

Spring 2005

# Bergson's Aristotelian Theory of Duration and the History of Temporality

Daniel Collins-Cavanaugh

Follow this and additional works at: <https://dsc.duq.edu/etd>

---

## Recommended Citation

Collins-Cavanaugh, D. (2005). Bergson's Aristotelian Theory of Duration and the History of Temporality (Doctoral dissertation, Duquesne University). Retrieved from <https://dsc.duq.edu/etd/426>

This Immediate Access is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Duquesne Scholarship Collection. For more information, please contact [phillipsg@duq.edu](mailto:phillipsg@duq.edu).

Bergson's Aristotelian Theory of Duration and the History of Temporality

A Dissertation

Presented to the Faculty

of the Philosophy Department

McAnulty College and Graduate School of Liberal Arts

Duquesne University

in partial fulfillment of  
the requirement for the degree of

Doctor of Philosophy

By

Daniel J. Collins-Cavanaugh

April 6, 2005

## ACKNOWLEDGEMENTS

I would like to acknowledge and express my gratitude to the following people, all of whom helped make this work and this day possible. Deborah Springhorn, who first introduced me to the world of philosophy. Dr. John Burkey, who shepherded me through my undergraduate years. Dr. Tom Rockmore and the members of my committee, whose valuable insights guided my work. My parents and family, whose support and encouragement helped me to persevere. And most of all, to Alethea, my beautiful and beloved wife. Without her love and patience, none of this would have been possible.

DEDICATION

TO MY SON CONNOR

ON WHOSE FIRST BIRTHDAY  
THIS WORK WAS DEFENDED

THIS WORK IS ON TIME

THERE ISN'T ENOUGH OF IT

## TABLE OF CONTENTS

INTRODUCTION: Heidegger and the Genealogy of Time	1
CHAPTER 1: Augustine's Influence on Modern Theories of Time	9
Part I: Augustine's Theory of Time	11
Part II: Objections to Augustine's Theory of Time from the 'Spatial' Tradition	24
Part III: Responses to the Standard Objections from within the 'Spatial' Tradition	28
Part IV: Augustine's Influence on the Two Major Modern Theories of Time	34
CHAPTER 2: Aristotle's Qualitative Theory of Time	51
Part I: A Description of Aristotle's Theory of Time	52
Part II: Traditional Spatial/Quantitative Interpretations of Aristotle's Theory of Time	63
Part III: Heidegger's Idealistic/Spatial Interpretation of Aristotle's Theory of Time	75
Part IV: Aristotle's Qualitative Theory of Time	87
CHAPTER 3: Bergson's Aristotelian Theory of Duration	99
Part I: Bergson's Latin Dissertation	100
Part II: Bergson's Theory of Duration	109
Part III: Two Standard Interpretations of Bergson's Theory of Duration	125
Part IV: The Influence of Aristotle's Theory of Time on Bergson's Theory of Duration	133
CHAPTER 4: Dasein's Spatial Temporality and the Relationship Between Bergson and Heidegger	148
Part I: Heidegger's Reading of Bergson	150

Part II: Heidegger's Theory of Primordial, Authentic, Original or True Temporality	173
Part III: Reading Heidegger's Theory of Original Temporality as a Reaction to Bergson's Theory of Duration	187
BIBLIOGRAPHY	203

## INTRODUCTION

### Heidegger and the Genealogy of Time

This dissertation is an attempt to come to grips with a claim Heidegger makes in the second part of the Introduction to *Being and Time*. While discussing the ordinary concept of time, Heidegger claims that the history of this ordinary concept is Aristotelian. He says: “This ordinary way of understanding it has become explicit in an interpretation precipitated in the traditional concept of time, which has persisted from Aristotle to Bergson and even later.”<sup>1</sup> What he means by this is the following. Aristotle’s theory of time is the dominant theory in the tradition. It is dominant because every other theory in the tradition, from Aristotle himself to Bergson is informed by what is central in Aristotle’s account. And what is central in Aristotle’s account is the concept of the “now.”<sup>2</sup> This tradition, which emphasizes the “now” has covered over or otherwise obscured the question concerning Being, since the ordinary way of understanding time gives us (Dasein) only a certain kind of derivative time. True temporality, which Heidegger also sometimes calls primordial, original or authentic temporality, will get behind this ordinary concept of time. In doing so, both the roots of the ordinary concept, and Dasein’s fundamental existence as a temporal being oriented towards the future will be revealed to Dasein.<sup>3</sup> This will clear the way for understanding Being itself in a general kind of way.<sup>4</sup>

The first thing I find puzzling about this claim is that even a cursory look at the history of the concept of time, as that concept has been thought in Western philosophy, shows that the history of the concept of time is not Aristotelian. Surely people in the

---

<sup>1</sup> Heidegger, *Being and Time*, 39[18].

<sup>2</sup> Heidegger, *Basic Problems of Phenomenology*, 246.

<sup>3</sup> Heidegger, *Being and Time*, 29-40 [9-19]

<sup>4</sup> *Ibid.*, 29-40 [8-19].

ancient world were familiar with Aristotle's work on that subject. However, neo-Platonic theories of time are much more dominant. In fact, I will argue in Chapter 1 of this dissertation that it was Augustine's neo-Platonic theory of time that became the dominant theory in the tradition. It is Augustine's theory that lies at the heart of classical mechanics and Kant's theory of time. This is because Augustine's theory is a quantitative theory of time, whereas Aristotle's is a qualitative theory.<sup>5</sup>

So why does Heidegger claim that the history of the concept of time is Aristotelian? Was Heidegger unaware of Augustine? No, in fact Heidegger believed Augustine's theory of time to be one of the two major influential ancient treatises on the subject. In *The Basic Problems of Phenomenology*, he pairs Augustine and Aristotle together as the two main ancient thinkers, saying: "The two ancient interpretations of time which thereafter became standard – Augustine's...and the first great treatise on time by Aristotle – are also by far the most extensive and truly thematic investigations of the time phenomenon itself. Augustine agrees with Aristotle also on a series of essential determinations."<sup>6</sup> He even claims Augustine had some particular insights into the problem of time, saying later on in the same work: "Of the two, Aristotle's investigations are conceptually more rigorous and stronger while Augustine sees some dimensions of the time phenomenon more originally."<sup>7</sup> What he seems to be saying here is that Augustine had something very interesting to say about time that Aristotle had not said,

---

<sup>5</sup> I label theories of time quantitative when they regard time as an homogenous medium where time is the number which counts. I label theories qualitative where time is not a homogenous medium, but has something to do with the motions of different kinds of things when those motions are experienced by conscious beings. This distinction is similar to the distinction Bergson draws in *Time and Free Will* between spatial theories of time and his own theory of duration. The claim that Aristotle's theory of time is a qualitative theory similar to (and, in fact, quite influential for) Bergson's theory of duration will be drawn out in Chapters 2 and 3.

<sup>6</sup> Heidegger, *Basic Problems of Phenomenology*, 231.

<sup>7</sup> *Ibid.*, 232.

even though, at heart, Augustine's theory is primarily in agreement with Aristotle's, and hence, Aristotelian. Heidegger never says what this original contribution by Augustine was, though, nor does he ever undertake a systematic exposition of Augustine's theory in either *Being and Time* or *The Basic Problems of Phenomenology*.

Both Heidegger's critics and defenders will admit that he sometimes takes liberties with the history of philosophy, even though he is often said to be involved in some kind of engagement with this history. Some of these critics, such as Derrida, even claim that Heidegger's whole early project is little more than another version of the very metaphysics he is claiming to subvert.<sup>8</sup> Yet, as far as I have been able to tell, no one has seriously challenged Heidegger's claim concerning the genealogy of the history of the concept of time itself. That is, none of Heidegger's critics have taken issue with his labeling the genealogy of the concept of time Aristotelian, when it is clearly not Aristotelian. If he did mislabel this history, though, then Heidegger must have had a reason. I believe one of the primary factors that led Heidegger to misleadingly label the history of the concept of time Aristotelian is Heidegger's engagement with Henri Bergson.

Heidegger refers to Bergson in a number of places in his early works. And he puts Bergson at the other end of the genealogy that starts with Aristotle. Yet remarkably little has been said about the relationship between Bergson and Heidegger. It is my contention that this is a serious gap in both Bergson and Heidegger scholarship – a gap which I propose to fill in somewhat in the following chapters. I think this is important because, if it is the case that Heidegger mislabels the history of the concept of time, and

---

<sup>8</sup> See Jacques Derrida, "Ousia and Gramme," in *Margins of Philosophy* for a detailed argument concerning Heidegger's practicing the very metaphysics he claims to be destroying.

in doing so he connects Bergson with Aristotle, then Bergson's theory of time could have something to do with Heidegger's theory of authentic or original temporality. That is, if Bergson is the penultimate figure in the history of the concept of time, as Heidegger's genealogy suggests Heidegger believes he is, and Heidegger believes his theory of original temporality both uncovers the ontological roots of the ordinary concept of time and gives Dasein access to its own being and even Being itself, then there must be something in Bergson's philosophy that Heidegger is reacting against.

It is this reading of Heidegger as a reaction to Bergson that I will develop in this dissertation. The history of the concept of time is actually Augustinian, not Aristotelian. Aristotle's theory of time is better understood as a qualitative theory of time, rather than a quantitative theory. Furthermore, Aristotle's theory was quite influential on Bergson's theory of duration (his version of true or original temporality, in Heideggerian terms). All of which points to the likely possibility that Heidegger's theory of true or original or authentic temporality actually arose, at least in part, as a reaction to Bergson's theory of duration. Therefore, rather than subverting the history of metaphysics or anything like that, when it comes to thinking on the concept of time, Heidegger's theory actually falls firmly back into that tradition. By drawing the genealogy of the concept from Aristotle to Bergson, he was able to confuse the issue enough, it seems, to escape serious critical notice on this point. Nevertheless, the resurgence in Bergsonian scholarship has made it possible to bring the connection between Bergson and Heidegger out. And in doing this, Heidegger's critics will have a new set of tools with which to work, since, on Bergson's account, Heidegger's theory of true or original temporality is actually a quantitative or spatial theory.

To accomplish this task, I will divide this dissertation into four chapters. In Chapter 1, I will demonstrate that the history of the concept of time is Augustinian, rather than Aristotelian. Aristotle's theory of time contains no absolute presence. For Aristotle, time is something that concerns the motion of individual bodies. This was incompatible with the theological concerns of most medieval philosophers, including Aquinas. Nor does Aristotle's theory consider time as an homogenous medium, which makes it incompatible with classical mechanics. This is because, for Aristotle, time is the number that is counted, not the number that counts. Finally, although Aristotle's theory of time requires a perceiving soul, the perceiving soul does not provide time as an homogenous medium, as is the case in Kant's theory. Therefore, Aristotle's theory could not have, and did not, exercise the influence over the history of the concept that Heidegger claims it did.

In contrast, Augustine's theory did contain all of these elements. It certainly had all the theological aspects necessary to medieval philosophy. It had an understanding of an eternal presence that frames time. This makes every moment of time available to some being (God, in Augustine's case). If every moment of time is available to some being, then time exists in an homogenous and spatial way. This is precisely what classical mechanics claims, even if it tries to dispense with the necessity of calling such a being God. Finally, the descriptive nature of time as a distention of the mind offered by Augustine in the *Confessions* bears some remarkable similarities to the way Kant describes time as a condition for experience in rational beings in the *Critique of Pure Reason*.

Chapter 1 demonstrates all this by first offering a clear explication of Augustine’s theory of time, which is found primarily in his *Confessions*, Book XI. In particular, I will offer a philosophical interpretation of the role of God as the eternal presence framing all time and temporal experience, something which seems to be lacking in Augustinian scholarship. Next, I will discuss several prominent objections from what Bergson refers to as the “spatial” tradition and what I refer to as the “quantitative” tradition of thinking on time (thinkers like Russell, etc). Following this discussion, I will show that Augustine’s theory is not prone to many of these objections. And finally, I will demonstrate the influence that Augustine’s theory has had on classical mechanics and Kant.

In Chapter 2, I will take up Aristotle’s theory of time. Since the history of the concept of time is actually Augustinian, but Heidegger claims it is Aristotelian, a detailed examination of Aristotle’s theory is in order. This theory, which is found in Book IV of the *Physics* is, I argue, actually a qualitative theory of time, rather than a quantitative theory. This interpretation of Aristotle’s theory of time is novel, I believe, and so it will need some justification.<sup>9</sup> To do this, I will offer a careful description of Aristotle’s theory from Book IV of the *Physics*. Next, I will look at interpretations of Aristotle’s theory that come out of the spatial tradition of thinking on time. Following that, I will offer a detailed examination of Heidegger’s interpretation of Aristotle’s theory of time, which is found primarily in the *Basic Problems of Phenomenology*. Finally, I will give my argument for why Aristotle’s theory of time is better understood as a qualitative theory of time, rather than as a quantitative theory.

---

<sup>9</sup> This is particularly the case since Aristotle claims in the *Categories* that time is a quantity. However, I will show that the way time is defined makes it behave more after the fashion of an affective quality, as the *Categories* describes affective qualities.

Chapter 3 will discuss the influence of Aristotle's theory of time on Bergson's theory of duration. Bergson's theory of duration is a purely qualitative theory, which he develops to critique what he calls spatial theories of time and to afford us an opportunity for pure temporal experience, which he believes will lead to a more satisfactory knowledge of the universe through intuition. Nearly all of Bergson's works rely on this theory. In this dissertation, I will rely primarily on the theory as it is articulated in *Time and Free Will*, *Creative Evolution* and various articles and lectures from *Creative Mind*. To show the influence of Aristotle on Bergson, then, I will first discuss Bergson's Latin dissertation, entitled *Aristotle's Conception of Place*. This will show that Bergson understood Aristotle in a qualitative, heterogeneous way, rather than a quantitative, homogenous way. This is important, because Heidegger will claim that Bergson understood Aristotle to be a spatial thinker. Next, I will offer a detailed description of Bergson's theory of duration, as that theory is articulated in the works listed above. Following that, I discuss what seem to be the two primary schools of interpretation of Bergson's theory of duration: the phenomenological and the Deleuzian. Neither of these schools seems to recognize Aristotle's contribution to Bergson's theory, though. In the last part of Chapter 3, then, I describe this influence and show how it offers a more reasonable and complete interpretation of Bergson's theory of duration than do the interpretation offered by phenomenologists and Deleuze.

Chapters 1, 2 and 3 will put me in a position to articulate and defend the claims made above about Heidegger and his theory of authentic temporality. In Chapter IV, I conclude this dissertation by looking at Heidegger's theory of authentic (or true, primordial or original) temporality in light of what has been said about the history of the

concept of time, Aristotle's theory of time, and its influence on Bergson's theory of duration. To do this, I will offer the first detailed examination in English of Heidegger's references to Bergson from his early works.<sup>10</sup> These examinations will show that Heidegger knew Bergson well, and that he was engaged with him in some way (even if he seems to get Bergson's theory wrong). Next, I will show that Heidegger's theory of time fits many of the criteria for what Bergson calls "spatial" (and what I call "quantitative") theories of time. Finally, I will show how these two sets of factors, in addition to everything else I have done up to this point in the dissertation, points to the fact that Heidegger's theory of original temporality arose, in part, as a reaction to Bergson's theory of duration. This is why he draws the genealogy of the concept of time from Aristotle to Bergson. And this is also one of the main reasons why his own theory of original temporality actually remains within the tradition of metaphysics he claimed to be subverting.

---

<sup>10</sup> The early works I have in mind are *Being and Time*, *The Basic Problems of Phenomenology*, and *The Metaphysical Foundations of Logic*, each of which has several references to Bergson.

## CHAPTER 1 AUGUSTINE'S INFLUENCE ON MODERN THEORIES OF TIME

As I stated in the Introduction, it is strange that Heidegger mentioned Augustine as ancient thinker on time whose theory of time was important for his and subsequent ages. It is strange because Heidegger never offers a detailed analysis of Augustine's theory. Nor does he ever mention what it is about that the theory that is more "original" than Aristotle's theory. If Heidegger was seeking original temporality, as he says he is in his early works, and if original temporality is something different than time as it is ordinarily understood (which he says is the case), then it would seem to be an oversight, at the very least, to leave Augustine's theory unexamined – even if Aristotle's theory actually was the more influential.

I believe there is a good reason why Heidegger does not undertake a detailed examination of Augustine's theory of time in either *Being and Time* or *The Basic Problems of Phenomenology*. I believe this is because it was really Augustine's theory of time that was the most influential for the major theories of time I think Heidegger has in mind when he discusses "ordinary" theories of time: Kant's theory and the general theory that runs through classical mechanics. These were the theories that would have been (and to a great extent, still are) operative in the so-called "common" understanding of the concept of time. And it was precisely these theories that Bergson was reacting against when he offered his critiques of "spatial" theories of time in *Time and Free Will* and other places. So, since all of this is the case, and because I believe Heidegger is reacting to Bergson, I will now offer a detailed description of Augustine's theory and an argument

for why I believe it, rather than Aristotle's theory, is the dominant theory in so far as modern theories of time are concerned.

To do this, I will divide this chapter into four parts. In Part I, I will offer a detailed explication of Augustine's theory of time. This theory is found primarily in Book XI of the *Confessions*. This theory has four major components. The first is the eternal presence of God. This eternal presence frames time, particularly because, as an eternal being, God has no temporal existence; yet God causes every moment of time that exists to exist. Therefore, there is something outside of time, by which and through which all time occurs. The second component to the theory are the three modes of time's existence: the past, present and future. For Augustine, the present is the primary mode of time, with the future and the past being attached to it, for us, in the forms of memory and expectation. However, because of the eternal presence of God, the future for us actually exists, although it may not exist to us yet. The third component of Augustine's theory concerns motion and measurement. Contrary to Aristotle, Augustine's use of number is as the number which counts, not the number which is counted. This means that whatever kind of number time is, it is a uniform number that measures all time equally and identically. The final component to the theory is actually more of an epistemological component, although some have confused it with an ontological description.<sup>11</sup> This concerns time's definition as a "distention" of the mind. What this actually means for Augustine, though, is that we experience time as a synthesis of past and future, that is, memory and expectation, to the present perception. This makes it possible for us to understand time and make some use of its measurements.

---

<sup>11</sup> I believe this causes confusion for thinkers such as Bertrand Russell, and it explains one of the reasons why Russell was so quick to dismiss Augustine's theory as "subjective." See Bertrand Russell, 212-215.

In Part II, I will look at objections to Augustine's theory from what Bergson calls the "spatial" tradition of temporal thinkers. Since most of these thinkers have ignored the way God functions in Augustine's theory (a point that many philosophers seem to have ignored, unless they were engaged in some kind of philosophical theology), they see Augustine's theory as solipsistic at worst, and fuzzy and lacking in objective measurement at best. In the former category are thinkers such as Bertrand Russell, Etienne Gilson and G.S. Whitrow. In the latter category are thinkers such as Danne W. Polk. All of these criticisms fail, though, when one looks at the way God functions in the system from a philosophical, rather than a religious perspective.

In Part III, I offer answers to these objections that rely, in part, on the way God is used in Augustine's system. In doing so, many of the neo-Platonic influences that run through Augustine will be brought to light, particularly as these influences also run through Kant and classical mechanics. This will show that Augustine's theory is not subjective in the way people like Russell think it is. Nor does it lack objective measurement (or at least, measurability) in the way Polk claims.

Finally, I will demonstrate how Augustine's theory can be found at the heart of both the theories of time found in classical mechanics and in Kant's theory of time from the *Critique of Pure Reason*. Here I will argue that Aristotle's theory of time could not have had the influence Heidegger claims it did, since it is at odds with what is fundamental to those modern theories. Augustine's theory, though, shares a number of key elements, and was therefore much more likely to have been influential on those thinkers and theories. This will prepare the way for a detailed examination of Aristotle's theory in Chapter 2.

## PART I: AUGUSTINE'S THEORY OF TIME

Augustine's theory of time is found primarily in Book XI of the *Confessions*. There are also references to time in *The City of God* and *On Genesis Contra the Manichees*. These later texts serve to compliment the theory of time developed in the *Confessions*. They also provide evidence that Augustine was aware, in a general way, of objections that might come from so-called "objective" and "subjective" perspectives. Taken altogether, they reveal a theory of time that has all the components necessary to support and influence spatial theories of time.

Augustine begins his account of time with a question of God: "O Lord, since you are outside time in eternity, are you unaware of these things I tell you?"<sup>12</sup> This is more than a simple invocation or a traditional benediction. Augustine is beginning his treatment of time with an examination of God's non-temporal existence. This non-temporal existence frames time, though, since he says further: "Yours is the day, yours the night. No moment of time passes except by your will."<sup>13</sup> So God both exists non-temporally, yet God causes all temporal moments to exist. This means that all things with a temporal existence, and all the temporal experience those things have, find their cause in an eternal thing, which is to say, something that exists independently of or outside of time.

The concept of an eternal presence framing temporal existence is not original to Augustine. Both Plato and Plotinus held similar views. Plato held that there was a creator who constructed time based on the image of eternity: "Wherefore he resolved to have a moving image of eternity, and when he set in order the heaven, he made this

---

<sup>12</sup> Augustine, *Confessions*, XI, 1. References to the *Confessions* will refer to the book number and paragraph number.

<sup>13</sup> *ibid.*, XI, 2

image eternal but moving according to number, while eternity itself rests in unity, and this image we call time.”<sup>14</sup> Plotinus holds that there is a “world-soul” that creates time when it seeks to imitate the eternal One:

Would it, then, be sound to define Time as the Life of the Soul in movement as it passes from one stage of act of or experience to another? Yes; for Eternity, we have said, is Life in repose, unchanging, self-identical, always endlessly complete; and there is to be an image of Eternity – Time – such an image as this lower All presents of the Higher Sphere. Therefore over against that higher Life there must be another life, known by the same name as the more veritable Life of the Soul; over against that Movement of the Intellectual Soul there must be the movement of the some partial phase; over against that Identity, Unchangeableness and Stability there must be that which is not constant in the one hold but puts forth multitudinous acts...the lesser must always be working towards the increase of its Being; this will be its imitation.<sup>15</sup>

Augustine owes a debt to both of these ancient philosophers, particularly Plotinus, as Roland J. Teske points out.<sup>16</sup> But Augustine’s notion of an eternally present and creative God goes beyond the relationship between time and eternity found in either Plato or Plotinus. For Augustine, the eternal presence of God both creates and sustains all of time and every single moment of time. He says: “whatever begins to be, or ceases to be, does so at the moment when the eternal reason knows that it should begin to be or cease to be, although in the eternal reason there is no beginning and no ending.”<sup>17</sup> Time is not a picture of God, anymore than God is “unaware” of anything that goes on in time. Time is something that is caused by God, but God is not something that exists temporally. None of this can be said to be the case with either Plato or Plotinus. So even if it is the case

---

<sup>14</sup> Plato, *Timaeus*, 37d.

<sup>15</sup> Plotinus, *Enneads*, III. 7, 11.

<sup>16</sup> Teske. *Paradoxes of Time in Saint Augustine* and “The World-Soul and Time in St. Augustine”

<sup>17</sup> Augustine, *Confessions*, XI, 8.

that Augustine took the notion of eternity from Plotinus, as Teske suggests<sup>18</sup>, he did more with the concept.

What Augustine did was turn God's presence into a space that frames time. This also helped answer the objections of the Manichaeans, who wondered what God was doing before time was created, and for how long God was doing it then. By explaining eternity in spatial terms, rather than temporal terms, Augustine avoids the apparent contradiction of trying to explain eternity as a temporal phenomenon. And, by attributing time's existence to the will of an eternal being, Augustine paves the way for modern theories that will attempt to define time by reference to that which is not temporal.

Having described the way God's eternal presence frames time, Augustine turns his attention to the nature of the past, present and future. The existence of the various modes of time is a standard way to enter discussion of the nature of time and the question of time's existence. In fact, it was not uncommon for thinkers to wonder about time's existence as such. Aristotle starts his examination of time this way, saying: "To start, then: the following considerations would make one suspect that it [time] either does not exist at all or barely, and in the obscure way. One part of it has been and is not, while the other is going to be and is not yet. Yet time – both infinite time and any time you like to take – is made up of these. One would naturally suppose that what is made up of things which do not exist could have no share in reality."<sup>19</sup> Considerations like this had led some thinkers, such as Parmenides, to conclude that there could be no such thing as time. Only

---

<sup>18</sup> Teske claims that it was necessary to do this in order to defend orthodox Christian doctrine concerning God from Manichaean objections: "In order to respond to the Manichaean question about what God was doing before he created the world, he needed such a concept of divine eternity as timelessness, and he found that concept in Plotinus, for there was simply nowhere else he could have found it." *Paradoxes of Time in Saint Augustine*, 22.

<sup>19</sup> Aristotle. *Physics*, 218a.

that which is at the present moment can exist, therefore, nothing ever comes into being or passes away. Thus he says: “There remains, then, but one word by which to express the road: Is. And on this road there are many signs that What Is has no beginning and never will be destroyed: it is whole, still, and without end. It neither was nor will be, it simply is.”<sup>20</sup> And he says further: “How could What Is be something of the future? How could it come-to-be? For if it were coming-to-be, or if it were going to be in the future, in either case there would be a time when it is not. Thus coming-to-be is quenched, and destruction is unthinkable.”<sup>21</sup>

What one gets from descriptions like this in Parmenides, though, is really a description of eternity. But Augustine is after a description of time. Now every temporal being seemingly experiences time as past, present and future, although only in the present moment. The past is experienced in memory, the present in perception, and the future in expectation. Still, though, there are problems. One can have a memory of an event that happened a long time ago. One can also have a memory of an event that happened yesterday. But, since neither of these events is happening now, how can we really say that one happened a greater amount of time ago than another? In a similar fashion, Augustine wonders how one event can be further in the future than another, if neither event exists yet? After all, only things that exist can be measured, and the past and the future, as such, do not seem to exist:

But how can we measure time except in relation to some measurable period? We cannot use the terms ‘as long’, ‘twice as long’, ‘three times as long’, and so on, when we speak of time, except in relation to a given period. But to what period do we relate time when we measure it as it is passing? To the future, from which it comes? No: because we cannot measure what does not exist. To the present, through which it is passing?

---

<sup>20</sup> Parmenides, Fragments 7a.

<sup>21</sup> Ibid., 7b.

No: because we cannot measure what has no duration. To the past, then, towards which it is going? No again: because we cannot measure what no longer exists.<sup>22</sup>

This is further complicated by examining the present itself. Can one even say the present exists? If so, the present what? Is it the present century, the present day, the present hour? But all of these can be further divided into past and future components. Only this very instant can be considered present, but this poses a problem, too. Augustine says: “In fact the only time that can be called present is an instant, if we can conceive of such, that cannot be divided even into the most minute fractions, and a point of time as small as this passes so rapidly from the future to the past that its duration is without length. For if its duration were prolonged, it could be divided into past and future. When it is present, it has no duration.”<sup>23</sup>

Two things help Augustine to solve this paradox. One is the nature of God’s eternal existence. Since God exists outside of time, all moments of time are equally present to God. Past, present and future moments of time are then past, present and future, as such, only to temporal beings. To God, the eternal being, they are all the same. The second thing that helps Augustine, following God’s eternal presence, is the connection the past and the future have to the present of a temporal being. The past and the future are connected to the present for a temporal being through memory and expectation. At first glance, this gives them a kind of “virtual” reality that would seem to be different from the reality of beings that exist in space. Upon closer examination, though, this is not the case.

---

<sup>22</sup> Augustine, *Confessions*, XI, 21.

<sup>23</sup> *Ibid.*, XI, 15.

Augustine claims we access the past through memory. What are memories of? They are memories of perceptions that we had before but are not having now. That is to say, the perceptions themselves occurred, but are no longer occurring. However, as temporal beings, we can remember that we once had a perception, say of a lectern, and recall that perception by supplying our imagination with an image from memory. The time during which we had the perception, say the lecture during which the lectern was used as an example to support some epistemological difficulty in Kant, is no longer occurring. Even if the same lectern is used as an example by the same professor in a lecture on the same topic in Kant years after the time in question, that particular time is still no longer in existence. Only our memory of that time exists, and it exists as memory attached to the mind of a particular temporal being experiencing that memory in the present. Thus, Augustine claims: “When we describe the past correctly, it is not past facts which are drawn out of our memories but only words based on our memory pictures of those facts, because when they happened they left an impression on our minds, by means of our sense-perception. My own childhood, which no longer exists, is in past time, which also no longer exists. But when I remember those days and describe them, it is in the present that I picture them to myself, because their picture is still present in my memory.”<sup>24</sup>

The future exists for us in a similar fashion. Temporal beings have expectations, and these expectations are images they give to themselves, generally based on current perceptions interlaced with memories of similar situations in the past and the ways in which the expectations had then were fulfilled. When events unfold as our expectations predicted they would, then we have correctly predicted the future. When they unfold

---

<sup>24</sup> Augustine, *Confessions*, XI, 18.

otherwise, then it will have turned out that we were in error when we made the initial prediction. In any case, we can rest assured that the future and past do exist, since all moments of time exist because of God's will. After all, prophets do see the future, and one cannot see what does not exist.<sup>25</sup> For us, though, the past and future exist insofar as they are bound to the present. The predictions I might make about the future are made in the present and represent what could occur (or will occur, depending upon how refined my powers of expectation and anticipation are). The same can be said of the past.

Therefore, the future exists as the future of the present and the past exists as the past of the present for temporal beings: "It might be correct to say that there are three times, a present of past things, a present of present things, and a present of future things. Some such different times do exist in the mind, but nowhere else that I can see. The present of things past is memory, the present of present things is direct perceptions; and the present of future things is expectation. If we may speak in these terms, I can see three times and I admit that they do exist."<sup>26</sup>

This explains how these things exist for us. And it explains how the future and the past can be real for us. For an eternal being like God, there is no past or future (perhaps, strictly speaking, there is no real present, either). Everything is at once. For temporal beings such as ourselves, though, not everything is at once. Only the present moment is. But we can experience images that were formed by present perceptions previous to the current perception. And we can form images based on things we perceive now that attempt to predict what we will perceive later on. This must be why Augustine says that when we speak of the future: "We do not see things which are not yet in being,

---

<sup>25</sup> Ibid., XI, 18.

<sup>26</sup> Augustine, *Confessions*, XI, 20.

that is, things which are future, but it may be that we see their causes or signs, which are already in being. In this way they are not future but present to the eye of the beholder, and by means of them the mind can form a concept of things which are still future and thus is able to predict them.”<sup>27</sup>

This is why it was so important for Augustine to begin his discussion of time with a discussion of the eternal nature of God. All moments of time proceed because God’s will mandates that they proceed. Obviously, this would include all moments of time experienced by us. So even if we understand the future as something dependent upon our anticipation, which is based on our present perceptions, or past perceptions held as images in memory, whatever moments actually come to be, come to be because God willed them to come to be. They already exist as non-temporal events for God, since every temporal event already exists for God in a non-temporal way. The eternal presence of God frames time, even if time as such only seems to exist because particular created beings were designed to be temporal beings. This helps Augustine’s theory avoid solipsism or any other kind of rampant subjectivism.

Having established that time exists within the framework of an eternal being who creates it, and having established that the past, present and future exist as modes of the present for temporal beings, Augustine now turns his attention to how time is measured. Many ancients, including Aristotle, thought time had something to do with motion. Whether it was the measure of motion in terms of the before and after, as Aristotle claims, or the moving image of eternity, as Plato claimed, time was often connected with

---

<sup>27</sup> Ibid., XI,18.

motion in some way. Augustine, however, follows Plotinus<sup>28</sup> in claiming that time is not the same as motion, nor is it connected to motion in any necessary way. That is, there does not have to be motion in order for there to be time. Time measures both motion and the lack of motion, rest. Furthermore, in order for time to measure anything at all, it cannot be the same as motion, or even necessarily bound up with motion, because then there would be no time without motion. But time exists whether there is motion or not. And in order to say that one motion took less or more time than another, the way time is measured must be independent of those motions. Otherwise, it would be difficult to compare the two motions with respect to time. This is why Augustine says: “we measure time as it passes. This enables us to say that a given space of time is twice as long as whatever period we take as the unit of measurement, or that the two are of equal duration, and we apply the same principle to any other space of time that we are able to measure.”<sup>29</sup>

If motion were necessary to time, or if the unit of measure that measures time was somehow dependent on motion, as is the case in Aristotle<sup>30</sup>, then it would not be possible to compare two times in any meaningful way. But it is possible. Furthermore, all times are part of the same time created by the eternal God who frames time. So rather than identify time with motion, Augustine says:

---

<sup>28</sup> Plotinus sums up the connection between motion and time, or the lack thereof, this way: “Now, to begin with, Movement, even continuous, has no unchanging extent (as Time the equable has), since – to take only motion in space – it may be faster or slower; there must, therefore, be some unit of standard outside it, by which these differences are measurable, and this outside standard would more properly be called Time.” Plotinus, *Enneads*, III, 7, 8.

<sup>29</sup> Augustine, *Confessions*, XI, 21.

<sup>30</sup> Aristotle says “time is not movement, but only movement in so far as it admits of enumeration.” *Physics*, 219a. He also says, in reference to the necessity of the perceiving/rational soul to time’s existence, that “the before and after are attributes of movement, and time is thee *qua* countable.” *Physics*, 223a. These aspects of Aristotle’s definition and discussion of time will be discussed in Chapter 2 below.

It is clear, then, that the movement of a body is not the same as the means by which we measure the duration of its movement. This being so, it must be obvious which of the two ought more properly to be called time. The same body may move at different speeds, and sometimes it is at rest, and we measure not only its motion but also its rest by means of time. We say that it was at rest for the same length of time as it was in motion, or that it stood still for twice or three times as long as it moved, and so on...<sup>31</sup>

All motions that are measured are measured by time, but time is independent of motion itself. This is why, according to Augustine, even when God made the Sun stand still until Joshua finished his battle, time still moved from future to past. That is, for Joshua (and the others involved in the battle, presumably), there was still time, they still had temporal experiences.<sup>32</sup> This time, though, went on regardless of the fact that the sun stopped. It went on because time, as it is measured, time is measured in the mind.

Time must be measured in the mind. This is because it is clear to Augustine that time is something that is measured, since some times are said to be longer or shorter than other times. Now only things that are extended can be measured. Motion is extended. But Augustine has already dismissed motion as the cause of time or the place where time is found. This only leaves the mind perceiving time. Time, therefore, must be some kind of extension of the mind:

It is in my own mind, then, that I measure time. I must not allow my mind to insist that time is something objective.<sup>33</sup> I must not let it thwart me because of all the different notions and impression that are lodged in it. I say that I measure time in my mind. For everything which happens leaves an impression on it, and this impression remains after the things itself has ceased to be. It is the impression that I measure, since it is still present, not the thing itself, which makes the impression as it passes and then

---

<sup>31</sup> Augustine, *Confessions*, XI, 24.

<sup>32</sup> This is in reference to the popular view that time was somehow governed by the movement of heavenly bodies. Augustine says of this: "I cannot therefore accept the suggestion that time is constituted by the movement of heavenly bodies, because although the sun once stood still in answer to a man's prayer, so that he could fight on until the victory was his, the sun indeed stood still but time continued to pass. The battle went on for as long as was necessary and was then over." *Confessions*, XI 23.

<sup>33</sup> Clearly, Augustine does not mean that time only exists in his mind, or even in human minds exclusively. He simply means that it does not exist in either objects or their motions.

moves into the past. When I measure time it is this impression that I measure. Either, then, this is what time is, or else I do not measure time at all.<sup>34</sup>

This is further illustrated by Augustine's famous consideration of his mentor's psalm: Deus Creator Omnium. As he recites the psalm, those syllables which are yet to be recited exist in the future as expectation. That future is attached to the present of whomever is reciting the psalm, since presumably that person, knowing the psalm, expects to utter the latter syllables after the former syllables. As Augustine recites the psalm, those syllables already recited move into the past. Augustine remembers saying them, though, so an image remains with him, in his mind, of those syllables being said before the syllables he is presently speaking.

Therefore, what was held in expectation passes through present perception and turns into memory. What was in the future passes through the present and becomes the past. In order to measure this, one needs to measure the time it took for the anticipated events to become memories, which means one needs to measure the extension of the mind in its temporal experience. This is what Augustine calls the "distention" of the mind. And this is the definition he finally settles on for time. Time, for Augustine, is a distention of the mind. However, that is only time as it is experienced by temporal beings. All the moments of time itself exist in the eternal presence of God, which frames and creates all the temporal moments at once. This would appear to give time an "objective" (in the sense of existing by a power other than our own) standing. For us, though, time is a synthesis of expectation, perception and memory.

This theory of time as a "distention of the mind" bears a remarkable similarity to the theories of time found in Kant and Husserl. Husserl even began his treatment of

---

<sup>34</sup> Augustine, *Confessions*, XI, 27.

internal time consciousness with deference to Augustine: “The analysis of time-consciousness is an ancient burden for descriptive psychology and epistemology. The first person who sensed profoundly the enormous difficulties inherent in this analysis, and who struggled with them almost to despair, was Augustine. Even today, anyone occupied with the problem of time must still study Chapters 14-28 of the *Confessions* thoroughly. For in these matters our modern age, so proud of its knowledge, has failed to surpass or even to match the splendid achievement of this great thinker who grappled so earnestly with the problem of time.”<sup>35</sup> Danne W. Polk makes this connection explicit as well, point out that: “Augustine’s insight, which Husserl attempted to make even more explicit, is that an object is the product of an act of synthesis which reaches beyond any fragmented ‘now’ by incorporating both past and future elements. Without these ‘missing’ aspects, the instant is merely an inadequate portion of the object. Without the other’s ‘non-existent’ aspects, the object falls apart.”<sup>36</sup> This shows that Augustine had a tremendous influence on the early 20<sup>th</sup> century phenomenological movement, of which the early Heidegger was a part. And it is my contention that Heidegger was well aware of Augustine’s influence, but for some reason he chose not to explicitly discuss it in his early works on temporality. To further support this claim, I will look at Augustine’s influence on the “ordinary” concept of time, particularly as that concept is expressed in Kant and classical mechanics. First, however, I will answer some of the more prominent objections by what Bergson called “spatial” thinkers on time to Augustine’s theory.

---

<sup>35</sup> Husserl, 3. It is of some interest that these lectures were published in 1928, and that Martin Heidegger was credited as being the editor. He also wrote a little introduction to them. See Barnett’s introduction to the volume, page xii.

<sup>36</sup> Polk, 66-67. He continues on to say that there is a common theme from Augustine to Husserl to Heidegger, and that the definition of time as a distention of the mind forms the basis for Husserl’s intentionality and Heidegger’s being-in-the-world. More will be said on this below, particularly in Chapter 4 as it concerns Heidegger.

## PART II: OBJECTIONS TO AUGUSTINE'S THEORY OF TIME FROM THE 'SPATIAL' TRADITION

Given that Husserl specifically mentions Augustine's theory of time, and given that phenomenological theories of time like Husserl's tend to be centered around the individual subject, it should not come as much of a surprise that Augustine's theory of time was of great influence on thinkers of this sort. That is, for those who thought that time has something to do with the individual subject and its experiences, Augustine's theory of time as a distention of the mind would have been an attractive starting point. For those who hold that time exists independently of human minds (or any other subjects' minds, whomever or whatever they may be), the definition of time as a distention of the mind would not have seemed particularly remarkable. In fact, it might seem quaint at best, and solipsistic at worst, to hold such a view. This seems to be the prevailing opinion among those who espouse what Bergson calls the traditional "spatial" view of time. Because Augustine's theory is "subjective," it is not a good theory of time.

I have said, though, that Augustine's theory of time contains many of the attributes found in both "objective" spatial theories of time, as well as subjective spatial theories of time. This influence will be brought to light by first examining some of the standard objections spatial thinkers have made to the theory. In particular, I will look at objections by Bertrand Russell, G. S. Whithrow, and Etienne Gilson. In the next Part, I will show how Augustine not only answers these objections, but actually provides the early theoretical mechanisms upon which these theories were founded in the first place.

