', and 'expectation', as Augustine does, does not solve the paradox, because it does not preserve the description of the present as without determinate size. In fact, Augustine does not hold that we measure non-extended moments in present psychological modes, but rather that we measure *intervals* of time's effects in memory – we do *not* measure present time itself. This is immediately obvious upon reflection, since it makes no sense to talk of an indivisible present, and then argue that it has three dimensions – a present in memory, a present of the now, and a present of expectation. This is a tri-fold division, not an indivisible moment.²⁷ Second, if this psychological explanation of time were Augustine's real answer, it would not make philosophical sense, given Augustine's description of the present as fleeing. The 'present' of even a past memory, for instance, while being entertained, would be fleeing into the past just as quickly as the 'present' occurring in the world, so that one would have to remember the past of the present memory of the past, and the past of the past present memory of the past, and so on ad infinitum. It is therefore unreasonable to think that Augustine solved the paradox of the nonextension, and hence non-measurability of time, by simply identifying time as a distention of the soul into three different modes of internal time awareness.²⁸

²⁷ I am unsure of what Humphries, op. cite, 88, means when he asserts that "the past can be present in one non-dimensive point of time through the memory. This allows for the measurement of time." Herman Hausheer, in 'St. Augustine's Conception of Time', *The Philosophical Review*, Vol. 46, No. 5 (1937), 508, asserts a similar claim.

²⁸ Wilma G. von Jess, 'Augustine: A Consistent and Unitary Theory of Time', *The New Scholasticism* 46, (1972), 337-351, notes that the thesis that Augustine's final definition of time was a *distentio animi* was "taken severely to task" by a number of scholars in the 1950's. Richard Sorabji, in *Time, Creation, and The Continuum: Theories in Antiquity and the Early Middle Ages* (1983), 30-32, also claims that Augustine defines time as a "dimension of the mind." Sorabji gets around the problem of Augustine's other views of time by suggesting that Augustine abandoned his psychological view of time in his later writings.

Instead, Augustine's solution to his own paradox is to argue that changing things within time, by virtue of the impressions those things make on the mind, create an extended and enduring series of images or experiences which map or trace out the temporal changes of things spatially. Time for Augustine, is in fact at least indirectly measured by means of space, but a very special type of space – namely, the divisible, extended space of memory. Augustine is clear elsewhere that our thoughts are "a certain type of place," 29 and it seems that Augustine conceives time to be measured in a way analogous to the following example: Conceive of two pens positioned parallel to one another. Conceive of the pen tips as representing the present moment. If both pens begin to draw two lines simultaneously on a sheet of paper, then when one measures the 'length' of time it took for the two lines to be drawn, one does not measure the pen tip, but only the relative length (or interval) of the spatial impressions the pen produced. Augustine conceives of memory as like the sheet of paper, and the lines drawn as the impression of things moving in time and imprinted upon our memory. However, it is because these impressions are enduring, and spatial, that allows them to be measured, as Augustine himself reports.³⁰ Here, the soul is the substance which is able to retain the extended series of impressed (spatial) images in an unchanging form and compare them to other (spatial) images, even though time itself, which is coordinate with change, continues to flow. This explanation of time then, as with views 1 and 2 above, again tells us about time's effects, but not about the nature of time itself.³¹

VI. Subjective Time and the Potter's Wheel Example

Augustine presents another central argument in the *Confessiones* which, like the idea of time as a distention of the soul, is also often misinterpreted as suggesting that Augustinian time is only a subjective phenomenon, in the sense of being dependent upon or produced by the judgment of the human mind. In chapter XI of the *Confessiones*, Augustine presents a challenge to the astrological and Peripatetic theory that regular heavenly motion is the efficient cause of

²⁹ trin. IV.1.1 "...quasi locis sicut spirituum nostrorum cogitationes," PL 42, col. 887.

³⁰ conf. XI.28.37.