Russell's criticism of Augustine is the most abrupt. For Russell, Augustine's theory was hopelessly subjective because it had no sense of history apart from the individual engaged in temporal experience. That is, on Augustine's theory, there is not time for matter independent of human perception. This means, for someone like Russell, Augustine might as well be claiming that nothing temporal ever happened, apart from those temporal events experienced by human beings. But this kind of theory even fails on the subjective level, says Russell:

St. Augustine, whose absorption in the sense of sin led him to excessive subjectivity, was content to substitute subjective time for the time of history and physics. Memory, perception, and expectation, according to him, made up all that there is of time. But obviously this won't do. All his memories and all his expectations occurred at about the time of the fall of Rome, whereas mine occur at about the time of the fall of industrial civilization, which formed no part of the Bishop of Hippo's expectations. Subjective time might suffice for a solipsist of the moment, but not for a man who believes in a real past and future, even if only his own. My momentary experience contains a space of perception, which is not the space of physics, and a time of perception and recollection, which is not the time of physics and history. My past, as it occurred, cannot be identified with my recollections of it, and my objective history, which was in objective time, differs from the subjective history of my present recollections, which, objectively, is all *now*.<sup>37</sup>

Not only is it the case that someone like Augustine cannot say anything about events separate from himself, it would appear that, for the most part, he cannot even say anything meaningful about the temporal events he has experienced or is experiencing now. According to Russell, Augustine's theory is a theory of time fit for someone perpetually dreaming. That is to say, because Augustine defines time as a distention of the mind, time becomes nothing more than our own internal perception of things, which is to say, it becomes little more than our imagination. But actual events have happened, regardless of what I remember or believe about them; and actual events will happen,

---

<sup>37</sup> Russell, 212.

regardless of what I hope or expect will be the case. Therefore, Augustine's theory is mere solipsism, and as such, it should be dismissed.<sup>38</sup>

Whitrow raises a similar objection to Russell (minus the *ad hominem*s). He finds that Augustine's definition of time is too imprecise to be practically useful. That is, he does not see how Augustine's definition of time will yield any standard measure of time that could be useful in a general way, since it is always the measurements of a particular subject or perceiving soul. According to Whitrow, this was better than Aristotle was able to do, since Augustine's theory, although imprecise, at least does not make the mistake of tying time to motion.<sup>39</sup> And it does say something about how we experience time. It just does not really get to what time actually is, or how we could come up with any kind of accurate measure of it. Whitrow says: "St. Augustine thus came to the conclusion that we can measure times only if the mind has the power of holding within itself the impression made on it by things as they pass by even after they have gone...Although St. Augustine failed to explain how the mind could be an accurate chronometer for the *external* order of physical events, he must be regarded as the great pioneer of the study of *internal* time."<sup>40</sup> This continues the distinction between time as we experience it and time as it is apart from our experience, which was Russell's point in making the distinction between "subjective" and "objective" time. It also shares something in common with Gilson's objection, since it recognizes the difference between internal and external time, and the fact that Augustine's definition of time as a distention of the mind was able to give some account of this internal time.

---

<sup>38</sup> Ibid., 213-15

<sup>39</sup> Whitrow, 47-48.

<sup>40</sup> Ibid., 49.

Russell and Whitrow are both from the analytic school of temporal thought. Their objections to Augustine stem from an understanding of time worked out by classical mechanics that held time to be something devoid (at least potentially) of content that exists in the universe in much the same fashion that space exists. Gilson's objection is more Kantian. He claims that there may be such a thing as objective time in Augustine's theory. It just so happens that it is impossible for us to know anything about it according to that theory. Gilson claims that, since the past and future are bound to a present which itself is only an instant, it is only by an act of mental synthesis that Augustine is able to come to any understanding of time. In other words, it is only by conceiving time as a distention, which is a representation affected by the mind, that human beings can have any relationship with time whatsoever. Since this relationship is still one of representation. Augustine's theory, then, does not reveal the reality of time, but only our experience of time: "But we also see what superhuman efforts are required of us if we would understand the relation of created time to creative eternity. Man can do this only on condition that he finds a haven for the mind beyond the reach of time's tide, that he becomes moored, so to speak, and by gathering together into a permanent present all things that are no more and that are yet to be, leaves time behind to cross over, alone, into eternity."<sup>41</sup>

God perceives time as it really is. Humans perceive time as a distention of their minds, which is only an image of time, not time itself. Time remains subjective then, but its subjectivity is more in line with Kant's notion of subjectivity than with the derivative notion subjectivity that Russell ascribes to Augustine. Much like Kant's phenomenal/noumenal split, time gives us an idea of eternity, but not its experience. This

---

<sup>41</sup> Gilson, 195.

means we cannot truly experience time itself, we can only experience the appearance of time that is generated in the distention of the mind. Only God, who is eternal, can know both time (which God creates) and eternity (which God experiences). Thus Gilson says: “Where we fail is in our attempt to get a clear picture of the link between time and eternity. In this case it means comparing two modes of heterogeneous being, and we must add that one of these, namely that of God, escapes us almost entirely. Since we ourselves are subject, even in our minds, to the law of becoming, we cannot picture how that which is permanent exists.”<sup>42</sup> So even though we attempt to know eternity, we always come up short. This means our understanding of time will lack the consistency and unity necessary to make the theory sufficiently objective.

These sorts of objections to Augustine’s theory are typical of the spatial tradition. But I believe Augustine’s theory accounts for all of them and answers all of them. In fact, Augustine’s theory of time provides all of the mechanisms necessary to an objective theory in Russell’s sense and Gilson’s sense. That is, Augustine provides sufficient resources in his theory of time to influence those “objective” theories Russell has in mind when he talks about world history and physics, namely, the theory of time that pervades classical mechanics. And, Augustine’s theory also has the mechanisms to influence internal or rationally subjective theories of time, such as Kant’s. In the next Part, I will show how Augustine answers the objections described above from the spatial theory.

### PART III: RESPONSES TO THE STANDARD OBJECTIONS FROM WITHIN THE SPATIAL TRADITION

---

<sup>42</sup> Ibid., 191.

Augustine's texts already contains answers to the standard objections. Both Teske<sup>43</sup> and Ross<sup>44</sup> use a textual approach to respond to those who accuse Augustine of solipsistic subjectivism and the like. In particular, Augustine's other texts on time (*City of God* and *On Genesis Against the Manichees*) can be used to support the claim that the theory of time of develops in *Confessions* is an objective theory of time after all. In this Part, I will follow them in using that approach to show that Augustine's theory is not subjective in the manner Russell suggests. Nor is it the case that it lacks the external objectivity Whitrow and Gilson say it does. Rather, Augustine's theory has an objective component that mandates time's existence without the mandating the existence of any particular temporal being. This is why it was possible for Augustine's theory to become influential on the theory of time that pervades classical mechanics. And this is why it lays at the foundation of all spatial theories of time.

As I discussed above in the examination of Augustine's theory of time in the *Confessions*, all moments of time exist all at once for God. This is because, as an eternal being, God has no temporal presence. Everything that is simply is all at once, as far as God would be concerned. In fact, one could say that even to say "everything exists all at once for God" is not quite appropriate, since the phrase "all at once" seems to imply some kind of temporal experience. Nevertheless, God exists without time, which means, from a temporal point of view, God exists before time. All time is contained within God's eternal frame. Therefore, time has an existence independent of any particular temporal (that is, human) beings – or even all temporal (that is, human) beings taken

---

<sup>43</sup> Teske has written several important works in this area. In addition to "The world-Soul and Time in St. Augustine," and *Paradoxes of Time in St. Augustine* (cited above), he also did a translation of Augustine's *On Genesis Against the Manichees* that offers a number of valuable insights.

<sup>44</sup> Ross, 191-205.

together. All that is needed for time to exist is the fact that God creates it and sets things in motion within it. Thus, in *City of God*, Augustine says: “if eternity and time are rightly distinguished by the fact that time does not exist without some movement and change, whereas in eternity there is no change, who does not see that there could have been no time had not some creature been made which, by some movement, could bring about change?”<sup>45</sup> And in *On Genesis Against the Manichees*, he adds:

But even if we believe that God made heaven and earth at the beginning of time, we should certainly realize that there was no time before the beginning of time. For God also made time, and thus there was not time before he made time. Hence, we cannot say that there was a time when God had not yet made anything. For how could there be a time that God had not made since he is the maker of all time? And if time began to be with heaven and earth, there cannot be found a time when God had not yet made heaven and earth...But a time could not pass that God had not already made, because he cannot be the producer of time unless he is before time.<sup>46</sup>

Teske believes that these passages support the claim that time existed before there were human beings to have mental distortions. If this is the case, then the theory does not begin as subjectively as traditional objections would have it. Unfortunately, though, this does not prove that time remains objective once human beings arrive on the scene. Individual humans, by experiencing time as a distortion of the mind, could conceivably alter its nature in such a way as to make time itself, on Augustine’s theory, subjective in the way Russell claims it is.

To save Augustine from this, Teske imports the notion of the world soul into Augustine. Or rather, Teske claims that the notion of the world soul was already there, and analyzes the concept. He says that, after a visit to the *libri Platonicorum*, Augustine returned with a well-worked-out doctrine of an eternal and incorporeal God as well as the

---

<sup>45</sup> Augustine, *The City of God*, 456

<sup>46</sup> Augustine, *On Genesis against the Manichees*, 49-50.

concept of the world soul. Teske claims that Augustine got these notions from Plotinus. Neither of these concepts had yet been fully worked out, yet alone accepted as standard doctrine, before Augustine was able to successfully import them into Christian theology. And they had the added benefit of answering Manicheen objections concerning what God was doing before the creation of time.<sup>47</sup> As it pertains to Augustine, then, according to Teske, the world soul in Augustine could be one or several of three things. First, it could be a unification of all human souls. Second, it could be a single soul of tremendous psychic magnitude and importance upon which other, individual human souls depend. Or finally, it could be a rational principle for the world itself.

Teske claims that Augustine himself had difficulty with the notion of a world soul. In some places, Augustine claims the notion can be neither accepted nor rejected.<sup>48</sup> In other places, Augustine struggles to clarify his neoplatonic version of the soul as something incorporeal.<sup>49</sup> This causes him to apparently fuse the notion of individual incorporeal souls with the idea of a Plotinus-like world soul:

For if I tell you that there is one soul, you will be disturbed because in one person it is happy and in another unhappy, for one and the same thing cannot be both happy and unhappy at the same time. If I say that it is one and many at the same time, you will laugh, and I would not easily find a way to put a stop to your laughter. But if I say that souls are simply many, I shall have to laugh at myself, and I will endure less well my dissatisfaction with myself than your dissatisfaction.<sup>50</sup>

Teske believes this tipped the balance in Augustine's mind toward the notion of a world soul, particularly since Augustine goes on to describe the contemporary Christian

---

<sup>47</sup> See Teske's footnote in Augustine, *On Genesis Against the Manichees*, fn 49.

<sup>48</sup> Teske, *Paradoxes of Time in St. Augustine*, 51.

<sup>49</sup> It is important to keep in mind that the conception of the soul as immaterial was imported into Christian theology by Augustine, although there are passages in the epistles of Paul of Tarsus that suggest something like the neoplatonic notion Augustine has in mind.

<sup>50</sup> Augustine, *De Quantitate animae*, cited in Teske, 52.

community in this manner: “If, then, when we think the same thing and love each other, my soul and your soul become one soul, how much more is God the Father and God the Son one God in the source of love.”<sup>51</sup> So, because Augustine has this notion of a world soul, he can then be said to have a unified notion of time that does not depend upon any individual human soul. This would make Augustine’s theory of time an objective theory of time, according to Teske.<sup>52</sup>

Other commentators agree that Augustine has an objective theory of time, but they do not agree that it involves, much less necessitates, the concept of a world soul. Quinn, for example, admits that Augustine was influenced by Plotinus. However, he does not think this involves Plotinus’ notion of a world soul. Rather, he claims that Augustine’s theory of time springs from natural experience. This is why, according to Quinn, Augustine seeks to define the natural experience of time as we experience it. Plotinus’ theory, though, is a completely metaphysical theory. It cannot bridge the gap between our physical experience of time and the eternal nature of the One upon which it is based. This makes Augustine’s theory objective, because our experience of time is based on something in the world that would presumably be there without us experiencing it, without making it something purely mental or even mentally inaccessible. This is why Quinn says: “Whereas in Augustine the distention of the soul is a psychic rendering and counterpart of natural intervals, the metaphysical definition of time in Plotinus splits the soul off from nature. Consequently, a certain metaphysical aloofness from natural fact entangles him in insuperable paradoxes...”<sup>53</sup>

---

<sup>51</sup> Ibid., 54.

<sup>52</sup> Ibid., 54.

<sup>53</sup> Quinn, 106.

Ross proposes a third alternative. He claims that time is a kind of extension analogous to space, according to Augustine. It is only the sequential ordering of time that requires the presence of a human mind.<sup>54</sup> This is why Augustine starts the discussion of time with a discussion of God's eternal presence. It is God's eternal presence that frames time, and it is God's will that creates and sustains time. The input of the human mind, and the definition of time as a distention of that mind, only comes after God's presence is described. According to Ross, this means that what Augustine had in mind was a theory of time that did not depend upon human minds for the existence of time.<sup>55</sup> In addition, if what Augustine had in mind was something truly subjective, as people like Russell claim, then Augustine would have described 'times' in his works, rather than a singular 'time.' Finally, even if time seemed to be something subjective, according to Augustine, everything, including all human subjects, is still subject to the creative power and sustaining force of God's will. In other words, human minds, like everything else, are created by God. Therefore, there is still something objective, even in the most subjective interpretation of Augustine's theory of time.<sup>56</sup>

This interpretation by Ross not only answers the objections of people like Russell and others, but it points the way to the argument I will advance in the final part of this chapter. Augustine's theory, which includes a number of spatial components, is the theoretical basis of both major modern theories of time: Kant's theory and the theory that pervades classical mechanics. It was these theories that Bergson had in mind when he critiqued what he called "spatial" theories of time. And it must have been these sorts of

---

<sup>54</sup> Ross, 192.

<sup>55</sup> Ibid., 193.

<sup>56</sup> Ross, 193.

theories Heidegger really had in mind when he discussed the “ordinary” conception of time in his early works.

#### PART IV: AUGUSTINE’S INFLUENCE ON THE TWO MAJOR MODERN THEORIES OF TIME

A number of reasons can be given as to why Augustine’s theory of time would have been influential on a theory of time such as Kant’s. Both theories seem to make time, at least as far as time is experienced by us, the province of the rational subject (although Augustine did not use that precise term, of course). Both theories hold that the time we experience is an homogenous medium that measures experience in a uniform way. And both theories make reference to some kind of universality (God, in Augustine’s case, the *a priori* nature of time as a condition for all possible experience in Kant).

To attempt to connect Augustine with classical mechanics, though, seems like a difficult task from the outset. The theory of time that pervades classical mechanics hardly seems related to a “distention” of the mind. Nor does it seem to be the case that something like classical mechanics would be very concerned with the presence of an eternal being whose existence frames time and whose will creates and sustains time, even if particular thinkers in the tradition of classical mechanics were themselves very religious.<sup>57</sup> Additionally, although Augustine does say that time is an homogenous unit, he never defines that unit in an kind of systematic way. So time is the measure of motion independent of any particular motion, but he does not say what exactly that unit is, as

---

<sup>57</sup> For example, it is well known that Newton spent much of his professional life attempting to do things like calculate the tonnage of Noah’s ark. But even if he did spend a lot of time on such questions, it would seem that the scientific principles he constructed stand or fall independently of his religious convictions.

Whitrow pointed out.<sup>58</sup> Finally, even if time exists in some kind of “objective” fashion on Augustine’s theory, it is still a finite time. This is because, according to Augustine, who follows the standard view of Christian Theology, time has a definite beginning and a definite end. The time of the universe as a whole, then, would be finite.<sup>59</sup> Classical mechanics, though, holds that time itself is an infinite medium. An infinite medium cannot have either a beginning or an end.

Certainly these would be (and to some extent, were) the sorts of objections one could raise against the attempt to tie the theory of time pervasive in classical mechanics to the theory of time found in Augustine. And on the surface they seem persuasive. Upon closer examination, though, the apparent gap between Augustine’s theory of time and the theory of time that pervades classical mechanics dwindles significantly. According to Quinn, Augustine’s description of time is a description of natural experience. Certainly classical mechanics was also attempting to describe nature. It just remains to be seen whether the nature each theory describes is the same.<sup>60</sup> Ross maintains that, according to Augustine, time is really an extended, non-sequential phenomenon. The sequential nature is supplied by the mind in its experience of time. But time itself is spread out in the same manner of space.<sup>61</sup> Classical mechanics also viewed time as essentially spread out. In fact, Laplace would go so far as to say that all moments of time are knowable to a being with sufficient intellect and perception of present circumstances and their causes.<sup>62</sup>

---

<sup>58</sup> Whitrow, 49.

<sup>59</sup> See Augustine, *Confessions*, XI, 1-15; and *City of God*, XI, 4-7.

<sup>60</sup> Quinn, 106-8.

<sup>61</sup> Ross, 192-3

<sup>62</sup> For a discussion of Laplace’s theory, see Capek, *The Philosophical Impact of Contemporary Physics*.

I will advance a third interpretation, although this third interpretation will rely heavily on the interpretation offered by Ross. I will claim that the eternal presence ascribed to God by Augustine acts as a “frame” for temporality. This “frame” works whether time is finite or infinite. And it works in a similar fashion to how space works in classical mechanics. This is because the framing of time by an omni-present entity, whether it has a personality or not, creates temporal certainty for both the past and the future. This would make possible any mathematical formula for time, although Augustine himself does not get into the specifics of what such a formula might be. By guaranteeing future events through God’s eternal presence, though, he sets the metaphysical grounds for such a unit of measurement. So even if the notion of space in classical mechanics lacks the creative personality of Augustine’s use of God, it still functions in more or less the same fashion. That is, space, according to classical mechanics, guarantees the predictability of temporal events. This predictability is internalized in our calculations of time, according to classical mechanics, just as our experience of time is internalized into the mental synthesis Augustine calls a distention of the mind.

Classical mechanics developed a model of absolute time. Absolute time is a uniform, homogenous medium that measures events that occur within it. This is different than a theory that would suggest time exists only when there is motion, as Aristotle’s theory states. Time, for theorists of classical mechanics such as Newton, is something that exists independent of moving things. Rather, time is that through which things move. It does not depend upon anything else for its existence: “Absolute true and mathematical time, of itself and by its own nature, flows uniformly, without regard to

anything external.”<sup>63</sup> Time, on this theory, is everywhere the same. The unit that measures time might change, but that which the unit represents does not. In fact, the specific unit of time is rather arbitrary. So long as it provides a clear understanding of temporal flow to whomever happens to be using it: “Relative, apparent and vulgar time, is some sensible and external measure of absolute time, estimated by motions of bodies, whether accurate or unequable, and is commonly used instead of true time; such as an hour, a day, a month, a week.”<sup>64</sup> According to Newton, only pure mathematics could hope to offer an accurate picture of true or absolute time. And, since mathematics is essentially devoid of concrete content, that is, since mathematics does not rely on things actually being the case in the world of experience, time, as something that can be represented by true mathematics, becomes something that can be (and in reality, is) devoid of concrete content in the world of experience.

Capek describes this view of time by comparing it to the way the same theorists viewed space: “According to this view time flows no matter whether something changes or not; in its own nature time is empty and is only in an accessory and contingent way filled by changes. Changes are in time; they are not time itself. This distinction between time and concrete becoming is at the very foundations of classical physics. As space does not imply matter, time does not imply motion nor change in general.”<sup>65</sup> One does not find support for this view in Aristotle. For Aristotle, time could not be considered independent from motion or change. According to Augustine’s theory of time, though, neither motion nor change is a necessary component for time itself, which is why he says: “It is not your [God’s] will that I should agree to the proposition that time is constituted

---

<sup>63</sup> Isaac Newton, *Mathematical Principles of a Natural Philosophy*, Scholium I, cited in Capek, 37.

<sup>64</sup> *Ibid.*, 37.

<sup>65</sup> Capek, 36.

by the movement of a material body. For no body moves except in time...For when a body moves, it is by time that I measure how long its motion lasts, from the time when it begins to move until its movement ceases.”<sup>66</sup> Augustine’s theory seems a more appropriate vehicle for one of the core elements of the theory of time that pervades classical mechanics, then, because he considers time to be independent of motion or change, whereas Aristotle thought time was dependent on motion or change.<sup>67</sup>

Further evidence for this is found when we consider the way both Augustine and classical mechanics treat the notion of rest. Rest, in this sense, is the absence of motion or change. For Aristotle, the fact that a soul does not notice motion or change is evidence for that soul that time has not passed. For Augustine and classical mechanics, though, time is external to motion because it measures motion. If time and motion were the same, or if time was an attribute of motion, then time could not measure motion in a uniform, homogenous way. This is why Isaac Barrow, one of Newton’s mentors, said the following about the relationship of time to motion:

But does time imply motion? Not at all, I reply, as far as its absolute, intrinsic nature is concerned; no more than rest; the quantity of time depends on neither essentially; whether things run or stand still, whether we sleep or wake, time flows in its even tenor. Imagine all the stars to have remained fixed from their birth; nothing would have been lost to time; as long would that stillness have endured as has continued the flow of this motion. Before, after, at the same time (as far as concerns the rise and disappearance of things), even in that tranquil state would have had their proper existence, and might by a more perfect mind have been perceived.<sup>68</sup>

This statement is strikingly similar to the following passage from Augustine’s treatment in Book XI of the *Confessions*:

---

<sup>66</sup> Augustine, *Confessions*, XI, 24.

<sup>67</sup> Aristotle, *Physics*, IV 219a.

<sup>68</sup> Isaac Barrow, *Mathematical Works of Isaac Barrow D.D.*, Vol II, 160f; cited in Capek, 36.

It is clear, then, that the movement of a body is not the same as the means by which we measure the duration of its movement. This being so, it must be obvious which of the two ought more properly to be called time. The same body may move at different speeds, and sometimes it is at rest, and we measure not only its motion but also its rest by means of time. We say that it was at rest for the same length of time as it was in motion, or that it stood still for twice or three times as long as it moved, and so on, whether we make an exact calculation or a rough estimate – ‘more or less’, as the saying goes.<sup>69</sup>

This shows a common theme running through both theories. Time is external to motion. It cannot arise from considerations of local motion, any more than pure mathematics can arise from considerations of local problems of addition. We might gain insight into pure mathematics by such means as adding things together in the world of experience. But the fact that we do so in no way implies that pure mathematics depends on such experiences in the world for its existence or for the truth of its propositions. Martin Bertman also recognizes this common theme, which he sees as Platonic. Discussing the fact that motions are in time but not constitutive of time, he says: “The motion of all created things is in time but, from a Platonic standpoint (whatever Plato himself held) no motions make time. If this were not so the ideal, that is, mathematical measurement of things would arise out of the local motions rather than measure those motions. Time must have an ideal or absolute nature similar to mathematical entities for Platonists, including such modern Platonists as Galileo and Newton.”<sup>70</sup> Time, therefore, is not determined by motion, because it is what determines the rate of motion.

If this is the case, though, then where does time occur, or through what? Time measures motion, and is not dependent upon motion. Nor is time dependent upon human consciousness, according to classical mechanics. Therefore, time must occur within

---

<sup>69</sup> Augustine, *Confession.*, XI, 24.

<sup>70</sup> Martin A. Bertman, “Augustine on Time, with Reference to Kant,” *Journal of Value Inquiry*, Vol. 20, 1986, 232.

something. According to classical mechanics, that within which time occurs is absolute space. This concept of absolute space is similar to Augustine's use of the eternal presence of God as a frame within which time occurs. In fact, the descriptions of absolute space offered by classical mechanics use much of the same language as descriptions of God's eternal presence. For example, another of Newton's mentors, Henry More, described space this way: "One, simple, immovable, eternal, complete, independent, existing by itself, existing through itself, incorruptible, necessary, measureless, uncreated, unbounded, incomprehensible, omnipresent, incorporeal, all-pervading and all-embracing, Being in essence, Being in act, Pure act."<sup>71</sup> And More recognized that this description was similar to descriptions of God offered by theologians.<sup>72</sup> It provided a backdrop against which Newton offered a similar description of absolute space: "Absolute space, in its own nature, without regard to anything external, remains always similar and immovable."<sup>73</sup> These notions of absolute space were necessary to guarantee the mathematical certainty of absolute time. Without the stability provided for by absolute space, calculations made concerning time would be arbitrary. However, space is immovable and external to temporal considerations. That is, space is eternal. Capek believes this notion of eternal space was necessary in order to make sense of how and why time proceeds the way it does, according to classical mechanics:

It is fairly well known how More's divinization of space influenced Newton's philosophy of nature, in which absolute space is regarded as an attribute of God – the sensorium Dei, by which the divine omnipresence as well as the divine knowledge of the totality of things is made possible. But not infrequently this was dismissed as a mere private theological fancy, superadded in an artificial manner to Newton's scientific achievements. Not so. If we disregard Newton's theological language, we

---

<sup>71</sup> Henry More, *Enchiridion Metaphysicum*, London, 1671, VIII; cited in Capek, 10.

<sup>72</sup> More, in Capek, 10.

<sup>73</sup> Newton, in Capek, 7.

see clearly that he merely confused the logical priority of space to matter with an ontological priority... The logical, if not the temporal, priority of space to its physical content was a dogma which few dared to doubt. For Newton as for Gassendi and More, this priority was temporal as well; absolute space being an attribute of God, naturally had to exist prior to the creation of the world.<sup>74</sup>

Without space, then, there would be no time, according to classical mechanics. Just as without God, there would be no time, according to Augustine.

These descriptions of absolute space find no support in Aristotle. Aristotle thought that an infinitely extended anything was an absurdity. For Aristotle, space was finite. Even if one could conceive of something as infinitely divisible, to extend it infinitely would cause problems. This concept, as it is found in classical mechanics, could only have come from a reworking of the traditional notion of eternity. This notion, considering the way infinite, absolute space was described in divine-like tones, and the admissions of the linguistic and even functional similarities between descriptions of God's eternal presence and the infinite, non-temporal existence of absolute space, is much closer to what is found in Augustine's theory of time. All temporal moments, however they are mathematically expressed, happen within and because of space, according to classical mechanics. All temporal moments, however they are experientially understood, happen within and because of the eternal presence of God, according to Augustine. Therefore, the influence of Augustine would be paramount over Aristotle, whose theory does not seem compatible at all with classical mechanics.

By claiming mathematical certainty for time, classical mechanics ends up with a theory of time on which the past, present and future have to be said to exist all at the same time in some real way. That is, even though we, as temporal beings, only

---

<sup>74</sup> Capek, 10.

experience time as present, the past and the future must also exist in order for the mathematical certainty to be the case. Otherwise, predictions made based on the knowledge of events now, assuming that the knowledge was accurate, would only be true by accident. Classical mechanics was not interested in theories that were true by accident, though. It wanted certainty in all phases of time. This sort of certainty was not possible on Aristotle's theory of time, because Aristotle's theory of time is too bound to the concrete experience of perceiving souls. For Augustine, though, time is predictable because all moments of time already exist within the eternal presence of God. God's eternal presence gives reality to both the past and the future, since the past and the future, just like any moment of time, exist by God's will, which always exists all at once. For us, who exist temporally, the past and the future are accessible in different ways, such as anticipation and memory. But in order for these things to be true, they must refer to things that do exist. Otherwise, their truth value would only be accidental. This cannot be the case, however, as Augustine claims: "how do prophets see the future, if there is not yet a future to be seen?...In the same way people who describe the past could not describe it correctly unless they saw it in their minds, and if the past did not exist it would be impossible for them to see it at all. Therefore both the past and the future do exist."<sup>75</sup>

Regardless of whether it seems like this past and future Augustine describes exist only in the human mind, or whether, as seems more likely to be the case, they exist independent of human minds, it is definitely the case that Augustine believed the past and the future do exist. And, since God's eternal presence frames time, and every moment, including all the moments experienced by temporal beings, passes because God wills it, and all these moments are as one for God's eternal presence, it would seem that a more

---

<sup>75</sup> Augustine., *Confessions*, XI, 17.

accurate interpretation of Augustine's theory would hold that the past and the future do exist, and they are the past and the future of a particular present depending upon who is experiencing that present. But considered independently, they are all present to God. In a similar fashion, absolute space frames absolute time, according to classical mechanics. Therefore, just as all places in space exist all at once, all moments in time, from the point of view of space, exist all at once. We, as temporal beings, may only experience certain moments as occurring before and after. But then, we only experience certain places in space at any given time. So, too, do we only experience certain moments of time in a given space. Because of this, should a particular intellect have sufficient knowledge of the temporal and/or spatial situations, that individual would be able to say things about both the past and the future, from the point of view of that particular moment, which would be completely accurate. This accuracy, in order to be the kind of accuracy acceptable to classical mechanics, could not and would not have depended upon any external or accidental feature. It must necessarily be the case that a sufficiently powered intellect with sufficient knowledge of the temporal and spatial circumstances would be able to make true statements about past and future events. This is where the theory of time that pervades classical mechanics logically finds its resting place, and its fullest expression, in the theory of Laplace.

According to Laplace, all temporal points could be known in the same way that all spatial points could be known. That is, a sufficiently powerful intellect would have all moments in time, past, present and future, before him at once. In fact, for such an intellect, the distinction between past, present and future might seem arbitrary. If all moments of time are known with the same certainty that all locations in space can be

known, then the only difference between past, present and future, theoretically, would be the temporal “location” of the mind performing the calculation. The knowledge of the events themselves, however, would be no different for such an intellect, regardless of when they occurred. That is, if time is extended like space, then the intellect which grasps this is only “in the present” by accident, because all moments of time are equally knowable to such an intellect, which therefore makes them all equally available.

According to Laplace: “An intellect which at a given instant knew all the forces acting in nature, and the position of all things of which the world consists – supposing the said intellect were vast enough to subject these data to analysis – would embrace in the same formula the motions of the greatest bodies in the universe and those of the slightest atoms; nothing would be uncertain for it, and the future, like the past would be present to its eyes.”<sup>76</sup> Time, on this theory, is really just another dimension of space. This makes Laplace’s theory of time, which is the culmination of the theory of time that pervades classical mechanics, a “timeless” theory of time.

This theory of time is similar to the interpretation of Augustine’s theory of time offered by Ross. Laplace believed all moments in time could be represented mathematically, after the manner spatial co-ordinates. This has the effect of making the sequential ordering of time arbitrary, or at best, a matter of perspective. That is, for Laplace, the past and future of any given point of time is relevant only to the extent that a particular observer happens to be temporally located in such a way as to declare one moment past and one moment future. The moments themselves, though, exist independently of their being so ordered. Ross offers the same interpretation of Augustine’s theory of time. He claims that, according to Augustine, time was given all at

---

<sup>76</sup> Laplace, *Introduction a la theorie analytique des probablilites*, (Paris, 1886), 6; cited in Capek 122.

once. Only the ordering of time is dependent upon human intervention: “Augustine’s model of time is that of an extended but non-sequential dimension of reality, analogous to space. On this interpretation time is absolutely real; only its sequentialization is mind-dependent.”<sup>77</sup>

For a being that could perceive time all at once, though, this sequentialization would be unnecessary. For Augustine, this being would be God. In Laplace, this being becomes a sufficiently powerful and well-placed observer with a certain knowledge of mathematics. But even for Augustine, it is theoretically possible that even a non-divine mind could grasp time in a more-or-less eternal fashion, in just the same way Laplace thought: “Surely if there is a mind that so greatly abounds in knowledge and foreknowledge, to which all things past and future are as well known as one psalm is well known to me, that mind would be an exceeding marvel and altogether astonishing. For whatever is past and whatever is yet to come would be no more concealed from him than the past and future of that psalm were hidden from me when I was chanting it: how much of it had been sung from the beginning and what and how much still remained till the end.”<sup>78</sup>

Either way, it seems clear enough that a similar theory runs through both thinkers. And it seems impossible that Aristotle’s theory of time could be this theory. Augustine, though, has all the mechanisms in place to serve as a foundation for this theory, as well as classical mechanics in general. Aristotle’s theory of time is too dependent upon motion, too bound up with a rational soul, and too concrete to serve as a foundation for the theory of time that pervades classical mechanics. Augustine’s theory, though, has a spatial-like

---

<sup>77</sup> Ross, 192.

<sup>78</sup> Augustine, *Confessions.*, XI, 15.

presence that frames temporality, namely the eternal presence of God. This eternal presence gives certainty to both the existence of temporal moments in relation to human minds and experiences and to the existence of those moments in the absence of direct human experience. In other words, time is an objective theory for both, and in its essence, behaves the same for both. Therefore, it is far more likely that it is Augustine that lies at the heart of classical mechanics, despite what some 20<sup>th</sup> century thinkers critical of Augustine may think about his theory and its alleged subjectivity.

A similar comparison can be made between Augustine's theory of time and Kant's theory of time. Kant's theory of time differs from classical mechanics in that it is internalized. That is to say, time, which is a condition of all possible experience, is not something found in things independent of experience (as far as we know, anyway). Time is not the time of the world, it is the time of beings who can experience the world. However, this time retains some of the "objectivity" that is usually attributed to theories of time like the one that pervades classical mechanics. Even though time is found in the subject, and therefore would seem to be subjective, within the subject it acts as if it were being imposed from outside. In other words, time, for Kant, because it is a condition of all possible experience, and because it is something that underlies all representations, is not different for different subjects. All subjects experience time itself as it is in itself the same way: as a super-category that makes experience possible. This makes time uniform or homogenous for all rational beings. And this makes the theory "objective" after the fashion of classical mechanics. This is particularly the case because for Kant, all content can be abstracted from time, but time cannot be abstracted in the same way from content. He says: "Time is a necessary representation, lying at the foundation of all our intuitions.

With regard to phenomena in general, we cannot think away time from them, and represent them to ourselves as out of and unconnected with time, but we can quite well represent to ourselves time void of phenomena. Time is therefore given *a priori*. In it alone is all reality of phenomena possible. These may all be annihilated in thought, but time itself, as the universal condition of their possibility, cannot be so annulled.”<sup>79</sup> This is identical to the view held by classical mechanics. The primary difference is the location of time itself in the subject, rather than in external, absolute space.

At first glance, there would appear to be more similarities between Kant and Augustine than between Augustine and classical mechanics. Both thinkers define time as something we experience. The sequential ordering of time is dependent upon our experience of time. Time is something which can be thought to be devoid of content. And time measures both motion and rest in an homogenous fashion. However, Quinn believes that this connection can only be superficial at best, because Kant takes no account of the world independent of human experience, that is, the natural world, in his theory. Augustine’s theory, by contrast, is an attempt to describe time as a naturally occurring phenomenon. For Kant, though, time can be nothing more than an idealized reflection of consciousness: “No doubt painstaking scrutiny cannot fail to ferret out some parallels in the two approaches, but to take such resemblances seriously seems no less questionable than trying to capitalize on remote similarities discernible between the stream of consciousness and the flow of electric current. To read Kantian themes into Augustine turns accidental likenesses into essential points of agreement and in addition

---

<sup>79</sup> Kant, *Critique of Pure Reason*, I, Sect II, 5.

risks disfiguring his realism, for it is hard to put one's finger on one piece of solid evidence to support Kant's theory."<sup>80</sup>

Quinn writes this in response to Taliaferro and Lachieze-Rey, both of whom believe Augustine's theory is full of Kantian undertones.<sup>81</sup> And from the point of view of Augustine, Quinn would seem to be correct. Augustine is not describing a phenomenon that simply exists in us. Augustine believes that time exists independently of us because it is created and sustained by God's eternal will and presence. What Augustine offers with the definition of time as a "distention" of the mind, then, is little more than a description of our experience of time. Kant, however, offers only a description of our experience of time. He never gets to time itself apart from human experience. In fact, he suggests such a thing would be impossible.

So Augustine is not doing what Kant ended up doing. Yet this criticism seems equally superficial, since we would not expect Augustine to contain Kant – we would expect Kant to contain Augustine. And this is the case. Kant's theory operates in the same fashion as the descriptive aspects of Augustine's theory. It is our minds that order time, according to Augustine, because it is our minds that impose their presence on the memories of the past and the expectations of the future. That is to say, our consciousness gives the unity to time, for both Augustine and Kant. In failing to talk about time outside of experience, Kant is not lost in a theory of subjectivity. On the contrary, he objectifies subjective experience by fitting it all within an homogenous medium that is shared equally by rational beings, just as it is equally generated by and for each rational being for that rational being.

---

<sup>80</sup> Quinn, 97.

<sup>81</sup> Ibid., 96-99.

Where this differs from Augustine is insofar as Augustine believes the unchanging reality that guarantees time is God's eternal presence. Kant cannot say anything about this in an intelligible manner because such notions are more properly the content of the sublime. According to Kant, we can experience but not cognize certain things. God's eternal presence would certainly be one of them. But even what he labels "noumenal" reality in general is beyond our boundaries. This does not mean that what is beyond our boundaries holds no influence or trepidation. It just means we cannot know it. Kant's theory of time is uniform and homogenous, just like Augustine's. The only difference is Kant took our experience of time to be constitutive of time itself, whereas Augustine took it to be reflective of the wishes of the eternal being.

So even though Kant did not influence Augustine, we can certainly say that Augustine influenced Kant. And at the same time, we cannot say that anything in Aristotle really resembles Kant's theory. Aristotle may have held that time only existed when a rational soul was able to notice motion or change. But this experience, and the changes noticed, were different and different for each rational being perceiving them. For Kant, time is a uniform condition of experience. Since it does not depend upon our perceiving things, because it makes perception possible in the first place, it cannot be dependent on motion. Time measures motion uniformly, according to Kant. Therefore Aristotle's theory could not have been very influential on Kant's theory itself.

So it was Augustine's theory, not Aristotle's, that was found to lie at the heart of both classical mechanics and Kant's theory of time. Augustine's theory, in fact, provides the groundwork for all the "spatial" theories of time that follow. This includes Heidegger's theory of primordial, true or original temporality, as I shall show in Chapter

4. Augustine's theory is framed by an eternal presence that functions like absolute space does in classical mechanics. The past and future are real and knowable on all three theories. Time measures motion, but is not dependent upon motion. In fact, time can be thought of without content, although individual moving things can only be thought of as moving in time. And the sequence and ordering of time is brought on by individual conscious subjects. This is why Augustine called time a "distention" of the mind, which leads to the arbitrary ordering of temporal events in Laplace and the use of time as a condition for all possible experience in Kant. And these are the two dominant theories in modern times. And these are certainly the two theories that would jointly compose what Heidegger claims is the "ordinary" concept of time.

What is it about Aristotle's theory that caused Heidegger to link Aristotle to Bergson? I maintain that Aristotle's theory is actually a qualitative theory. In fact, even though Aristotle calls time a quantity, and even though he defines it as a number, I believe it really acts more like an affective quality, and it is the number that is counted, which makes a difference. The number that counts is uniform and homogenous. The number that is counted is different and, potentially, at least, heterogeneous. This will end up connecting Aristotle to Bergson, which Heidegger certainly seems to have wanted to do. But a close examination of Aristotle's theory will also show, contrary to what Heidegger states, that Aristotle's theory of time was not, nor could it have been, very influential on modern "ordinary" conceptions of time.

## CHAPTER 2 ARISTOTLE'S QUALITATIVE THEORY OF TIME

Heidegger claims that Aristotle's theory of time is the primary theory that influences what he calls the "ordinary" concept of time. By this he means that the theories of time prevalent in the history of the concept have an Aristotelian tone. In Chapter 1, however, I demonstrated that this is not the case. Instead, the prevailing tone in the history of the concept of time is Augustinian. In fact, Aristotle's theory of time is incompatible with the two major theories of time in the modern era, which had to be the theories of time Heidegger had in mind when he referred to the "ordinary concept of time. This is because, as I shall demonstrate in this chapter, the two prevailing theories of time in the modern era, Kant's theory and the theory that pervades classical mechanics, are both quantitative theories. Quantitative theories, or 'spatial' theories of time, possess the following characteristics. They view time as an homogenous medium. They maintain that time acts as a container for motions (or the lack of motions). They claim that time can be conceived as being devoid of content. And ultimately, they claim all the moments of time, past, present and future, can be conceived of as given all at once. These characteristics are not found in Aristotle. They are found in Augustine.

Yet Heidegger insists that it is Aristotle's theory that is the dominant theory. In both *Being and Time* and in *The Basic Problems of Phenomenology*, he claims again and again that Aristotle's theory is the theory behind the ordinary way, which is the derivative way, of understanding time. And he insists again and again on linking this understanding to Bergson, and then setting both against the way he [Heidegger] understands true or original temporality. In order to understand more fully why he makes these claims, and

to draw out the influence of Aristotle's theory of time on Bergson's theory of duration, I will now examine Aristotle's theory of time. This examination will consist of four parts. Part I will be a detailed description of Aristotle's theory of time, which is found in the *Physics*, Book IV, Chapters 10 through 14. In Part II, I will examine the way Aristotle's theory is interpreted from the 'spatial' point of view. That is, I will look at several common characteristics that people who interpret Aristotle's theory use to attempt to conform it to the prevailing quantitative or 'spatial' way of viewing time. Part III will focus on Heidegger's interpretation of Aristotle's theory of time. This interpretation is worked out most fully in *The Basic Problems of Phenomenology*, paragraph 19. Here, I will demonstrate that Heidegger's interpretation is a quantitative interpretation in the Kantian sense. That is, Heidegger's interpretation turns Aristotle's theory of time into a quantitative, subjective theory of time similar to Kant's theory. This makes Heidegger's interpretation of Aristotle's theory of time an objective/idealistic interpretation. Finally, in Part IV, I will offer my arguments for why Aristotle's theory of time is a qualitative theory of time, which is why it was able to provide the basis for Bergson's theory of duration.

#### PART I: A DESCRIPTION OF ARISTOTLE'S THEORY OF TIME

There are five key components to Aristotle's theory of time. First, time does not exist independently of motion or change. But time is not the same thing as motion or change, either. Therefore time must be some kind of attribute of motion or change.<sup>82</sup> Second, time only seems to exist when perceived by a soul, or at least, when it is perceived by a soul capable of noting motion or change.<sup>83</sup> Third, time is the number of

---

<sup>82</sup> Aristotle, *Physics*, Book IV, 218b-219b.

<sup>83</sup> *Ibid.*, 218b-219a; 223a.

motion or change with respect to the ‘before’ and ‘after’.<sup>84</sup> Fourth, number is used in two kinds of ways. Some numbers are numbers that count. Other numbers are numbers that are counted. Time is of the kind of number that is counted.<sup>85</sup> And lastly, time is contained by the ‘now’ and divided by the ‘now’.<sup>86</sup>

Aristotle begins his treatment of time by drawing a distinction between motion or change and time as an attribute of motion or change. This is contrary to one of the prevailing views of the period, which held that time was identical to motion or change or a kind of motion or change.<sup>87</sup> He offers two arguments as to why this cannot be the case. The first concerns the motion or the things themselves. If time were the same as change or motion, or a particular type of change or motion, then it would seem to follow that, if the thing that changes or moves was removed, then the time would also be removed. On the contrary, though, he says: “time is present equally everywhere and with all things.”<sup>88</sup> This means that time would still be present, even if the specific thing was not present. But the motion of the thing would not be present if the thing was not present. Therefore, time cannot be said to be either motion or change, or a type of motion or change.

The second argument he offers concerns the way time functions. Aristotle notes that some changes or motions are called fast, while others are called slow.<sup>89</sup> What makes a change or motion either fast or slow is the amount of time it takes to go from the beginning of the change or motion to the end of the change or motion. If a motion takes a short amount of time to go a great distance, it is said to be fast. If a change takes a great

---

<sup>84</sup> Aristotle, *Physics*, 219b.

<sup>85</sup> Ibid., 219b; 220b.

<sup>86</sup> Ibid., 219b-220a; 222a-222b.

<sup>87</sup> Aristotle, *Physics*, 218b.

<sup>88</sup> Ibid., 218b.

<sup>89</sup> Ibid., 218b.

amount of time to go from one state to the next, then it is said to be slow.<sup>90</sup> Time itself, though, is not thought to be fast or slow, since time determines what is fast and what is slow. This is because one cannot define time by reference to time, either as a certain amount of time or as a certain kind of time. Therefore, since time cannot be either fast or slow, since only motions or changes can be, then time is neither identical with change or motion nor with a certain kind of change or motion.<sup>91</sup>

Yet although time is neither identical with motion or change nor a certain kind of motion or change, Aristotle says: “neither does time exist without change.”<sup>92</sup> This is because if there were never any motion or change, then there would be no time. And this is because without motion or change, there would be no way to mark off the ‘before’ and ‘after’ that will be necessary to identify and define time.<sup>93</sup> So time must have something to do with motion or change. And since it is not the same as motion or change, then it must be an attribute of motion or change, because: “Time is neither movement nor independent of movement.”<sup>94</sup> If it is not movement itself, then, it must be an attribute of motion or change.

If time is an attribute of motion or change, then two things need to be discovered. The first is to discover for whom time is an attribute of motion or change. The second is to figure out how this attribute actually works. Time is an attribute of motion. But time is not the motion itself. Things move in the universe, presumably, without being perceived. And it would not make much sense to say that things only move when they are being perceived by a perceiving being. Nor would it make sense to claim that things

---

<sup>90</sup> Aristotle, *Physics*, 218b.

<sup>91</sup> *Ibid.*, 218b.

<sup>92</sup> *Ibid.*, 218b.

<sup>93</sup> *Ibid.*, 218b.

<sup>94</sup> *Ibid.*, 219a.

that are both moving and being perceived by a perceiving being would stop moving the way they were moving once the perceiving being that was perceiving those things move stopped perceiving those things and their motion. Since time is not the same as motion itself, though, but is only an attribute of motion, then it could be the case that time would not exist if a perceiving being did not perceive the motion in question. In other words, in order for time to exist, according to Aristotle, there must be a soul capable of experiencing time present to note the motion in question and experience the time.

Time is only present, then, when a being capable of perceiving motion perceives a motion and counts that motion with respect to the ‘before’ and ‘after’. When a perceiving soul is not present, or when that perceiving soul happens not to be perceiving, then Aristotle claims that no time has passed. This is why the heroes in the cave at Sardinia are said not to be part of time’s passing, since they are asleep and therefore cannot mark the passage of time: “For when the state of our minds does not change at all, or we have not noticed its changing, we do not think that time has elapsed.”<sup>95</sup> Aristotle was aware that linking time too closely to the soul could be problematic. This is why time, as an attribute, is one thing. That which time measures, motion, is something else altogether. This is why he says: “Whether if soul did not exist time would exist or not, is a question that may fairly be asked; for if there cannot be some one to count there cannot be anything that can be counted either...But if nothing but soul, or in soul reason, is qualified to count, it is impossible for there to be time unless there is soul, but only that of which time is an attribute, i.e. if *movement* can exist without soul. The before and after are attributes of movement, and time is these *qua* countable.”<sup>96</sup> The soul is

---

<sup>95</sup> Aristotle, *Physics*, 218b.

<sup>96</sup> *Ibid.*, 223a.

necessary for time to exist because only the soul can count the movement. Movements would presumably continue, regardless of whether souls were there to perceive them. It is simply the case that none of those movements would be counted. The attribute that time is, then, is an attribute that only exists in or through soul, not in or through the phenomenon of which the attribute is an attribute.

So what sort of attribute of motion is time? According to Aristotle: “time is just this – the number of motion in respect of ‘before’ and ‘after’.”<sup>97</sup> Time is the way we count and measure motion when a particular motion affects us. That is, when we notice something changing, we say that there is time. If nothing ever changed, we would not notice time passing. Nor would there be time if things changed but nothing was there to count the ‘before’ and ‘after’ of that change. And, since we use time to decide changes are fast or slow, or that a particular change took a long time or a short time, then it must be the case that time is some kind of number. Furthermore, it has to be a number that in some way matches the motion of which it is an attribute. That is, the time of the movement must go along with the movement in some accurate way. This means the time of a particular movement will share some attributes of the movement, while that time itself is itself an attribute of that movement. So, since all movements are continuous from beginning to end, and all continuous things are one and unified, the time of the movement will be continuous, one and unified.

If this were not the case, that is, if time were not continuous as the movement of which it is the time is continuous, then we would arrive at the paradoxes of the Eleatics. According to Zeno, nothing moves because it could never both be in the place it is and the place it is not. He says: “If anything is moving, it must be moving either in the place

---

<sup>97</sup> Aristotle, *Physics*, 219a.

in which it is or in a place in which it is not. However, it cannot move in the place in which it is [for the place in which it is at any moment is of the same size as itself and hence allows it no room to move in], and it cannot move in the place in which it is not. Therefore movement is impossible.”<sup>98</sup>

According to Parmenides, time does not exist, there is only the present. Only that which already is, exists. There can be no such thing as coming-to-be from non-being. Nor can that which pass into non-being. This means, among other things, that there can be no such thing as the future or the past. This is why he says: “There remains, then, but one word by which to express the [true] road: Is. And on this road there are many signs that What Is has no beginning and never will be destroyed: it is whole, still, and without end. It neither was nor will be, it simple is – now, altogether, one, continuous.”<sup>99</sup>

But it is obviously the case that things move from one place to another. Just as it is obviously the case that some things happen before other things in time, or that something that changes from one state to another state used to be in one state, and then later is in a different state. All of this is because the movement or change of the thing is continuous. To prevent the absurdity of an eternal presence without past and future, time must also be as continuous as the movement to which it is attached as an attribute.

So time is continuous and the number of motion. But what kind of number is it? According to Aristotle, number is used in two ways. He says: “Number, we must note, is used in two ways – both of what is counted or countable and also of that with which we count. Time, then, is what is counted, not that with which we count: these are different

---

<sup>98</sup> Zeno, Fragment 3.

<sup>99</sup> Parmenides, fragment 7A.

kinds of things.”<sup>100</sup> This will turn out to be a very important distinction. If time were the number that counts, then it would count everything everywhere the same. That is, even though different movements are specifically different from each other, and even given that different kinds of movement (e.g., locomotion and alteration) are completely different than each other, the same time would be employed to count them all. Time would have a unit, in this case, and every different kind of motion or change could be construed in terms of this unit. This would have the effect of construing all motion as more or less measurable in terms of all other motion. Or, in other words, all motions or changes would become identical in terms of time.

All changes or motions are not the same, though, either when different instances of the same kind of motion, or between the different kinds of change or motion. That is to say, each instance of locomotion is different than each other instance, because each movement has a different ‘before’ and ‘after’. This is why Aristotle says: “Time is not number with which we count, but the number of things which are counted; and this according as it occurs before or after is always different, for the ‘nows’ are different. And the number of a hundred horse and a hundred men is the same, but the things numbered are different – the horses for the men.”<sup>101</sup> As the number that is counted, then, each different perception of movement will have a different time. And each different kind or movement of change, that is, locomotion or alteration, will have a different time. The ‘nows’ are always different. The ‘befores’ and ‘afters’ of the various movements are always different. So, since time is the number of these movements, and these movements

---

<sup>100</sup> Aristotle, *Physics*, 219b.

<sup>101</sup> Aristotle, *Physics*, 220b.

are different, then the numbers of the movements will also have to be different. This is why time has to be the number counted, not the number counts.

Time is the number counted. This number is the number of the motion that is perceived by a soul as that soul notices the motion or change. But this time is not the same as the motion itself, nor is it a kind of motion. Rather, time is an attribute of motion. Motion is continuous from the 'before' which marks the start of the motion in question to the 'after' that marks its completion. This is why the paradoxes of Zeno do not work; this is why Parmenides' notion that there could be no such thing as time also fails. But if motion is continuous from the 'before' to the 'after', what is it exactly that marks one 'before' off from another? In the case of locomotion, the 'before' would seem to be the place where the movement began, and the 'after' would be the place where the movement ended. But what if another movement started at the place where the former movement ended? That is, what if the 'after' of movement 1 ends up being the 'before' of movement 2? Are they still two motions, or are they one and the same motion? If they are two, why are they counted as two when the 'before' of the second is the 'after' of the first? And if they are one continuous motion, do we not arrive at something similar to the paradoxes of the Eleatics? For then it would seem that there was only one great motion. But if there is only one great motion, and no discernable 'after' (or 'before', for that matter), and if time is the number of that motion from the 'before' to the 'after', then either time or motion or both would be impossible.

There is a way to distinguish the 'before' and 'after' of motion or change. This is the 'now'. Aristotle's treatment of the 'now' is the most complex part of his theory of time. In particular, the fact that Aristotle begins his treatment of time with three

paradoxes concerning the ‘now’ makes his use of the ‘now’ problematic. These paradoxes arise from the commonly held belief that time is composed of ‘nows’ that come into being and pass away. If this were the case, though, then the following would result. Either the now is always different or it is the same. If it is different, then it would have to cease to exist at some time in order for the following ‘nows’ to exist. But if this is the case, then either it would have to cease to exist in itself or in another ‘now’. It cannot cease to exist in itself. But neither can it cease to exist in another ‘now’, because two ‘nows’ cannot be next to each other. Therefore, all the different ‘nows’ will exist at the same time, which is absurd. But if the ‘now’ is always the same, then either of two impossible things results. Either the ‘now’ would be a determinate divisible thing with a single termination, which is absurd, or the events of ten thousand years ago would happen simultaneously as events of today, and nothing would be earlier or later than anything else. This is also absurd. Therefore, it does not appear that time is composed of ‘nows’.<sup>102</sup>

Aristotle solves these dilemmas, and imports the ‘now’ into his theory of time by claiming that the ‘now’ does not compose time, but rather, defines time. The ‘now’ is what separates a ‘before’ from an ‘after’, even if the ‘before’ and ‘after’ seem to be one and the same. Even though a particular ‘after’ appears to be, or even is, identical with a particular ‘before’, they still denote the ‘after’ and ‘before’ of two distinct movements. This means they still denote two differently experienced ‘nows’. And this makes it possible to say that there are more motions than one. The ‘now’ also unifies the motion, since while the motion itself is being perceived by a perceiving being, that perception, that noticing of the change or motion, is also referred to as the ‘now’. Therefore, the

---

<sup>102</sup> Aristotle, *Physics*, 218a.

‘now’ serves two purposes for Aristotle. It makes each experience of time a unified experience in and of itself. And it also separates one temporal experience from another. This helps explain why motion itself is possible in the first place. And it helps to explain why all experience is not of an ever-present ‘now’, as Parmenides held.

The ‘now’ is one with itself and continuous because the body that is in motion or undergoing change is one with itself and continuous. The body is the continuous, therefore the magnitude of its motion or change is continuous, and the ‘now’ goes along with this change or motion so that this change or motion can be counted. Therefore, the ‘now’ is one and the same and continuous. This is the case even in alteration, since the being that undergoes alteration is still the same in substratum. A child who becomes an adult is no longer a child, but the person who undergoes the alteration of aging from childhood to adulthood is still the same person. Likewise, the ‘now’ is the same for the entirety of the motion or change, even if the thing that changes happens to change in its being. This is why Aristotle says: “For the motion or locomotion is made one by the thing which is moved, because it is one...because it is one in definition; for this determines the movement as ‘before’ and ‘after’.”<sup>103</sup>

So the ‘now’ is one and the same with itself and continuous. But the ‘now’ is also different and different. That is, there are different particular ‘nows’, since there are different particular times, particularly when it comes to movements that are not locomotion.<sup>104</sup> And there are also different particular bodies which move, just as there are different particular souls to perceive the motion and count it from the ‘before’ to the

---

<sup>103</sup> Aristotle, *Physics*, 220a.

<sup>104</sup> Aristotle claims that locomotion may admit of regular movement, due to the sphere of the heavens, but other kinds of movement or change do not admit of regularity. This is one of the reasons I interpret Aristotle’s theory of time as a qualitative theory.

‘after’. And the fact that souls can count from the ‘before’ to the ‘after’ indicate that the ‘before’ and ‘after’ as such must be different from each other, even if the movement or change that they mark off is one and the same with itself. That is, even though the magnitude, and therefore the time of the motion or change is continuous, it still must have a beginning and end in order for that continuous motion or change to be counted. This means that even though the substratum of the movement remains the same, because the body is always the same in substratum, the being of the moving thing will change. This is why he says: “Hence in these also the ‘now’ as substratum remains the same (for it is what is before and after in movement), but its being is different’; for it is in so far as the before and after is that we get the ‘now’.”<sup>105</sup>

This is why the ‘now’ is both the same and continuous and different ‘nows’ are different and different. And this is why time is defined by the ‘now’ without being composed of ‘nows’. Time is not composed of ‘nows’, time is the attribute of motion or change that makes motion or change countable. The fact that time is bound by the ‘now’ and differentiated by the ‘now’ is what makes temporal experience possible and intelligible. And even though different times are different, insofar as they are counted by different perceiving souls and insofar as they concern different instances and types of motions, all times are unified, in their definition, by the way the ‘now’ functions as both unifier and divider. This is why Aristotle says:

Clearly, too, if there were no time, there would be no ‘now’, and vice versa. Just as the moving body and its locomotion involve each other mutually, so too do the number of the moving body and the number of its locomotion. For the number of the locomotion is time, while the ‘now’ corresponds to the moving body, and is like the unit of number... The ‘now’ is the link of time... (for it connects past and future time), and it is a limit of time (for it is the beginning of the one and the end of the

---

<sup>105</sup> Aristotle, *Physics*, 219b

other)...It divides time potentially, and in so far as it is dividing the ‘now’ is always different, but in so far as it connects it is always the same, as it is with mathematical lines.<sup>106</sup>

So Aristotle’s definition of time is that time is an attribute of motion that makes it possible for a soul with the power enumeration to count the number of the change from ‘before’ to ‘after’ for a particular motion, this number is the number counted, and the time that it counts is bounded by and unified by Aristotle’s dual concept of the ‘now’. This theory of time appears to be highly subjective, perhaps even solipsistic after the manner that Russell described Augustine’s theory.<sup>107</sup> Many commentators on Aristotle’s theory of time, from Simplicius to present-day commentators like David Bostock and Sarah Waterloo, have tried to interpret Aristotle’s theory in such a way as to bring it in line with the general, quantitative nature of the prevailing theories of time. In other words, most commentators over the years have tried to read Aristotle’s theory of time as an homogenous, quantitative (spatial) theory of time – one that was in line with the prevailing notions on the subject. It is to these interpretations that I now turn.

## PART II: TRADITIONAL SPATIAL/QUANTITATIVE INTERPRETATIONS OF ARISTOTLE’S THEORY OF TIME

Most thinkers have attempted to interpret Aristotle’s theory of time as a traditional, quantitative theory of time. I believe there are two reasons for this. The first is the fact that, as I just mentioned above, quantitative interpretations of time in general were the prevailing interpretations of theories of time for most of the history of the concept. It should be no surprise, then, that people attempting to make sense of Aristotle would read him in the light of the prevailing theories of time, such as Augustine’s and the

---

<sup>106</sup> Ibid., 222a.

<sup>107</sup> For a treatment of Russell’s (unfavorable) interpretation of Augustine’s theory of time, see Chapter 1, Part II.

schools of thought over which Augustine exercised a great influence. The second reason lies within Aristotle's text itself. Aristotle's text seems ambiguous on several key points. This makes it textually possible to offer spatial as well as other kinds of interpretations of Aristotle's theory. In particular, there are three areas of ambiguity that make attempts to interpret Aristotle's theory problematic. First, he claims that time is everywhere and with all things, and it is defined by the 'now'. But the 'now' is both the same with itself and different and different. This means one could claim that time is uniform and homogenous, since it is everywhere and with everything. One could also claim, though, that since the 'nows' are different, and since time is defined by the 'now', that all specific times are different and therefore time itself is not homogenous. Second, even though Aristotle says specifically that time is the number that is counted, not the number that counts, towards the end of his treatment of time he seems to reverse himself. In particular, he claims that all motion is measurable by the circle. This seems to change time from the number counted to the number that counts. This would mean that, rather than having as many different times as there are different motions counted, all time would be reducible to one counted number. This could lead to an homogenous unit for time, which would make it the number that counts. And third, even though the 'now' is both one and the same with itself and continuous, and all 'nows' are different and different, he also says that motions or changes that have the same 'before' and 'after' have the same time, even if they are different from each other.

To resolve these apparent inconsistencies in a way consistent with the prevailing style of thinking on time, spatial commentators on Aristotle's theory tend to do one or more of the following. They try to unify time into an homogenous medium. They

concentrate on the parts of Aristotle's theory that seem to change time from the number counted to the number that counts, and then argue that Aristotle really meant time to be the number that counts. And they try to claim that time is something that can (and does) exist independently of rational, perceiving souls. I will now offer an examination of these characteristics, using three commentators as representative of this style of interpretation.<sup>108</sup>

A unified, homogenous view of time is a view of time that insists on the two following characteristics. First, time must be the same everywhere. Second, the units used for measuring time must be fundamentally the same. That time is the same everywhere is the view of time held by Augustine, classical mechanics, and Kant.<sup>109</sup> And if time is the same everywhere, then the fundamental unit for measuring time must be the same everywhere as well. This unit might be called a second, a minute, or a year. But this is only because we lack the precision to get to the precise unit of time (and it was the attempt to find this precise unit that occupied much of classical mechanics' thinking on time). There are three particular passages in Aristotle's treatment of time that support such a view. First, Aristotle claims early on in his theory that "time is present equally everywhere and with all things."<sup>110</sup> The second and third passages come at the end of his treatment of time. There he says:

But other things as well may have been moved now, and there would be a number of each of the two movements. Is there another time, then, and will there be two equal times at once? Surely not. For a time that is both equal and simultaneous is one and the same time, and even those that are

---

<sup>108</sup> I have chosen Simplicius, from the ancient perspective, and Sarah Waterloo and David Bostock from the modern perspective, although certainly many other people have written about Aristotle's theory of time. I believe these views are more or less representative of both the ancient and contemporary trends in spatial interpretations, though, and therefore should be adequate for my purposes here.

<sup>109</sup> See Chapter 1 of this dissertation for a discussion of these particular theories.

<sup>110</sup> Aristotle, *Physics*, 218b.

not simultaneous are one in kind; for if there were dogs, and horses, and seven of each, it would be the same number. So, too, movements that have simultaneous limits have the same time, yet the one may in fact be fast and the other not, and one may be locomotion and the other alteration; still the time of the two changes is the same if it is both equal and simultaneous, and for this reason, while the movements are different and separate, the time is everywhere the same, because the *number* of equal and simultaneous movements is everywhere one and the same.<sup>111</sup>

And then immediately following that, he adds:

Now there is such a thing as locomotion, and in locomotion there is included circular movement, and everything is counted by some one thing homogeneous with it, units by a unit, horses by a horse, and similarly times by some definite time, and, as we said, time is measured by motion as well as motion by time (this being so because by a motion definite in time the quantity both of the motion and of the time is measured): if, then, what is first is the measure of everything homogeneous with it, regular circular motion is above all else the measure, because the number of this is the best known. Now neither alteration nor increase nor coming into being can be regular, but locomotion can be. This also is why time is thought to be the movement of the sphere, viz. because the other movements are measured by this, and time by the movement.<sup>112</sup>

When these three passages are taken together, they cause some commentators to believe that Aristotle holds a unified, homogenous view of time.

If time is, in fact, equally everywhere and with all things, and if simultaneous motions or changes are the same, then all time must be one and the same thing. And this must be true regardless of whether the motion in question is locomotion, alteration, or coming-into-being, or any other conceivable kind of change or motion. This is what Sarah Waterloo claims is the case with Aristotle's theory. She says: "The result is a universal temporal order: universal, that is, in the sense that there is a place in it for every member of every pair of kinetic series  $K^x$  and  $K^y$  such that some member of  $K^x$  coincides

---

<sup>111</sup> Aristotle, *Physics*, 223b.

<sup>112</sup> *Ibid.*, 223b.

with some member of  $K^y$ .<sup>113</sup> If this were not the case, then time could be the same as itself and different than itself. But this is not the case, since nothing can be different than itself. So if time is measured from a specific ‘before’ to a specific ‘after’, then what needs to be considered are the specific ‘befores’ and ‘afters’, not the particular motions themselves. This is why even different kinds of movements, such as alteration and locomotion, will have the same time, so long as they have the same ‘before’ and ‘after’. All simultaneous times are the same time, and this is what makes time a unified and homogenous medium.

If all simultaneous times are the same time, and therefore, if time is a unified, homogenous medium, then it will have a basic, identical unit that can be used to measure any and all specific times. This is the view Simplicius held. He notes that Aristotle even goes so far as to give a unit to time that would make all time homogenous. This unit is the circle. Thus, Simplicius states:

He [Aristotle] therefore looks for the primary and most simple time, which will measure all time. So, if time is the measure of change, if some change be found which is the measure of all other changes, it is clear that its time will be found to be the measure of time. So what change is such? Clearly, that which is primary, uniform and well-known. For one that was not primary and was irregular and unknown would be an unsuitable measure...only circular motion has this character; so this is the measure of change and, consequently, of time. It becomes the measure of change by being determined by time and thus being a certain quantity.<sup>114</sup>

And it certainly seems to be the case that Aristotle must be held to this view, even though he claims that changes other than locomotion are not regular and so do not have a regular unit of measurement. This is because all specific times are the number of motion from a particular ‘before’ to a particular ‘after’. If the ‘before’ of a particular alteration

---

<sup>113</sup> Waterloo, 111.

<sup>114</sup> Simplicius, 181-182.

coincides with the ‘before’ of some locomotion (and I imagine it would not be too hard to find such coinciding ‘befores’ for any case of alteration), and the ‘afters’ of both also coincide, then the times must be the same. Therefore, if one of these two times, namely locomotion, is subject to the regular measurement of the circle, then the other of these two times, namely alteration, must also be equally subject to that regular unit of measurement. Otherwise, Aristotle’s theory would seem self-contradictory. This means that all motions must be subject to the unit of circular measurement.

If this is the case, though, then what is the most fundamental unit of circular measurement? Johannes Fritsche attempts to answer this question by reviving the notion that time is fundamentally measured by the circular motion of the heavens. It is the circular motion of the heavens that makes time one and the same with itself and the same everywhere and with everything: “It is one and only one time, since no earthly change or form produces time. Rather, time is produced by the heavens. It is everywhere within the cosmos, since it is brought to us on earth through the heavens’ causal action. As such, time can be the measure of terrestrial change (and rest) as well as the measure of the heavens’ motion.”<sup>115</sup> And this solution seems to work, insofar as finding the basic unit for a homogenous theory of time in Aristotle is concerned. Even though Aristotle dismisses the view that time is the same as the motion of the heavens early in his treatment, saying: “Besides, if there were more heavens than one, the movement of any of them equally would be time, so that there would be many times at the same time,”<sup>116</sup> Fritsche can still say with some legitimacy that the heavens work as a basic, homogenous unit. This is because Aristotle’s claim concerns identifying time with the motion of the

---

<sup>115</sup> Fritsche, 112.

<sup>116</sup> Aristotle, *Physics*, 218b.

heavens themselves. And time, according to Aristotle, is neither the same as motion nor a particular kind of motion. But as the attribute of the motion of heavens, the time thus counted could still serve as a homogenous unit. And, since everything in Aristotle's universe is encompassed by the sphere of the heavens, and this sphere is not infinite, then it could (and according to Fritsche, Waterloo and Simplicius, it is) provide a standard unit by which all other times could be measured, and to which all other times could be reduced. And this would be the same for all motions and the times that go with those motions, whether they are locomotion, alteration, or any other kind.

If Aristotle's theory of time is read as being a unified, homogenous medium with a single unit of time that all other experiences of time can be reduced to, then it seems to follow that the way number is conceived in his theory will change, too. Aristotle says time is the number counted. And he seems to indicate that this means that, even though numbers as numbers are the same, the things they count are different, and therefore the number counted is different. If all motions of which time is the measure, though, can be reduced to circular locomotion, and the number of units counted constitutes a standard form of time, then all counted units will be the same. This will change time from the number counted to the number that counts. And if time is to be the same everywhere, and Aristotle is to be kept consistent, then it must be the case that time, as a quantity, is really the number that counts; and what it counts would be particular amounts of time.

Those who hold that time is a unified, homogenous thing, according to Aristotle, generally also treat number as the number that counts, and for the reasons given above. Yet Aristotle seems clear on the point that time is the number counted.<sup>117</sup> And Aristotle also says things in several places that indicate time is a unified, homogenous medium.

---

<sup>117</sup> He says this explicitly at both *Physics* 219b and 220b.

This by itself might not seem enough to change the concept of number Aristotle is using from within the text. There are two further passages, though, that seem to address the nature of number, and turn the emphasis from the number counted to the number that counts. The first reads: It is clear, too, that time is not described as fast or slow, but as many or few and as long or short. For as continuous it is long or short and as number it is many or few; but it is not fast or slow – any more than any number with which we count is fast or slow.”<sup>118</sup> And he clarifies this a bit further on, saying:

We describe the time as much or little, measuring it by the movement, just as we know the number by what is numbered, e.g. the number of horses by the one horse as the unit. For we know how many horses there are by the use of the number; and again by using the one horse as unit we know the number of the horses itself. So it is with the time and the movement; for we measure the movement by the time and vice versa. It is reasonable that this should happen; for the movement goes with the distance and the time with the movement, because they are quanta and continuous and divisible.<sup>119</sup>

When these two passages are considered along with the previous passages cited in support of the homogeneity and unity of Aristotle’s theory, one can see why it is that spatial commentators are not reluctant to rethink the way Aristotle uses number, even within the text itself. If time is only the number counted, and not the number that counts, then time could be fast or slow. And it is certainly the case that time, if it is considered to be the number counted, can be as many and different as there are different motions or changes and different kinds of motions or changes. If time is the number counted, then time would have no universality. Even the same movement could end up having different times. This is why David Bostock claims:

The full doctrine, then, seems to be this. There are such things as amounts of duration, e.g. 5 minutes, and the time of a movement is its amount of

---

<sup>118</sup> Aristotle, *Physics*, 220b.

<sup>119</sup> *Ibid.*, 220b.

duration. But this is an ambiguous expression, depending on the extent to which the amount of duration of one movement is thought of as capable of being the *same* amount of duration as that of another. If we construe the expression quite universally, it simply applies to all movements which last equally long, no matter when they occur. On this construal it would, I think, count as a ‘number by which we number’, though also of course as a ‘particular kind of number’ rather than a number without qualification.<sup>120</sup>

That is, because all measurements of time measure the same thing, that is, time, then those units must fundamentally be the same. And if they are fundamentally the same, then time must really be the number that counts, not the number counted.

Aristotle’s ambiguity in terms of what kind of number time is can be further clarified if the distinction between time as the number counted and the number that counts is removed in favor of a definition of time as number where number simultaneously counts and is counted. That is, the number that is time is the counting/counted. Time is counted as being the number of change from ‘before’ to ‘after’. But something must be used to count this number, and that something is time. This is why Simplicius states: “For the measures are measured in their turn by the things measured.”<sup>121</sup> That is to say, time is both what counts and what is counted when the movement is enumerated. This reduces all temporal experience to something quantifiable in a general way, and that which is generally quantifiable must be conceived of as counting that which it quantifies. This is the view Waterloo holds regarding Aristotle’s use of number: “The extent to which he is committed to a quantitative treatment will show even more as we go on. But it can already be said that for him the concept of simultaneity comes to life only in the context of temporal quantification. Thus his whens

---

<sup>120</sup> Bostock, 155.

<sup>121</sup> Simplicius, 143.

are above all termini of quantifiable intervals.”<sup>122</sup> And since, in order for quantifiable intervals to measure the same things, they must themselves be the same, and since Aristotle already seems committed to the view that simultaneous motions or changes have the same time, then time must be the number that counts, not the number counted.

Thus, Bostock claims:

And this, I think, is the point he is getting at when he says that time is a thing numbered rather than a thing we number with. But, so construed, the amount of duration *is* still a universal, not confined to this or that particular movement but shared by all simultaneous movements. It is partly for this reason, I believe, that Aristotle continues to call it a *number*. For when explaining his point that simultaneous movements to have exactly the same time he again makes use of the idea that time is a number...and once more he adds in comparison that 7 dogs and 7 horses have the same number.<sup>123</sup>

So therefore, this number must be the number that counts, as well as the number counted.

Time is everywhere all the same. This makes it an homogenous medium. And because it is an homogenous medium whose primary unit is the circle, then the number of motion turns out to be more like the number that counts. The third thing spatial interpreters of Aristotle’s theory seek to do, then, is address the issue of time’s relationship to the soul. Aristotle connects time to the soul, since it is in soul that one finds the power of enumeration. Time is not motion, but it is an attribute of motion. This attribute is motion as countable. Therefore, since a soul is needed to count things, time must only exist when a soul perceives motion or change and counts the time from the ‘before’ to the ‘after’ of that motion or change. Otherwise, Aristotle indicates we think that no time has passed.

---

<sup>122</sup> Waterloo, 111.

<sup>123</sup> Bostock, 155. He also claims that what makes time a number is its existence as boundary. If that is the case, then all times that have the same boundary must have the same number. Hence time has to be the number that counts. Bostock, 163.

If time is going to be a universal, homogenous medium, though, that is everywhere and with all things, then it would seem that its existence must be independent of individual souls perceiving motion or change. In fact, if time is truly universal, it would seem to be the case that it must exist independent of all souls. This has caused a problem for spatial interpreters of Aristotle's theory. If Aristotle's theory is dependent upon perceiving souls, then it will be only a subjective theory of time. And this seems to be the case, for Aristotle says towards the end of his treatment of time:

Whether if soul did not exist time would exist or not, is a question that may fairly be asked; for if there cannot be some one to count there cannot be anything that can be counted either, so that evidently there cannot be number; for number is either what has been, or what can be counted. But if nothing but soul, or in soul reason, is qualified to count, it is impossible for there to be time unless there is soul, but only that of which time is an attribute, i.e., if *movement* can exist without soul. The before and after are attributes of movement, and time is these *qua* countable.<sup>124</sup>

The way spatial interpreters tend to solve this problem is to focus on the fact that motions or changes are thought to exist independently of anyone's perceiving motions or changes. Time is an attribute of motion or change, in so far as any motion or change can be counted. Therefore, even if there were no soul to count, time would still exist as an attribute of motion potentially. This is the solution Simplicius offers. He claims that time, as the duration of motion, exists as duration whether or not it is perceived or counted by a soul. It is only time's status as a number that depends upon a counting soul for its existence. He says: "For nothing prevents the substrate of time, or the enumerated, from existing without soul existing, if it is in general possible for change to exist without soul."<sup>125</sup> And he says further that: "it is worth noting, I think, that if the enumerator is abolished time as an enumerated number is abolished, but as the before and

---

<sup>124</sup> Aristotle, *Physics*, 223a.

<sup>125</sup> Simplicius, 173.

after in regard to duration of change it is not abolished. In that respect time exists.”<sup>126</sup> So time can exist, either *qua* duration or as potential number, regardless of whether or not souls exist who can count a particular motion or change.

These are the characteristics of traditional spatial interpretations of Aristotle. Time is an homogenous medium. Time consists of identically reducible units that are the same everywhere. This unit is the circle of locomotion. The fact that all units of time can be reduced to the circle of locomotion means that time really turns out to be the number that counts, not the number counted. And finally, time must exist independently of perceiving, counting souls, and it does as a potentially countable attribute of motion. These interpretations force Aristotle’s theory into the mold of spatial theories that have their most complete source in Augustine.

To force Aristotle into such an Augustinian framework, though, compels one to ignore too much of the text. Aristotle’s theory may not be as objective as the above mentioned spatial interpreters would have it be. In fact, according to Heidegger, it is not objective at all – at least, not in the sense discussed above. In the next part of this chapter, I will turn my attention to Heidegger’s interpretation of Aristotle’s theory of time. This interpretation, which is found in the *Basic Problems of Phenomenology*, will also turn out to be a spatial interpretation, although not in quite the same way as those discussed above. This is because Heidegger brings a Kantian/German Idealist spin to his interpretation of Aristotle. This will make Aristotle’s theory more closely resemble Kant’s than is perhaps usually thought to be the case. And it will help to show how and why Heidegger will attempt to connect Bergson to Aristotle in his early works, and what that connection says about Heidegger’s own theory of original temporality.

---

<sup>126</sup> Ibid., 174.

### PART III: HEIDEGGER'S IDEALISTIC/SPATIAL INTERPRETATION OF ARISTOTLE'S THEORY OF TIME

Heidegger's interpretation of Aristotle's theory of time differs from more traditional, spatial interpretations because Heidegger interprets Aristotle's theory primarily through his [Heidegger's] notion of the subject: Dasein. Heidegger attempts this interpretation in order to restore something of what he takes to be the original meaning of Aristotle's theory of time to the interpretation of Aristotle's theory of time. What Heidegger ends up with, though, is a spatial interpretation of Aristotle's theory that reads Aristotle in a Kantian light. In particular, Heidegger's attempt to think past the subjective/objective distinction that troubles so many traditional spatial interpretations demonstrates the Kantian undertones of his interpretation. This Kantian interpretation of Aristotle also sheds light on the connection Heidegger draws between Aristotle and Bergson. That is, it shows what Heidegger thought to be the connection between these two, which in turn will reveal something about Heidegger's own theory of original temporality in Chapter 4 of this dissertation.

There are four basic components to Heidegger's interpretation of Aristotle's theory of time. First, Heidegger believes Aristotle's theory of time is "stretched out." That is, Heidegger interprets Aristotle to say that time is a kind of extension. Heidegger claims extension is used in two ways: both concretely in space and formally in dimension (but not necessarily in space). Aristotle's theory of time is extended in the sense of being extended formally in dimension. Second, Heidegger, like traditional spatial interpreters, takes the number of time to be the number that counts and is counted, or the "counting/counted". This counting/counted differs from traditional theories in one

aspect, though, which is also the third component of the interpretation. Time, according to Heidegger's interpretation of Aristotle's theory, forms a horizon. Or, to be more specific, the 'now', which as number is the counting/counted, forms a horizon for temporal experience. This horizon is both functional and a demonstration of time's (formal) extension. This will allow time to act as a kind of container for motion. Finally, Heidegger dissolves the subjective/objective split by claiming that time can be objective, as spatial theories tend to maintain, while still be located only in perceiving souls while they are perceiving and counting motion or change.

Heidegger claims that Aristotle's theory of time involves extension. Extension, as Heidegger uses the term, is not the same thing as space. Heidegger claims that what time is, on Aristotle's theory, is 'extensity', or a 'stretching out'. This constitutes a dimension only in the formal sense. Therefore, time cannot be reduced to space as space is normally understood by traditional theories of time:

The comparison with *alloiosis* shows that this "away from something toward something" need not necessarily be taken spatially. We shall call this structure of motion its *dimension*, taking the concept of dimension *in a completely formal sense*, in which spatial character is not essential. Dimension expresses a general notion of *stretch*; extension in the sense of spatial dimension then represents a particular modification of stretch. In the case of the determination of *ek tinos eis ti* [away from something toward something (Heidegger's translation)] we should rid ourselves completely of the spatial idea, something that Aristotle did, too. A completely formal sense of stretching out is intended in "from something to something."<sup>127</sup>

This completely formal sense of dimension depends upon what Heidegger takes to be Aristotle's notion of continuity. All motions are continuous, according to Aristotle. If the motion is continuous, the magnitude, or, as Heidegger calls it, the extension, will also be continuous. This means that the motion and its extension are one with themselves and

---

<sup>127</sup> Heidegger, *The Basic Problems of Phenomenology*, 242.

complete. And the fact motions are one with themselves and complete means that they cannot be divided up the way that space is normally thought to be divisible. That is, motions are not infinitely divisible the way traditional space is. Therefore, time, on Aristotle's theory, is not infinitely divisible, and therefore time is not like traditional theories of space. Instead, Heidegger claims that it is a "stretching out that is closed within itself."<sup>128</sup>

The continuity and extension of motion are not merely facts of our experience of motion. According to Heidegger, one can only believe this of locomotion, since locomotion involves places external to the observer. Aristotle is concerned with all kinds of motion or change, though, and the extension Heidegger finds in his theory is found in the very nature of time itself. It is found in its ontological character, not only in the factual experience of perceiving beings perceiving motion or change in the world. This makes it a condition for our ability to perceive motion or change and note the difference between the 'before' and 'after' which makes it possible for us to notice time. This is why the ontological nature of Aristotle's theory needs to be examined, rather than simply looking at the way time is experienced:

Aristotle expresses this set of circumstances in reverse order when he says that motion follows (comes in the wake of) dimension (extension). This proposition should be understood not ontically but ontologically. It does not mean that a motion proceeds ontically from stretch or continuity, that dimension has motion consequent to it. To say that motion follows continuity or follows dimension means that by the very nature of motion as such dimensionality, and thus continuity, precedes it. Extension and continuity are already implicit in motion. They are earlier than motion in the sense of being a priori conditions of motion itself.<sup>129</sup>

---

<sup>128</sup> Heidegger, *The Basic Problems of Phenomenology*, 242.

<sup>129</sup> *Ibid.*, 243.

Even though time is ‘stretched out’ as an *a priori* condition of temporality, Heidegger maintains that, because this ‘stretching out’ is purely formal as a condition for temporal experience, Aristotle’s theory of time is not a spatial theory in the usual sense of time’s being thought of as spatial.

By attributing this sort of dimensionality to Aristotle’s theory of time, though, especially as a condition of time’s being time and time’s being something that can be experienced, Heidegger clearly offers something that can be read as a traditional spatial interpretation of Aristotle’s theory. The only way this cannot be the case is if we can draw an actual distinction between space as a concrete phenomenon and dimension as an abstract dimension. But this distinction breaks down on closer examination. If time is an attribute of motion, as Aristotle clearly says it is, then wherever there is motion, there will be time, at least potentially. If time is something with formal extension (or any kind of extension, for that matter), then one or both of the following would have to be the case for Aristotle. Either time would have to be motion or a kind of motion. Or time would have to be some completely independent phenomenon not related to motion at all. Neither of these things can be the case, though, according to Aristotle. So if time has extension, it must follow the motion. All motions, including alteration, take place in a place. Now Heidegger claims (correctly) that Aristotle’s notion of place is not the same as the modern notion of space.<sup>130</sup> However, all place must have some kind of spatial extension. Therefore, Heidegger’s claim that time is only formally extended breaks down, since all motions that time measure happen in place, which is always concrete, according to Aristotle.