³¹ Michael F. Wagner, 'Real Time in Aristotle, Plotinus, and Augustine', *The Journal of Neoplatonic Studies*, Vol. IV, No. 2 (1996), 111, also follows the interpretation just offered. Cf. Aristotle, *De memoria et reminiscentia* 452b6-25, which should be compared to the above account.

time. To rebut this theory, Augustine argues by means of a thought-experiment and hypothesizes that even if the heavens stopped moving, should a potter's wheel continue to rotate, time would still exist.³² This argument has typically been interpreted in one of two ways. It has either been read as implying a uniform time that flows irrespective of motion, or, as implying that time is a psychological phenomenon. From whence does this interpretive ambiguity derive?

The problem comes about because immediately after giving the potter's wheel example, Augustine asks, by what power are we able to measure the temporal duration of bodily motions in the first place?³³ Further, Augustine points out that we measure not only the movement of bodies, but also the *rest* of bodies when we judge time. In one sense, this suggestion lends itself to an absolutist view of time, since it implies that time occurs irrespective of motion. In a second sense, if the apprehension of time during an object's rest is stressed as occurring *only* in the mind, then Augustine's example can also be read as implying a subjective view of time. However, Augustine's own examples do not support either thesis, since he does not argue that we measure the rest of a body by psychological time alone, but by (1) time, (2) rest, and (3) *another motion*. Augustine does not say, "A body stood still for a certain amount of time," but rather, "It stood still *as much as it moved.*" Nowhere does Augustine say that rest can be perceived with no motion at all occurring anywhere, and Augustine's argument seems always to assume that some sort of motion must be perceived in order to comparatively judge how much time elapses when an object is rest. Augustine's concern is not to divorce motion from time, nor to argue that time is a subjective phenomenon in the modern sense.

Augustine is in fact clear that motion *is* a necessary condition of time.³⁵ In a discussion of the timelessness of matter without form, Augustine writes in book XII of the *Confessiones* that, "Without a difference of motions times are not; and there are no changes where there are no [changing] forms."³⁶ However, the formal motion which is a necessary condition of time does not need to be *physical* motion. Augustine argues that non-spatial things can 'move' through

³² conf. XI.23.29.

³³ conf. XI.23.30.

³⁴ Ibid. XI.24.31.

³⁵ *ciu*. XII.25.

³⁶ conf. XII.11.14, "quia sine varietate motionum non sunt tempora: et nulla varietas, ubi nulla species." *PL* 32, col 831. Cf. *ciu.* XII.25.

time alone. A soul, for example, can be moved through time into different mental states, such as when it remembers, or learns or forgets. Augustine argues that everything that moves through place is also moved through time, but there can be things that move through time, such as resting objects, angels, and souls, which do not move through space.³⁷

For Augustine then, it is only the *kind* of motion which first produces time that is at issue. Augustine's main concern in the potter's wheel passage is with showing that time is not dependent upon physical motion, so that he can show that it is primarily caused by spiritual motion. How does the potter's wheel example support such a contention? Although rarely mentioned in the literature, Augustine discusses in detail another potter's wheel example in De ciuitate Dei, in the context of a refutation of astrology. In this later work, Augustine argues against the Neo-Pythagorean astrologer Nigidius Figulus's attempt to explain how celestial motion could be the cause of the different destinies of twins. Nigidius, Augustine reports, argued that the motion of the heavens can be explained on analogy to a physical example. If one sets a potter's wheel into motion, and marks it with ink twice in quick succession while it is spinning, when the wheel stops one can observe that the marks (although made in quick succession) are distributed far apart on the wheel. Nigidius's point was to show that heavenly motion, which occurs at a non-observable rapidity, can in fact causally effect the fate of different people, even those who, like twins, are born in close temporal proximity. Since, according to Nigidius, a great distance is traversed by the heavenly bodies in a small portion of time, celestial motion can account for the great difference in human fates. On the one hand, Augustine replies that if these rapid movements of the heavens are in fact so fast and far away as to be incalculable and unobservable, how could astrology ever be accurate in any of its predictions? On the other hand, he says, if astrology only claims to examine the observable movements of the heavens to make its predictions, then the example of the potter's wheel cannot be appealed to, since if true, it is rather the quick unobservable motions of the heavens which in fact account for the fates of human beings.³⁸

The thrust of Augustine's query about the potter's wheel in the *Confessiones*, I suspect, should be read in light of this well known astrological anecdote. If so, Augustine is ironically inverting the purpose of this well-known story, to show that, far from the potter's wheel being a

³⁷ *Gn. litt.* VIII. 20.39.