---

<sup>130</sup> Although Heidegger incorrectly claims Bergson thought Aristotle’s notion of place was the same as the modern notion of space. Heidegger, *The Basic Problems of Phenomenology*, 244.

So the fact that Heidegger claims that time is a form of extension is one component to his interpretation of Aristotle's theory of time, and it is one reason why Heidegger's interpretation is a spatial interpretation. The next component of his interpretation is to claim that the way Aristotle uses number in his theory of time is as the counting/counted, not only as the number counted. That is, Heidegger believes the concept of number employed by Aristotle is a homogenous concept that brings a kind of uniformity to the counting of time. This counting/counted number is called the 'now', and it is this 'now' that we count, Heidegger claims, when we count the number of change from 'before' to 'after' of any given motion or change: "As counted, the nows themselves count – they count the places, so far as these are traversed places of the motion."<sup>131</sup> The 'nows' count as they are counted. This means that the unit called the 'now', by which any particular 'now' is identified, must exist prior to any particular motion. By having a prior unit, two times can be compared to each other to see which is greater, just as two motions can be compared to see which is faster according to the same overall definition of and experience of time.

If the 'now' is a counting/counted number, though, as Heidegger claims it is, then Heidegger's interpretation is a spatial interpretation for this reason, too. Any attempt to create an *a priori* unit that measures all time, which seems to be what Heidegger is doing with the 'now', necessarily homogenizes time into a specific, quantifiable phenomenon. This is exactly what spatial interpretations of Aristotle's theory attempt to do with that theory, just as spatial theories in general attempt to do so with the phenomenon of time in general. So Heidegger ends up following the traditional interpretations of Aristotle's theory when he says:

---

<sup>131</sup> Heidegger, *The Basic Problems of Phenomenology*, 246

The now is what it is, he d' arithmei, so far as it counts, hence number. Time as now is not limit but transition, and as transition it is possible number, possible mensural number of motion. It measures a motion or a rest in such a way that a specific motion, a specific change and advance is fixed, for example, the advance *from* one stroke of a second *to* the next, with which mensural number then the entire movement is measured. Because the now is transition it always measures a from-to, it measures a how-long, a duration. Time as number fixes the limits of a specific movement. This delimited movement is intended for measuring the whole of the movement to be measured.<sup>132</sup>

This treatment of the 'now' fixes time into an homogenous medium. And by doing so, it paves the way for Heidegger to set the limits to this medium, which he does by construing the 'before' and 'after' that surround particular 'nows' as a horizon for temporal experience.

According to Heidegger's interpretation of Aristotle's theory of time, in order to understand how the 'nows' are to be counted, so that one can properly experience the time of the motion, one must first understand that motions within Aristotle's system do not occur over space. At least, they do not occur over space as modern thinkers normally view space. Nor is it the case that places in Aristotle's system are related to each other by simple juxtaposition. This can make it difficult to mark off the 'before' and 'after' of a particular motion. However, if we understand the horizon within which any particular motion occurs, then we will be able to properly mark off the 'before' and 'after', and therefore, we will be able to properly count the change and hence know the time. This horizon provides both a frame for the movement, and a goal for the movement. By providing a goal for the movement, the horizon provides the movement's direction. This makes the motion intelligible, and allows Dasein to experience time: "If we thus see the place manifold in the horizon of the 'away from there – toward here' and traverse the

---

<sup>132</sup> Heidegger, *The Basic Problems of Phenomenology*, 251.

individual places in this horizon in seeing the motion, the transition, then we *retain* the first traversed place as the *away-from-there* and *expect* the next place as the *toward-here*. Retaining the prior and expecting the posterior, we follow the transition as such, the individual places within the transition, which can stretch arbitrarily far, we no longer fix the places as individual points or as individual theres and heres arbitrarily paired.”<sup>133</sup> The horizon fixes our experience of time, then, and it provides a number of nexus-points by which we can mark off the ‘before’ and ‘after’ of the motion in question.

By fixing our experience of time, though, Heidegger ends up importing spatial notions back into his interpretation of Aristotle’s theory of time. A horizon, in the sense Heidegger is using the term, frames the temporal motion. It provides ready-made starting and stopping points for that motion. Furthermore, it provides them based primarily on the stopping points, which makes the horizon teleological. This means that Heidegger believes Aristotle’s theory of time is based on the goals of particular actions. And this brings his interpretation of Aristotle’s theory very close to the theory of original or true temporality that he develops in his early works. It also imports Augustinian language into Aristotle’s theory, which supports my contention that Heidegger was more influenced by Augustine than either he or his critics and commentators generally acknowledge.

This is particularly the case when Heidegger uses terms like ‘retain’ and ‘expect’ when he describes the way the horizon works in Aristotle’s theory. Aristotle never uses these terms. In fact, it seems to me that Aristotle does not use terms that are similar to ‘retain’ and ‘expect’. Augustine does use these sorts of terms, however. According to Augustine (as I discussed in Chapter 1), our memory and our anticipation, or our

---

<sup>133</sup> Ibid., 245.

‘retention’ and ‘expectation’, in this case, connect the past and the future to a particular present. Both the past and future of the present in question, though, are understood within a particular horizon. For Augustine, this is God’s eternal presence. What exactly it is for Heidegger is a matter of some dispute. Perhaps it is the horizon of the world created by Dasein, or something like that. In any case, whatever it is, it seems to have been added to Aristotle’s text. At best, Heidegger could claim, along with the traditional spatial interpreters I looked at above, that the heavens are the ultimate place for Aristotle, and so serve as a horizon for the counting of any particular motion or change. This may be what Heidegger had in mind when he imported the notion of ‘intratemporality’ (Heidegger’s term) into Aristotle’s notion of time.

According to Heidegger, there are two senses of horizon. One is particular to particular Daseins, insofar as they have particular retentions and expectations around a particular motion that they count when they are having a temporal experience. This is how he interprets Aristotle’s use of the ‘now’, which is an Augustinian interpretation. There is a second sense of horizon, though, and this is what Heidegger associates with his term ‘intratemporality’. ‘Intratemporality’ is the “time of times.” He says: “given that time embraces beings, it is required that it should somehow be *before* beings, *before* things moving and at rest, encompassing them. Kant calls time the “wherein of an order.” It is an embracing horizon within which things given can be ordered with respect to their succession.”<sup>134</sup> It is the time that frames all other times, within which every particular time or temporal experience occurs. It is difficult to grasp exactly which part of Aristotle’s theory of time Heidegger believes he is referencing with this notion. At best, this could be an attempt to come to grips with Aristotle’s claim that time is

---

<sup>134</sup> Heidegger, *The Basic Problems of Phenomenology*, 252.

everywhere and with all things. But the notion of a time that encompasses all times seems to go beyond what Aristotle said, particularly in light of the way time is explained in the rest of Aristotle's theory. Heidegger seems to be importing his own notion of original temporality into Aristotle's theory in order to explain that theory.

There is evidence that this is what Heidegger is doing at the beginning of his interpretation of Aristotle's theory. He claims that Aristotle believes common time must be understood by way of original time, saying: "as Aristotle says in his interpretation, time can be interpreted only if it is itself understood again by way of time, that is, by way of *original* time."<sup>135</sup> But what is this original time? According to Heidegger, it is temporality: "Anyone who has once seen these interconnections must plainly demand that *in the definition of time the origin of time in the common sense, of time as we encounter it immediately, should come to light from temporality*. For its origin belongs to its essential nature and thus demands expression in the definition of this nature."<sup>136</sup> But this definition of temporality is not found anywhere in Aristotle's treatment. It is something Heidegger clearly imports into Aristotle's text. But by importing this notion into Aristotle's theory, Heidegger also imports the primary characteristics of this notion, in particular, that temporality is essentially a phenomenon based on the future. This would mean that Heidegger sees Aristotle's theory as being based, essentially, on an understanding of the 'after' in 'expectation', which is what he means when he places temporal experience, according to Aristotle's theory, within a horizon. This horizon, which is formed by Dasein's future, acts as a container for the motion of change taking place. If a motion or change takes place within a ready-made container, whether of

---

<sup>135</sup> Heidegger, *The Basic Problems of Phenomenology*, 241.

<sup>136</sup> *Ibid.*, 241.

Dasein's own making or within the auspices of the 'intratemporal' "horizon of horizons", then the entirety of that motion is already given. If it is already given, then what Heidegger ends up with in his interpretation of Aristotle's theory of time is another version of the traditional spatial interpretations I discussed in Part II of this chapter.

Where Heidegger's spatial interpretation of time differs from the traditional theories I described in Part II is in Heidegger's use of Dasein. One of the major stumbling blocks for many traditional, spatial interpreters of Aristotle's theory of time is its apparent reliance on a perceiving, rational soul in order for time to exist. One way this apparent reliance has been explained away is to say that, even if there were no perceiving souls which could count the numbers of different motions, time would still exist as an attribute of motion potentially. Heidegger goes a different way here. Relying on the Kantian side of the Augustinian heritage, Heidegger claims that the horizon that frames time is fixed by Dasein's attention. Dasein's attention, in turn, is fixed by the horizon of the world in which Dasein finds itself. This would seem to lead to the problem of "which came first?" For Heidegger, though, this is a false problem: "We see by the interpretation of "being in time" that time, as the embracing, as that in which natural events occur, is, as it were, more objective than all objects. On the other hand, we see also that it exists only *if the soul exists*. It is more objective than all objects and simultaneously it is subjective, existing only if subjects exist."<sup>137</sup> To try to claim that time exists potentially, without perceiving, rational souls, or, as Heidegger puts it, without Dasein, is to miss the point. Time is objective because Dasein creates it by and through its being. It posits time as a horizon, even while all its experiences are made intelligible by this very same horizon. It is a joint move on the part of Dasein and its world. This is

---

<sup>137</sup> Heidegger, *The Basic Problems of Phenomenology*, 254.

why temporal experience is both unique to Dasein and a function of the world as such. And this is why every particular temporal experience has its own horizon, yet all temporal experiences are contained within the horizon of horizons, that is, the world itself. Or, to put it another way, by substituting the term “Dasein” for the term “soul”, Heidegger can claim that, according to Aristotle’s theory of time, the soul creates the very objectivity which contains it: “We indicated earlier that the phenomenon of the world manifests something of the sort. Given that the Dasein exists, is in a world, everything extant that the Dasein encounters is necessarily intraworldly, held-around [con-tained] by the world. We shall see that in fact the *phenomenon of time* taken in a more original sense, *is interconnected with the concept of the world and thus with the structure of the Dasein itself.*”<sup>138</sup>

Now Heidegger admits that Aristotle did not explicitly state things this way. According to Heidegger, though, this must have been what Aristotle was attempting to do with his theory. The soul constitutes time. And the act of constituting time places the soul within the time it constitutes. The soul is then contained by time, just as it is contained by the world. This time that contains the soul (Dasein) is while it is being created by that soul, serves as a horizon for that soul’s temporal experience. This gives it extension in what Heidegger calls the formal sense of the term (which he claims, incorrectly, is not concretely spatial). This formal extension gives the ‘now’ that is counted the characteristic of both the thing counted and the unit by which it counts. That is, the number Aristotle has in mind is really a counting/counted number, not simply the number that is counted. This counting/counted number is the ordinary understanding of time that Aristotle gives to explain particular experiences of time. What time itself is,

---

<sup>138</sup> Heidegger, *The Basic Problems of Phenomenology*, 255.

though, according to Heidegger's interpretation of Aristotle's theory, is the horizon of possible experiences that Dasein constructs in such a way as to then be temporally constituted by it.

This interpretation of Aristotle's theory of time is a spatial/quantitative interpretation (as I have been using the terms 'spatial' and 'quantitative'). Even if Dasein constructs the horizon, this horizon still exists externally to any particular Dasein. This makes it a frame or container for temporal experience. This container is formally extended. But since all temporal experience is necessarily concrete, it is impossible to construe it as anything other than concretely extended, too. The experience of time the soul has, on this interpretation, is of a counting toward an expectation and from a retention. That is, the soul counts its memories and anticipates what is to come when it counts the number of change from before to after, as these things are constituted by the horizon. This turns time, though, since it is already given in a general way by the 'intratemporality' of the world, into an homogenous medium with a basic, identical unit. All of this comes across as different and original at first glance. But deeper investigation shows that Heidegger's interpretation only differs from traditional interpretations insofar as Heidegger's notion of space seems, on the surface, to be more elastic, because the horizon of the world is constituted by Dasein. But, since this constitution in turn constitutes Dasein, Heidegger's notion of space is no less concrete than traditional notions. It is simply the case that Heidegger's notion returns to the root of the Augustinian tradition by making space finite again. This does not change the fact, though, that the time experienced by the soul, on Heidegger's interpretation of Aristotle's theory, is homogenous, and ultimately, something external and objective.

Both Heidegger's Kantian interpretation and the traditional spatial interpretations miss the mark, I believe. Aristotle's text offers a theory of time that is actually qualitative, not quantitative/spatial. And it is just as subjective as Aristotle seems to be saying that it is. In the final part of this chapter, I will offer my qualitative interpretation of Aristotle's theory. I believe this interpretation will solve some of the apparent problems in Aristotle's text in a more satisfactory way than both the traditional spatial interpretations and Heidegger's interpretation do. And I believe it will lay the groundwork for demonstrating the influence of Aristotle's theory of time on Bergson's theory of duration.

#### PART IV: ARISTOTLE'S QUALITATIVE THEORY OF TIME

I believe that one of the major reasons different commentators have had trouble interpreting Aristotle's theory of time is because of the perceived need to make Aristotle's theory fit within the framework of ordinary spatial theories of time. This is why Bostock and Waterloo were concerned about the apparent lack of 'objectivity' in Aristotle's theory. This is why Heidegger makes Aristotle's theory into a Kantian/idealistic theory of time (although Heidegger would not be likely to admit that this is exactly what he was doing). This is why both sets of thinkers turn Aristotle's use of number as the number counted into some kind of homogenous number that counts. And this is why spatial thinkers (except Heidegger) seem concerned to divorce time from the perceiving rational soul.

The qualitative interpretation of Aristotle's theory of time that I will develop in this part will be able to solve the apparent inconsistencies in Aristotle's theory. It will be able to do this because it will show that these problems in Aristotle's theory are only

problems if one tries to fit his theory into the framework of spatial/quantitative theories of time. If one takes the theory as it is in the text, and understands it as a qualitative theory, the apparent inconsistencies disappear. The so-called 'lack of objectivity', the dependence on the perceiving, rational soul, and the heterogeneous nature of time as the number counted are all phenomena that my qualitative interpretation accounts for without putting modern or contemporary notions back into Aristotle's theory.

My qualitative interpretation of Aristotle's theory of time has four components. First, it focuses on Aristotle's claim that time is an attribute of motion. An attribute is something that exists in a subject. It does not exist independently of that subject. This makes time a qualitative phenomenon. The second component focuses on time as the number counted. Time is the attribute of motion that makes it countable. How it is countable becomes a concern only when we assume the counting of time must be identical. But if this was the case, Aristotle would surely have said as much. Instead, he said it was the number counted, which means each specific time is different than each other specific time. Third, I will look at the way Aristotle defines the 'now'. Aristotle claims the 'now' is both the same with itself and different and different. This is a qualitative description. A quantitative phenomenon could only ever be the same, that is to say, homogenous. Otherwise, one would not be able to coherently count it. Time is the number counted, though, and that number is determined by the different kinds of 'nows' the perceiving, rational soul encounters. This makes time a heterogeneous phenomenon, which makes it a qualitative phenomenon. Finally, my qualitative interpretation looks at the way Aristotle uses the perceiving, rational soul in his theory of time. I believe Aristotle means it when he says soul is necessary for time to exist. I

differ with Heidegger's Kantian interpretation of this claim, though. I do not believe the soul reduces all temporal experience to some sort of homogenous, horizon-based experience. I believe the time the soul encounters when it encounters motion, and counts that motion, is a different experienced time each time that time is experienced. Because each time is different, then, Aristotle's theory of time must be a qualitative theory.

Aristotle says that something can belong to something else in a number of ways. Something can be a quantity, quality, a relative, and so forth. Aristotle lists time as a quantity.<sup>139</sup> This would seem to end the discussion regarding time as a quality, particularly since time is also defined as a number. But time does not behave like a quantity in the strict sense. To begin with, all quantities count something identical. That is, all quantities, as quantities, are quantities of homogenous units. This is how one quantity can be larger than another quantity, because it has more of whatever that unit is. But an homogenous unit, when it is used to designate a certain amount of something, is used as the number that counts. Aristotle, on the contrary, says time is the number counted. Therefore, time cannot be a quantity in the sense Aristotle generally uses the term quantity. Because if it were, then what was counted would always be the same. And Aristotle says that different kinds of motion are not the same, nor are they reducible to each other. This is why he says: "Now neither alteration nor increase nor coming into being can be regular..."<sup>140</sup> If time were a quantity, though, then those motions would have to be regular insofar as the time was concerned. But they are not. So time must be something else other than a quantity.

---

<sup>139</sup> Aristotle, *Categories*, 4b.

<sup>140</sup> Aristotle, *Physics*, 223b.

Of course, the fact that time may not be a quantity in the strict sense does not mean that it must be a quality per se. It could be a hybrid of a quantity and a relative. When speaking about relatives, Aristotle says: “We call *relatives* all such things as are said to be just what they are, *of* or *than* other things, or in some other way *in relation to* something else. For example, what is larger is called what it is *than* something else...”<sup>141</sup>

Time is not fast or slow, although motions are fast or slow in relation to how much time they take. So even if alteration cannot be reduced to the circle of locomotion, we can still tell that one alteration happened quicker than another. This can only happen, though, if there is something about the times of two alterations to make them comparable. And this something is the amount of time, which makes time a quantitative phenomenon. If it were a quality, then each of two alterations would have a different time, even they were alterations of the same sort, such as melting ice. All comparisons between fast and slow in relation to the motions would be impossible, since the time of each motion would be unique to that motion. Time, this objection would conclude, while it may not be a quantity in the strict sense, is a relative quantity.

This would seem to be true for two instances of the same kind of motion. And Aristotle does maintain that identical motions have the same time. If time really were a relative quantity, though, then even different kinds of motion, like alteration and locomotion, should be comparable. But alteration does not admit of regularity. And that which does not admit of regularity cannot be an homogenous measure for anything. This would mean that time must be a quality. And this is particularly the case when one looks at the fact that time only seems to exist in actuality when a motion is perceived and counted by a soul which perceives the motion and has the rational capacity to count it.

---

<sup>141</sup> Aristotle, *Categories*, 6a.

If something only exists when it has an effect on something else, then it must be an affective quality. An affective quality is something that the perceiver of the object is affected by for himself or herself, but which the object itself is not affected by.<sup>142</sup> Some affective qualities are called affective qualities in virtue of the affect they produce in the perceiver of the quality. For example, bitter and sweet are affective qualities. They affect the perceiver who tastes the sweet or bitter thing, causing the perception to happen in that perceiver. They do not affect the object of which they are they affective quality. That is, a piece of candy is not affected by its being sweet. Nor is it really sweet unless a perceiving being with a fully functioning sense of taste eats the candy and notes the sweetness.

Time is an affective quality of motion. Motion exists whether there are perceivers of motions or not. Time is an attribute of motion, the attribute that makes it countable. This attribute only exists, though, when some rational, perceptive soul, notices the motion or change, notes the ‘before’ and ‘after’ of that motion or change, and therefore counts the time. And the time this rational soul counts is always the number counted, which means the time will always be different for different kinds of motion. So even though Aristotle says: “there is the same time everywhere at once,”<sup>143</sup> he also says further: “But not the same time before and after; for while the present change is one, the change which has happened and that which will happen are different. Time is not number with which we count, but the number of things which are counted; and this according as it occurs before or after is always different, for the ‘nows’ are different. And the number of a hundred horses and a hundred men is the same, but the things numbered are different –

---

<sup>142</sup> Ibid., 9a.

<sup>143</sup> Aristotle, *Physics*, 220b.

the horses and the men.”<sup>144</sup> If time were a quantity, then the ‘before’ and ‘after’ would not really matter. In fact, if time were a quantity, then it would seem to exist whether something was there to count it or not, just as two objects are still two, even if no one counts them. However, those two objects cannot be counted objects, unless someone does count them. And time is like this, it can only exist when the motion is counted.

So Aristotle can say that time is everywhere and with all things, presuming that someone is present to count all those motions, because time, as a quality, is the same. That is, just as sweetness is sweetness and bitterness is bitterness, so, too, time is time. But a particular sweet thing is sweet in a particular way. It would not make sense to say that it had a particular amount of sweetness. When we say that a thing is sweeter than something else, what we mean is that we were affected more profoundly in terms of the sweetness, not that something had more ‘units’ of sweetness. Time is like this. It only exists when we are affected (or rather, when perceiving, rational souls are affected). But the individual experiences of time, that is, the individual ‘nows’, ‘befores’ and ‘afters’ are always different. And the kinds of motion are also always different. This could not be the case if time were a quantity or a relative quantity. Therefore, time must be an affective quality.

Further evidence for the qualitative nature of Aristotle’s theory is found in the nature of the ‘now’. The ‘now’ is the same as itself, yet it is different and different. What Aristotle means by that is this. All motions are continuous. Since they are continuous, they are one and unified. Each motion, as a motion, is indivisible as that motion. This is how Aristotle avoids the paradoxes of the Eleatics. Yet the ‘now’ is also different and different. What this means is the following. All motions have a beginning

---

<sup>144</sup> Ibid., 220b.

and an end. That is, all motions start in a particular place, or state, or as a particular kind of thing, and then go to a different place, change to a different state, or become another particular kind of thing. In temporal terms, the former is called the ‘before’ and the latter the ‘after’. And it is by counting the number of the motion from ‘before’ to ‘after’ that we get time, according to Aristotle. The ‘now’ is what distinguishes the ‘before’ from the ‘after’, the earlier from the later, and so on. This is why it is different, because the being of the ‘now’ when it was the ‘before’ is different in some way from the being of the ‘now’ when it becomes the ‘after’. This is what he means when he says: “the ‘now’ is the same in substratum – though its being is different – and the ‘now’ determines time, in so far as time involves the before and after...but its being is different; for it is in so far as the before and after is that we get the ‘now’.”<sup>145</sup>

If this were not the case, Aristotle maintains, there would be no way to differentiate events from the distant past from events that are taking place today. The ‘now’ that constitutes time must be different, in order for it to be ‘before’ or ‘after’, even while it also constitutes one complete attribute of motion as the temporal substratum of that motion. This makes the ‘now’, and the time it constitutes, a qualitative phenomenon. Only a quality can be different in its particular instances. A quantity must ultimately be the same. But if time were a quantity, then it would be countable in a different way than it is when viewed as a quality. As I discussed in Chapter 1, quantitative theories of time can end up treating the order of temporal events as a convention.<sup>146</sup> If time were a quantity, then what about time, other than a particular, changeable convention, would require it to be counted in any particular way? It would be hard to differentiate the

---

<sup>145</sup> Aristotle, *Physics*, 219b.

<sup>146</sup> This was particularly the case with Laplace’s understanding of time. See Chapter 1, Part IV.

‘before’ from the ‘after’, since both would be expressible in the same terms and reducible to the same number. This would render time unintelligible. As a quality, though, the ‘now’ can be different in being, retain its unified substratum, and maintain temporal order. This is because qualities, even qualities of the same type, are not individually reducible to each other. One shade of red is not reducible to another. Sweetness in one kind of food is not expressible in terms of other kinds of food. One can only offer approximations that always fall short of actual experience. The same is the case when trying to compare the times of two different motions. One can say that the time it takes to move from one place to another is the same as the time it takes for a particular alteration to occur. But the way the time is counted will be different. And so the time will be different, too. This makes time a qualitative phenomenon.

Finally, time is a qualitative phenomenon because of time’s dependence on perceiving, rational souls. The fact that Aristotle makes time so dependent on the soul is a problem for traditional spatial interpreters, because it would seem to make Aristotle’s theory too subjective. For non-traditional spatial interpretations, such as the one offered by Heidegger, the apparent subjectivity does not seem to be a problem, because Heidegger believed the time constituted by the soul was more objective than any traditional theory of time, anyway. The time that ends up being posited on this interpretation, though, is itself spatial, after the manner of Kant’s theory of time. I believe neither of these kinds of interpretation of the role of the soul in Aristotle’s theory is correct, however. I believe the soul is more subjective than Heidegger suggests, and more constitutive than traditional spatial theories suggest. This leads me to believe that Aristotle’s theory of time is a qualitative theory, because no coherent quantitative theory

could account for all the differences in constitutive temporal experience that Aristotle's theory calls for.

If time were a quantity, then it would exist so long as the thing of which it is a quantity existed. This is what spatial interpreters believed must be the case when Aristotle claimed that time was an attribute of motion. So long as motion exists, then time exists, at least potentially. David Bolotin suggests that this is not the case, however. He thinks that Aristotle made it seem as if time would exist without perceiving rational souls for those less astute observers. But at its core, Aristotle's theory is, in fact, a theory that relies on the perceiving rational soul for the existence of time. Bolotin says: "And so it seems to me that in his serious view, even what he presents here as the substrate of time is dependent on a perceiving and counting soul. And his explicit assertion of the dependence of time upon soul states the core of his position, although he pretends, for he less demanding of his readers, that he believes that time has an unchanging substrate whose permanence does not depend on a counting soul."<sup>147</sup> Time does depend on soul for its existence. This is why he Aristotle claims: "for when the state of our minds does not change at all, or we have not noticed its changing, we do not think that time has elapsed, any more than those who are fabled to sleep among the heroes in Sardinia do when they are awakened; for they connect the earlier 'now' with the later and make them one."<sup>148</sup> So since time only exists when a perceiving, rational soul notices change or motion, and is affected by it in such a way as to count the 'before' and 'after' of that motion, and since the number used is the number counted, which makes the counting of the motion

---

<sup>147</sup> Bolotin, 57.

<sup>148</sup> Aristotle, *Physics*, 218b.

different for each experience of each motion, then time must exist only in the perceiving, rational soul as that quality which causes it to count the motion or change.

So Aristotle's theory of time is better understood as a qualitative theory of time. This interpretation follows the text of *Physics*, Book IV more closely than do spatial interpretations, whether they are traditional or Heideggerian. It does not force modern or contemporary notions of Kantian subjectivity onto Aristotle's theory, which John Proteri describes as "neglect of the context, as well as a certain freedom of interpretation."<sup>149</sup> It does not feel the need to fit Aristotle's theory into preconceived notions of the necessity of the independence of time from perceiving, rational souls, as traditional spatial interpretations do. Nor does it fix time into some strange horizon constructed by concepts Aristotle did not have access to, such as Dasein and its temporality, as Heidegger does when he feels that he "must intervene in several of Aristotle's economies of meaning in order to read the Aristotelian treatise on time as a clue to Dasein's temporality."<sup>150</sup> Nor does my qualitative interpretation try to make time into an homogenous medium where time is the number that counts (or the counting/counted, as Heidegger put it), rather than the number counted, since "an extended present, of a given length and location, will not be homogenous in the way that a punctual present must be. But that need no more matter than the fact that the past and the future are not homogenous in that way."<sup>151</sup>

Instead, my qualitative interpretation accounts for the way Aristotle uses the notion of the rational, perceiving soul in a way consistent with the text. Aristotle says time only exists when a soul capable of counting notices a change from before to after

---

<sup>149</sup> Proteri, 160.

<sup>150</sup> Ibid., 160.

<sup>151</sup> Inwood, 163.

and is affected in such a way as to count that change. Furthermore, the specific times are different, since the different kinds of motions are different. But if time were a quantity, then all motions or changes would be reducible to one number that counts. Aristotle, however, insists that time is the number counted, that alteration and other kinds of motions are irregular, and that these things do not exist independent of the soul. So time cannot be a quantity, then, which means it must be a quality.

This is what allows Heidegger to connect Aristotle to Bergson, even if Heidegger himself did not interpret Aristotle this way. Aristotle's theory of time is a qualitative theory where time is intimately connected to the soul and each temporal experience is qualitatively different. Bergson's theory of duration is also a theory of time where time (true time, that is) is intimately connected to the soul and each temporal experience is qualitatively different. In fact, as I shall discuss in Chapter 3, Bergson identifies his theory as a purely qualitative theory, in contrast to the quantitative, or what he calls spatial, theories of time that abound in the tradition. But the tradition of spatial theories of time, as I have already shown, is Augustinian in nature. Furthermore, Bergson was well aware that Aristotle's theories do not depend upon the notion of space prevalent in the tradition. In fact, Bergson wrote his Latin dissertation, *Quid Aristoteles De Loco Senserit (Aristotle's Concept of Place)* on Aristotle's notion of place, and demonstrated that this notion had nothing in common with modern notions of space.

So Heidegger was correct to connect Bergson to Aristotle, even though that connection is not quite the connection he seems to have believed to have been the case. In the next chapter, I will examine Bergson's theory of duration. This theory is also a qualitative theory. I will show that Aristotle's theory of time influenced Bergson's theory

of duration in a positive way. This will set the stage for me to show that Heidegger's theory of original or primordial temporality is, in part, a reaction to Bergson's theory of duration that falls back into the actual tradition of metaphysics he claimed to be attempting to escape.

### CHAPTER 3 BERGSON'S ARISTOTELIAN THEORY OF DURATION

Heidegger claims that there is something that connects Bergson and Aristotle. I believe he is correct, insofar as the connection goes between those two. I believe he is incorrect in claiming that there is a theme that includes all other major theories of time that fall between them historically. I have already demonstrated that Augustine's theory of time was far more influential than Aristotle's on several of the major theories of time. In fact, Aristotle's theory is contrary to the theories of time found in classical mechanics and Kant. But Aristotle's theory of time shares a number of characteristics with Bergson's theory of duration. This leads me to believe that Bergson found inspiration for his theory in Aristotle, and that Aristotle's theory of time informs many key elements of Bergson's theory of duration. This would mean that Heidegger was also incorrect when he claimed that Bergson misunderstood Aristotle's theory of time, since it does not seem to be the case that Bergson had Aristotle's theory in mind when he critiqued spatial theories of time, nor is it the case that Bergson understood Aristotle's notion of place to be something equivalent to the modern notion of space.<sup>152</sup>

Bergson wrote his Latin dissertation, *Quid Aristoteles De Loco Senserit* (*Aristotle's Concept of Place*) on Aristotle's concept of place. His interpretation of Aristotle is both interesting in its own right and useful as an aid to understanding Bergson's theory of duration. Duration is a purely qualitative theory of temporality. It does not rely on mathematical notions of space that frame temporal movement and

---

<sup>152</sup> In *Being and Time*, Heidegger claims that Bergson misinterpreted Aristotle's theory of time as a spatial theory of time, and that Bergson actually read the modern notion of space back into Aristotle's theory. This comes in the long footnote on Hegel at the end of *Being and Time*. Its significance for Heidegger's pairing of Aristotle and Bergson, his misreading of the history of the concept of time, and the resulting way he tries to react to Bergson's theory of duration with his own theory of primordial/original temporality will be discussed in detail in Chapter 4. See Heidegger, *Being and Time*, note xxx.

experience. It is not reducible to mathematical formulas in the way that traditional, quantitative (which Bergson calls ‘spatial’) theories of time are. It does not presuppose that all temporal moments are already given. And it allows for the existence of different temporal experiences as constitutive of actually different times. Much of this finds companion notions in Aristotle’s theory of time. It would seem, then, that since Bergson was aware of Aristotle, and in particular, since he was aware that Aristotle’s cosmology was contrary to the prevailing (spatially centered) cosmology that informed the modern age, that Bergson drew inspiration for his theory of duration from Aristotle’s theory of time.

To demonstrate this, I will divide this chapter into four parts. In Part I, I will discuss Bergson’s Latin dissertation, *Aristotle’s Concept of Place*. This will show that Bergson knew Aristotle, and that he understood Aristotle to be a qualitatively-minded thinker. In Part II, I will describe Bergson’s theory of duration. Duration is a purely qualitative theory of temporality that relies on the internal understanding and experience of motion itself. This counters (and critiques) the notions of time prevalent during much of Bergson’s career: classical mechanics’ theory of time and Kant’s theory of time. In Part III, I will look at the two prevailing schools of interpretation of Bergson’s notion of duration: the phenomenological and the Deleuzian. The former holds that Bergson was a proto-phenomenologist, and it relies most heavily on Bergson’s text *Matter and Memory*. The latter holds that Bergson was some kind of post-modern Platonist, and seems to draw most heavily from Bergson’s texts *Creative Evolution* and *Duration and Simultaneity*. I believe neither of these interpretations captures the full spirit of Bergson’s theory, though, which is why in Part IV, I show that Bergson’s theory of duration takes its cues

from Aristotle's theory of time, and so therefore, Bergson's theory of duration is an Aristotelian theory at its heart.

#### PART I: BERGSON'S LATIN DISSERTATION

During the late 1880's, Bergson wrote both his principle dissertation, *les Donnees immediates de la conscience (Time and Free Will)*<sup>153</sup>, and his Latin dissertation, *Quid Aristoteles de Loco Senserit (Aristotle's Concept of Place)*.<sup>154</sup> In *Time and Free Will*, Bergson clearly articulates the problems of the modern notion of space, particularly in regard to temporal experience. These concepts, while in some ways specific to modern times, trace their philosophical roots back to the paradoxes of the Eleatics and the notions of empty space (also called the 'void') held by the Atomists. Consideration of these paradoxes, and the general inadequacy of attempting to describe temporal experience through spatial metaphors (and the languages that depend upon those spatial metaphors) leads Bergson to develop a theory of temporality that will not be subject to the sorts of paradoxes that plague theories of time that are dependent upon spatial notions. This new theory of temporality is Bergson's theory of duration. The theory of duration will go on to form the foundation for all of Bergson's other theories throughout the rest of his published works.

In his Latin dissertation, though, Bergson does not consider time in any obvious way. Instead, he discusses, as his title suggests, Aristotle's notion of place. This discussion will prove important for understanding Bergson's theory of duration. Yet very

---

<sup>153</sup> For some reason, the title of this work in English is *Time and Free Will*, which is not even necessarily the best representation of the actual content of the work, rather than a literal translation of the French, *The Immediate Knowledge of Consciousness*, which would have been slightly more suitable. Since the work is known in English as *Time and Free Will*, though, that is how I will generally refer to it.

<sup>154</sup> I will generally refer to this work using the English title.

little has been said about the connection between Bergson and Aristotle. Heidegger, of course, mentions the connection in several places and in two ways. First, he connects Bergson to Aristotle through the genealogy of the history of the concept of time. Second, there is his claim that Bergson misunderstood Aristotle, even though, “Bergson’s view of time too has obviously arisen from an Interpretation of the Aristotelian essay on time.”<sup>155</sup> Most other thinkers who have commented on Bergson in any serious way either do not draw the Aristotelian connection out, interpret Bergson in such a way as to suggest he is not an Aristotelian, or flat-out deny that he could be an Aristotelian.<sup>156</sup> Only Capek seems to offer an interpretation of Bergson friendly to the possibility of Bergson’s being an Aristotelian or having Aristotelian-inspired theories.

I believe the fact that Bergson reads Aristotle as attempting to understand motion without using a concept of space is significant. It shows that Bergson understood Aristotle’s theory to be different than the prevailing view of the modern age, that motion takes place within space. How Aristotle understood motion reveals something about the way Bergson understood temporality, since Bergson, too, will have a theory where motion does not take place within space. This means that, for Bergson, temporal experience will be non-spatial. Bergson understood Aristotle’s cosmology to support something like this. And this, in turn, connects Bergson to Aristotle, although not quite in the manner Heidegger suggests.

According to Bergson’s interpretation of Aristotle, place neither exists before things nor apart from things (that occupy places).<sup>157</sup> This means that place is not

---

<sup>155</sup> Heidegger, *Being and Time*, note xxx.

<sup>156</sup> Phenomenologists fail to draw the connection out. Deleuze, by claiming Bergson is a Platonist, implies that he is not, nor can he be, an Aristotelian.

<sup>157</sup> Bergson, “Aristotle’s Concept of Place,” 23-24.

something into which bodies flow. Nor can place be conceived as being apart from the particular body that occupies it. If this is the case, though, then Bergson notes the following problems arise. First, can things occupy one place at one time and another place at another time? And if so, how can they do this? Second, does place move with bodies? And if it did, would that mean that there could be more than one place in a place? And third, if a body moves from one place to another, but its own place moves with it in some fashion, what is left where the moved place used to be?

Bergson begins his treatment by looking at the last question first. He claims that the most likely answer to the question “what remains where a moved place used to be?” would be the concept of the void. According to Bergson, though, Aristotle did not have a concept of the void. In fact, he maintains that Aristotle believes the void can neither be nor be conceived. So it cannot be the case that something remains where a moved place used to be. And since something cannot remain where a moved place used to be, it would seem that place cannot move. This would also mean that place could not be either a body or a quality of bodies. This would not work either, though, because bodies move, which would mean that places move, which would require the concept of a void, or lead to the problem of places within places. Yet Bergson maintains that Aristotle wants to stick to the notion that place cannot be conceived of as something that exists apart from bodies. According to Bergson, this would leave Aristotle with only one viable answer: place must be the interior surface of the surrounding thing.<sup>158</sup>

If the interior surface of the surrounding thing is not itself a body, though, then place would appear to be something like form. This does not appear to be Aristotle’s exact meaning, though, according to Bergson. Aristotle makes four arguments as to why

---

<sup>158</sup> Ibid., 28.

place can be neither matter, nor a quality of matter, nor form. First, neither matter nor form can be separated from the body in question. Second, bodies move within place or to a place. They do not move within themselves or to themselves. All bodies tend toward their proper places. If place were a form, this would not be possible. Third, if place were within a body, and that body moved, then the place would also move. This would lead back to the absurdity of having a place within a place, or a place leaving a place. Finally, when things change elements, or when something undergoes alteration, the place does not change, only the contents of the place are said to change. If place were within the thing, though, and the thing underwent alteration, the place would then be changed, too. In particular, the place of one element would be destroyed, on this view, if it were taken over by another element. But it is absurd to say that a place could be destroyed.

Therefore, as Bergson sums Aristotle's argument up:

Place is neither matter or form, since matter and form show themselves to be companions and sharers in the fortunes of a body, if I may so express it, whereas place is an impassive witness of those fortunes. If we penetrate deeper into Aristotle's innermost thoughts, we find that a definite and very subtle principle underlies all his arguments, namely, that there is such a reciprocal connection and continuation of matter and form that you cannot say where form begins and where matter ends. Place, however, is something fixed and definite and it cannot be reduced to form without being immediately joined to matter and therefore to body itself.<sup>159</sup>

So therefore, place can not be either matter or form. And it cannot be the empty interval, or void, either. The void is the closest thing to the modern notion of empty, abstract space that Aristotle had at his disposal. Aristotle's arguments against this notion appeal to Bergson, who himself argues against using notions of empty space to frame temporal (and hence, lived) experience. The void is something that lacks any and all bodies. But that which lacks any and all bodies is said to be nothing. And nothingness,

---

<sup>159</sup> Bergson, "Aristotle's Concept of Place,"., 31-32.

according to Aristotle, can neither be nor be conceived. Nor is it the case that one needs empty space in order for something to move or change. Things undergoing alteration do not require a void in order to have something in which to alter. They alter in the place they already happen to occupy. Nor is empty space necessary for movements such as locomotion. For example, fish swim through water, not the void or empty space.<sup>160</sup> And finally, even if there were empty space, nothing could move within it, anyway.

According to Aristotle, things tend toward their natural place due to an inner desire, or nature. They do not move toward their natural places due to external compulsion (although they probably move away from their natural places due to external compulsion). Bergson describes Aristotle's view this way: "They strive towards their proper place as to fulfillment of their form, as if different regions of the world were distinguished by different functions and also by different qualities."<sup>161</sup>

Since this is the case, to attempt to use the void in discussing motion would pose the following problem. In order for the void to be the void, it must be without any qualities whatsoever. If this is the case, then there are no qualities that would compel anything to move into it [the void] in the first place. Nor would there be anything in the void that could compel anything to move out of the void (besides the fact that, strictly speaking, if the void contained a body, it would no longer be the void). So bodies would move everywhere at once and nowhere at all, which is inherently contradictory. This means bodies would have neither natural motion nor natural rest in empty space. But all bodies have natural motion and natural rest. Therefore, empty space cannot exist, which

---

<sup>160</sup> Ibid., 35-36.

<sup>161</sup> Ibid., 37

certainly makes it unnecessary for motion.<sup>162</sup> Bergson says: “Whichever explanation (of the void) you choose, you come back to the same thing: an impulsive force cannot be maintained in the void.”<sup>163</sup>

So the void, or empty space, does not work to explain motion. What of Aristotle’s definition of place as the interior surface of the surrounding body? If place cannot move, and it cannot be contained within another place, then how is the interior surface of the surrounding thing different than the void? And how it is related to the things that occupy places? Is it continuous with the body whose place it marks, or is it contiguous? Something is contiguous with something else if the extremities of the two things are conceivable as separate. Something is continuous with something else if the extremities of the two things are the same. However, according to Bergson’s interpretation of Aristotle, continuous things end up being identical. This would make place identical with the things in a particular place, which would make place a body. But Bergson has already shown that Aristotle believes place cannot be a body. Therefore, place must be contiguous with that which is in place.<sup>164</sup>

Place cannot move, nor can one place change with or become another place. Things, however, move from place to place. Bergson says this ends up making place, on Aristotle’s definition: “the reality which contains within itself the movement of other things but is itself unmoved.”<sup>165</sup> Things which move and contain other things, such as a ship carrying men, are only places potentially. That which contains both the moving thing, and the things within the moving thing, is place in actuality. Therefore, only the

---

<sup>162</sup> Bergson, “Aristotle’s Concept of Place,” 37.

<sup>163</sup> *Ibid.*, 38.

<sup>164</sup> *Ibid.*, 47.

<sup>165</sup> *Ibid.*, 50.

immobile can be a place.<sup>166</sup> This fits the larger picture of Aristotelian cosmology, since Aristotle believed that all things tend toward their proper or natural place. There are only a finite number of places in this cosmology, though. Nor is it possible, according to Aristotle, to imagine an infinite number of places, just as it is not possible to imagine an infinite number of things. All of these finite things are contained within the heavens, which act as place, but are themselves not in place. And each thing seeking its own proper place, and therefore moving within the confine of the heavens, leads Bergson to offer this view of the Aristotelian universe: “Therefore from a consideration of natural movement it follows that the world is a kind of living thing, and that the simple elements, like the parts of a living thing, exercise their proper functions in certain proper places which they desire when lost and cling to when found again.”<sup>167</sup> This will lead to a difficulty, though, since if everything moves towards its proper place, would it not be the case that the heavens themselves are either a moving place or a place that contains places?

Bergson points out that Aristotle seems to “paint himself into a corner” with the notion of the heavens as the common place. Place is supposed to be immobile, but Aristotle generally holds that the heavens are in eternal motion. Furthermore, Bergson notes that Aristotle calls the heavens a place, yet says they lack place.<sup>168</sup> He sums up these difficulties in the following manner:

We have said that a mobile body is contained within the immobile limit of the containing thing as in its primary place, that a simple element is contained within the immobile element by which it is surrounded as in its proper place, and finally that all things are contained within the unmoved surface of the heaven as in their common place. But note that the heaven

---

<sup>166</sup> Bergson, “Aristotle’s Concept of Place,” 50-51.

<sup>167</sup> *Ibid.*, 56.

<sup>168</sup> *Ibid.*, 58-59

moves, that the elements move, and that the surface of each containing thing moves. Therefore, we have not entirely grasped Aristotle's meaning, since to examine these matters more easily we have commanded many things that were necessarily in motion to stand still. Now, if we are to restore interrupted movement to the Aristotelian world, it will be worth the effort to inquire as to what will become of place.<sup>169</sup>

Modern physicists and philosophers have tried to substitute the concept of empty or absolute space for place. This view is not self-contradictory to them, as it was for Aristotle. For Aristotle, nothing could be conceived of as devoid of quality. He was aware of the prototype theories of empty space, since he was aware of the atomists, but his notion of place, according to Bergson, leads to "a metaphysical principle from which Aristotle proceeds to arrive at a denial of space as we describe it."<sup>170</sup> According to Bergson's interpretation, for Aristotle, this attempt seems to fall short, since it ends up in the contradictory principle of having the heavens move yet be the common place. Bergson's critique of Aristotle reveals something about Bergson himself, though, and this is why his Latin dissertation is important for understanding his theory of duration.

Bergson's Latin dissertation reveals two important things about his understanding of Aristotle. First, it shows that Bergson read Aristotle's universe as a living universe, one where everything moved by some inner force. This interpretation of the universe as vibrant, rather than ultimately inert, provides Bergson with a heritage, so to speak, for his theory of duration. Duration will turn out to be a theory of temporal experience that relies, in part, on the notion that moving things are more "alive" than modern thinkers usually believe. Aristotle provides some background for this, and Bergson's Latin dissertation, which interprets Aristotle's universe in this manner, shows that Bergson was intimately aware of this background. Furthermore, Bergson finds in Aristotle's living

---

<sup>169</sup> Bergson, "Aristotle's Concept of Place," 60.

<sup>170</sup> *Ibid.*, 68.

universe a critique of the notion of empty, absolute space. This provides more foundational material for his own theory of duration, which will also critique the notion of empty, absolute space – particularly as it applies to temporal experience.

The other important thing revealed in Bergson's Latin dissertation concerns Heidegger's belief that Bergson misinterpreted Aristotle. Clearly, Bergson does not believe Aristotle's concept of place is equivalent to the modern notion of space. In fact, Bergson sees it as a critique of the modern notion of space. It may not do all the things that Bergson's critique ultimately will. But it is a critique nevertheless. So if Bergson did misinterpret Aristotle, it was not by reading Aristotle as a spatial thinker, as Heidegger maintains. This fact will come into place in Chapter IV, where it will be useful in demonstrating that Heidegger's theory of original temporality is actually a partial reaction to Bergson's theory of duration. Instead of getting Aristotle wrong, Bergson uses his theory as a basis for his own primary theory of duration.

## PART II: BERGSON'S THEORY OF DURATION

Bergson's theory of duration stands apart from other modern theories of time. In fact, it stands apart from most theories in the tradition. This is because Bergson's theory of duration is a purely qualitative theory of time, whereas most theories in the tradition are quantitative. Bergson's theory centers around our conscious experience of motion as such. It does not view time as a kind of container for motion. The belief that time, or that which contains time (space) is a container for motion enters into the tradition primarily through Augustine, and it runs through the theories found in both classical mechanics and Kant. Bergson's theory challenges this prevailing notion, though. And it challenges it precisely because these theories do not explain temporal experience as we

actually experience it. This helps to solve certain paradoxes that traditional, or what Bergson calls spatial, theories of time inevitably have trouble solving.

Bergson's theory of duration shares a number of conceptual traits with Aristotle's theory of time. I believe that Aristotle's theory of time lies at the heart of Bergson's theory, although certainly there are some differences. For example, Bergson was not a teleological thinker, whereas Aristotle is, to a certain extent. In fact, Bergson offers several sustained critiques of any attempt to think in a teleological manner in relation to time, particularly in *Creative Evolution* and *Creative Mind*. Also, Bergson never attempts to enter number directly into this theory of duration, although he does bring in the notion of an ordered series. For the most part, though, the similarities outweigh the differences. Both thinkers make time dependent on perceiving, rational souls. Both thinkers believe different particular times are different. Both believe that time is held together by a unified, continuous medium, such as the 'now' in Aristotle or 'attention' in Bergson. And both believe all times cannot be reduced to a single time.

I will discuss these similarities in more detail in Part IV. First, I will lay out the basic components of Bergson's theory of duration. There are five central components to this theory. First, Bergson's theory offers a critique of the traditional theories of time, which he labels 'spatial' theories of time. Second, duration is composed of heterogeneous qualities, rather than an homogenous medium. Third, duration is identified with motion in a much stricter sense than even Aristotle identified it. This makes duration a temporal theory that emphasizes becoming over being. Fourth, duration is a theory of temporality that ties temporality directly to the experience of motion within consciousness. And fifth, it rethinks the modes of time, past present and future, by

compressing them into an expanding present (which cannot be conflated with an eternal presence, such as space in modern theories or God for Augustine). All of these components combine to form a theory of temporality that begins and ends with concrete, lived experience.

Bergson's first major published work, *Time and Free Will*<sup>171</sup>, provides his first detailed account of his theory of duration. At the time of its publication (1889), spatial theories of time were at their zenith. Classical mechanics ruled the day in the sciences, and the sort of homogeneity found in Kant ruled the day in philosophy. Both of these schools of thought held that time was a phenomenon similar to space. It was thought to be homogenous. It was thought of as being "laid out" like space, with the only real difference between space and time being the order of the discrete units (these units were generally thought of as juxtaposed in space and successive in time). As I discussed in Chapter 1, though, once time is thought of in this manner, even the asymmetry and successive nature of time can be seen to disappear. This was certainly the case with Laplace. But the roots for this are in Augustine, whose theory of time is framed by the presence of an eternal being that creates every moment of time. Once the future and past are known with pure, mathematical precision, then they are 'present' in the same way that space is generally thought to be present. This is why Bergson says:

Now, let us notice that when we speak of *time*, we generally think of a homogeneous medium in which our conscious states are ranged alongside one another as in space, so as to form a discrete multiplicity... For if time, as the reflective consciousness represents it, is a medium in which our conscious states form a discrete series so as to admit of being counted, and if on the other hand our conception of number ends in spreading out in space everything which can be directly counted, it is to be presumed that

---

<sup>171</sup> As I indicated above, I will refer to this work, *Les Donnes Immediates de la Conscience*, with the title given to it by its English translators, *Time and Free Will* – even though that title is in no way an accurate reflection of the French title.

time, understood in the sense of a medium in which we make distinctions and count, is nothing but space.<sup>172</sup>

By thinking of time as simply another form of space, or at least, as something very similar to space, Bergson believed that spatial thinkers lost the essential nature of time altogether. By conceiving of time as something that simply contains motion, time can be conceived of as something that can be devoid of content. This is the view that classical mechanics and Kant hold.<sup>173</sup> Things happen in time, and time is the same for all things, regardless of what those things are, or whether or not any or all things are happening at all. According to Bergson, this homogenous view of time fails to adequately distinguish time from space. When even the successiveness and asymmetry of time disappear, as they do in the more advanced version of classical mechanics, for example, time simply becomes space. Yet this is the view that is held by most people, both those who are scientists or philosophers, and by the common person as well: “Nevertheless it is generally agreed to regard time as an unbounded medium, different from space but homogeneous like the latter: the homogeneous is thus supposed to take two forms, according as its contents co-exist or follow one another. It is true that, when we make time a homogeneous medium in which conscious states unfold themselves, we take it to be given all at once, which amounts to saying that we abstract it from duration. This simple consideration ought to warn us that we are thus unwittingly falling back upon space, and really giving up time.”<sup>174</sup> This conception of time may seem to resemble how time works. In actuality, though, it represents temporal experience in a way that nullifies that same experience. This is because spatial theories of time substitute our reflection on

---

<sup>172</sup> Henri Bergson, *Time and Free Will*, 90-91.

<sup>173</sup> See Chapter 1, Part IV for a discussion of these theories.

<sup>174</sup> Bergson, *Time and Free Will*, 98.

temporal experience for the actual temporal experience itself. That is, by understanding time as an homogenous medium, the content of temporal experience has all of its temporal characteristics removed. Only in this way can one possibly think of time as something that can be devoid of content. This results in a static conception of time that cannot come to grips with either the way motion works or the way consciousness experiences it. This in turn leads to the paradoxes of the Eleatics, as well as all the other paradoxes, inconsistencies, and even outright contradictions that plague most theories of time in the tradition: “And these difficulties will multiply the greater the efforts it makes to overcome them, for all its efforts will only bring into clearer light the absurdity of the fundamental hypothesis by which it spreads out time in space and puts succession at the very centre of simultaneity. We shall see that the contradictions implied in the problems of causality, freedom, personality, spring from no other source, and that, if we wish to get rid of them, we have only to go back to the real and concrete self and give up its symbolical substitute.”<sup>175</sup>

According to Bergson, temporal experience cannot be devoid of content. Temporal experience always involves some kind of motion or change, whether on the part of the moving or changing thing, consciousness, or both. In fact, it would seem to always be both, since consciousness is a necessary ingredient for temporal experience to occur. Since consciousness could have itself as its own object of motion, it would then be the movement of consciousness that constitutes temporal experience, on Bergson’s view. The things or objects consciousness experiences when it has temporal experiences are qualities, not spatial extensions. And it is by and through these qualities transforming themselves that consciousness is able to experience motion. This is contrary to the

---

<sup>175</sup> Ibid., 139.

notions held by both Kant and classical mechanics, which held that time was a container imposed externally onto motion. Bergson, however, holds that there is no difference between temporal experience and the objects of temporal experience. This means that there can be no such thing as “empty, homogenous time,” according to Bergson. Capek notes this tendency in Bergson’s thought: “The negation of the homogeneity of time implied for Bergson the elimination of the Newtonian time as an empty and inert receptacle, additionally filled up by concrete changes and events. In other words, there is no distinction between the duration itself and its content. Psychological events are not *in* time, since they are in the ceaseless emergence *constitute true time itself*. This was one of the most far-reaching and boldest of Bergson’s claims.”<sup>176</sup> Even though Bergson would eventually apply duration to non-conscious phenomena, after a fashion, he never altered his belief that temporal experience could not be reduced to spatial understandings, such as those generally found in the tradition, without destroying the experience as such. This is why he draws the distinction between what he calls “true time,” duration, and spatial time. By returning to our direct experience of duration, rather than substituting a reflective understanding for that experience, we regain direct access to temporal experience as it concretely occurs.

So we encounter duration when we turn our consciousness away from the reflective analysis of temporal experience and concentrate instead on lived experience as it is concretely lived. Bergson describes the experience this way: “Pure duration is the form which the succession of our conscious states assumes when our ego lets itself *live*, when it refrains from separating its present state from its former states.”<sup>177</sup> This pure

---

<sup>176</sup> Capek, *Bergson and Modern Physics*, p 91.

<sup>177</sup> Bergson, *Time and Free Will*, 100.

duration is the transition of qualities in conscious experience, which constitutes the second major component of his theory of duration. That is, it is consciousness experiencing qualities transforming themselves into each other. Qualities, as such, are always only themselves. They are pure states of consciousness. They cannot be reduced to some neutral homogenous medium. Nor can they be interpreted in terms of ‘psychic’ force, or something like that. In fact, the very attempt to reduce qualitative states to some kind of measured ‘psychic’ intensity is just the sort of mistake that gives rise to spatial theories of time in the first place: “For, if the confusion of quality with quantity were confined to each of the phenomena of consciousness taken separately, it would give rise to obscurities, as we have just seen, rather than to problems. But by invading the series of our psychic states, by introducing space into our perception of duration, it corrupts at its very source our feeling of outer and inner change, of movement, and of freedom.”<sup>178</sup>

In duration itself, we return to the pure experience of qualities as qualities in and for consciousness. All qualities are unique, and their experience in and by consciousness is unique as well. Therefore, to attempt to reduce these qualities to homogenous units of ‘psychic’ force, and then to array these units along side each other in a spatial manner, is to miss the point of consciousness and its experience of qualitative transformation.

Duration is the experience of qualities changing in and for consciousness. Each quality is something unique. It can only be expressed as it is in itself for consciousness. Yet movement is the transformation of qualities. This means that, in order for qualities to change, they must interpenetrate each other in some way. This means that each earlier quality is retained in each later quality, without either losing itself or being reduced to something else: “In a word, pure duration might well be nothing but a succession of

---

<sup>178</sup> Bergson, *Time and Free Will*, 74.

qualitative changes, which melt into and permeate one another, without precise outlines, without any tendency to externalize themselves in relation to one another, without any affiliation with number: it would be pure heterogeneity.”<sup>179</sup> This pure heterogeneity forms what Bergson calls an organic or qualitative multiplicity. This sort of multiplicity differs from discrete or quantitative multiplicities because it is not divisible. Discrete or quantitative multiplicities are infinitely divisible. Qualitative multiplicities are unified wholes composed of interpenetrating qualities that, once they are absorbed into the multiplicity, cannot be reduced from it in lived experience. Discrete or quantitative multiplicities are those where the items in the multiplicity are represented by numbers, or something like numbers, in reflection – but not in lived experience.

Bergson understands that representing temporal experience as a series of interpenetrating qualities that form a qualitative, indivisible multiplicity is something foreign to the tradition, and therefore, something foreign to what people believe to be their actual experience of temporality. The reason for this, he says, is the way language constructs temporal experience through the use of spatial metaphors. Bergson says: “We instinctively tend to solidify our impressions in order to express them in language. Hence we confuse the feeling itself, which is in a perpetual state of becoming, with its permanent external object, and especially with the word which expresses this object.”<sup>180</sup> This linguistic need explains the popularity, both philosophically and in the ‘common’ understanding, of spatial theories of time. Reflective consciousness seeks to make sense of its experience of changing qualities through references to already understood phenomena. Pure duration, however, is imprecise at best. This is because each quality is

---

<sup>179</sup> Ibid., 104.

<sup>180</sup> Bergson, *Time and Free Will*, 130.

only always itself; and each qualitative multiplicity is likewise always only itself – regardless of what qualities are contained within it. Qualities cannot be repeated, reduced, or otherwise explained in terms of anything other than each consciousness’ unique experience of it as it concretely and currently experiences it. What language attempts to do, though, is to make what are essentially different things the same, in order to make those different things intelligible. When this is done, though, the essence of the original tends to be lost:

But in reality there are neither identical sensations nor multiple tastes: for sensations and tastes seem to me to be *objects* as soon as I isolate and name them, and in the human soul there are only *processes*. What I ought to say is that every sensation is altered by repetition, and that if it does not seem to me to change from day to day, it is because I perceive it through the object which is its cause, through the word which translates it. This influence of language on sensation is deeper than is usually thought. Not only does language make us believe in the unchangeableness of our sensations, but it will sometimes deceive us as to the nature of the sensation felt.<sup>181</sup>

Instead, Bergson maintains, it would be better to understand our experience in terms of a musical symphony. The notes of the melody are each distinct. One note cannot be reduced to another note. Yet all the notes of the melody, of the whole symphony, interpenetrate each other to form an organic whole. In this way, each successive note contains both itself as itself, and every other note, also as it was in and of itself. This is why a piece of music is a single piece of music from beginning to end. And this is also why we can experience music as music. If we consider music in terms of the notes themselves as reducible quantities of sound, then what we have is a reflective analysis of music, not music itself. A.C. Lacey puts it this way: “A melody must consist of a plurality of notes, but Bergson is surely right in saying that equally the notes must be

---

<sup>181</sup> Ibid., 131.

united into a single whole...the experience of hearing a melody will not be what it is – the experience of hearing that melody – unless it is taken all together.”<sup>182</sup> This is how actual temporal experience works. The qualities consciousness notes interpenetrate each other to form an organic multiplicity, like the notes of symphony interpenetrate each other.

The third component of Bergson’s theory of duration is the identification of temporal experience with motion itself. Bergson ties temporality to motion more closely than any other thinker in the tradition. For Bergson, temporality is the direct experience of motion by consciousness. It is motion as it is directly experienced, not as it is understood after-the-fact by reflection. Spatial theories of time, according Bergson, tend to try to remove motion from time proper. They seek to define that which is fluid and mobile, which is time, by something fixed and immobile, which is space. This leads to the mistake of assuming the motion in question is identical to the space it has just moved over. According to Bergson, though, reality itself is something constantly in motion: “This reality is mobility. There do not exist *things* made, but only things in the making, not *states* that remain fixed, but only states in process of change. Rest is never anything but apparent, or rather, relative. The consciousness we have of our own person in its continual flowing, introduces us to the interior of a reality on whose model we must imagine the others. *All reality is, therefore, tendency, if we agree to call tendency a nascent change of direction.*”<sup>183</sup> In other words, to understand motion in anything but mobile terms reduces true temporality to a spatial reflection of that temporality. This, in

---

<sup>182</sup> Lacey, 27.

<sup>183</sup> Bergson, *Creative Mind*, 188.

turn, led to the paradoxes of the Eleatics, and all the other sorts of paradoxes that tend to crop up in standard, spatial interpretations of time.

This confusion of motion with the space moved over stems from the same root as the confusion of experience with our understanding of and reflection on experience. When consciousness tends to experience directly, as Bergson maintains it does when it experiences duration itself, it notes that movements do not occur in space. Space is nothing more than a juxtaposition of infinitely divisible points. Any object in space can only occupy one point at a time. This would make motion impossible. But clearly we experience motion all the time. Bergson contends, then, that motion itself does not take place in space, since that would be impossible, but over space. The motion itself becomes an act of mental synthesis for consciousness:

We generally say that a movement takes place *in* space, and when we assert that motion is homogeneous and divisible, it is of the space traversed that we are thinking, as if it were interchangeable with the motion itself. Now, if we reflect further, we shall see that the successive positions of the moving body really do occupy space, but that the process by which it passes from one position to the other, a process which occupies duration and which has no reality except for a conscious spectator, eludes space. We have to do here not with an *object* but with a *progress*: motion, in so far as it is a passage from one point to another, is a mental synthesis, a psychic and therefore unextended process.<sup>184</sup>

And because the organic multiplicity of qualities is itself not extended, understanding motion through this medium is not contradictory, as Bergson claims spatial theories are. And, since qualitative, organic multiplicities are indivisible, the motion itself is also indivisible. This gives consciousness a pure understanding of motion as it is experienced. And this understanding resolves many of the paradoxes that crop up when motion is considered an extended process, such as those of the Eleatics.

---

<sup>184</sup> Bergson, *Time and Free Will*, 110-111.

Motion as motion is perpetual becoming. Traditional, spatial theories of time, by describing motion in terms of the space that motion moves over, end up describing becoming by reference to fixed, static being. When this happens, the mobile nature of motion is replaced by the immobile juxtaposition of spatial points. This causes time to lose its asymmetry and successiveness, which ends up making time itself disappear. This makes motion disappear as well. But when we abandon our reflection on motion for our experience of motion directly, we notice that all motions are continuous and unending. That is, the stopping point of any motion is, in effect, an arbitrarily chosen point that consciousness imposes from without. This is why it is a mistake to confuse our reflection of motion with our experience of motion. Bergson says:

For I speak of each of my states as if it formed a block and were a separate whole. I say indeed that I change, but the change seems to me to reside in the passage from one state to the next: of each state, taken separately, I am apt to think that it remains the same during all the time that it prevails. Nevertheless, a slight effort of attention would reveal to me that there is no feeling, no idea, no volition which is not undergoing change every moment: if a mental state ceased to vary, its duration would cease to flow... The truth is that we change without ceasing, and that the state itself is nothing but change.<sup>185</sup>

Language still gets in the way of this understanding, however. And it gets in the way because of its insistence on organizing itself around the intransitive verb ‘to be.’ In ordinary language, ‘becoming’ is merely a substitute for being used to avoid temporal confusion, such as when we say “The child becomes the man.” What we generally mean by this statement is that this person was a child, is now a man, but he is still the same person. Bergson believes that if we substitute becoming for the person, and make childhood and manhood qualitative states of a continuous motion (which would be precisely what he would claim is the case), then we can express the motion more

---

<sup>185</sup> Bergson, *Creative Evolution*, 3-4.

accurately. This is because all motions, including changing from childhood to manhood, are continuous examples of becoming. They are changes of states, where each state is a heterogeneous quality contained within the organic multiplicity that constitutes the movement as a whole as such:

The truth is that if language here were molded on reality, we should not say “The child becomes the man,” but “There is becoming from the child to the man.” In the first proposition, “becomes” is a verb of indeterminate meaning, intended to mask the absurdity into which we fall when we attribute the state “man” to the subject “child.” It behaves in much the same way as the movement, always the same, of the cinematographical film, a movement hidden in the apparatus and whose function it is to superpose the successive pictures on one another in order to imitate the movement of the real object. In the second proposition, “becoming” is a subject. It comes to the front. It is reality itself; childhood and manhood are then only possible stops, mere vies of the mind; we now have to do with the objective movement itself, and no longer with its cinematographical imitation. But the first manner of expression is alone conformable to our habits of language. We must, in order to adopt the second, escape from the cinematographical mechanism of thought.<sup>186</sup>

In order to experience motion as it is in its pure becoming, Bergson claims we need to re-evaluate the role of consciousness in temporal experience. This is the fourth component of his theory. Many spatial theorists wanted to think of time as something independent of consciousness. And even subjective/idealistic thinkers like Kant and Heidegger believe that time is something individual temporal beings are subject to, even if they are the ones who generate time in the first place. This causes time to act in the same manner that it is thought to act by classical mechanics and other similar theories. And both of these groups of views stem from the conflation of our reflection on motion with our experience of motion. If we want to get to the direct experience of motion, then we need to attend to the attention of consciousness prior to reflection. That is, we need to understand consciousness during its attention to the movement while the movement is

---

<sup>186</sup> Bergson, *Creative Evolution*, 340.

going on, rather than when consciousness has cut the movement off so as to analyze it. This attention to motion by consciousness is duration itself.

This is what allows consciousness to synthesize the interpenetration of qualities into the organic multiplicity that composes each particular movement. It is the attention of consciousness that recognizes and experiences motions as indivisible. This is why the experience of listening to a symphony can be a coherent experience. Without the attention of consciousness, the symphony would be nothing more than a cacophony of independent notes. This is why Bergson says: “Thus, within our ego, there is succession without mutual externality; outside the ego, in pure space, mutual externality without succession: mutual externality, since the present oscillation is radically distinct from the previous oscillation, which no longer exists; but no succession, since succession exists solely for a conscious spectator who keeps the past in mind and sets the two oscillations or their symbols side by side in an auxiliary space.”<sup>187</sup> Since motions are not extended, according to Bergson, then it would seem to follow that they can only occur in the presence of an attentive consciousness.

Most spatial theories of time assume that there are three modes of time: past, present and future. They can make this assumption because, as Bergson points out, on spatial theories of time, the past, present and future are regularly conceived of as being given all at once. This is certainly the case in classical mechanics. And it is certainly the case in Augustine’s theory. It is even the case for Heidegger’s theory of original temporality (which I will discuss in the next chapter). It is not the case for Bergson. In fact, Bergson considers the way time is divided into three modes one of the main factors in generating the various paradoxes to which spatial theories of time are subject.

---

<sup>187</sup> Bergson, *Time and Free Will*, 108-109.

According to Bergson's theory of duration, the whole past of a continuing movement is carried along all the while that movement continues. That is, each moment of the present, which for Bergson would be a heterogeneous, qualitative experience of consciousness, carries all other heterogeneous qualities that have been experienced by that consciousness as part of the organic multiplicity that is that movement. And, since motion is indivisible, it would seem fair to say that the past and the present are united in the continuing attention given to the movement by consciousness, such as in the symphony example. This explains how the past can be alive for Bergson in way that it really cannot be on spatial theories. And this is the fifth component to his theory of duration, the rethinking of the roles of past, present and future.

When one listens to a symphony though, particularly a symphony one has heard played before, one expects certain notes to follow from the current notes one is hearing. When Augustine uses the psalm "Deus Creator Omnium" to illustrate his definition of time as an extension of the mind, he claims that he can anticipate the coming syllables, and that this anticipation is the future becoming the present.<sup>188</sup> For Bergson, though, this is not really anticipation of the future. This is a reflective projection based on past experiences that consciousness supposes will happen. But consciousness has absolutely no way of knowing what will happen. Therefore, according to Bergson, the future, as it is normally conceived, does not exist.

Bergson's theory of duration is a theory of continuous motion. Each continuous motion that is experienced/generated by consciousness is a unique motion. There is no real way to predict what will happen to that motion as it continues on. Bergson does not

---

<sup>188</sup> See Chapter 1 of this dissertation for a discussion of Augustine's theory of time and its impact on the history of the concept.

believe there is a determined course into which this motion flows. He says: “Reality is global and undivided growth, progressive invention, duration: it resembles a gradually expanding rubber balloon assuming at each moment unexpected forms.”<sup>189</sup> To assume that the future is already there, waiting to be realized, is a common mistake. And it is a common mistake in two ways. First, it assumes that time is already laid out after the manner of space, which would render the modes of time meaningless in a different way. And second, it assumes that the fact that people have expectations means there is something out there that could or could not be realized, which ends up being similar to the first problem. This mistake derives from the fact that consciousness has a tendency to project reflections on past experiences, combined with hopes, fears, or whatever else motivates it, into some nebulous void that lies ahead of itself, shrouded in mist. On closer examination, though, it turns out that this is a mere confusion of what ‘potentiality’ and ‘actuality’ actually are. Things are only potential after they have become actual. Potential only means something else could have been done after whatever was done actually was done. There is no more reality to potentiality than that. Many thinkers in the history of the concept of time, however (including Heidegger, in my opinion), confuse the notion and place potentiality ahead of the actual action, as if movement and change were the realization of some pre-determined program, rather than a continually creative process. This is why Bergson says: “If we put the possible back into its proper place, evolution becomes something quite different from the realization of a program: the gates of the future open wide; freedom is offered an unlimited field.”<sup>190</sup>

---

<sup>189</sup> Bergson, *Creative Mind*, 95-96.

<sup>190</sup> Bergson, *Creative Mind*, 104.

Duration is a theory of temporality based entirely on consciousness' experience of motion, both within itself and insofar as it is affected by external objects. It does not substitute spatial metaphors for direct experience, which reveals that motion is the interpenetration of heterogeneous qualities into an organic, indivisible multiplicity. Ordinary theories in the tradition, such as those I described in Chapter 1, hold that time is a homogenous medium that resembles space, and in the end, comes to be another version or dimension of space. This is why most spatial thinkers believed time could exist without consciousness. Bergson points out, though, that things do not move in space, they move over it, and only when consciousness turns its attention to them. Things do not have temporal experience, only consciousness does. This allows consciousness to hold the previous qualities of a movement together with the current qualities, which makes experience immediately intelligible. And this also causes Bergson to deny that there is such a thing as a future out there, either actually or potentially, since, if it is the case that duration is consciousness being attentive to movement, then that movement will always be creative, not the realization of something already planned.

This theory has been interpreted in several different ways by several different groups of thinkers. Some have seen it as a proto-phenomenological theory. Others have seen it as a kind of post-modern Platonism. I see it as a kind of contemporary Aristotelianism. In the next part, I will discuss the two prevalent schools of interpretation, the phenomenological school and the Deleuzian school. After examining these two positions, I will show that my Aristotelian interpretation better explains the concepts in the text, without importing notions into Bergson that he does not seem to have held.

### PART III: TWO STANDARD INTERPRETATIONS OF BERGSON'S THEORY OF DURATION

There are three standard interpretations of Bergson's theory of duration. The first is a close textual reading of Bergson's theory. This is the position held by Capek, and to a certain extent by Lacey and Olkowski. Capek's interpretation in particular is close to the text; and it will be very helpful in developing my Aristotelian account of duration in Part IV. The second interpretation holds that Bergson is a kind of proto-phenomenologist. Casey, Mullarkey and Moore hold this view, which seems to be based primarily on *Matter and Memory*. The third interpretation comes from Deleuze. Deleuze's interpretation also influences Olkowski to some extent. Both the phenomenological interpretation and the Deleuzian interpretations are odds with the Aristotelian interpretation I will develop in Part IV. Examining these interpretations should provide a nice point of comparison, then, for my Aristotelian interpretation.

Phenomenological interpretations of Bergson's theory of duration center around two elements. The first is the psychological description of duration, particularly as it is expressed in *Time and Free Will* and *Matter and Memory*. The second is Bergson's use of the body as a kind of central image, particularly when it comes to the attention and action of consciousness. These interpretations draw good parallels between Bergson's work and thinkers such as Merleau-Ponty. In fact, they often claim that Bergson's work lays a foundation for contemporary phenomenology, or at least, for the Merleau-Pontian wing of the contemporary phenomenological movement. Bergson's theories provide a foundation against both idealism and empiricism (also referred to as realism), both of which were still quite popular when Bergson was writing. At the same time, his theories were able to attempt a synthesis of these two contrary positions. This synthesis,

particularly as it is expressed in *Matter and Memory*, provides a theoretical foundation for Merleau-Ponty's early work. In addition, Bergson's use of the body, and our experience of our own body as a central concept for understanding duration, provides a starting point for phenomenological descriptions of the body in Merleau-Ponty and others. Casey notes this influence, saying: "I have begun with Bergson not just because of his proto-phenomenological descriptions (themselves based on the strikingly similar sensibilities which he shares with phenomenologists) but mainly because he introduces the topic of habit memory in a way that forms an indispensable prelude to Merleau-Ponty's treatment of body memory in general. Not that this is an isolated case: Bergson is often the most effective escort into Merleau-Pontian reflection on many subjects, as Merleau-Ponty himself acknowledges..."<sup>191</sup> Of course, Bergson did not take these notions far enough. But then, Bergson did not have the rigorous methods, nor the advances in science and psychology upon which to draw: "By situating habit in the body, Merleau-Ponty gives to habit a new depth of meaning and function which, though adumbrated by Bergson, is never worked out expressly by the author of *Matter and Memory*."<sup>192</sup>

In *Matter and Memory*, Bergson represents the experience of duration as a pyramid. The apex of the pyramid is the present 'moment' of lived experience. The body of the pyramid is the past, which is alive in memory. This past has a 'virtual' presence. That is, the past is available to consciousness presently, because the past does not cease to exist for consciousness as such. It is bound up with and informs the present experience consciousness has. But this 'binding up' of past experience is not available to

---

<sup>191</sup> Casey, 282-283.

<sup>192</sup> Ibid., 284.

consciousness the way actual present, currently lived experience is available to consciousness. Bergson wants to avoid thinking of the past in spatial terms, though, so he needs a different way to express it. The cone diagram<sup>193</sup> shows that the past is carried along with the present in a way that is more real than mere imagination, since the events of the past actually happened. But, since the past and present do not each exist in the same way at the same time, the past must have a different kind of existence that allows it to be connected to the present experience. This existence is called ‘virtual’, since it mirrors certain elements of current lived experience, and because it gives meaning to the present experience by flowing into that experience.

These ‘virtual’ realities are bound up with the present because temporality is a phenomenon of consciousness. This experience occurs when consciousness tends to its motions directly, rather than reflectively. Moore notes the similarities between this attempt to think experience prior to reflections on experience and the attempt to get behind reflective understanding in phenomenological approaches: “As we shall see, Bergson’s main claim is that this discreteness is not real. It is not that we start from discrete items of experience spread out over time but somehow threaded together like beads on a string of consciousness. Rather we start from the experience of temporal flow. Temporal structure is not a matter of putting together given discrete items. On the contrary, so-called discrete elements are only apparent when we have a need to pluck them from our *continuing* experience.”<sup>194</sup> On this view, duration would be the heterogeneous interpenetration of qualities for consciousness. Since duration is indivisible, those qualities that have already been incorporated into the organic

---

<sup>193</sup> See pages 151-163 of *Matter and Memory* for Bergson’s famous cone illustration.

<sup>194</sup> Moore, 55.

multiplicity would continue on as virtual qualities. This can only occur in consciousness, because only consciousness can hold these various qualities together in the present, lived moment of experience. Things themselves, apart from consciousness, could only have an instantaneous kind of existence. Only consciousness has memory, and only memory can hold the virtual reality of past qualitative experiences. This interplay of the virtual with the lived movement in experience centers around the body of the conscious being. It exists ‘virtually’ through the memory of the conscious being. As Casey puts it: “in the embodiment of the past in habits we witness the tip of an enormous pyramid whose total bulk is the past itself. Moreover, the tip is moving in a way the past is not: hence the effect of the past’s receding from us.”<sup>195</sup> This compares favorably to Merleau-Ponty’s own notion of the past in the *Phenomenology of Perception*, where he says the past is: “a mobile setting which moves away from us.”<sup>196</sup> The body becomes the central image from which all actions derive and to which all actions return. That is, the intentionality of the body is the source of the present experience of duration, and the attention of the body is the reason the past remains in virtual memory.

As interesting as the relationship between Merleau-Ponty and Bergson might be, though,<sup>197</sup> no one has done more to revitalize interest in Bergson than Deleuze.

Deleuze’s interpretation of Bergson agrees with the bulk of the phenomenological

---

<sup>195</sup> Ibid., 293.

<sup>196</sup> Merleau-Ponty, *Phenomenology of Perception*, 149.

<sup>197</sup> I maintain that this relationship between Merleau-Ponty and Bergson, in terms of the body, is much closer than Merleau-Ponty wants to admit in the *Phenomenology of Perception*. Even though Merleau-Ponty wants to go beyond what he calls Bergson’s “mysticism,” the way the phenomenal field operates is much closer to Bergson than it seems to be at first glance. And, while there is certainly a more distinct Husserlian flavor to Merleau-Ponty’s phenomenology in his early work, the way the field moves, as well as the way consciousness shapes its lived experience, still retains enough of a Bergsonian heritage to incite comment. In Merleau-Ponty’s later works, this Bergsonian heritage moves to the foreground, as it were. For an interesting look at the influence of Bergson’s duration and theory of the body on Merleau-Ponty, especially his later work, see Dorthea Olkowski, “Merleau-Ponty and Bergson: The Character of the Phenomenal Field,” 27-37.

interpretation. What Deleuze does is take this interpretation a step further. According to phenomenological interpretations, duration is entirely a phenomenon of consciousness. And this seems to be supported by much of Bergson's texts. Deleuze expands this notion, however, drawing on some of Bergson's later works. In this way, he is able to claim that Bergson's notion of duration is more than a theory of temporality completely bound to consciousness. Instead, duration covers the entirety of the universe, according to Deleuze. Deleuze maintains this gives Bergson a Platonic heritage.

Deleuze sees Bergson's theory of duration as an attempt to eradicate differences in kind in temporal thinking, so as to show that true time only ever differs in degree. To accomplish this, Deleuze maintains that Bergson must make a distinction between actual multiplicities and virtual multiplicities. This way, Bergson will be able to reconcile the individual durations of individual consciousness with the overall duration of the universe. In his earlier works, Bergson maintained that things do not have duration. Only consciousness has duration. A multiplicity of things would have no duration, then, they would just be as they are: things in space. Therefore, the kind of multiplicity assigned to things independent of consciousness is an actual multiplicity. Qualities are assigned to virtual multiplicities, because qualities endure in consciousness. Deleuze says:

The important thing here is that the decomposition of the composite reveals to us two types of multiplicity. One is represented by space (or rather, if all the nuances are taken into account, by the impure combination of homogeneous time): It is a multiplicity of exteriority, of simultaneity, of juxtaposition, of order, of quantitative differentiation, of *difference in degree*; it is a numerical multiplicity, *discontinuous and actual*. The other type of multiplicity appears in pure duration: It is an internal multiplicity of succession, of fusion, of organization, of heterogeneity, of qualitative discrimination, of *difference in kind*; it is a *virtual and continuous* multiplicity that cannot be reduced to numbers.<sup>198</sup>

---

<sup>198</sup> Deleuze, *Bergsonism*, 38.

This leads Deleuze to describe Bergson as a Platonist.

At first glance, it seems rather strange to describe Bergson as a Platonist. Nothing could seem farther from Bergson than the static world-view normally attributed to Plato. But Deleuze sees in Bergson's distinction between different types of multiplicities an attempt to solve the problem of the one and the many in Platonic terms. Deleuze says: "Once again there is a Platonic tone in Bergson. Plato was the first to deride those who said "the One is multiple and the multiple one – Being is nonbeing," etc. In each case he asked *how, how many, when and where*. "What" unity of the multiple and "what" multiple of the one?"<sup>199</sup> By acclimating differences in kind into a virtual multiplicity, Deleuze believes Bergson is able to solve the problem of the one and the many by rendering the distinction between the one and the many meaningless in duration. But this only works if duration applies to the universe as a whole.

This is the key point of departure between Deleuze and phenomenological interpretations. According to Deleuze's reading of Bergson, duration does not reside in consciousness alone, but in the universe as a whole. That is, there must be movement in things as well as in the mind in order for duration to work. Otherwise, Bergson will remain a dualist. He will be a different kind of dualist, one who prioritizes becoming over being instead of being over becoming. But he will still be a dualist. This is not what Bergson does, however, according to Deleuze. What Bergson does is to naturally extend his thinking on duration out to the universe as a whole as he became a more mature philosopher, particularly in light of the advance of relativity theory in physics.