³⁸ *ciu*. V.4-6.

demonstration of the nature of heavenly motion and its universal control over human destiny, as Nigidius attempted to show, the example of the potter's wheel (post Augustine's refutation) shows instead that even the spin of the wheel *alone* could produce time.³⁹ But all this shows is that there is no motion of a physical object, great or small, that is sufficient by itself to explain time's production. Augustine takes this argument to be sufficient for refuting the astrological idea that physical time governs the *destinies* of created beings.⁴⁰ Augustine will use this conclusion to show that spiritual motion, which will be discussed below, can better account for the production of time, citing as a first example the book of *Joshua* X.12-14, where God stopped the sun's movement during an attack upon Gibeon.

VII. Time as the Product of the World-Soul or Angelic Movements

However, because Augustine affirms that spiritual movement can produce time, it has also been suggested that Augustine ultimately believed time to be a distention of a world-soul.⁴¹ While this does solve the problem of coordinating the existence of multiple subjective times (if Augustine thought time was only located in the soul), this thesis has remained controversial amongst scholars. The most prominent proponents of this view have been Roland Teske and R.J. O'Connell, both of whom have argued that Augustine's early theory of the fall of the human soul, in its fundamental details, is consonant with the cosmogonical theory expounded in Plotinus's *Enneads* concerning the fall of a world-soul.⁴² Plotinus's *Enneads* explains the production of time as the result of the world-soul's wish to "(eternally) distribute [the contents of

³⁹ Augustine's acknowledgement of Nigidius's potter's wheel is strong evidence against the idea that Augustine relied upon an unknown translation of Basil's *Adversus Eunomium* in order to formulate his own potter's wheel example, a thesis put forth in John F. Callahan, 'Basil of Caesarea a New Source for St. Augustine's Theory of Time', *Harvard Studies in Classical Philology*, Vol. 63 (1958), 437-454.

⁴⁰ conf. XI.23.30.

⁴¹ Roland Teske, *Paradoxes of Time in Saint Augustine*, Milwaukee (1996). Teske argues that Augustine's solution follows Plotinus's general description of time being the "speading out" of the life of the world-soul in *Ennead* III.7.11.42, "Διάσασις οὖν ζωῆς χρόνον εἶχε..."

⁴² Robert J. O'Connell, St. Augustine's Confessions, the Odyssey of Soul, Cambridge (1969).

Nοῦς] into successive lower objects," and having departed from Nοῦς, generated and continues to generate the temporal series of 'before' and 'after'. 43

There is overwhelming evidence that this Neo-Platonic version the world-soul's fall into temporality and multiplicity seems to have been at least partially adopted by Augustine in his early writings. However, in his more mature works, Augustine seems to replace the negative idea of time's creation by the fall of the world-soul with the positive idea of angelically produced time.⁴⁴ In *De ciuitate Dei*, Augustine argues that time co-originated and is co-extensive with the spiritual movement of non-corporeal angels:

So for this reason we assert that [the angels] have always been, because they were in all time, and they have been in all time, because times themselves in no way would have been able to exist without the angels. Where there is no created being, by whose changing motions time is led forth, times are altogether impossible...but by means of this [movement] the *immortality* of the angels does not move in time, neither is *it* past as if it now were not, nor future as if it were not yet: nevertheless, their motions, by which times are led forth, do cross from the future into the past.⁴⁵

First, assuming that this passage credits angels with the production of time, it would be, it seems, redundant for Augustine to believe that both the universal world-soul and the heavenly

⁴³ Ennead III.7.11.14, "...ἀεὶ μεταφέρειν εἰς ἄλλο...", and cf. Ibid.IV.7.13, and VI.9.5.29-30.