According to Deleuze, then, there are three fluxes at work in Bergson. The first is the flux of my own consciousness. The second is the flux of every individual thing in the

---

<sup>199</sup> Deleuze, *Bergsonism*, 44.

universe. And the third is the flux of the universe when the universe is taken as a whole. The flux of the individual subject is handled in *Time and Free Will*. The flux of things in general is taken up in *Matter and Memory*. This is done by extending motion to the things themselves, rather than saying that motion can only occur when consciousness is present. This is a change from Bergson's earlier work, where he claimed things only ever occupied places, which is why Deleuze gives a lot of credit to *Matter and Memory*, for here "Movement is attributed to things themselves so that the material things partake directly of duration, and thereby form a limit case of duration."<sup>200</sup>

Once Bergson begins to think that things in the universe are capable of motion by themselves, the distinction between spatial multiplicities and virtual multiplicities begins to diminish. Eventually, it disappears altogether. This makes everything virtual, according to Deleuze, because everything will now fall under the universal duration. That is, by the end of Bergson's writings, there is a third flux, that of the universe taken as a whole. Everything that occurs within this universal flux will be virtual as far as that flux is concerned. The particular virtual things may still seem to be different in kind. And each of these particular things, including consciousness, will still have its own duration. But all of these things, all of these virtual multiplicities that carry their pasts with them, each one of these in turn composes the universal, virtual duration. Deleuze says:

Hence the triplicity of fluxes, our duration (the duration of a spectator) being necessary both as flux and as representative of Time in which all fluxes are engulfed. It is in this sense that Bergson's various texts are perfectly reconcilable and contain no contradiction: There is only one time (monism), although there is an infinity of actual fluxes (generalized pluralism) that necessarily participate in the same virtual whole (limited pluralism). Bergson in no way gives up the idea of difference in kind

---

<sup>200</sup> Ibid., 75.

between actual fluxes; any more than he gives up the idea of differences of relaxation or contraction in the virtuality that encompasses them and is actualized in them. But he considers that these two certainties do not exclude, but on the contrary imply, a single time. In short: Not only do virtual multiplicities imply a single time, but duration as a virtual multiplicity is this single and same Time.<sup>201</sup>

This gives us a view of duration that does indeed appear Platonic. There is one overall Time, but that one Time is itself a virtually existing thing. It is made up of many different times, which are all in turn virtual things themselves. This is why, even though it is the case that all particular times are different, they are still all part of the same universal time. So even if they do differ in kind from each other, they only differ in degree insofar as they are part of the overall, universal multiplicity.

#### PART IV: THE INFLUENCE OF ARISTOTLE'S THEORY OF TIME ON BERGSON'S THEORY OF DURATION

Deleuze thinks Bergson is a kind of Platonist because he sees Bergson's theory of duration as something that is universal in scope. All particular durations would then be heterogeneous qualities within the larger, universal duration. Even if it is true that all particular durations are part of a universal duration, though, this does not mean that Bergson is a Platonist. In fact, it would seem that Bergson is nothing like a Platonist at all. To say Bergson's theory of duration is a Platonic theory would be to imply that the particular durations imitate or participate in some kind of essential way in the duration of durations, which would be the universal duration. But this would introduce a spatial element back into Bergson's theory. In fact, it would nearly seem to make the theory homogenous. This cannot be the case for Bergson, though. Each particular duration, whether it is part of a larger duration or not, is still uniquely and wholly its own. It cannot be reduced to some kind of universal duration, regardless of what anyone means

---

<sup>201</sup> Deleuze, *Bergsonism*, 82-83.

by 'universal'. Bergson's theory as a whole lacks the sort of essentialism necessary for describing it as a Platonic theory.

Bergson's theory of duration is similar to Aristotle's theory of time, though. In fact, I believe that Bergson's theory of duration was influenced heavily by Aristotle's theory of time. Both theories are qualitative. Both theories rely on the presence of some kind of agent. Both theories account for different kinds of temporal experience. And both theories bind time to motion in some way. When these similarities are combined with the fact that Bergson knew Aristotle, and that he saw Aristotle's universe as a living, moving universe, I believe the case can be made for the influence of Aristotle on Bergson.

I will make this case by looking at six points of comparison/influence. First, both Bergson and Aristotle begin their treatments of time with critiques of the prevailing theories. These prevailing theories behave in similar fashions (both are spatial in the sense Bergson uses the term). And the critique of both is similar. Second, I will look at the similar role motion plays in both theories. Third, I will discuss the use of consciousness in Bergson and the perceiving, rational soul in Aristotle. Both thinkers use these devices in the same way, particularly since both believe time to be dependent upon them. Fourth, I will show Aristotle's use of number is qualitative, and as such is closer to Bergson's notion of heterogeneous, interpenetrating qualities. Fifth, I will discuss the notion of indivisibility for the 'now' in Aristotle and motion in general for Bergson. And finally, I will show the similarities in each thinker's basic view of the universe as a living, moving thing. All of these combine to show a heavy influence of Aristotle on Bergson.

The first point of comparison/influence is the way both thinkers begin with critiques of the prevailing notions of time. These standard theories hold time to be composed of ‘nows’ in a manner reminiscent of space or geometrical lines. Aristotle lays out three arguments to show why time cannot be composed of ‘nows’, though. He says, “the ‘now’ is not a part: a part is a measure of the whole, which must be made up of parts. Time, on the other hand, is not held to be made up of ‘nows’.”<sup>202</sup> Also, if time were composed of ‘nows’, then in order for time to flow one ‘now’ would have to be different from another ‘now’. If the ‘now’ were different and different, though, then when would one ‘now’ exist and the other ‘now’ come into existence? “For we may lay it down that one ‘now’ cannot be next to another, any more than a point to a point. If then it did not cease to be in the next ‘now’ but in another, it would exist simultaneously with the innumerable ‘nows’ between the two – which is impossible.”<sup>203</sup> Nor can the ‘now’ always be the same, for then, “things which happened ten thousand years ago would be simultaneous with what has happened today, and nothing would be before or after anything else.”<sup>204</sup> Time, therefore, cannot be composed of parts called ‘nows’.

In a similar fashion, Bergson begins his own treatment of temporality with a critique of spatial theories of time. These theories hold that time is an homogeneous medium, like space, where the parts are arranged in an order of succession rather than juxtaposition. If time were such a homogeneous medium, then all the elements of temporal experience would be identical in essence to each other. But according to Bergson, temporal experience is of heterogeneous qualities that interpenetrate each other, not of a homogeneous medium that remains unchanged regardless of whether or not any

---

<sup>202</sup> Aristotle, *Physics*, 218a,6-8.

<sup>203</sup> *Ibid.*, 218a.

<sup>204</sup> *Ibid.*, 218a.

motion occurs. In Aristotle, the attempt to think of time as a medium composed of ‘nows’ led to the impossibility of time’s existence. In Bergson, the attempt to think of time as an homogeneous medium that behaves more or less like space (a similar description to the attempt in Aristotle’s day to think of time geometrically) leads to the assimilation of time into space and the loss of temporal experience altogether:

“Nevertheless it is generally agreed to regard time as an unbounded medium, different from space but homogeneous like the latter: the homogeneous is thus supposed to take two forms, according as its contents co-exist or follow one another. It is true that, when we make time a homogeneous medium in which conscious states unfold themselves, we take it to be given all at once, which amounts to saying that we abstract it from duration. This simple consideration ought to warn us that we are thus unwittingly falling back upon space, and really giving up time.”<sup>205</sup> This critique is similar to Aristotle’s because it notices the impossibility of time as such when the prevailing view is examined in detail. If time is an homogeneous medium, it ceases to be time and becomes space. If time is composed of identical ‘nows’ arranged in a geometrical pattern, the functions of time become impossible.

Having begun in a similar fashion to Aristotle, Bergson follows him in tackling the problem of time as it relates to motion. Both thinkers believe time to be bound up with motion in some way. For Aristotle, it cannot be the same as motion itself, but it cannot be found without motion, either. Aristotle says, “time is neither movement nor independent of movement.”<sup>206</sup> Bergson says, “if a mental state ceased to vary, its duration would cease to flow... The truth is that we change without ceasing, and that the state itself

---

<sup>205</sup> Bergson, *Time and Free Will*, 98.

<sup>206</sup> Aristotle, *Physics*, 219a

is nothing but change.”<sup>207</sup> Aristotle sees time as an attribute of motion. Bergson sees duration as the direct experience of motion. Both of these theories reject the notion that time is a kind of container for motion. This is the view that traditional, spatial theories hold. Aristotle’s theory of time and Bergson’s theory of duration depend upon things moving or changing. The difference between the two lies in the concept of place and space each has to work with. The similarity resides in the way motion is experienced by souls or consciousness.

Bergson identifies Aristotle’s theory of place as a theory different than modern notions of space. He says Aristotle, “nowhere speaks clearly and in detail of what we mean by space.”<sup>208</sup> This is because Aristotle could not accept the existence of the void. In fact, Aristotle maintained that the void could not even be conceived. This means that there could be no such thing as actually existing homogenous space, on Aristotle’s view. When things move, they move in place and from place to place. They do not, nor could they, move in space. And, since places exist whether any souls notice them or not, and since everything is either in its natural place or attempting to move to its natural place, motion would exist whether souls noticed motions or not. Time only exists when the soul has been affected by motion, therefore time is not the same as motion.

Bergson holds a similar position in some respects. He is able to replace Aristotle’s notion of place with the modern notion of space, though, and clarify the way motion itself works. All things that exist do so in space. But everything that exists in space only ever exists at one particular point in space, according to Bergson. When things move, they do not move in space, they move over space. In order for this to be the

---

<sup>207</sup> Bergson, *Creative Evolution*, 3-4.

<sup>208</sup> Bergson, “Aristotle’s Concept of Place,” 20.

case, the things that move need to have their motion bound together by consciousness. This binding together is what causes motion itself in the first place. And it is the experience of this motion that gives us the experience of duration, according to Bergson. This is similar to Aristotle, insofar as time is bound up with motion. It simply goes a bit further, by making time and motion one and the same thing, more or less. For Aristotle, motion could happen without soul, since place still exists. For Bergson, motion cannot happen without consciousness, since only consciousness can synthesize the transformation of qualities that constitutes motion.

Both Bergson and Aristotle tie time to something similar besides motion. They both tie time to a particular kind of observer. For Aristotle, time exists when a soul that can perceive change actually perceives change and is affected by that change in some way. He says: “When the state of our minds does not change at all, or we have not noticed its changing, we do not think that time has elapsed, any more than those who are fabled to sleep among the heroes in Sardinia do when they are awakened...we apprehend time only when we have marked motion, marking it by before and after; and it is only when we have perceived before and after in motion that we say that time has elapsed.”<sup>209</sup> This ties time to the soul in a direct way. Even if motion could exist without soul, time itself, as the enumeration of motion by the soul, could not exist without the soul. The same thing is the case in Bergson, although Bergson’s claim is a bit stronger. Bergson claims that motion itself could not exist without the observations of consciousness. Since duration is the direct experience of motion by consciousness, then it could not exist without consciousness, either: “Outside of me, in space, there is never more than a single position of the hand and the pendulum, for nothing is left of the past positions. Within

---

<sup>209</sup> Aristotle, *Physics*, 218b-219a.

myself a process of organization or interpenetration of conscious states is going on, which constitutes true duration. It is because I *endure* in this way that I picture to myself what I call the past oscillations of the pendulum at the same time as I perceive the present oscillation.”<sup>210</sup> This means that the role consciousness plays is even more important for Bergson, because one cannot even conceive of time potentially, he claims, without consciousness. Aristotle provides the blueprint here, by suggesting the soul is needed for the temporal experience of motion.

By saying that motion could occur without the soul, though, Aristotle leaves himself open for the interpretation that time could still exist in some way without the soul’s being present. This is the view that Simplicius and others hold.<sup>211</sup> This view seems contrary to the spirit of Aristotle’s definition of time, though. And it is certainly contrary to his specific treatments of soul in relation to time. It stems from the need to think of Aristotle’s theory as a traditional theory. Bergson, on the other hand, is able to clarify Aristotle’s notion of the importance of the soul by introducing the more advanced notion of consciousness (in the modern sense). This allows him to clear up the confusion between motion and our experience of motion by differentiating between empty space and the motion of objects over empty space. Without consciousness, then, nothing at all can move, let alone be experienced in duration. This influence must have come from Aristotle’s use of the soul in defining time. And both of these uses run counter to the prevailing spatial theories of time, which hold that the conscious spectator (or soul) is irrelevant to either time’s existence or operation.

---

<sup>210</sup> Bergson, *Time and Free Will*, 108.

<sup>211</sup> See Chapter 2, Part II for a discussion of this aspect of traditional interpretations of Aristotle.

Where this argument runs into its greatest problem, though, is with Aristotle's definition of time as a number. Bergson's theory of duration is an attempt to think of time without resorting to number. Yet Aristotle defines time as a number, specifically as the "number of motion in respect of 'before' and 'after'."<sup>212</sup> This is why Aristotle says time is not the same as motion itself, but is instead an attribute of motion. Specifically, it is the attribution of motion that makes it possible to number motion. This is why he says "time is not movement, but only movement in so far as it admits of enumeration."<sup>213</sup> Bergson, on the contrary, defines pure duration as: "nothing but a succession of qualitative changes, which melt into and permeate one another, without precise outlines, without any tendency to externalize themselves in relation to one another, without any affiliation with number."<sup>214</sup> This would seem to limit the amount of influence Aristotle could have had on Bergson.

Upon closer examination, though, Aristotle's use of number in his theory is not so different from Bergson's use of interpenetrating heterogeneous qualities. As I discussed in Part IV of Chapter 2, Aristotle's use of number in his theory, and his theory itself, is more qualitative than quantitative. This is the case for two reasons. First, according to Aristotle, number is used in two ways: as the number that counts and as the number of things counted. Time is the number counted. So therefore, just as there are different kinds of things counted by the number that is counted, horses, men, and so on, so, too, will there be different times counted for different motions. Second, things are only counted when a rational, perceiving soul is affected by the motion in such a way as to be caused to count it. This makes time more of an affective quality than a quantity. If it

---

<sup>212</sup> Aristotle, *Physics*, 219a.

<sup>213</sup> Aristotle, *Physics*, 219a.

<sup>214</sup> Bergson, *Time and Free Will*, 104.

were a quantity, then presumably it would exist whether it was counted or not. And if it were the number that counts, all motions would be reducible to something regular.

Alterations and other kinds of motions are not regular, however, and cannot be reduced to anything else, such as locomotion (although some have tried to claim that this is the case in Aristotle, as I discussed in Chapter 2).

Bergson's description of duration as the interpenetration of heterogeneous qualities is similar to this use of number and irregularity by Aristotle. The fact that irregular motions cannot be reduced to a single unit is similar to the way each quality in the organic multiplicity of duration cannot be reduced to any other quality. Nor can any particular experience of duration be reduced to any other particular experience. Bergson says: "in reality there are neither identical sensations nor multiple tastes: for sensations and tastes seem to me to be *objects* as soon as I isolate and name them, and in the human soul there are only *processes*."<sup>215</sup> So the fact that motions are always irregular for Bergson and often irregular for Aristotle, combined with the way Aristotle uses number in a more qualitative fashion, demonstrates a pronounced similarity between the two thinkers. When this is combined with Bergson's interpretation of Aristotle's universe as a living thing, it seems reasonable to say that Aristotle's qualitative use of number and the irregularity he attributes to motions as a result of this could form an influence on Bergson's use of heterogeneous, interpenetrating qualities as the foundation of and raw material for the experience of duration.

All motions do have one common feature, though. Each motion or change is continuous. Both Aristotle and Bergson see motion is whole and continuous. This means that the motion, as motion, is not divisible. And this means the time, as time, is not

---

<sup>215</sup> Bergson, *Time and Free Will*, 131.

divisible, since time goes with the motion. Otherwise, whenever motion occurred, it would be broken up into smaller motions, and the time broken up into smaller times, with no hope of ever completing either a motion or a time. This led Aristotle to say: “But what is moved is moved from something to something, and all magnitude is continuous. Therefore the movement goes with the magnitude. Because the magnitude is continuous, the movement too is continuous, and if the movement, then the time; for the time that has passed is always thought to be as great as the movement.”<sup>216</sup> This continuous magnitude is bound together by the ‘now’. The ‘now’ makes the time counted continuous, just as the body in motion makes the movement continuous. This magnitude needs to be understood in a qualitative sense, however, since it is the number counted. This means every motion is continuous but unique, for Aristotle, particularly in the case of irregular motions such as alteration. If it were understood in the quantitative sense, as the number that counts, then there would be no reason not to artificially break any particular motion up into infinitely divisible smaller motions. This would make motion impossible for Aristotle, however, just as a similar action in regards to time would make time impossible. Time must be indivisible in order to be the time of a particular motion.

Bergson takes this notion a step further by combining the moving body and the ‘now’ into one direct experience of consciousness. Since motion is a qualitative change for consciousness over space for Bergson, it will necessarily be continuous. And since duration is the experience of this change by consciousness, it will also necessarily be continuous. This motion, and the experience of duration formed by this motion, is the notion of an organic multiplicity composed of heterogeneous qualities. This notion follows Aristotle’s concept of the now as unifying different stages of the experience of a

---

<sup>216</sup> Aristotle, *Physics*, 219a.

movement into one coherent experience of that movement. Where Bergson and Aristotle differ is in the fact that Aristotle believes the movement could still take place without the soul being affected by it, whereas Bergson believes movement is a purely qualitative change that could not take place without consciousness. But Aristotle's idea of the unity of motion comes across in Bergson's critique of spatial theories of time and the use of his melody example to explain the indivisibility of motion: "Let us listen to the melody, allowing ourselves to be lulled by it; do we not have the clear perception of a movement which is not attached to a mobile, of a change without anything changing? This change is enough, it is the thing itself. And even if it takes time, it is still indivisible; if the melody stopped sooner it would no longer be the same sonorous whole, it would be another, equally indivisible."<sup>217</sup> By collapsing the distinction between the thing that changes and the change itself, Bergson is able to take Aristotle's notion of the continuity and indivisibility of motion and time and collapse them into one simpler notion. Time and the movement are the same because they are both one and the same qualitative experience of consciousness. He was able to do this because he had the modern notion of space at his disposal, whereas Aristotle, although vaguely aware of an earlier form of that notion, did not. However, Aristotle's notion of the continuity and indivisibility of motion and time, as evidenced by the continuity of the body moving and the 'now' that constitutes the 'before' and 'after' provided Bergson with a theoretical starting point lacking in modern notions of motion and time, which have both taking place within infinitely divisible space independent of consciousness.

As Bergson point out in his Latin dissertation, Aristotle's concept of the universe was an organic, vibrant concept. According to Aristotle, everything in the universe has

---

<sup>217</sup> Bergson, *Creative Mind*, 147.

its natural place. This is a likely reason why Aristotle thought things moved independently of a perceiving soul. Everything in the universe has a natural place, and therefore, everything in the universe moves toward that natural place if it is not there already, according to Aristotle. While Bergson does not seem to hold the view that everything has a natural place, he does seem to have been influenced by Aristotle's view of the universe as a kind of living thing. That is, in Aristotle, Bergson found a source for his idea that reality itself is a moving, living thing. This provides the final point of comparison between Bergson and Aristotle. And I believe it cements my argument that Bergson's theory of duration is an Aristotelian theory.

Everything for Aristotle moves in some way. In particular, things that are not in their natural place move toward their natural place. But even the heavens are in perpetual motion. And since the heavens are the limit of the universe, according to Aristotle, this means that the universe itself, as a whole, is constantly in motion. This description is not analogous to the modern concept of space, since there is no possible way to interpret modern space as a mobile phenomenon.<sup>218</sup> It is not one of inert matter set over and against living things. Instead, Bergson saw in Aristotle that the universe, and all its parts, move as each thing's internal nature dictates: "Therefore from a consideration of natural movement it follows that the world is a kind of living thing, and that the simple elements, like the parts of a living thing, exercise their proper functions in certain proper places which they desire when lost and cling to when found again."<sup>219</sup> Bergson mirrors this

---

<sup>218</sup> At least there is no way to do this before Relativity theory. The effects of relativity theory on Bergson's theory of duration are interesting, but outside the scope of this project. Certainly, at the time Bergson published most of his major works, Relativity theory was not yet available. The modern notion of space that he critiques then, which is the central notion in traditional theories of time, is an absolute, immobile notion, as I described in Chapter 1.

<sup>219</sup> Bergson, "Aristotle's Concept of Place," 56.

conception of reality with his application of duration to the universe as such: “This reality is mobility. There do not exist *things* made, but only things in the making, not *states* that remain fixed, but only states in process of change. Rest is never anything but apparent, or rather, relative. The consciousness we have of our own person in its continual flowing, introduces us to the interior of a reality on whose model we must imagine the others. *All reality is, therefore, tendency, if we agree to call tendency a nascent change of direction.*”<sup>220</sup>

This expansion relies on a conception of the universe as a living thing, which Bergson clearly found in Aristotle. It is a modified form of what Bergson finds in Aristotle, of course. But there is certainly nothing Platonic about it, as Deleuze suggests. Even if there is a tripartite flux in Bergson, nothing about this flux resembles the static conception of the universe one finds in Plato. The sort of immobile, eternal existence attributed to the higher levels of reality in Plato is precisely the sort of thing that Bergson’s theory of duration, and the mobile world-view that springs from it, criticizes as directly contrary to the experience of consciousness and the world as such.

This absence of essentialism is what led Moore to say that Bergson could not be an Aristotelian, either. I believe I have shown, though, that Bergson’s understanding of Aristotle’s theory of time, and the worldview within which Aristotle situated that theory, is a worldview of concrete experience and natural motion. Even the definitions one finds in Aristotle’s worldview are not absolute. Things tend towards their proper place. Things are not fixed in absolute space in a precise, mathematical manner. Bergson’s theory of duration provides a qualitative fulfillment for Aristotle’s theory, since it uses the modern notion of the conscious subject to solve the problem of the body that moves

---

<sup>220</sup> Bergson, *Creative Mind*, 188.

and the time it takes to move that body. Aristotle's theory, which I have shown was already qualitative, gives Bergson a basis for his more coherent and complete qualitative theory. Both thinkers provide a universal definition of temporal experience. But this universal definition is a concrete universal. Aristotle's statement "time is present equally everywhere and with all things,"<sup>221</sup> means that all things that move, and are noticed moving by the soul, have time as an attribute, which is an affective quality of the soul. Bergson's belief that the universe has an overall duration does not mean that there is one duration that measures all other durations. Both thinkers hold that individual movements have their own individual times or temporal experiences. These cannot be reduced to anything else. At best, the universal nature of duration means that each individual duration is an individual quality in the overall organic multiplicity of the universal duration. As far as this goes, Deleuze would be correct. As Capek says, though, "This, of course, does not mean that Bergson is a Platonist; his duration is a *concrete universal* and as such akin to the Aristotelian or Hegelian View."<sup>222</sup>

Bergson's theory of duration was influenced by Aristotle's theory of time. In Aristotle, Bergson found the prototype for a critique of purely mathematical theories of time (geometrical theories for Aristotle, abstract spatial theories for Bergson). He found a theory of time that bound time with motion, which went against the prevailing trend in the tradition. He found a theory of time that made time in some way dependent upon a conscious presence (although for Aristotle, this was a perceiving being, which is not quite the same thing as a conscious subject). He found a theory of time that accounted for difference and irregularity, even though Aristotle claimed time was a kind of number

---

<sup>221</sup> Aristotle, *Physics*, 218b.

<sup>222</sup> Capek, *Bergson and Modern Physics*, 170.

(although Aristotle uses number in a more qualitative sense in his theory). He found a theory of time that was continuous and indivisible, as motion is continuous and indivisible. And he found this theory situated in a worldview that held the universe to be organic. Bergson took this theory, I believe, and through the notion of the modern conscious subject and certain advances in the understanding of mathematics and space, produced a purely qualitative theory that more adequately described the temporal experience of consciousness and temporality as a whole.

I believe this also shows why Heidegger attached Bergson to Aristotle in the way he did in his early works. Bergson was clearly influenced by Aristotle. Bergson's theory is clearly an Aristotelian theory. It does not seem that Bergson misunderstood Aristotle, as Heidegger claims he did (which I will discuss in detail in the following chapter). So it also remains to be seen why Heidegger claims that the rest of the history of the concept of time is Aristotelian, when it is clearly not. I believe Heidegger makes his claims concerning the relationship between Bergson and Aristotle, and his concurrent claim concerning the history of the concept of time, in order to mask the fact that his (Heidegger's) own theory of original or primordial or true or authentic (or whatever else it might be called) temporality is not as radical a departure from the tradition as Heidegger believes it to be. In fact and instead, as I will show in the final chapter, Heidegger's theory of original (etc.) temporality is simply another version of the traditional, spatial theories of time that Bergson critiqued. This means that Heidegger's theory actually falls back into the very tradition he claimed to be subverting.

## CHAPTER 4

### DASEIN'S SPATIAL TEMPORALITY AND THE RELATIONSHIP BETWEEN BERGSON AND HEIDEGGER

I said in the Introduction that this dissertation is an attempt to come to grips with Heidegger's claim that the history of the concept of time is Aristotelian, and that a relationship exists between Aristotle and Bergson. I demonstrated that Heidegger is not historically correct in his assertion that the history of the concept of time is Aristotelian. Instead, as I argued in Chapter 1, the history of the concept of time is Augustinian. Aristotle's theory is actually at odds with most major theories of time, including those found in classical mechanics and Kant. This is because, as I demonstrated in Chapter 2, Aristotle's theory of time is a qualitative theory of time. Most theories of time in the history of the concept of time are quantitative theories, which Bergson labels spatial theories. Bergson's theory of duration, though, is also a qualitative theory of time. In Chapter 3, I showed the relationship between Aristotle's theory of time and Bergson's theory of duration. This served to establish that Heidegger was right to link Bergson to Aristotle. And he was correct in claiming that Aristotle's theory of time influenced Bergson's theory of duration. However, Heidegger was right for the wrong reasons.

Heidegger claims that the history of the concept of time is Aristotelian, and that Bergson misunderstood Aristotle's theory, thinking that Aristotle's theory was a spatial theory. Bergson did critique the history of the concept of time for advancing primarily spatial theories. Aristotle's theory does not fit with these theories. Bergson did not misunderstand Aristotle. In fact, as Heidegger himself admits, Bergson knew Aristotle quite well. Why does Heidegger make the claims he makes, then, regarding the

relationship between Bergson and Aristotle and concerning the history of the concept of time?

I believe the key to this answer comes from an examination of Heidegger's theory of original or primordial temporality.<sup>223</sup> This examination will show that Heidegger's theory of original temporality is actually a spatial theory of time of just the sort that Bergson critiqued. The only major differences are the centering of temporality on the future and the apparent finitude of temporality as a whole. However, both of these things seem to derive from the same common root as both major modern theories of time: Augustine. Heidegger's theory of original temporality is, in reality, an Augustinian theory. When this is combined with an examination of the ways Heidegger treats Bergson in his early writings, I believe the following conclusion emerges. Heidegger claims that the history of the concept of time is Aristotelian, and draws this genealogy from Aristotle to Bergson, and claims that Bergson misunderstood Aristotle, even though and while he was influenced by him, because Heidegger's theory of primordial temporality arose, in part, as a reaction to Bergson's theory of duration.

To make this case, I will divide this final chapter into three parts. In Part I, I will examine Heidegger's various references to Bergson in his early works. There are twelve explicit references combined between *Being and Time*, *Basic Problems of Phenomenology* and the *Metaphysical Foundations of Logic*. These references show that Heidegger knew Bergson. And the way he interprets Bergson, including passages where he attempts to answer hypothetical Bergsonian objections, shows that he anticipated a

---

<sup>223</sup> Heidegger uses the following terms to describe his theory of temporality: original, primordial, authentic, and true. I will generally use original or primordial to refer to Heidegger's own theory of temporality, as opposed to his understanding of the common theory of time, which he believes his theory both explains and counters.

critique from the Bergsonian perspective. In Part II, I will look at Heidegger's theory of primordial temporality. Here, I will describe the theory in such a way as to bring the traditional, spatial qualities of that theory to light. Finally, in Part III, I will conclude this dissertation by demonstrating that Heidegger's theory of primordial temporality can be read, at least in part, as a reaction to Bergson's theory of duration. This means that, rather than subverting the tradition of metaphysics as he claimed to be doing, Heidegger ends up falling back into that tradition as it is actually construed.

#### PART I: HEIDEGGER'S READING OF BERGSON

It is a bit surprising that more has not been said already about the relationship between Heidegger and Bergson. In *Being and Time* in particular, Bergson is mentioned prominently in several important places. As far as I know, though, only Stephen Crocker has explored this relationship in any detail.<sup>224</sup> He maintains that Heidegger believed that his theory overcame several difficulties in Bergson's theory of duration. I will maintain, on the contrary, that Heidegger's theory not only fails to supercede Bergson's theory, but that Heidegger's theory is subject to the sorts of critiques that Bergson levels against the spatial tradition of temporal theories. I will begin this process by looking at Heidegger's explicit references to Bergson.

There are twelve explicit references to Bergson in Heidegger's three major early works: *Being and Time*, and *The Metaphysical Foundations of Logic*.<sup>225</sup> Five of these references are found in *Being and Time*, two are found in *The Basic Problems of Phenomenology* and five are found in *The Metaphysical Foundations of Logic*. Of the

<sup>224</sup> Crocker, "The Oscillating Now: Heidegger on the Failure of Bergsonism," 405-423.

<sup>225</sup> These are the same texts Crocker concentrates on in reference to the relationship between Heidegger and Bergson. Crocker seems to put more weight on *The Metaphysical Foundations of Logic*. I put more weight on *Being and Time*.

five references found in *Being and Time*, two are in the Introduction, one is in the first chapter of Part I, one is in the third chapter of Part II, and the last comes in endnote xxx. Both references to Bergson in *The Basic Problems of Phenomenology* are in the first chapter of Part II. And all the references to Bergson in *The Metaphysical Foundations of Logic* are in Part II. I divide these references into two general categories: genealogical and interpretive. Genealogical references are those that place Bergson within a group of philosophers, in particular, within a group of philosophers who think about time. They do not necessarily say anything about Bergson's theory per se. They merely place him in a list of names (although the fact that he was so placed generally says something about how Heidegger interprets Bergson's theory). There are four purely genealogical references. Two are found in *Being and Time*; and two are found in *The Metaphysical Foundations of Logic*. Interpretive references say something about Bergson's theory of duration, its originality, its effectiveness, its misguided nature or something like that. The remaining eight references are all interpretive references. I will examine the genealogical references first.

Heidegger's first explicit reference to Bergson comes in the Introduction of *Being and Time*. Here he claims that there is a common way of understanding time which runs from Aristotle to Bergson: "This ordinary way of understanding it [time] has become explicit in an interpretation precipitated in the traditional concept of time, which has persisted from Aristotle to Bergson and even later."<sup>226</sup> This 'ordinary' way of understanding time, this concept that dominates the tradition, is an Aristotelian one. This is why he clarifies his genealogy further, in his second genealogical reference to Bergson saying: "Aristotle's essay on time is the first detailed Interpretation of this phenomenon

---

<sup>226</sup> Heidegger, *Being and Time*, 39[18].

which has come down to us. Every subsequent account of time, including Bergson's, has been essentially determined by it."<sup>227</sup>

The thematic nature of Heidegger's genealogical references to Bergson disappears, however, in the *Metaphysical Foundations of Logic*. Here, Bergson appears to be just another name among those who have had something to say historically about the concept of time. Thus, the third and fourth genealogical references read as follows:

But why is the preparatory analysis of Dasein with regard to revealing the possibility of the understanding-of-being an exposition of the *temporality* of Dasein? Why does the metaphysical projection of Dasein move in the direction of time and the radical interpretation of time? Possibly because relativity theory treats time or the principle of an objective measurement of time? Or maybe because Bergson and, following him, Spengler deal with time? Or because Husserl worked at the phenomenology of internal time consciousness? Or because Kierkegaard speaks, in the Christian sense, of temporality in contradistinction to eternity? Or maybe because Dilthey considers the historicity of Dasein to be central, and historicity is connected with time? Was the analysis of Dasein then projected on the backdrop of time because it was believed the result would be good if the above-mentioned were fused together? In short, because one can get the idea of mixing together these various treatments of the problem of time and, as the phrase has it, "think them out to the end"? This is all too much the simpleton's notion of philosophy, the one who believes that out of five authors you can make a sixth... Furthermore, the so-called thinking out to the end has its own special difficulty. In order to think something out to the end, especially taking in Kierkegaard, Husserl, Bergson, and Dilthey, one must first be in possession of that end toward which one is supposed to think them out; and still the question always remains: Why just these particular thinkers mentioned?<sup>228</sup>

and:

The classical texts on the problem of time are the following: Aristotle's *Physics*; Plotinus' *Enneades*; Augustine's *Confessions*; Kant's *Critique of Pure Reason*; Hegel's *Encyclopedia* and *Phenomenology of Spirit*; Bergson, all his writings; Husserl, *Ideas I* and *The Phenomenology of the Consciousness of Internal Time*. (The investigations into time by Aristotle and Augustine are the important ones, and they are decisive for subsequent periods. More unawares than with clear intent, Kant later pushed the

<sup>227</sup> *ibid.*, 48-49 [26]

<sup>228</sup> Heidegger, *Metaphysical Foundations of Logic*, 141.

problem farthest into the dimension of the truly philosophical problematic.)<sup>229</sup>

I believe three important questions emerge from these genealogical references to Bergson. First, why is Bergson the penultimate figure in the genealogy instead of Husserl? In fact, why does Husserl receive no mention in the genealogical references in *Being and Time*? Considering how close Heidegger was to Husserl, particularly at the time of *Being and Time*'s publication, this omission is strange. Second, why are scientific theories, like those found in classical mechanics, left out of the genealogies? Surely, if Heidegger was interested in the 'ordinary' concept of time, he should have at least mentioned these kinds of theories. And third, why does Heidegger's view of the influence of the two major ancient thinkers, Augustine and Aristotle, change from *Being and Time* to the Metaphysical Foundation of Logic? I believe that an examination of these three questions will shed some light on the relationship between Bergson's theory of duration and Heidegger's theory of original temporality.

Why did Heidegger leave Husserl out of the genealogies of the history of the concept of ordinary time in *Being and Time*? Heidegger knew Husserl. He was a student of Husserl. He edited the *Phenomenology of the Consciousness of Internal Time*. This means he knew that Husserl's major work on time began with reference to and tribute to Augustine's theory of time from Book XI of the *Confessions*. It would also mean that he knew that Husserl's major work on time made no mention whatsoever of Aristotle's theory of time, even though that theory links time quite strongly with a perceiving, rational soul. Heidegger even dedicated *Being and Time* to Husserl. In a work whose alleged purpose is to get to the roots of Dasein's understanding of temporality, and hence

---

<sup>229</sup> Heidegger, *Metaphysical Foundations of Logic*, 198-199.

to the meaning of Being itself, this omission is significant, particularly since it seems to have been corrected (at least, genealogically corrected) a year later in the *Metaphysical Foundations of Logic*.

I believe that Heidegger left Husserl out of *Being and Time* because Husserl's theory of internal time consciousness was too Kantian. Had Heidegger confronted Husserl's work more directly, he would have had to have given a more explicit account of Dasein's temporality in light of Husserl's work. In particular, because Husserl's work was both more recent than Bergson's and contrary to Bergson's, Heidegger would have had to go to great lengths to both set his theory in contrast to Bergson's and to hide the fact that his (Heidegger's) theory shared much in common with German Idealism. Since Heidegger did not want his theory of original temporality, nor his thinking on Dasein more generally, to be just another theory of the subject (in either the Kantian or Hegelian sense), he would likely have wanted to avoid placing his work too close to the likes of Husserl's theory. In this way, Heidegger was able to avoid appearing too idealistic, at least for a while. In the end, though, Heidegger's theory of original temporality does seem to fall back into the very sorts of subjectivist/idealistic theories he claims to be subverting. For example, Pierre Keller points out that, for Heidegger, while there may be events independent of time, there is not time independent of the way in which these events are unfolded for Dasein.<sup>230</sup> The "for Dasein" is key, I think, to understanding the role of consciousness in the early Heidegger. It makes Heidegger appear to be more of a "spatial thinker", in the Bergsonian sense. And this would mean Heidegger remains firmly in the very tradition of metaphysics he claims to be supplanting by making the

---

<sup>230</sup>Keller, 43-66.

relationship between Dasein and temporality an essential one for both Dasein and for temporality itself.

This might also provide a clue into Heidegger's reasoning behind the exclusion of classical mechanics from his genealogies. It is well known that Kant was influenced by classical mechanics. And it seems strange at least for Heidegger to make investigations into the 'ordinary' concept of time without a treatment of the prevailing scientific theories of time, particularly insofar as other thinkers he does name, such as Bergson, had seen fit to do this. Nor is it likely the case that Heidegger felt the problem had already been addressed by the likes of Bergson. Perhaps Heidegger worked himself into a corner by claiming an Aristotelian heritage for the history of the concept of time. This would have ruled out classical mechanics, whose temporal theory is decidedly not Aristotelian. And it would have left intact Heidegger's claim that 'ordinary' time springs from temporality. But this would seem to paint Heidegger into an idealistic corner, since it would make both temporality itself, and the 'ordinary' concept of time that springs from it, phenomena of something like Dasein. In particular, it would put Heidegger in the position of claiming that temporality is in Dasein, but the things that affect temporal experience are not. This sort of quasi-Kantianism should be at odds with what Heidegger is trying to do. However, this seems to be precisely what he ends up doing. As Keller points out: "Heidegger insists, somewhat paradoxically, that while being, truth and time 'are' only so long as there are human beings, entities themselves are independent of the existence of persons."<sup>231</sup>

I can think of two likely reasons why Heidegger did not offer an explicit treatment of classical mechanics in his early work on original temporality. This first is that he

---

<sup>231</sup> Keller, 52.

intended to discuss classical mechanics in a later part of *Being and Time*, perhaps as part of his discussion of Kant. Of course, this second part was never published, so the explicit discussion of classical mechanics that might have been found there never had a chance to come to light. If this were really the case, though, one thinks that at least some clue as to Heidegger's view on the subject should be evident in the parts of *Being and Time* that did get published, as well as the other lectures and early works that dealt with the problem of time. At best, we can extrapolate based on Heidegger's attitude towards what he calls the common understanding of things, the 'worldliness' of the world, and so on. But this seems like too much to leave to chance.

The second likely reason Heidegger left out an explicit treatment of classical mechanics is as follows. On the one hand, Bergson had made an extensive critique of classical mechanics, particularly in *Time and Free Will*. And on the other hand, relativity theory was emerging right around the time that Heidegger began publishing his early works. In fact, he mentions relativity theory specifically in the *Metaphysical Foundations of Logic*. So it could be the case that Heidegger thought the theories of time in classical mechanics had already been adequately addressed, and/or they had become irrelevant, anyway.

I do not believe this is the case, however. I think Heidegger left out a specific treatment of classical mechanics because classical mechanics offered theories of time that treated the future as an already existing mode of time. That is, the theory of time that pervades classical mechanics, especially as it was formulated by the likes of Laplace, treated the future as something 'already there', that is, something that could be known in a way at least similar to (and in the case of the Laplace, actually identical to) the way one

can know the present (and the past, for that matter). For classical mechanics, the future existed in a spatial sense, as a kind of set of co-ordinates relative to the position of the ‘present’ of any particular thing at any particular time. Bergson, of course, found this view to be paradoxical at best, and a complete misunderstanding of both how temporality works as such and how we experience time in particular. For if we assume that the future already exists in some fashion, and that our present actions are somehow determined by it, then time itself ceases to exist as something independent of space; and we run into all the various paradoxes this sort of thinking involves.<sup>232</sup> Yet (as I shall discuss in Part II below), it is precisely in the future that Heidegger locates the essence of original temporality. And while this is not identical to the notion of time devoid of content but existing as something into which the present flows, it is not entirely different from it, either. If Dasein ‘throws’ itself towards its own future, then that future must exist in some way in order for Dasein to ‘throw’ itself there. A treatment of classical mechanics would have brought the ‘originality’ of Heidegger’s definition of original temporality, which revolves around this notion, more easily into question. Therefore, I believe Heidegger avoided a confrontation with classical mechanics.

The final noteworthy thing about Heidegger’s genealogical references to Bergson is the changing position of Aristotle with reference both to Bergson himself and to the genealogy of the concept of time as a whole. In *Being and Time*, both genealogical references claim that Aristotle’s theory of time is the dominant theory in the tradition; and it is the theory that influences all the other theories. This claim is repeated in several places in the *Basic Problems of Phenomenology*, without specific reference to Bergson.

---

<sup>232</sup> For a treatment of Bergson’s critique of spatial theories of time, see Chapter 3, Part II.

What is particularly interesting about these references, though, is the position Augustine occupies in relation to Aristotle. Heidegger says:

The two ancient interpretations of time which thereafter became standard – Augustine’s, which has already been mentioned, and the first great treatise on time by Aristotle – are also by far the most extensive and truly thematic investigations of the time phenomenon itself. Augustine agrees with Aristotle also on a series of essential determinations.<sup>233</sup>

And he adds shortly thereafter:

We have already stressed that the essentials of what can first of all be said about time within the common understanding of it were said in the two ancient interpretations of time by Aristotle and Augustine. Of the two, Aristotle’s investigations are conceptually more rigorous and stronger while Augustine sees some dimensions of the time phenomenon more originally. No attempt to get behind the riddle of time can permit itself to dispense with coming to grips with Aristotle.<sup>234</sup>

Both of these passages demonstrate the continued belief that Aristotle is the dominant and influential figure in the history of the concept of time.

In the *Metaphysical Foundations of Logic*, however, a shift seems to occur.

Rather than claiming Aristotle is the dominant and influential figure in the history of the concept of time, Aristotle becomes one of many figures, or a figure that was influential primarily on his age, but not necessarily on subsequent ages. In fact, Heidegger declared in the last genealogical references that Augustine was a dominant figure for the age that followed him.<sup>235</sup> This would not be problematic, if, as Heidegger claimed in the *Basic Problems of Phenomenology*, Aristotle’s and Augustine’s theories were similar theories. But as I demonstrated in Chapters 1 and 2, Aristotle’s theory and Augustine’s theory are not similar to each other at all. In fact, they are contrary theories at the very least.

Furthermore, Heidegger seems to be aware that there are important differences, even

---

<sup>233</sup> Heidegger, *Basic Problems of Phenomenology*, 231.

<sup>234</sup> *ibid.*, 232.

<sup>235</sup> Heidegger, *Metaphysical Foundations of Logic*, 198-199.

though he glosses those differences over, since he claimed that Augustine saw some aspects of the problem of time more “originally” than Aristotle did (although Heidegger never goes into any detail concerning what he believed those “original” insights by Augustine were). Finally, because Heidegger claims in the *Metaphysical Foundations of Logic* that both thinkers were dominant for their subsequent ages, he must recognize that there are important differences between the two. Otherwise, why include Augustine at all, or make these kinds of claims in reference to the history of the concept of time? And what would cause this shift in emphasis from *Being and Time* and the *Basic Problems of Phenomenology* to the *Metaphysical Foundations of Logic*?

I believe there are three possible ways to answer these questions. The first is that Heidegger was after something different in the latter work, so the exactness with which he needed to examine ownership of the history of the concept had diminished. This does not seem likely, though, since in all three of these early works, he appears most motivated by an attempt to get to original or authentic temporality. Second, perhaps Heidegger felt that he had been unfair to Augustine in the earlier two works, so the ambiguity over who influenced whom in the later genealogies could reflect this. This could also be the case because the position of other thinkers, notably Bergson, also changes. In *Being and Time*, Bergson was an Aristotelian (and not a very good one, apparently). By the time of *The Metaphysical Foundations of Logic*, Bergson appears to be standing on his own. However, there is nothing explicit in the text to suggest this. Heidegger never says whom Augustine influenced, nor does he say how it might have happened. Given the great details he went into concerning Aristotle’s influence in *Being and Time* and *The Basic*

*Problems of Phenomenology*, it seems unlikely that he really was correcting a previous error.

I believe Heidegger reconfigures the genealogy of the history of the concept of time in order to make that concept and that history more ambiguous. His earlier genealogies were very clear, even if they were inaccurate. I believe that Heidegger became aware of this as his early period progressed. In particular, the way Bergson is tied to both Aristotle directly and to a tradition that includes Kant through this genealogy by Heidegger in *Being and Time* does not work. I believe Heidegger became aware of just how tenuous that connection was, and sought to cover it over by making it appear that the history of the concept of time was not as monolithic as he had earlier claimed it to be. Unfortunately, though, all of this remains highly speculative. Further illumination comes, I believe, from examining the eight interpretative references Heidegger makes to Bergson.

Heidegger's eight interpretive references to Bergson portray Bergson as a thinker bound to what Heidegger describes as the traditional or standard form of metaphysics; a form of metaphysics that runs from Aristotle to Kant. This is one of the main reasons why Bergson's attempt to get beyond what Bergson describes as spatial time, which Heidegger seems to think is an equivalent label in Bergson to Heidegger's designation 'ordinary' time, is doomed to failure. And it seems to be the case that Bergson is doomed to failure because he does not get through to original or primordial temporality. That is, Bergson, and his distinction between spatial time and real duration, is doomed to failure because he is not Heidegger. And the fact that Bergson does not seem to understand this,

according to Heidegger, is what renders any possible critique from a Bergsonian perspective moot.

As I indicated above, three of Heidegger's interpretive references are in *Being and Time*, two are in the *Basic Problems of Phenomenology*, and three are found in the *Metaphysical Foundations of Logic*. Of the three references in *Being and Time*, two address Bergson's theory of duration, and his attempt to make a distinction between spatial time and real duration. Heidegger says:

We call the temporal attribute of entities within-the-world "*within-time-ness*." The kind of 'time' which is first found ontically in within-time-ness, becomes the basis on which ordinary traditional conception of time takes form. But time, as within-time-ness, arises from an essential kind of temporalizing of primordial temporality. The fact that this is its source, tells us that the time 'in which' what is present-at-hand arises and passes away, is a genuine phenomenon of time; it is not an externalization of a 'qualitative time' into space, as Bergson's Interpretation of time – which is ontologically quite indefinite and inadequate – would have us believe.<sup>236</sup>

And he adds at the end of *Being and Time*:

In its results, Bergson's view is in accord with Hegel's thesis that space 'is' time, in spite of the very different reasons they have given. Bergson merely says the reverse: that time (*temps*) is space. Bergson's view of time too has obviously arisen from an Interpretation of the Aristotelian essay on time. That a treatise of Bergson with the title *Quid Aristoteles de loc senserit* should have appeared at the same time as his *Essai sur les donnees immediates de la conscience*, where the problem of *temps* and *duree* is expounded, is not just a superficial literary connection. Having regard to Aristotle's definition of time as the "measure of motion"<sup>237</sup>, Bergson prefaces his analysis of time with an analysis of *number*. Time as space is *quantitative* Succession. By a counter-orientation to this conception of time, duration gets described as *qualitative* Succession. This is not the place for coming to terms critically with Bergson's conception of time or with other Present-day views of it. So far as anything essential has been achieved in to-day's analyses which will take us beyond Aristotle and Kant, it pertains more to the way time is grasped

---

<sup>236</sup> Heidegger, *Being and Time*, 382 [333].

<sup>237</sup> My translation

and to our ‘consciousness of time’. We shall come back to this in the first and third divisions of Part Two.<sup>238</sup>

The other reference claims that Bergson was involved in some kind of philosophical anthropology, after the manner of Dilthey:

The researches of Wilhelm Dilthey were stimulated by the perennial question of ‘life’... Its philosophical relevance, however, is not to be sought here, but rather in the fact that in all this he was, *above all*, on his way towards the question of ‘life’. To be sure, we can also see here very plainly how limited were both his problematic and the set of concepts with which it had to be put into words. These limitations, however, are found not only in Dilthey and Bergson but in all the ‘personalistic’ movements to which they have given direction and in every tendency towards a philosophical anthropology.<sup>239</sup>

The ramifications of labeling Bergson a philosophical anthropologist are not directly taken up again by Heidegger in his later interpretive references to Bergson. Instead, he focuses in the *Basic Problems of Phenomenology* on the laudable but failed attempt by Bergson to get past the ‘ordinary’ concept of time and get to true temporality, which caused Bergson to misinterpret Aristotle’s theory as a spatial theory. Heidegger claims:

From the most recent period we may cite Bergson’s investigations of the time phenomenon. They are by far the most independent. He presented the essential results of his inquiries in his *Essai sur les données immédiates de la conscience* (1888). These investigations were extended and set in a wider context in his major work, *L’evolution creatrice* (1907). As early as his first treatise, Bergson makes the attempt to overcome the Aristotelian concept of time and to show its one-sidedness. He tries to get beyond the common concept of time by distinguishing *duree*, duration, in contrast with time as commonly understood, which he calls *temps*. In a more recent work, *Duree et simultaneite* (2<sup>nd</sup> edition, 1923), Bergson provides a critical examination of a direct critique of the Aristotelean concept of time. The interpretation he gives of time in the common sense rests on a misunderstanding of Aristotle’s way of understanding time. Accordingly, his counterconcept to common time, namely duration, is also in this sense untenable. He does not succeed by means of this concept in working his

---

<sup>238</sup> Heidegger, *Being and Time*, fn xxx.

<sup>239</sup> *Ibid.*, 73 [47].

way through to the true phenomenon of time. Nevertheless, Bergson's investigations are valuable because they manifest a philosophical effort to surpass the traditional concept of time.<sup>240</sup>

And Heidegger adds later:

Unless the ontological sense of *akolouthein* [to follow, go after<sup>241</sup>] has been comprehended, the Aristotelian definition of time remains unintelligible. Or else defective interpretations occur, for example that of Bergson, who said that time as Aristotle understand is it space. He was misled into adopting this inadequate interpretation because he took continuity in the narrower sense of the extensional magnitude of space. Aristotle does not reduce time to space nor does he define it merely with the aid of space, as though some spatial determination entered into the definition of time. He only wants to show that and how time is something connected with motion. To this end, however, it becomes necessary to recognize what is already experienced in and with the experience of motion and how time becomes visible in what is thus experienced.<sup>242</sup>

This view of Bergson as original but misled continues in the *Metaphysical Foundations of Logic*. Here Heidegger reaffirms his claim that Bergson's theory remains within the traditional boundaries of metaphysics, as set by the Aristotelian definition of time:

Once the analysis of temporality has first received its direction from the basic metaphysical problem, the previous interpretation of time, from Aristotle through Augustine to Bergson, can be highlighted in its decisive content and appropriated. And it would be remarkably naïve to reject the aid to be found in Aristotle, be it only indirect, for Aristotle defined the problematic of time for every subsequent thinker, and not least of all for Bergson.<sup>243</sup>

So even though Bergson attempts to break free from the Aristotelian definition of time, he cannot do so. He cannot see through to the original problem of temporality, and this means that his own theory of duration comes up short. This is why Heidegger says:

---

<sup>240</sup> Heidegger, *Basic Problems of Phenomenology*, 231-232.

<sup>241</sup> My translation.

<sup>242</sup> Heidegger, *Basic Problems of Phenomenology*, 244.

<sup>243</sup> Heidegger, *Metaphysical Foundations of Logic*, 142.

Recently Bergson tried to conceive the concept of time more originally. He made it more clear than any previous philosopher that time is interwoven with consciousness. But the essential thing remained unresolved in Bergson, without even becoming a problem. He developed his interpretation of time on the basis of the traditional concept of consciousness, of Descartes' *res cogitans*. The basic metaphysical problem of the primordial connection between Dasein and temporality he does not pose, and even less does he pose the problem of being, for which the other problem is only a preparation.<sup>244</sup>

And he adds in his final interpretive reference to Bergson:

N.B. Bergson first worked out the connection between a derived and an original time. But he did so in a way that went too far and said that time, once merged, is space. Bergson thereby blocked the way to the real understanding of derived time, since he, in principle, mistakes the essence of emergent time, insofar as he does not view as emergent the time that has emerged. But, conversely, insofar as he stays merely with the time that has emerged, he does not really succeed either in clarifying primordial and genuine time in its essence. Bergson's analyses nonetheless belong to the most intense analyses of time that we possess. It has become a commonplace that Bergson (as well as Dilthey) is fuzzy and must be therefore re-examined and improved. But Bergson's "images" are the very expression of his exertions to really grasp the phenomenon within the realm he takes for his theme. The lack does not lie in an alleged fuzziness – Bergson is perfectly clear in what he sees. But it lies in the overly narrowed realm of his set of problems. Nor would this be removed by a revision for "greater exactness." As everyone knows, there are also exact trivialities in philosophy.<sup>245</sup>

I find six things particularly noteworthy and relevant about Heidegger's interpretive references to Bergson: 1) Heidegger gives Bergson some respect for attempting to get beyond what Heidegger calls 'ordinary' time (which Bergson calls spatial time) to true temporality. This gives one the impression that Heidegger felt Bergson was something of a kindred spirit. 2) Unfortunately for Bergson, however, he failed to get beyond 'ordinary' time. Instead, he simply confused the concept. After all, Bergson was not Heidegger (according to Heidegger). 3) Heidegger connects Bergson to

---

<sup>244</sup> Heidegger, *Metaphysical Foundations of Logic*, 149.

<sup>245</sup> *Ibid.*, 203.

Descartes concept of the conscious subject. This seems to be an attempt to justify placing Bergson in the alleged tradition of thinking on time that runs from Aristotle to Bergson, which Heidegger calls the 'ordinary' conception of time. 4) Heidegger labels Bergson's theory of time Aristotelian in an essential way. 5) However, Heidegger believes that Bergson misunderstood Aristotle's theory of time. 6) And finally, Heidegger seems to have anticipated a likely Bergsonian objection, namely, that Heidegger's theory of primordial or original temporality is a spatial theory of time.

Heidegger seems to think Bergson is something of a kindred spirit. He saw in Bergson an attempt to get beyond the 'ordinary' concept of time. He believed Bergson was attempting to come to grips with Aristotle's dominance in the tradition. He indicates that Bergson's attempts pre-figure Heidegger's own work in a way. That is, Bergson knew that the 'ordinary' theory of time, the theory that springs from Aristotle and runs through the tradition, was missing something. This 'ordinary' way of understanding time was not adequate to the task of describing our fundamental experience of temporality as such. Bergson calls this failed understanding of time spatial time (*temps*). He then attempts to set up true time, which he calls duration, in contrast to spatial time (*temps*). He even goes so far as to claim that spatial time derives from a misunderstanding of duration. This move is similar to the move that Heidegger makes, when he claims that 'ordinary' time derives from primordial or original temporality. So even though Bergson's attempt to get beyond 'ordinary' time was not successful, because he does not break through to what Heidegger calls original or true temporality, it was still important for two reasons. On the one hand, it showed that the 'ordinary' concept of time was deficient. And on the other hand, it provided a point of reference from which Heidegger

could proceed. This also gives some insight into why Heidegger placed Bergson at the end of his genealogy of the concept of time. Bergson knew the Aristotelian dominated theories of time that comprise the ‘ordinary’ concept of time were deficient. He was just unable to completely break through the Aristotelian concept itself and get to true temporality.

Why does Bergson fail to get beyond the Aristotelian concept of time that dominates the tradition? According to Crocker, Bergson failed because he did not recognize that time is something that temporalizes (Crocker’s term) itself. Bergson lacks what Crocker claims is Heidegger’s ‘finite transcendence’, which allows Dasein to project itself upon its ownmost possibilities for Being. According to Crocker: “finite being exceeds its intratemporal forms, it is irreducible to actuality and presentness.”<sup>246</sup> What this means is that Bergson did not get beyond the ‘ordinary’ concept of time because he was confused about that concept. And this confusion led him to label the ‘ordinary’ concept of time ‘spatial’ in a way that sets Bergson up for a counter-concept that will necessarily be deficient. By simply describing time as space, and then attempting to reverse this without thinking about the ontological nature of the problem of temporality, Bergson ends up with a theory that remains locked within ordinary notions of presence and dependence upon the present. Both of these are hallmarks of the ‘ordinary’ concept of time. They do not address Being itself, nor the Being of beings, nor the being of Dasein, nor any other primordial considerations that Heidegger believes are necessary to the understanding of true or primordial temporality. This is why Crocker claims: “If Bergson’s distinction between duration and spatial time does not overcome the Aristotelian interpretation of time [which, according to Heidegger – and Crocker – it

---

<sup>246</sup> Crocker, 418.

does not], it must be because he thinks the being of time on the basis of being as presence. Even when he reverses the limit-transition opposition, his thought still rests on the same unthought relation of time and being as does Aristotle's. What is in being now is what is in flux. But the "specific interpretation" of being as being in the present is still not placed into question."<sup>247</sup> Or, to put it another way, Bergson's laudable attempt to get beyond the 'ordinary' concept of time to true temporality fails because his counter-concept, duration, is still an Aristotelian concept (albeit not in a way Bergson seems to have understood, according to Heidegger). That is, Bergson seems to fail because Bergson is not Heidegger.

Bergson's attempt to get beyond the 'ordinary' concept of time was laudable but ultimately futile. It was futile because Bergson's theory of duration is a theory that remains bound to certain modern notions of the subject, which notions find an affinity with the Aristotelian theory of time. In particular, Heidegger notes that Bergson's theory of duration is bound to a Cartesian notion of the ego, which is probably what causes Heidegger to place Bergson's notion of duration into the category of philosophical anthropologies, along with Dilthey. Crocker supports this interpretation of Bergson's theory. Following Heidegger, he says: "Bergson describes only our consciousness of time – how it appears to us once it is "in being." Time is thought on the basis of the ego, and the subject's perception of itself, and that in a way, Heidegger claims, that is entirely in keeping with the Cartesian subject...Duration is a self-presence, a proximity of the I to the I."<sup>248</sup> Here, what Heidegger seems to be doing is attempting to provide reasons for saying Bergson's theory is both Aristotelian and locked within the tradition of

---

<sup>247</sup> Crocker, 416.

<sup>248</sup> Crocker, 416.

metaphysics that includes all such theories as are subject to the ‘ordinary’ notion of time. To be sure, Heidegger thinks Bergson did a fine job of describing the relationship of time to the conscious subject. Where Heidegger thinks Bergson failed was in the fact that Bergson did not get beyond the conscious subject’s experience of time to temporality itself.

Heidegger believes Bergson’s theory is bound by the Cartesian notion of the subject. He also believes that it is bound by Aristotle’s theory of time. Heidegger does not place Bergson at the end of the genealogy of the concept of time by accident. He believes Aristotle’s theory of time essentially determines Bergson’s theories of spatial time and immediate duration. This means that Heidegger sees Aristotle as exercising a double influence on Bergson. First, the history of the concept of time is Aristotelian, according to Heidegger. Since Bergson begins *Time and Free Will* with a long critique of spatial theories of time, a critique that runs historically from the paradoxes of the Eleatics to the modern theories of time found in Kant and classical mechanics, and Aristotle’s theory of time is allegedly the dominant theory in the tradition (although its relationship to the theories of the Eleatics and other pre-Socratic thinkers is an interesting topic to consider, from a Heideggerian perspective), then it must be the case that Aristotle’s theory provides a negative background against which Bergson can react when he formulates his criticism of traditional theories of time as being spatial theories.

I think Heidegger is making a stronger claim, however. The fact that he believes Aristotle’s theory of time is dominant, and, as he says in the *Metaphysical Foundations of Logic*, “not least of all for Bergson,”<sup>249</sup> leads me to believe that Heidegger thinks Aristotle’s theory of time exerts a positive influence on Bergson’s theory of duration.

---

<sup>249</sup> Heidegger, *Metaphysical Foundations of Logic*, 142.

However, I do not think Heidegger thinks Bergson's theory of duration is Aristotelian in the same way I believe that it is.<sup>250</sup> Heidegger believes that Aristotle's theory of time, which is a theory of time that revolves around the present, or, as Aristotle defines it, the 'now', influences Bergson because Bergson's theory of time is also a theory of presence (as Crocker also indicated). So even though Bergson tried to get beyond the 'ordinary' concept of time, he cannot, because the 'ordinary' concept of time is a concept of presence bound around the present. Temporality itself (as I shall discuss in Part II below), however, is not bound to or around the present. Instead, it is fundamentally a phenomenon of the future. Bergson, trapped as he is in the Aristotelian influence, cannot see this, which is why his concept of duration remains a concept of presence in the present, and which is why duration remains an Aristotelian theory.

According to Heidegger, though, Bergson believed that he was getting beyond the Aristotelian theory and getting to something fundamental about temporality as such. His theory was still too subjective and too bound up with the traditional notion of time as influenced by Aristotle's theory. From Heidegger's perspective, this happens because Bergson fundamentally misunderstood Aristotle. He misunderstood Aristotle because Aristotle defined time as a number, and according to Heidegger, Bergson took this to mean that Aristotle considered the magnitude of space passed over by the motion counted to be the same as the time of the motion itself. This mistake caused Bergson to believe that time, on Aristotle's understanding, was space. As I discussed in Part III of Chapter 2, though, Heidegger does not believe the 'extension' proper to time, on Aristotle's definition, is the same as extension in the concrete, spatial sense. Instead, Heidegger

---

<sup>250</sup> See Chapter 3, Part IV for my arguments concerning why and how Bergson's theory of duration is an Aristotelian theory.

reads Aristotle's use of number and magnitude in reference to time as extension in a purely formal sense. Bergson does not make this distinction, though, which leads to his misinterpretation of Aristotle. And since the history of the concept of time is Aristotelian, according to Heidegger, this would mean that Bergson's critique of spatial theories of time in general is based on a faulty premise.

For Heidegger, the fact that Bergson misunderstands Aristotle means that Bergson's counter-concept to what he (Bergson) misperceives as spatial theories of time is itself faulty, too. That is, when Bergson tries to present duration as a counter-concept to what Heidegger calls 'ordinary' theories of time, this presentation does not succeed, because it itself is built on the faulty assumption that 'ordinary' theories of time are necessarily spatial theories of time. And this misunderstanding derives from Bergson's misunderstanding of Aristotle. All Bergson does, then, according to Heidegger, is 'flip' what Heidegger believes to be two interpretations of the same phenomenon, the concept of 'ordinary' time. In other words, Bergson's theory of duration, which is really only a theory of the experience of time for conscious subjects in the present, according to Heidegger, is only half of the story, so far as the 'ordinary' theories of time go. The other half, which Bergson labeled 'spatial', is really little more than the beliefs about time that we hold independently of our direct experience. Or, to put it another way, since the 'ordinary' theory of time holds that time exists whether it is perceived or not, yet also holds that time exists by and for conscious subjects in their direct experience of present temporal events, then all Bergson ends up doing with his theory of duration is concentrate on one half of the 'ordinary' theory of time while denying the other.

This explains why Heidegger thinks Bergson's theory of duration and his critique of spatial time is "ontologically quite indefinite and inadequate,"<sup>251</sup> and why he believed Bergson blocked himself from breaking through to a true understanding of original or primordial temporality. Had Bergson really understood Aristotle, and been more careful not to merely emphasize the experience of 'ordinary' time over the definition of and analytic understanding of 'ordinary' time, then he might have been able to undertake the sorts of analyses of original temporality that Heidegger believes he is doing in his early works, such as *Being and Time*. Bergson's misunderstanding of Aristotle, though, prevents him from escaping that very same Aristotelian influence, which once again explains why Heidegger would have placed Bergson at the end of the genealogy of the concept of time.

I think there is another reason, though, why Heidegger placed Bergson where he placed him in regards to the history of the concept of time. If Heidegger is correct in claiming that Bergson misunderstood Aristotle, and therefore ended up with a theory of temporality that was interesting and partially original, but ultimately deficient and held within the tradition of the 'ordinary' concept of time, then it would seem to make sense to end the genealogy of the concept of time with Bergson. Bergson would have been the last major thinker to address time in the manner Heidegger has in mind when he talks about the concept of 'ordinary' time. But I believe he also places Bergson where he places him because he knew that his own theory of primordial or original temporality could be construed by Bergson (or a Bergsonian) as another 'spatial' theory of time. By trying to tie Bergson to Aristotle, and then claim that: a) the history of the concept of time is Aristotelian; and b) that Bergson is an Aristotelian; but c) he misunderstood

---

<sup>251</sup> Heidegger, *Being and Time*, 382 [333].

Aristotle, which made his concept of duration untenable and unoriginal, Heidegger could set up his own theory of primordial or original temporality as both truly original (in terms of discussing temporality itself, not derived or 'ordinary' time and as distinct both from Bergson and any likely Bergsonian critique. This can be seen in the fact that, in several places, Heidegger's interpretive references to Bergson appear to bring up and answer such likely Bergsonian objections.

Heidegger must have been aware, then, that his theory of original or primordial temporality could be seen as a 'spatial' theory of time, in the Bergsonian sense. This helps to explain why Heidegger repeatedly claims that Bergson misunderstood Aristotle, erroneously read the history of the concept of time as spatial, when it is only spatial in certain respects, and why Heidegger says again and again that Bergson did not succeed in breaking through to original temporality. I do not believe that Heidegger's assertion that his theory of original or primordial temporality is not spatial in the Bergsonian sense is sufficient to prove that it is not spatial in the Bergsonian sense. I think that, by claiming Bergson misunderstood Aristotle, without offering more exacting details as to how and why this is the case, Heidegger is hoping to obscure two things. First, he is hoping to obscure the fact that Bergson did not misrepresent the history of the concept of time as spatial through a misunderstanding of Aristotle, for the simple reason that the history of the concept of time is not Aristotelian, but Augustinian. This does not mean that Heidegger is wrong to assert that Bergson was wrong in labeling the history of the concept of time as spatial. It only means his premise is wrong. I do not believe Bergson misread the history of the concept of time, nor do I think he was wrong to label it as spatial. But that is a separate matter. What is important here is the other thing that I

believe Heidegger was hoping to obscure with his claims concerning Bergson's theory of duration, its relationship to the history of the concept of time, and whether or not Heidegger's theory was subject to its criticism. This other thing is the fact that I believe Heidegger's theory of original or primordial temporality arose, in part, as a reaction to Bergson's theory of duration, and that, if it is read in the context of the Augustinian history of the concept of time, it does fall under Bergson's criticism of spatial theories of time, and therefore remains firmly within the tradition of metaphysics Heidegger believed he was subverting. To demonstrate this, I will now turn my attention to Heidegger's theory of original or primordial temporality.

## PART II: HEIDEGGER'S THEORY OF PRIMORDIAL, AUTHENTIC, ORIGINAL OR TRUE TEMPORALITY

Heidegger first works out the concept of original, primordial, authentic or true temporality in Division II of *Being and Time*. Although he spends a great deal of time formulating his theory, this is some dispute as to whether or not Heidegger ever offers a clear definition of primordial or authentic temporality. Mark Okrent holds the view that Heidegger's formulation of original temporality is not clear in the way Heidegger believes it is.<sup>252</sup> There is also some dispute as to whether or not primordial, original, authentic and true temporality are really all just different names for the same thing. Daniel Dahlstrom believes that original and authentic temporality are really different things, for example.<sup>253</sup> And there are those who hold the view that Heidegger's original or authentic (or whatever term one wishes to affix to it) temporality is really a temporality of presence, and as such, stays within the tradition of metaphysics that Heidegger claimed to be subverting. This is the view held by Derrida (Okrent also holds

---

<sup>252</sup> Okrent, 191-205.

<sup>253</sup> Dahlstrom, 95-115.

this view).<sup>254</sup> Some of the major commentators on Heidegger, such as Dreyfus and Kockelmans, do not seem to have much to say on the matter. They choose to focus primarily on the first Division of *Being and Time*.

I believe that Heidegger does offer a clear account of what he means by original, primordial, authentic or true temporality. I believe that all of these terms refer to the same phenomenon (following Okrent, Keller and others). I believe further that Heidegger clarifies some of the aspects of original temporality in both *The Basic Problems of Phenomenology* and the *Metaphysical Foundations of Logic*. And I believe, along with Derrida and Okrent, that Heidegger's theory of primordial or original temporality is a theory of temporality based around the concept of the present or presence. However, I believe this for different reasons. I believe that the nature of Heidegger's theory of true or original temporality is best understood in light of the actual history of the concept of time. That is, I think Heidegger's theory is clearest when it is set within the framework of the Augustinian influence on the history of the concept, and against the divergent view of Aristotle's theory. When this is done, the quantitative/spatial nature of Heidegger's theory is brought to light. And when this is done, it should be easy to see how Heidegger's theory of original or primordial temporality arises, in part, as a reaction to Bergson's theory of duration and, rather than subverting the tradition of Western metaphysics, actually remains firmly within that tradition.

To understand Heidegger's theory of original temporality,<sup>255</sup> one needs to understand four things. The first is the definition of temporality as fundamentally a

---

<sup>254</sup> Derrida, 60-67.

<sup>255</sup> I shall try to stick to original or true temporality, since it would be cumbersome to say "original, authentic, primordial or true temporality" every time I need to refer to the concept.

phenomenon of the future, or as primarily ‘futural’ (Heidegger’s term) phenomenon. Second, one must see that this future belongs to Dasein. That is, the future Heidegger has in mind when he defines true temporality as a ‘futural’ phenomenon is Dasein’s ‘ownmost’ potentiality for being. This means that the future towards which Dasein ‘throws’ or ‘projects’ itself is already contained within Dasein in some way. Third, because Dasein ‘throws’ itself towards a future that is already there, original temporality is a teleological phenomenon. And finally, because this future exists in, for and through Dasein, true temporality must be a phenomenon of consciousness. This makes Heidegger’s concept of original temporality an idealistic concept (in the sense of German Idealism).

Heidegger claims that he is developing the problem of temporality from a different angle than has traditionally been the case. Most thinkers on time struggle with the problem of times three modes: past, present and future. Heidegger tries to rework the problem from “how can there be three modes of time?” to “how do times three modes relate to each other in temporality?” In other words, Heidegger wants to get behind the three modes of time, as they are ordinarily understood, because he wants to get behind or beyond the ‘ordinary’ concept of time (which he claims is Aristotelian). This is accomplished, according to Heidegger, when we come to an understanding of temporality as it fundamentally and primordially is. And when we do this, he says, we see that temporality is primarily and fundamentally a phenomenon of the future. Heidegger first makes this claim in *Being and Time*, where he says: “Primordial and authentic temporality temporalizes itself in terms of the authentic future and in such a way that in having been futurally, it first of all awakens the Present. *The primary phenomenon of*

*primordial and authentic temporality is the future.*”<sup>256</sup> And he reiterates and expands upon this view in the *Basic Problems of Phenomenology*, where he adds: “Expecting a possibility, I come from this possibility toward that which I myself am. The Dasein, expecting its ability to be, *comes toward itself*. In this coming-toward-itself, expectant of a possibility, the Dasein is *futural* in an original sense.”<sup>257</sup>

So the future is the primary mode of authentic or original temporality for Heidegger. The other two modes of time, the past and the present, depend upon the future for their being. Or at the very least, the past and the present are only possible in original temporality because of the future towards which original temporality projects itself. Heidegger understands this to be distinct from ‘ordinary’ or inauthentic temporality because that phenomenon is based around the present. As I discussed in Part III of Chapter 2, this is one of the meanings Heidegger ascribed to Aristotle’s use of the ‘now’ in his definition of time. This ‘ordinary’ conception of time, which descends from Aristotle (according to Heidegger) and gives rise to things like ‘clock time’ (also according to Heidegger), though, is merely a derivative form of original temporality. And original temporality is a phenomenon of the future. Beginning with Aristotle, and descending through to Bergson (presumably), thinkers could not come to grips with true temporality because they did not understand the derivative nature of time based on a concept of the present. But even this derivative nature still ultimately finds itself being a phenomenon of the future. This means that both true temporality and ‘ordinary’ time must be explained in terms of the future.

---

<sup>256</sup> Heidegger, *Being and Time*, 378 [329].

<sup>257</sup> Heidegger, *Basic Problems of Phenomenology*, 265.

Simply saying that true temporality is fundamentally a phenomenon of the future is not enough, however. Generally, when one employs the term ‘future’, one means the future of some given thing. And this given thing generally limits the discussion by excluding everything else not related to that given thing. This would seem to be necessary, since to talk about the future in general would be an ambiguous undertaking at best. Heidegger tries to avoid this ambiguity by limiting the scope of the future that determines and founds original temporality to Dasein. That is, the future Heidegger has in mind is Dasein’s future. This is important, because the future of anything other than Dasein, which is the being that can have an authentic future, because only Dasein is the being for whom its being, and Being in general, is a question, would eventually lead us back to ‘ordinary’ conceptions of time. We would not get to true or original temporality that way, so the future cannot be a generalized phenomenon. It must be the specific future of a specific being, and that being is Dasein. Other things, things in the world, things outside of the world, or any other kind of thing in general that is not Dasein, would presumably not have their being as questions for them. And because of this, only Dasein is capable of understanding itself as something defined by temporality. And because of this, only Dasein can seek the meaning of Being in original temporality by coming to grips with its (Dasein’s) future. As Okrent sees it:

We soon discover how Heidegger is using these words (past, present and future). ‘Future’ refers to the act in which Dasein expects, anticipates, or intends a possible future being for itself. Heidegger takes this future to be more ‘original’ than the ordinary future because it is a necessary condition for the possibility both of being aware of a possible future state of any being other than Dasein and of intending the moment at which that state is intended as being. That is, only because Dasein projects a possible future for itself, as the for-the-sake-of of its action, is it capable of intending

what a being other than itself is capable of, or when it is to realize that possibility.<sup>258</sup>

This helps to explain how Heidegger can conceive of the past and present as phenomena that depend upon the future. The past and the present depend upon the future because they depend upon Dasein's future. They depend upon the future because Dasein is a being whose meaning becomes revealed to it by its encounter with its own future. This transfers the meaning to the present and the past of Dasein, which is why they must be dependent upon that future. Okrent describes the manner in which the past and the present rely on the future this way. Of the past, he says:

Similarly, when Heidegger uses the term 'past', or 'having been' in his definition of 'temporality', he is referring to the way in which any project of Dasein's is an ongoing enterprise that presupposes a set of initial conditions and activities already carried out: something is done for the sake of *x* only if it is a stage in a process that has determined Dasein as having done, and thus been, such and such. Any act is the act it is, and is done for the sake of some determinate end, only insofar as it is a stage in a process of purposive activity that has already been underway when the act is performed.<sup>259</sup>

And concerning the present, he adds:

Finally, the present is just a particular aspect of the act in which Dasein acts toward a possible future for itself: namely, that to act for-the-sake-of is also in the same act to make present that with which one is a present working as that which is worked with an on. To count as acting toward a particular possibility of itself, a Dasein must also count as understanding that with which and on which it is working as having some definite determination. It must 'make present' those things as such and such if it is to exist: that is, it must be a being that acts purposively toward a future. Thus the present in Heidegger's 'original' sense, is the making-present of what is present, just as the future is the act of coming toward one's own future, and the past is the way in which any project always involves continuing projects already underway.<sup>260</sup>

---

<sup>258</sup> Okrent, 193.

<sup>259</sup> Ibid., 194.

<sup>260</sup> Ibid., 195.

Heidegger attempts to clarify the nature of temporality as a phenomenon of the future by describing the future as a potentiality for being that Dasein already contains within itself. That is, Dasein's authentic future is something Dasein already possesses in some way. It is simply a matter of Dasein choosing to come towards its authentic future, as opposed to choosing to do something else. That is, how Dasein relates to its future will help to determine whether or not Dasein finds itself in a relation with true temporality or derivative, 'ordinary' time. If it 'throws' itself towards its future, then it will be involved with original temporality. But even if it does something else, and regardless of the derivative, inauthentic nature that this other course of action would possess, Dasein is still locked into the fact of its own future. And in this way, the past and the present, whether viewed authentically or not, still depend upon Dasein's future, both for their existence and their meaning. This is what Heidegger means when he says:

This sort of thing is possible only in that Dasein *can, indeed* come towards itself in its ownmost possibility, and that it can put up with this possibility as a possibility in thus letting itself come towards itself – in other words, that it exists. This letting-itself-come-towards-itself in that distinctive possibility which it puts up with, is the primordial phenomenon of the *future as coming towards*. If either authentic or inauthentic *Being-towards-death* belongs to Dasein's Being, then such Being-towards-death is possible only as something *futural*, in the sense which we have now indicated, and which we have still to define more closely. By the term 'futural', we do not here have in view a "now" which has *not yet* become 'actual' and which sometime *will be* for the first time. We have in view the coming in which Dasein, in its ownmost potentiality-for-Being, comes towards itself. Anticipation makes Dasein *authentically* futural, and in such a way that the anticipation itself is possible only in so far as Dasein, *as being*, is always coming towards itself – that is to say, in so far as it is futural in its Being in general.<sup>261</sup>

The past and the present depend upon the future, because it is in throwing itself towards its future that Dasein reveals the meaning of temporality, which will eventually lead it to

---

<sup>261</sup> Heidegger, *Being and Time*, 372-373 [325].

the meaning of its being and Being itself. When Dasein does this authentically, when it realizes that the past and the present depend upon the ‘temporalization’ of temporality, the past and the present are seen as dependent upon Dasein’s various possibilities, which are what make up the future.

This future is not something that is ‘out there’ for Dasein to discover. It exists within Dasein as the meaning of Dasein’s being. Dasein contains the future within itself as its ‘ownmost’ potentiality for being. Heidegger says: “Only in so far as Dasein *is* as an “I-am-as-having-been”, can Dasein come towards itself futurally in such a way that it comes *back*. As authentically futural, Dasein *is* authentically as “*having been*”.

Anticipation of one’s uttermost and ownmost possibility is coming back understandingly to one’s ownmost “been”. Only so far as it is futural can Dasein *be* authentically as having been. The character of “having been” arises, in a certain way, from the future.”<sup>262</sup>

This means that the past and the present for Dasein have their meaning through Dasein and its relationship to its own future. So the past and the present are also not ‘out there’, but are contained within Dasein in the same way as the future. In fact, because the future is only what it is through Dasein, because even the ‘ordinary’ way of understanding time derives from temporality, which derives from Dasein’s own authentic future (whether Dasein is comporting itself authentically or not), then the past and the present can only be what they are through Dasein. Heidegger sums it up this way:

Coming back to itself futurally, resoluteness brings itself into the Situation by making present. The character of “having been” arises from the future, and in such a way that the future which “has been” (or better, which “is in the process of having been”) releases from itself the Present. This phenomenon has the unity of a future which makes present in the process of having been; we designate it as “*temporality*”. Only in so far as Dasein has the definite character of temporality, is the authentic potentiality-for-

---

<sup>262</sup> Heidegger, *Being and Time*, 373 [326].

Being-a-whole of anticipatory resoluteness, as we have described it, made possible for Dasein itself. *Temporality reveals itself as the meaning of authentic care.*<sup>263</sup>

This reveals something else about Dasein and its relationship to original temporality. And it also says something about temporality itself. If everything about temporality, the past and present included, is geared towards Dasein's future, and Dasein comes towards this future, then Heidegger's theory of original temporality is a teleological theory.

Dasein already contains its future within itself. It is by realizing this future that Dasein experience true or authentic temporality, which in turn is what makes a particular Dasein authentic. Since the future is what makes authentic temporality authentic, and this future is the same as the realization of Dasein's 'ownmost' potential, then Heidegger's theory of original or authentic temporality is a teleological theory. By making the future known to Dasein as its own future, its own potential, Heidegger is claiming that true temporality is directed toward something. When something is directed toward something, then that thing that serves as the final destination, the goal, generates the meaning of that thing. This is what Aristotle means by final cause, for example. The goal of a pen is to be an instrument of writing, therefore writing is what defines a pen. The goal of Dasein is to throw itself towards its 'ownmost' potentiality for being. Therefore this potentiality of Dasein is what defines Dasein. And since it is the process of doing this that constitutes temporality, then this goal defines temporality as well. This is why the future, according to Heidegger's theory, cannot be a vague thing, or even a set of random possibilities. At least, the authentic future that describes true temporality cannot be these things. Instead, the authentic future can only be what Dasein already has

---

<sup>263</sup> Heidegger, *Being and Time*, 374 [326].

as its possibility, what it ‘throws’ itself towards when it behaves authentically. This is why he says:

The “ahead-of-itself” is grounded in the future. In the “Being-already-in...”, the character of “having been” is made known. “Being-alongside...” becomes possible in making present. While the “ahead” includes the notion of a “before”, neither the ‘before’ in the ‘ahead’ nor the ‘already’ is to be taken in terms of the way time is ordinarily understood; this has been automatically ruled out by what has been said above. With this ‘before’ we do not have in mind ‘in advance of something’ in the sense of ‘not yet now – but later’; the ‘already’ is just as far from signifying ‘no longer now – but earlier’.<sup>264</sup>

All of this serves to indicate that the future, as a conceptual goal for Dasein, is already present to Dasein in some way. Otherwise, how could it serve as the meaning for Dasein and for temporality as such?

Given that this is the case, it would seem difficult to make the case that Heidegger’s theory of original temporality is not teleological. After all, Heidegger says: “The ‘before’ and the ‘ahead’ indicate the future as of a sort which would make it possible for Dasein to be such that its potentiality-for-Being is an issue. Self-projection upon the ‘for-the-sake-of-oneself’ is grounded in the future and is an essential characteristic of *existentiality*. *The primary meaning of existentiality is the future.*”<sup>265</sup> And this future seems to actually exist in the present in some fashion. In fact, Heidegger claims that the present itself is defined by the authentic future of temporality, which is the authentic potentiality-for-being of Dasein. If the past and the present are defined by the future, what else could this theory be, other than teleological? This is particularly the case when one considers the ‘fallen’ state of Dasein. If Dasein ‘fell’ from somewhere, and is trying to recover that from which it fell, and this ‘pre-fallen’ state is a state found

<sup>264</sup> Heidegger, *Being and Time*, 375 [327].

<sup>265</sup> *Ibid.*, 375-6 [327].

only in Dasein's authentic future anyway, then not only is Heidegger's theory of original temporality teleological, but it is teleological in a decidedly traditional way. That is, it incorporates all the ordinary notions of beginnings and ends, *arche* and *teloi*, it just happens to do so in an archaic fashion.<sup>266</sup>

Original or authentic temporality is a phenomenon based on the future. The past and the present are bound up with this future, and are given meaning by this future. Since the future is already contained within Dasein as Dasein's authentic potential-for-being, then the future is Dasein's own goal towards which it works. This makes original temporality teleological. All of these things center around one phenomenon: Dasein. This makes original temporality a phenomenon of Dasein. And this makes Dasein a theory of the modern conscious subject. Of course, I do not think either Heidegger or Heideggerians would agree with this claim. And to be fair, Heidegger never explicitly restricts Dasein to human form (although one wonders what else he would think it could be?). But even if Dasein could be something other than human, that does not mean it is not a conscious subject in the Kantian or even Hegelian sense. Nor does it allow Heidegger's treatment of Dasein, and its role in creating true temporality, or its relationship to true temporality, to escape these kinds of analyses. When one looks at the way Dasein is used in conjunction with true temporality in his early works, then, it becomes apparent that Dasein is, in fact, a theory of the subject.