⁴⁴ Cf. Katherin A. Rogers, 'St. Augustine on Time and Eternity', *American Catholic Philosophical Quarterly*, 70:2, (1996), 207-223. Rogers emphasizes the importance of the angelic doctrine of time, but (incorrectly, I think) believes that Augustine is committed to the thesis that God is metaphysically unable to perceive time, since His perception is restricted to a eternal present, and that finite conscious beings must exist in order for time to be at all.

⁴⁵ *ciu*. XII.15.2, "...ut propterea semper fuisse dicantur, quia omni tempore fuerunt, et propterea omni tempore fuerunt, quia nullo modo sine his ipsa tempora esse potuerunt. Ubi enim nulla creatura est, cuius mutabilibus motibus tempora peragantur, tempora omnino esse non possunt...Ac per hoc etiamsi immortalitas angelorum non transit in tempore, nec praeterita est quasi iam non sit, nec futura quasi nondum sit: tamen eorum motus, quibus tempora peraguntur, ex futuro in praeteritum transeunt..." *PL* 41, col. 364.

hosts are responsible for the creation of time. 46 Therefore, unless Augustine was unaware of this inconsistency, only one or the other should be credited with the production of time. However, it is more likely that both of these views are incorrect. If Augustine credits the angelic hosts with the production of time, it is clear that it is only *qua* moving, not *qua* being angelic, that times are produced by the angels. 47 Earlier in the same work, Augustine writes:

If *aeternitas* and *tempus* are correctly distinguished from one another, by virtue of the fact that time doesn't exist without some active changeability, while in eternity, conversely, there is no change – who would not see that times would not exist had not creatures been made which change from one thing to another by means of motion, whose motions and changes, one next to another, continually cease and succeed, *because such motions are not able to exist together simultaneously* (Italics mine).⁴⁸

Quite remarkably, the reason that Augustine gives here for time's correlation with motion (angelic or otherwise) is the Aristotelian thesis that substances cannot hold contrary attributes at the same time (e.g. a substance changing from black to white cannot hold *both* of these predicates at the same time, in the same respect). Because of this metaphysical principle, Augustine argues, actual change from one attribute to another in a substance *must* occur through the passing away of one attribute in order to make way for a new one. Time is the *sine qua non* of this change of attributes *in a substance*.⁴⁹ This metaphysical affirmation of the logic of

⁴⁶ Cf. Ronnie J. Rombs, *Saint Augustine and the Fall of the Soul: Beyond O'Connell and His Critics*, (Washington, D.C., 2006) for an excellent analysis of the debate.

⁴⁷ Von Jess, op. cite, 344, also upholds this assessment.

⁴⁸ *ciu.* XI.6, "Si enim recte discernuntur aeternitas et tempus, quod tempus sine aliqua mobili mutabilitate non est, in aeternitate autem nulla mutatio est: quis non videat, quod tempora non fuissent, nisi creatura fieret, quae aliquid aliqua motione mutaret, cuius motionis et mutationis cum aliud atque aliud, quae simul esse non possunt, cedit atque succedit..." *PL* 41, col. 321.

⁴⁹ Aristotle claims that the principle of non-contradiction itself is based upon this truth. Cf. *Metaphysica* IV.1005b19-20, "τὸ γὰρ αὐτὸ ἄμα ὑπάρχειν τε καὶ μὴ ὑπάρξειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό.", "For it is impossible that the same [property] both belong and not belong at the same time to

substance and accident, as we will see below, is in fact crucial to understanding Augustine's complete depiction of time in his later works.

VIII. Time as the Accident of a Substance

In *De trinitate*, Augustine begins to explore in a more rigorous fashion this Aristotelian depiction of time as connected to changing accidents inhering in (relatively) stable substances. Although Augustine did not have access to any of Aristotle's major works on physical nature or ontology (namely, the *Physica* and the *Metaphysica*), he does seem to have been well acquainted with a number of Aristotle's doctrines through Neo-Platonic intermediaries such as Porphyry, Plotinus, Ambrose, and Marius Victorinus.⁵⁰ Unfortunately, while there has been much investigation into Augustine's relationship with Neo-Platonism, not much investigation has occurred into Augustine's Aristotelianism.⁵¹ In the *Confessiones*, for instance, Augustine claims to have read and understood, at the age of 20, a book of Aristotle entitled, "*Decem categorias*," a (probably) anonymous Latin epitome of Aristotle's own *Categories*.⁵² In *De trinitate* V.7.8,

the same thing in respect of that same [property]." Cf. imm. an. III.3, where Augustine also states the principle that physical substances cannot manifest simultaneous contrary motions.

⁵⁰ I thank Charles Brittain for originally pointing this out to me.

⁵¹ For an overview of the Neo-Platonic texts that Augustine may have read, cf. Pier Franco Beatrice, 'Quosdam Platonicorum Libros: The Platonic Readings of Augustine in Milan', Vigiliae Christianae, Vol. 43:No. 3 (1989), 248-281.

⁵² conf. IV.16.28. However, the possibility that Augustine had on hand Marius Victorinus's complete translation of Aristotle's work cannot completely ruled out. I thank an anonymous reviewer for pointing out that the most likely view, however, is that the text used by Augustine is identical to the received *Paraphrasis Themistiana (Pseudo-Augustini Categoriae decem)*, which may be reliably traced back to either a paraphrase of Aristotle's work penned by one of Themistius' circle, or possibly a certain Albinus, mentioned by Boethius in his commentaries on Aristotle's *De Interpretatione*. This work was mistakenly ascribed to Augustine in the medieval period. Cf. L. Minio-Paluello, 'The Text of the Categoriae: The Latin Tradition', *The Classical Quarterly*, Vol. 39 (1945), 63-74. Cf. Michael P. Foley, 'Augustine, Aristotle, and the Confessions', *The Thomist* 67 (2003), 607-622. Foley favors the idea that Augustine was working with a full translation of Aristotle's work, but seems unaware of the *Paraphrasis* as a possible source.

Augustine draws upon this work in claiming that all affirmative and negative propositional statements are structured in respect to the ten Aristotelian categories or predicaments, insofar as all statements are said either in respect of 1) substance, 2) quantity, 3) quality, 4) relation, 5) position, 6) condition, 7) time, 8), place, 9), action, or 10) passion.⁵³

Augustine, like Aristotle, singles out substance as primary among the ten categories, such that all the other categories or ways of being (namely, 2-10) are understood as *inhering* in, or as existentially dependent upon, an individual substance.⁵⁴ Since Augustine affirms that time is correctly listed among the categories, this is a first sure indication that time is *not* a substance for Augustine, and must be understood to persist *relatively to an individual substance*. Under such a categorial schema, there can be no such thing as a place by itself, for example, but only the place *of* a substance; likewise, there can be no such thing as time by itself, but only time of or in a substance. In general, all predicaments that are not a substance, are grouped by Aristotle and the Aristotelian commentators under the common designation of 'accidents'.

In earlier works, such as *De naturi boni*, Augustine credits the changeability of creatures almost exclusively to their ontological status of having been created from nothing, and being deprived of the only 'being' that is stable, namely, God's eternal being.⁵⁵ In *De trinitate*, however, Augustine seems to argue that it is *on account of accidents* that substances are subject to change and time.⁵⁶ This can be inferred from the fact that Augustine leverages the theoretical difference between substance and accident to argue that, since all accidents entail mutability, and since God is immutable, God can have no accidents, and is therefore not subject to temporality.⁵⁷

⁵³ Cf. Aristotle, *Categories* 1b25–2a3, and 5a1–35.

⁵⁴ *trin*. V.5.5.

⁵⁵ *nat. b.* I and X.

⁵⁶ trin. V.5.6.

⁵⁷ Ibid. V.5.6. It should be noted that this is really an oversimplification of a very complex problem, which the reader may find more information about in Roland Teske's useful articles, 'Properties of God and the Predicaments in *De Trinitate* V', *The Modern Schoolman* 59 (1981), 1-19, 'Augustine's Use of 'Substantia' in Speaking about God', *The Modern Schoolman* 62 (1985), 147-163, and 'Divine Immutability in St. Augustine', *The Modern Schoolman* 63 (1986), 233-249. Also, cf. William E. Mann, 'Immutability and Predication: What Aristotle Taught Philo and Augustine', *International Journal for Philosophy of Religion*, Vol. 22, No. 1/2 (1987), 21-39.

However, if one grants that Augustine is framing the condition of temporality under the categorial schema of a substance's ability to gain and lose accidents (and God's atemporality as the result of His not fitting into such a schema), one begins to see how Augustine makes use of this categorial scheme to *positively* characterize the nature of temporality and change.

In the first place, Augustine seems to drawn upon Aristotle's category theory in a number of works in order to distinguish object-permanence and accidental change. In *Episulae* VII, Augustine suggests to Nebridius that, "First, therefore, it should be seen that it is not always things passing away that we remember, but for the most part things which *endure*," an idea that suggests that the change of an object happens extrinsically to something that is fundamentally stable in time. The idea of enduring objects is also assumed in *Confessiones* XI. There, Augustine is careful to point out that it is *not* the 'sun' that is future (*non sol futurus*), since the sun actually exists at every moment of created time, but rather, it is the 'rising *of* (*ortus eius*) the sun that is future. In both cases, what is being theoretically appealed to is the idea of an underlying continuity that maintains the identity of an object through its changes. However, for Augustine, this is just the Aristotelian notion of a *substance* or nature which possesses accidents.

In the second place, this affirmation by Augustine of stable objects which change by gaining and losing accidental predicates diffuses at least one possible interpretation of time's relationship to substances, namely, that time might create a *new* object at each temporal moment. Finally, although Augustine does not explicitly say so, Augustine's affirmation of time as an accident theoretically harmonizes Augustine's claims that time is (1) dependent upon the

⁵⁸ *ep.* VII.1.1, "Primum ergo videndum est non nos semper rerum praetereuntium meminisse, sed plerumque manentium." *PL* 33, col. 68.

⁵⁹ conf. XI.18.24, "Quod intueor, praesens est, quod praenuntio, futurum; non sol futurus, qui iam est, sed ortus eius, qui nondum est..." This idea that substances are in some way 'enduring' and only quasitemporal, while accidents are changing and fully subject to time, becomes a standard idea in medieval theories of time. Cf. Richard Cross, 'Four Dimensionalism and Identity Across Time: Henry of Ghent vs. Bonaventure', *Journal of the History of Philosophy* 37:3 (1999), 394, who takes this distinction to be most probably the result of Aristotle's influence. However, if the thesis here is correct, Augustine should be credited as the first medieval philosopher to obliquely formulate a theory of time based upon the relationship between substance and accident.

motions of an enduring thing for its existence, as Augustine argues in the *Confessiones*, ⁶⁰ and also that it is (2) a condition of the possibility of change in general, insofar as it allows substances to take on contrary predicates, as Augustine argues in *De ciuitate Dei*. ⁶¹

IX. Time as Consisting of Past and Future only

If we grant the idea that Augustine is conceiving of time in terms of substances which contain accidental 'times' attached to their movements, a problem still remains. If time is the condition for the successive distribution and loss of a substance's accidents (through time numbers, for examples), as Augustine argues in *De ciuitate Dei*, *De uera religione*, and *De musica*, and if substances can only be truly present when they do *not* lose or gain accidents, as God is described in *De trinitate*, then it follows that, for Augustine, substances should not ever be able to become present in the created temporal series at all.

We find that Augustine asserts just this idea in a number of places. In *Epistulae* II, for instance, Augustine affirms that sensible objects do not ever become present in time:

We both agree, I suppose, that all corporeal things which touch the senses are unable to endure in the same mode of being even for a moment (*puncto*) of time, but as perishing, these things flow and do not obtain presence, which is to say, in the Latin tongue, that they should be classified as *non esse*. ⁶²

Not only does Augustine describe sensible objects as unable to become fully present in created time, but in his *Tractatus in euangelium Iohannis*, Augustine argues that the present *itself* does not appear in created time:

⁶⁰ Vide supra, n. 35.

⁶¹ *Vide supra*, sec. VII, n. 48, n. 49.

⁶² *ep.* II, "Bene inter nos convenit, ut opinor, omnia quae corporeus sensus attingit, ne puncto quidem temporis eodem modo manere posse, sed labi, effluere et praesens nihil obtinere, id est, ut latine loquar, non esse." *PL* 33, col. 63. Cf. *Io. eu. tr.* 38.10.

Past and future I find in every motion occurring in things: In truth, which endures, past and future I do not find, but only the incorruptible present, which is not to be found in created things. Examine the changes of created things, and you will find *Fuit* and *Erit*: Reflect upon God, you will find *Est*, where *Fuit* and *Erit* are not able to be. In order, therefore, for you *to be*, climb above time.⁶³

Although this passage is often quoted in the literature, it is almost never given an analysis, and I know of no attempt to systematically reconcile its contents with Augustine's statements in the *Confessiones*. Both of the above passages together express what is perhaps the central unnoticed problem in Augustine's philosophy of time, which is that *nothing* in time is ever present, nor is the present moment *in* time.⁶⁴ Admittedly, these passages are difficult to coordinate with Augustine's claim that the past is no longer, and the future is not yet. However, if we are thinking with the categories of substance and accident, both of these passages become intelligible. For Augustine, the 'present' does not exist in the created time series (or in created substances) because the present is synonymous with not-changing and eternity. Since every created substance, at any point in the series of its transitory changes, is related to (1) what accidents it will have in the future, (2) what accidents it is gaining, and (3) what accidents is losing, there is no 'point' of time in which a *substance* is itself unchanging or fully present. Full presence occurs, for Augustine, when a substance possesses *all* of the qualities which are proper to it, and *cannot* change.

X. Neo-Platonism and the Removal of Accidental Time

⁶³ *Io. eu. tr.* 38.10, "Praeteritum et futurum invenio in omni motu rerum: in veritate quae manet, praeteritum et futurum non invenio, sed solum praesens, et hoc incorruptibiliter, quod in creatura non est. Discute rerum mutationes, invenies Fuit et Erit: cogita Deum, invenies Est, ubi Fuit et Erit esse non possit. Ut ergo et tu sis, transcende tempus." *PL* 35, col. 1680. A similar view is expressed in *ciu.* XIII.11.

⁶⁴ Robert Jordan, in 'Time and Contingency in St. Augustine', *The Review of Metaphysics*, Vol. 8, No. 3 (1955), 414, is an exception to this rule. His analysis of time as a relation, "with a foundation in successive states of finite or limited being, whose measurement is a cognitive act terminating in the 'distentio' of the mind' I find to be very close to correct. However, Jordan is unclear as to what this relation is a relation to. Here, it is relation between a substance and its successive accidents.

If this is correct, only one problem remains in interpreting Augustine's full theory of time. If time is an accidental condition of substances which makes possible (through time numbers) the successive distribution of a substance's accidents, how will time exist, if at all, in the eschaton, and will substances ever become present? At various places, Augustine seems to claim that God's salvation of the world will involve deliverance from the order of time and our receiving of eternity.⁶⁵ How though, can a substance's removal from time, or conversely, it's receiving of presence in eternity, be conceived? If we are correct, the transition from temporality to eternity cannot have been understood by Augustine as merely a replacement of flowing temporality with static presence, neither can it simply be a Plotinian withdrawal into an abiding incorporeal unity. Under Plotinus's view, if time were to be removed from an individual substance, such a substance would, upon returning to its contemplation in Noῦς, withdraw into total unity, since there would be no function to 'space out' a body from its parts, or a soul from its states. This sort of existence, however, would provide no need (and no possibility) for a material resurrection body, something that is crucial to Augustine's metaphysics. ⁶⁶ Moreover, Augustine claims that such resurrection bodies will have greater mobility in the eschaton than physical bodies do in this life.⁶⁷ After all, for what purpose would a body serve in the afterlife if such a body never moved, but simply abided in a motionless beatific vision?⁶⁸

However, quite paradoxically, Augustine *also* claims that the resurrection body will not be subject to change, unlike the sensible objects that we experience during our lifetime, which change at *every* moment of time.⁶⁹ How is this possible? Augustine's claim, that there will be an unchanging, moving substance (the resurrection body) that enjoys eternity, becomes intelligible within the framework of substance and accident. In the later chapters of *De ciuitate Dei*,

⁶⁵ By far the most important article on this topic is Roland Teske's, "*Vocans Temporales, Faciens Aeternos*": St. Augustine on Liberation from Time', *Traditio* 41 (1985): 36-58. He cites in particular, *en. Ps.*101.10, 127.15, 134.6, *s.* 340A, *Io. eu. tr.*31.5, and *ep. XVIII*, among others, as evidence for Augustine's view that salvation entails liberation from time.

⁶⁶ retr. I.10.1-4, I.12.4,

⁶⁷ ciu. XIII.18, XXII.11. Cp. ench. 88-91.

⁶⁸ Cf. Sorabji, *TCC*, 167-168.

⁶⁹ retr. I.26.

Augustine describes in detail how, at the resurrection, the corruptible accidents of human bodies will be destroyed and replaced with qualities that harmonize with immortality. When this occurs, all of the accidental deformities in our substance will be removed, and the newly restored substance, having been perfected, will be unable to lose any of its new qualities. For Augustine, this inability to lose or gain accidental qualities has an unusual conclusion – such a state of affairs will itself *constitute* the elimination of normal time. For indeed, how could normal time exist if all substances had all of their forms (qualities, quantities, relations, etc.) proper to their nature *at once*?

For this reason, the motions that Augustine thinks that we will experience after the resurrection will not be true temporal *changes*, precisely because all our 'possessions' will be things that are immediately available to us, are already ours, and which are proper to our immortal substance – whether that be a relationship with another person, an idea that we wish to contemplate, or a place where we want to go. The such a case, any 'change' that occurs will not be a change from something we have to something different that we do *not* have, but rather a 'change' from something we have to something else we *already* have, without the loss of any possession. In this sense, and in this sense alone, time as we know it, for Augustine, will not occur (at least not in a linear sense) in eternity. However, practically speaking, a form of temporality will remain in eternity, since motion will continue to occur; it will just not be the sort of temporal motion coordinate with the loss or gain of desired things. If this is correct, then Augustine's final view of time should be viewed in a further double respect. In the first respect, time is the *ordo* of change that takes place in *fallen* creation. However, in a second respect, time will for Augustine become the *ordo* of endurance in *redeemed* creation, when it allows for

⁷⁰ *ciu*. XX.16.

⁷¹ Ibid. XX.19.

⁷² Such an idea also explains why Augustine argues that the quality of the 'immortality' of the angels does not pass from future to past, but only their spiritual motions. *Vide supra*, sec. VII.

⁷³ For Augustine, the existence of souls in bodies already demonstrates this conceptual possibility in the case of place, since a soul already 'possesses' all spatial locations in the body at once, and does not need to travel to each point in the body by local motion. Cf. *c. ep. Man*.16.20, *ep.* CLXVI, *an. quant*. 14.23, 31.67.

substantial possession without accidental loss or gain, as well as motion without change into otherness.

This understanding of time not only preserves all of Augustine's descriptions of time and its effects on the human mind, but also carefully aligns with Augustine's explicit theological commitments concerning the experience of eternity. Further, such an interpretation also avoids the pitfalls of interpreting Augustine's lifelong preoccupation with time through the lens of a mere fragment of his work. If this thesis is correct, Augustine's most brilliant contribution to the philosophy of time is not to be found primarily in his introspective analysis of time's effects upon the human soul, but rather in his lifelong attempt at explicating a cosmological, mathematically structured theory of time as the created means of carrying out a providential order of change in each substantial creature in the physical and spiritual world, fallen and redeemed.