For example, when Heidegger describes original or authentic temporality, it is only through Dasein that this examination can take place. Things in the world may be

---

<sup>266</sup> This is one of Derrida's main points in "Ousia and Gramme." I will rely on Derrida for one portion of my argument in the concluding section of this dissertation, since he shows that Heidegger remains within the tradition of metaphysics Heidegger thought he was subverting, precisely because of his reliance on teleological concepts and notions such as derived time based on teleological concepts.

caught up in 'ordinary' time. But they are neither caught up in 'ordinary' time for themselves, nor can they experience authentic temporality for themselves. Things are only things. Both true temporality and 'ordinary' time encounter things only when and how Dasein encounters things. Even the totality of things Dasein experiences, what Heidegger calls the 'world', takes its form, authentic in true temporality, inauthentic in 'ordinary' time, from the way Dasein comports itself to this 'world' and the things it contains. Neither 'ordinary' time nor true temporality can exist independently of Dasein's comportment to this 'world' and its things. Keller describes this relationship this way: "Heidegger affirms the existence of physical occurrences that are independent of time, but not the existence of a physical time that is independent of the way in which such occurrences are disclosed to us. Were he to assume an ultimate ontological difference between time and events or things with changing states that holds independently of human understanding, he would be committed to an absolute theory of time. Because he identifies time with the basic condition under which entities exist *for us*, he is led to deny an independent reality to time."<sup>267</sup> Not only does this comportment by Dasein give the 'world' meaning. In a very real sense, it seems that Heidegger's theory must lead us to believe that Dasein actually creates the 'world' in the first place. This is because the world is always encountered as something in Dasein's 'fallen' state. Presumably, Dasein must 'fall' first, then create the 'world' through this 'fallen' state, and then, perhaps, re-encounter the 'world' again once Dasein regains its lost authenticity. This is why Heidegger says:

Just as the Present arises in the unity of the temporalizing of temporality out of the future and having been, the horizon of a Present temporalizes itself equiprimordially with those of the future and of having been. In so

---

<sup>267</sup> Keller, 57.

far as Dasein temporalizes itself, a world *is* too. In temporalizing itself with regard to is Being as temporality, Dasein *is* essentially ‘in a world’, by reason of the ecstatico-horizonal constitution of that temporality. The world is neither present-at-hand nor ready-to-hand, but temporalizes itself in temporality. It ‘is’, with the “outside-of-itself” of the ecstases, ‘there’. If no *Dasein* exists, no world is ‘there’ either.<sup>268</sup>

Now if it is the case that the ‘world’ depends on Dasein for its existence, then how can Dasein not be the subject in either the Hegelian or the Kantian sense? Heidegger at least suspected that his treatment of Dasein resembled Hegel’s subject, because he devoted the end of *Being and Time* to a quick analysis of Hegel. He even thought Hegel was on the correct path, although still confined to the Aristotelian tradition, and hence, still outside of the problem of true temporality. This is why he says: “The priority which Hegel has given to the “now” which has been levelled off, makes it plain that in defining the concept of time he is under the sway of manner in which time is *ordinarily* understood; and this means that he is likewise under the sway of the *traditional* conception of it. It can even be shown that his conception of time has been drawn *directly* from the ‘physics’ of Aristotle.”<sup>269</sup> Perhaps the difference lies in the fact that Heidegger definitively says that Dasein is finite. And Dasein is finite because of its inevitable death.

Dasein dies, and the fact that it will die, its ‘being-towards-death’, is important to it. Since Dasein experiences true temporality as the projecting of itself towards its ‘ownmost-potentiality-for-being’, which lies in its future, which future is contained within itself already, then it must be the case that true temporality is also finite. ‘Ordinary’ time, however, is generally understood to be infinite. This is because ‘ordinary’ time arises out of, or rather, derives from, Dasein’s experience, and even

---

<sup>268</sup> Heidegger, *Being and Time*, 417 [365].

<sup>269</sup> *Ibid.*, note xxx.

rejection of, the authentic, finite temporality that it experiences as and through itself.

Heidegger says:

The problem is not one of *how* the ‘*derived*’ infinite time, ‘in which’ the ready-to-hand arises and passes away, becomes *primordial* finite temporality; the problem is rather that of how *inauthentic* temporality arises out of finite authentic temporality, and how inauthentic temporality, *as inauthentic*, temporalizes an *in*-finite time out of the finite. Only because primordial time is *finite* can the ‘*derived*’ time temporalize itself as *infinite*. In the order in which we get things into our grasp through the understanding, the finitude of time does not become fully visible until we have exhibited ‘endless time’ so that these may be contrasted.<sup>270</sup>

And he adds a little later: “Time is primordial as the temporalizing of temporality, and as such it makes possible the Constitution of the structure of care. Temporality is essentially ecstatical. Temporality temporalizes itself primordially out of the future.

Primordial time is finite.”<sup>271</sup>

So it is clearly the case that authentic or original temporality can only be something that is bound up essentially with Dasein. If it were not, then it would have to be bound up with things in the ‘world’, which it is clearly not, or it would have to be a phenomenon of Being itself. It does not appear to be the latter, either, though, because it is through true temporality that Dasein gets to the meaning of Being. Being itself does not appear to be temporal, at least not in the sense that Heidegger has been using true temporality (and certainly not as something derived like ‘ordinary’ time). Nor is it proper, from a Heideggerian perspective, to say that Being itself is finite, and true temporality is definitely finite. Therefore, true, original, authentic or primordial temporality is a phenomenon of Dasein. And this, as far as I can tell, makes it a phenomenon of consciousness, which makes the theory a theory of the subject. And it is

---

<sup>270</sup> Heidegger, *Being and Time*, 379 [330-331].

<sup>271</sup> *Ibid.*, 380 [331].

a theory of the subject that is clearly teleological in nature, since the temporality that Dasein encounters when it experiences true temporality found in the future, and this future is, and can only be, Dasein's future. And it is this future that gives meaning to both the past and the present, which is why true temporality is centered around the future that Dasein throws itself toward.

All of this describes a theory of temporality that is not quite as original as Heidegger claims it to be. Rather, it seems to share a lot with Augustine's theory of time. Both theories locate the real understanding of time in the mind (although Heidegger's conception is certainly more advanced than Augustine's). Both use one mode of time to explain and give reality to the other two, with the difference being the mode they choose to center time around. However, as I shall discuss in the concluding part to this chapter and this dissertation, the way Heidegger uses the future ends up treating the future as the present, which makes his theory of temporality really a theory of the present. And this further binds him to the Augustinian tradition. All of this serves to make Heidegger's theory of time a 'spatial' theory of time, in the manner Bergson describes spatial theories. And this, I believe, means that Heidegger's theory of original, true, authentic or primordial temporality a theory that arose, in part, as a reaction to Bergson's theory of duration.

### PART III: READING HEIDEGGER'S THEORY OF ORIGINAL TEMPORALITY AS A REACTION TO BERGSON'S THEORY OF DURATION.

There are three key passages that lead me to believe that Heidegger's theory of original temporality is at least a partial reaction to Bergson's theory of duration. Two of these passages have already been discussed in Part I of this chapter. The first is the

passage from *Being and Time* where Heidegger claims that he is not introducing a ‘spatial’ concept of time, as he thought Bergson might claim:

But time, as within-time-ness, arises from an essential kind of temporalizing of primordial temporality. The fact that this is its source, tells us that the time ‘in which’ what is present-at-hand arises and passes away, is a genuine phenomenon of time; it is not an externalization of a ‘qualitative time’ into space, as Bergson’s Interpretation of time – which is ontologically quite indefinite and inadequate – would have us believe.<sup>272</sup>

The second comes in the long endnote on Hegel. Here Heidegger links Bergson to Aristotle, but postpones a direct discussion of Bergson until later:

Having regard to Aristotle’s definition of time as the “measure of motion”<sup>273</sup>, Bergson prefaces his analysis of time with an analysis of *number*. Time as space is *quantitative* Succession. By a counter-orientation to this conception of time, duration gets described as *qualitative* Succession. This is not the place for coming to terms critically with Bergson’s conception of time or with other Present-day views of it. So far as anything essential has been achieved in to-day’s analyses which will take us beyond Aristotle and Kant, it pertains more to the way time is grasped and to our ‘consciousness of time’. We shall come back to this in the first and third divisions of Part Two.<sup>274</sup>

And the third passage comes in the Introduction to *Being and Time*. I believe that this passage is the most revealing of the three. This passage is Heidegger’s famous statement: “Higher than actuality stands *possibility*.”<sup>275</sup>

I find this last passage to be the most revealing because it contradicts Bergson’s reversal of the traditional understanding of actuality and possibility. That is, Bergson, in the *Creative Mind*, had claimed that possibility or potentiality is not prior to actuality or reality – either temporally or any other way other than as an act of speculative imagination. In other words, it is often thought, based on a common misunderstanding of

---

<sup>272</sup> Heidegger, *Being and Time*, 382 [333].

<sup>273</sup> My translation

<sup>274</sup> Heidegger, *Being and Time*, note xxx.

<sup>275</sup> Heidegger, *Being and Time*, 63 [38].

Aristotle's *Metaphysics*, that first a number of possibilities exist for a given action. One of those possibilities then becomes reality (or actuality). But regardless of which possibility becomes reality, all the other possibilities are still said to have existed before the particular reality became that particular reality. According to Bergson, though, this cannot be the case. The possibilities can only be said to exist after the particular reality comes into being, and only then as speculative operations of consciousness projected back into the past. Bergson says:

As reality is created as something unforeseeable and new, its image is reflected behind it into the indefinite past; thus it finds that it has from all time been possible, but it is at this precise moment that it begins to have been always possible, and that is why I said that its possibility, which does not precede its reality, will have preceded it once the reality has appeared. The possible is therefore the mirage of the present in the past; and as we know the future will finally constitute a present and the mirage effect is continually being produced, we are convinced that the image of tomorrow is already contained in our actual present, which will be the past of tomorrow, although we did not manage to grasp it. That is precisely the illusion.<sup>276</sup>

Consciousness can make assumptions based on past experiences. But these assumptions have nothing more than an imaginative/speculative bearing on reality. They do not exist as something 'out there', independent of consciousness.

Heidegger's entire theory of original temporality, however, relies on possibility or potentiality, as that which Dasein throws itself towards. This is the primary phenomenon of original or authentic temporality, this possibility which exists only as the future for Dasein. It is from this that both Dasein's own potentiality for being authentic and the 'ordinary' conception of time that Heidegger draws from Aristotle to Bergson spring. But by conceiving of Dasein, and original temporality in this manner, I think Heidegger ends up doing two things. First, he creates a 'space' for Dasein. This space might seem

---

<sup>276</sup> Bergson, *Creative Mind*, 101.

to be mobile, or relative, or something else other than the absolute, infinite space of classical mechanics or Kant that Bergson has in mind when he critiques ‘spatial’ theories of time in *Time and Free Will*. But it is still a space. And, since it is within this space that Dasein has its meaning and the meaning of Being itself disclosed to it, and since Being itself frames all possible temporal experiences whatsoever, then a form of absolute space does creep back into Heidegger’s theory. Second, by conceiving of temporality in this way, and by making ‘ordinary’ or ‘clock’ time derivative of it, Heidegger ends up with a rather Augustinian theory of temporality. This is because Heidegger thinks of original temporality as something within Dasein which carries a teleological component for each Dasein, while still revealing the deeper meaning of that from which each Dasein springs (Being itself). This ends up placing Heidegger’s theory back into the tradition of metaphysics that Heidegger claimed he was subverting. And this makes it subject to the Bergsonian critique of such theories.

This is a new claim about Heidegger’s theory of original temporality, so far as I know. Few others have even discussed the relationship between Bergson and Heidegger, and then not in much detail. Only Crocker discussed it at any length, as I noted in Part I of this chapter; and he thought Heidegger’s theory of original temporality overcame certain inadequacies in Bergson’s theory of duration. Other thinkers, however, have noted the spatial nature of Heidegger’s theory, or have placed his theory within the purview of traditional metaphysics. Sallis, for example, discusses the spatial nature of Heidegger’s theory of original temporality. But he does not make any connections to Bergson. Derrida points out the traditional metaphysical nature of Heidegger’s theory,

but he also declines to make the connection to Bergson. Nevertheless, I believe the connection is there, and both of these thinkers will be helpful in drawing it out.

Heidegger's theory of original temporality is a 'spatial' theory of time, according to the Bergsonian criteria. These criteria include the existence of the future as something 'present' to the present, teleological thinking, and time's reliance on something non-temporal that 'frames' time. Heidegger's theory of original temporality satisfies these criteria. This does not mean that Heidegger himself thought his theory was 'spatial'. He believed that it either of the following was the case. Either space was free of time, or space depended upon time (rather than the other way around, which is what Bergson found lacking in 'spatial' theories of time). As Maria Villela-Petit points out:

According to *Sein und Zeit*, nevertheless, the foundation of spatiality upon temporality not only serves to secure the independence of space with reference to time but also makes it possible to understand the dependence of Dasein with regard to space and, in this way, 'the well known fact concerning the abundance of "spatial images" in language'. This 'fact', let us recall, had been thematized by H. Bergson in *Time and Free Will* where space and language are found to be intricately interconnected. As for Heidegger, he claims to be able to explain it with reference to temporality itself. Does he not see in it, after all, the sign of a dominance of the *present* as the temporal dimension of concern, which is the mode of being of Dasein delivered over to its concerned everydayness, by way of which, for him, its spatiality is also made manifest?<sup>277</sup>

But this passage also demonstrates that Heidegger was not quite able to divorce space from time. Space creeps back into temporal thinking because of the prominence of the present. Nor does the claim that it is the future that is the primary phenomenon of temporality overcome the effect of the present and its pull on language – and the 'spatial' thinking associated with that language. In fact, the opposite would seem to be the case. By claiming that the future is primary, rather than the present, Heidegger's theory

---

<sup>277</sup> Villela-Petit, 36.

becomes more ‘spatialized’ than most of the ‘ordinary’ theories of time Heidegger claims he is attempting to overcome.

This can be seen most clearly by examining the role of death in terms of Dasein’s future. Death is the end of Dasein. At the same time, death is not part of Dasein’s temporality, strictly speaking, since death is the temporal event that ends Dasein as Dasein. Once Dasein is no longer Dasein, then it cannot experience itself temporally (or any other way, one would imagine). Yet death is the foremost possibility Dasein faces, particularly because Death is the only certainty of Dasein’s future. To be authentic, then, Dasein must throw itself towards its own death, even though this death, which forms the limit of all possible temporality for Dasein, means the end of Dasein as Dasein. This makes death both unthinkable and the limit of thought. So, since temporality is how Dasein discloses Being itself, and death is the ultimate limit of temporality and outside of temporality, then temporality is determined, in some way, by the non-temporal. This sort of double-speak is not foreign to definitions of time, to be sure. Both Aristotle and Augustine note the difficulties that ordinary language imposes on understanding time. Heidegger himself noted this, and discussed the problem himself. But Heidegger’s discussion keyed off of Aristotle, rather than Augustine, even though Augustine treated the problem in more detail – detail which turns out to be similar to Heidegger’s theories, since it involves a non-temporal presence framing time, and so on. Now Heidegger claimed that Augustine followed Aristotle on most major points. I have already claimed that this claim is dubious at best, if not outright misleading. Patrick Bigelow notes this oddity as well, saying: “We find this [the problem of language and reference in regards to time] more explicitly embodied in Augustine than in Aristotle, for in the former

language is called to greater sophistication by virtue of the disclosure of its allegorical character when called upon to reflect its own origin. And the problem of language is for Augustine one with the problem of time. Precisely this is the difference between Aristotle and Augustine<sup>278</sup>, a difference early Heidegger failed to note – a remarkably puzzling failure.”<sup>279</sup> Death, as the limit of time, is also hindered by the problems language has in defining time, particularly since death, too, is both the limit and beyond the limit of temporal thinking.

This makes death both the limit and goal of temporality in Heidegger, which is how Sallis sees it:

Death is the end, the final possibility, the most extreme possibility, the possibility beyond which one cannot cast oneself, *das Vorbei*. It is, one may say, the suspending of time, of the time as which I am myself. It is *a future that will never be present*, that will never have become present: “As the authentic future, *das Vorbei* can never become present” (Z 21). With death my time will have stopped, come to a standstill; death is as much out(side) of my time as is eternity. And yet, it is precisely from, out of *das Vorbei* that authentic time is formed, that is, proper time, time itself, or, rather, the time that I myself am. Death, *das Vorbei*, suspends time and yet grants time, lets it unfold. It is not something other than time but is, rather, something that one might almost call a time out of time; it is the limit of time, itself neither time nor not time, the limit too of the *itself*, as well as of my *own* self. It is a limit that delimits without being simply delimitable, an elusive and self-effacing limit – impending with certainty and complete indefiniteness.<sup>280</sup>

I do not see how this limit could possibly be anything other than spatial. Dasein’s death is already given by Dasein as the ultimate future event. It is the future that determines temporality for Dasein. Dasein cannot be conceived at all apart from its own death.

Therefore, the even that serves as the ultimate definition of temporality for Dasein, which

---

<sup>278</sup> For more discussion on the differences between Aristotle and Augustine, see Chapters I and II of this dissertation. I maintain that there are several more rather noteworthy differences.

<sup>279</sup> Bigelow, 365.

<sup>280</sup> Sallis, 51.

is what Heidegger considers to be original temporality, is already given as an *a priori* condition for Dasein. And transcendental conditions are ‘spatial’ conditions, according to the Bergsonian understanding.

This is further evidenced by the following consideration. Death is a transcendental condition of Dasein. As such, it must be non-temporal. Yet death is also the limit that defines temporality for Dasein, because every Dasein faces its own death as the ultimate future event that defines all other future events towards which Dasein can ‘throw’ itself. So even though Heidegger claimed that temporality is supposed to arise out of the ‘temporalization’ of temporality, it ends up arising out of something more akin to the eternal. This is because death is outside of temporal experience as such, which is precisely what it means for something to be eternal. If the temporal is defined by the eternal, then the eternal acts as a frame for the temporal, particularly when that eternal thing defines the temporal as such. This brings space returns to Heidegger’s concept of original temporality, since death, as something non-temporal, must end up as a spatial concept. This is why Sallis declares: “And yet, space, long since subordinated to world and hence even more rigorously to temporality, *does in fact return* at the very heart of *Being and Time*; it does in fact return in metaphorized form as the very point where it is a matter of expressing the constitution of temporality.”<sup>281</sup> This space is finite, instead of infinite. But that only serves to make a slight distinction of degree between Heidegger and classical mechanics. It does not lessen the comparison between Heidegger and Augustine, or between Heidegger and Kant, for that matter. Both of these thinkers had to have a finite limit on temporal experience, since they located that experience within finite beings. Heidegger does something similar with both time and space; but this does not

---

<sup>281</sup> Sallis, 61.

make his theory any less spatial. This is because the space forged by Dasein's 'hurtling' towards its own death is forced back into all of Dasein's temporal experiences, whether Dasein is authentically aware of them or not.

By re-introducing the notion of space into his account of original temporality, Heidegger ends up staying within the confines of the Bergsonian critique of spatial theories of time, despite what Heidegger himself thought. Even though Heidegger's theory of space, and how it relates to Dasein and Dasein's experience of original temporality, is different than the theories of space found in classical mechanics, it still only addresses one side of Bergson's critique. Heidegger seems to have thought that Bergson's critique of spatial theories of time only applied to those theories Heidegger claimed were 'ordinary' theories of time descended from Aristotle. This is probably why Heidegger says in the introduction to *Being and Time*: "Here we must make clear that this conception of time and, in general, the ordinary way of understanding it, have sprung from temporality, and we must show how this has come about. We shall thereby restore to the ordinary conception the autonomy which is its rightful due, as against Bergson's thesis that the time one has in mind in this conception is space."<sup>282</sup> Presumably, Heidegger's notion of finite space, which derives from the inevitability of Dasein's death, does not fall under Bergson's concept. But Bergson's critique was directed as much against Kantian idealism as it was against the 'realism' of classical mechanics. So even though Kant could conceive of time without specific content, he could not conceive of it without the conscious subject. This makes Kant's notion of time ontologically finite. And it leaves space intact as the defining characteristic of temporal thought. So, despite the attempt to get by with only a metaphor of space, Heidegger's theory must become

---

<sup>282</sup> Heidegger, *Being and Time*, 39 [18].

caught up in the necessity of spatial thinking, or it becomes unthinkable. This is why Sallis says: “And yet, will space – even if metaphorized – ever cease to return in Heidegger’s analysis? Will it not already have returned in the very designation *Innerzeitigkeit*? Can the *within* be though without space?”<sup>283</sup> I think it cannot be.

By re-introducing space into his theory of original temporality, Heidegger ends up with a theory of time that remains within the dominant metaphysical tradition. That is, whether intentional, metaphorical, or not, the presence of space and spatial kinds of thinking in Heidegger’s theory holds his theory within the tradition of metaphysics Heidegger claimed to be subverting/escaping. This happens because Dasein is a being oriented towards death. This makes Dasein a teleological being; and it makes Heidegger’s theory of original temporality a teleological theory. The fact that Dasein is thought of as a ‘fallen’ being trying to ‘project itself back’ upon some authentic set of possibilities only serves to set up a space within which temporality operates. And because this is a transcendental condition for Dasein, the fact of Dasein’s death serves as both a beginning and an end for Dasein’s temporality: an archeology to go with the teleology. Heidegger’s combination of the two into one concept may be unique in some ways, but only insofar as it is a new twist on an old tradition. This is why Derrida claims:

The extraordinary trembling to which classical ontology is subjected in *Sein und Zeit* still remains within the grammar and lexicon of metaphysics. And all the conceptual pairs of opposites which serve the destruction of ontology are ordered around one fundamental axis: that which separates the authentic from the inauthentic and, in the very last analysis, primordial from fallen temporality... Now, is not the opposition of the *primordial* to the *derivative* still metaphysical? Is not the quest for an *archia* in general, no matter with what precautions one surrounds the concept, still the “essential” operation of metaphysics? Supposing, despite powerful

---

<sup>283</sup> Sallis, 63.

presumptions, that one may eliminate it from any other provenance, is there not at least some Platonism in the *Verfallen*?<sup>284</sup>

And this is precisely how Augustine understood time: a synthesis of past and future, bound to the present, and all in the mind. All Heidegger seems to be doing, then, particularly according to Derrida's analysis, is changing which mode of time is the dominant mode. Rather than the past of the present, the present of the present, and the future of the present, Heidegger asserts that original or authentic temporality is the past of the future, the present of the future and the future of the future. This is what Dasein realizes when it engages itself in authentic temporality, particularly when it realizes that the ultimate future of the future is its own death.

So Heidegger's theory of original temporality is a spatial theory that remains within the tradition of metaphysics. This tradition, however, is not Aristotelian, as he claimed it was, but Augustinian, as I demonstrated in Chapters 1 and 2, and again in the above discussion. This sets the stage for an examination of Heidegger's remarks concerning the positioning of possibility and actuality. To say that possibility stands higher than actuality could mean several things. It could mean that there are many possibilities, but only one that is correct. It could mean that all possibilities are equally probable at a given time, which means collectively they have a higher standing than the one that becomes actual. But in the context of Heidegger's early works, particularly in *Being and Time*, it seems to me that his claim means the following. The possibility that Heidegger refers to is the future of Dasein. Specifically, this future is the future that Dasein throws itself towards when Dasein is acting authentically and engaged in original temporality. In fact, original temporality itself is based on this very possibility.

---

<sup>284</sup> Derrida, 63.

Actuality, then, is the present circumstance in which Dasein finds itself (which tends to be a fallen circumstance, according to Heidegger). But this actuality, this present, is less important, both temporally and ontologically, than the future that Dasein ‘throws’ itself toward. And, since the present as such is only authentic if it is authentically the present of Dasein’s future, then it must be, in some sense, less real than the future towards which it is aimed. This makes Dasein’s authentic future the foundational concept of Heidegger’s theory of original temporality.

The fact that Heidegger’s theory of original temporality is a foundational theory means two things, I believe. First, as I have already demonstrated, it means that Heidegger’s theory is, in fact, a traditional theory of time. And it is a traditional theory of time under the criteria Bergson assigns to ‘spatial’ theories of time. These criteria tend to spring from Augustine, and Heidegger’s theory certainly has an Augustinian flavor to it. Since it is a foundational theory in this way, than the foundational concept of the foundational theory must have at least as much reality as any other concept in that theory. If it did not, the theory would implode from the beginning. Heidegger’s theory does not do this, even if it also does not seem to do the things Heidegger thought it did, such as subvert the history of metaphysics. The future must be real, for Heidegger, in the way that it is real for Augustine – and for every other spatial theory of time. It is real because it is already there, present to consciousness (or Dasein, in Heidegger’s case), just like space is all already there. And second, by taking what Bergson had identified as a traditional mistake in the order of the possible and the actual, and constructing a theory of temporality based precisely on this mistaken order, and claiming that he was not doing

what Bergson would say he was doing, it must have been the case that Heidegger had Bergson at least partially in mind when he constructed his theory of original temporality.

If Heidegger did not have Bergson in mind, then why would he go to all the trouble of pointing out that what he was doing was not what Bergson would have said he was doing? And for that matter, why claim a concept as ‘primordial’ or ‘original’ if one is not engaged in some kind of foundationalism? As I discussed above, Derrida pointed out that discussions of originals and derivatives are themselves necessarily traditionally metaphysical. And Sallis showed that space worked its way back into Heidegger’s theory of original temporality. But Heidegger claims, emphatically, even, that what he is doing is not spatial in the sense Bergson would have claimed. He even goes so far as to say that the ordinary way of understanding time itself, which Heidegger claims derives from authentic or primordial temporality, does not come about in the way Bergson suggested:

We call the temporal attribute of entities within-the-world “*within-time-ness*.” The kind of ‘time’ which is first found ontically in within-time-ness, becomes the basis on which ordinary traditional conception of time takes form. But time, as within-time-ness, arises from an essential kind of temporalizing of primordial temporality. The fact that this is its source, tells us that the time ‘in which’ what is present-at-hand arises and passes away, is a genuine phenomenon of time; it is not an externalization of a ‘qualitative time’ into space, as Bergson’s Interpretation of time – which is ontologically quite indefinite and inadequate – would have us believe.<sup>285</sup>

But what these factors combine to reveal is the fact that Heidegger was aware that Bergson’s thinking could level a critique against Heidegger’s theory of original temporality.

Heidegger claims he is trying to “restore” the ‘ordinary’ conception of time is rightful place. Even if this claim seems strange, considering the fact that he believes ‘ordinary’ time to be derivative of original temporality, anyway, he clearly asserts that he

---

<sup>285</sup> Heidegger, *Being and Time*, 382 [333].

is doing this to counter a claim made explicitly by Bergson: 'ordinary' time is, in actuality, space. And he claims that Bergson tried to do something similar to Heidegger, insofar as Bergson tried to get beyond the 'ordinary' concept of time, which was admirable. But because Bergson did not understand 'ordinary' time properly, he really could not get beyond it, which is why Heidegger claims that Bergson's concept of duration ends up being inadequate. Both Heidegger's conception of 'ordinary' time and original temporality, then, can be seen as reactions to concepts at play in Bergson's critique of spatial time and Bergson's theory of duration. This clearly indicates that Heidegger was reacting to Bergson, at least in part, when he developed his theory of original, primordial, true or authentic temporality.

This explains why Heidegger claimed in his early works that the history of the concept of time was Aristotelian. Bergson was an Aristotelian, as I showed in Chapter 3. But the rest of the history of the concept was not, as I showed in Chapters 1 and 2. Heidegger's theory of original temporality, though, as I discussed in Part II of this chapter, and above in this concluding part, falls within the tradition dominated by Augustine.

I think several important questions follow from this. First, if Heidegger was reacting to Bergson, did he succeed in overcoming Bergson's theory? Second, if Heidegger remains in the tradition of metaphysics, what other implications abound concerning Heidegger's theory of primordial temporality? And third, does this make Bergson the more original thinker, and perhaps more worthy of study in terms of future metaphysical, epistemological, and even ethical projects?

As far as the first question goes, I do not believe that Heidegger succeeds in overcoming Bergson's critique of spatial theories of time. Because his theory is teleological and subjective, it really only succeeds, I think, in confusing the ordinary concept of time found in thinkers such as Kant. This is done, it seems to me, by importing some of the latent and explicit theological notions from Augustine into what is supposed to be a theology-free theory of original temporality. By making this theory dependent upon both Dasein's future, and the death of Dasein as the ultimate defining characteristic of that future, Heidegger ends up with a spatial theory that does even less than the two major spatial theories of time prior (Kant and classical mechanics) do. On the one hand, it cannot get beyond the subject, and on the other hand, it has a tendency towards the purely morbid. It does nothing to open the future up, as Bergson theory of duration does. It does nothing to aid evolution, as Bergson's theory of duration does. In fact, it reduces Dasein to its death, which would seem to put a halt to concepts such as freedom – concepts that are very much alive and at play in Bergson. This leads Heidegger back into the paradoxes that spatial theories of time generally exhibit, particularly insofar as Heidegger's theory relies so heavily on Dasein's future as death.

Second, because Heidegger's theory is a traditional metaphysical theory after all, I believe the criticisms of such divergent thinkers as Derrida, Adorno and the like are made more effective. Because temporality is a function of Dasein projecting itself towards its death, temporality is contained within the subject. This means that Heidegger's theory displays many of the inadequacies evident in purely subjective theories, but with a new and even more limiting twist. For thinkers such as Hegel, who are also critiqued as being subjective, there is at least the potential for growth in and by

the subject. Concepts such as Absolute Knowing, though, would seem unreachable, *a priori*, by a being completely pre-occupied with its own death. This means, I think, that not only is it the case that Heidegger's theory of original temporality is subjective, but it is subjective in a purely solipsistic manner.

Since both of these things are the case, I believe that Bergson provides a more fertile ground for continuing research and speculation. Although Bergson's theory is subjective in a sense, it is in more of an open-ended Hegelian sense. That is, there is plenty of room and opportunity for the subject to grow, according to Bergson's theories, than there is according to Heidegger's theories. Furthermore, the future is not something set in stone, as it seems to be for Heidegger. Rather, as Bergson claims in "The Possible and the Real," the "gates of the future open wide; freedom is offered an unlimited field."<sup>286</sup> Since Bergson is not morbidly occupied with the subject's impending death, his theories open the door for the subject to grow, and the universe along with it. This holds out much more promise in the areas of metaphysics, epistemology, and even ethics than Heidegger's theories ever could.

---

<sup>286</sup> Bergson, *Creative Mind*, 104.

## BIBLIOGRAPHY

- Aristotle. *Categories*. Translated by L. Minio-Paluello. In *The Complete Works of Aristotle*, edited by Jonathan Barnes. Princeton, NJ: Princeton University Press, 1984.
- *Metaphysics*. Translated by W.D. Ross. In *The Complete Works of Aristotle*, edited by Jonathan Barnes. Princeton, NJ: Princeton University Press, 1984.
- *Physics*. Translated by W.D. Ross. In *The Complete Works of Aristotle*, edited by Jonathan Barnes. Princeton, NJ: Princeton University Press, 1984.
- Augustine. *The City of God*. Translated by R. W. Dyson. London: Cambridge University Press, 1998.
- *Confessions*. Translated by R.S. Pine-Coffin. New York: Penguin, 1961.
- *On Genesis Against the Manichees*. Translated by Roland J. Teske. Washington, DC: Catholic University Press, 1991.
- Bergson, Henri. "Aristotle's Concept of Place." Translated by John K. Ryan. *Studies in Philosophy and the History of Philosophy* 5 (1970) 13-72.
- *Creative Evolution*. Translated by Arthur Mitchell. New York: Henry Holt, 1911.
- *The Creative Mind: An Introduction to Metaphysics*. Translated by Mabelle L. Andison. Secaucus, NJ: Citadel Press, 1946.
- *Duration and Simultaneity*. Translated by Leon Jacobson. Manchester, England: Clinamen Press, 1922.
- *Matter and Memory*. Translated by N.M Paul and W.S. Palmer. New York: Zone Books, 1991.

- , *Time and Free Will*. Translated by J.H. Muirhead. Edinborough:  
Riverside Press, 1902.
- Bertman, Martin A. "Aguustine on Time, with Reference to Kant." *Journal of Value Inquiry*, 20 (1986): 223-234.
- Bigelow, Patrick. "The Indeterminability of Time in *Sein und Zeit*." *Philosophy and Phenomenological Research* 46 (1986): 357-379.
- Bolotin, David. "Aristotle's Discussion of time: an Overview." *Ancient Philosophy* 17 (1997): 47-62.
- Borrow, Isaac. *Mathematical Works of Isaac Barrow D.D.*, Vol II, 160f. Cited in Milac Capek, *The Philosophical Impact of Contemporary Physics*. New York: Van Nostrand, 1961.
- Bostock, David. "Aristotle's Account of Time." *Phronesis* 25 (1980): 148-169.
- Callahan, John F. *Four Views of Time in Ancient Philosophy*. Boston: Harvard University Press, 1948.
- Capek, Milac. *Bergson and Modern Physics: A Reinterpretation and Re-evaluation*. Dordrecht, The Netherlands: Reidel Publishing, 1971.
- , *The Philosophical Impact of Contemporary Physics*. New York: Van Nostrand, 1961.
- Casey, Ed. "Habitual Body and Memory in Merleau-Ponty." *Man and World* 17 (1984): 282-283.
- Crocker, Stephen. "The Oscillating Now: Heidegger on the Failure of Bergsonism." *Philosophy Today* (1997): 405-423.
- Dahlstrom, Daniel O. "Heidegger's Concept of Temporality: Reflections on a recent

- Criticism.” *Review of Metaphysics* 49 (1995): 95-115.
- Deleuze, Gilles. *Bergsonism*. Translated by Hugh Tomlinson and Barbara Habberjam. New York: Zone Books, 1988.
- . *Cinema I: The Movement-Image*. Translated by Hugh Tomlinson and Barbara Habberjam. Minneapolis, MN: University of Minnesota Press, 1986.
- . *Difference & Repetition*. Translated by Paul Patton. New York: Columbia University Press, 1994.
- Derrida, Jacques. *Margins of Philosophy*. Translated by Alan Bass. Chicago: University of Chicago Press, 1982.
- Durie, Robin. “Splitting Time: Bergson’s Philosophical Legacy.” *Philosophy Today* 44 (2000): 152-168.
- Felt, James W. “Philosophic Understanding and the Continuity of Becoming.” *International Philosophical Quarterly* 18 (1978): 375-393.
- Fritsche, Johannes. “The Unity of Time in Aristotle.” *Graduate Faculty Philosophy Journal* 17 (1994): 101-125.
- Gilson, Etienne. *The Christian Philosophy of Saint Augustine*. Translated by C. E. M. Lynch. New York: Octagon Press, 1969.
- Heidegger, Martin. *Being and Time*. Translated by John Macquarrie & Edward Robinson. San Francisco: Harper & Row, 1962.
- . *The Basic Problems of Phenomenology*. Translated by Albert Hofstadter. Bloomington, IN: University of Indiana Press, 1982.
- . *The Metaphysical Foundations of Logic*. Translated by Michael Heim. Bloomington, IN: University of Indiana Press, 1984.

- Howe, Lawrence. "Bergsonian Methodology and the Problem of Time." *Southwest Philosophy Review* 15 (1999): 39-55.
- Husserl, Edmund. *On the Phenomenology of the Consciousness of Internal Time*. Translated by John Barnett Brough. Dordrecht, The Netherlands: Kluwer Academic Publishers, 1991.
- Inwood, Michael. "Aristotle on the Reality of Time." In *Aristotle's Physics: A collection of Essays*, edited by Lindsay Judson. Oxford, England: Clarendon Press, 1991.
- Kane, Michael T. "Heidegger and Aristotle's Treatise on Time." *American Catholic Philosophical Quarterly* 69 (1995): 295-309.
- Kant, Immanuel. *Critique of Pure Reason*. Translated by Norman Kemp Smith. New York: St. Martin's Press, 1929.
- Keller, Pierre. "Heidegger's Critique of the Vulgar Notion of Time." *The International Journal of Philosophical Studies* 4 (1996): 43-66.
- Kirwan, Christopher. *Augustine*. New York: Routledge, 1989.
- Lacey, A.C. *Bergson*. New York: Routledge, 1989.
- Laplace. *Introduction a la theorie analytique des probabilités*, Paris, 1886. Cited in Milac Capek, *The Philosophical Impact of Contemporary Physics*. New York: Van Nostrand, 1961.
- Lloyd, Genevieve. *Being in Time: Selves and Narrators in Philosophy and Literature*. New York: Routledge, 1993.
- McLure, Roger. "St. Augustine and the Paradox of Reflection." *Philosophy* 69 (1994): 317-326.
- Merleau-Ponty, Maurice. *In Praise of Philosophy*. Translated by John Wild and James

- M. Eddie. Evanston, IL: Northwestern University Press, 1963.
- . *Phenomenology of Perception*. Translated by Colin Smith. New York: Routledge, 1962.
- . *Signs*. Translated by Richard L. McCleary. Evanston, IL: Northwestern University Press, 1964.
- Moore, F.C.T. *Bergson: Thinking Backwards*. London: Cambridge University Press, 1996.
- More, Henry. *Enchiridion Metaphysicum*, London, 1671, VIII. Cited in Milac Capek, *The Philosophical Impact of Contemporary Physics*. New York: Van Nostrand, 1961.
- Muldoon, Mark. "Time, Self, and Meaning in the Works of Henri Bergson, Maurice Merleau-Ponty, and Paul Ricoeur." *Philosophy Today* (Fall 1991): 254-268.
- Newton, Isaac. *Mathematical Principles of a Natural Philosophy*, Scholium I. Cited in Milac Capek, *The Philosophical Impact of Contemporary Physics*. New York: Van Nostrand, 1961.
- Okrent, Mark. *Heidegger's Pragmatism*. Ithica, NY: Cornell University Press, 1988.
- Olkowski, Dorthea. *Gilles Deleuze and the Ruin of Representation*. Berkeley, CA: University of California Press, 1999.
- . "Merleau-Ponty and Bergson: The Character of the Phenomenal Field," In *Merleau-Ponty: Difference, Materiality, Painting*, Edited by Veronique M. Foti. St. Louis: Humanities Press, 1996.
- Parmenides. *Fragments*. Translated by Philip Wheelwright. In *The Presocratic*, edited by Philip Wheelwright. Upper Saddle River, NJ: Prentice Hall, 1966.

Plato. *Timaeus*. Translated by Benjamin Jowett. In *The Collected Dialogues of Plato*, edited by Edith Hamilton and Huntington Cairns. Princeton, NJ: Princeton University Press, 1961.

Plotinus. *The Enneads*. Translated by Stephen MacKenna. New York: Penguin Books, 1991.

Polk, Danne W. "Temporal Impermanence and the Disparity of Time and Eternity." *Augustinian Studies* 22 (1991): 63-82.

Proteri, John. Time and Exteriority: Aristotle, Heidegger, Derrida. Lewisburg, PA: Bucknell University Press, 1994.

Quinn, John M. "The Concept of Time in St. Augustine." *Studies in Philosophy And the History of Philosophy* 4 (1969): 75-127.

Reck, Andrew J. "Bergson's Theory of Duration." *Tulane Studies in Philosophy* 8 (1959): 27-48.

Rogers, Katherin A. "St. Augustine on Time and Eternity." *American Catholic Philosophical Quarterly* (1996): 207-223.

Ross, Donald L. "Time, the Heaven of Heavens, and Memory in Augustine's *Confessions*." *Augustinian Studies*, 22 (1991): 191-205.

Russell, Bertrand. *Human Knowledge: Its Scope and Limits*. New York: Routledge 1948.

Sallis, John. *Echoes: After Heidegger*. Bloomington, IN: Indiana University Press, 1990.

Simplicius. On Aristotle's Physics. Translated by J.O. Urmson. Ithica, New York: Cornell University Press, 1992.

Teske, Roland J. *Paradoxes of Time in Saint Augustine*. Milwaukee, WI: Marquette University Press, 1996.

-----, "The World-Soul and Time in St. Augustine." *Augustinian Studies*, 14 (1983): 75-92.

Villela-Petit, Maria. "Selfhood and Corporeity." *Journal of the British Society for Phenomenology* 25 (1994): 34-43.

Waterloo, Sarah. "Aristotle's Now." *Philosophical Quarterly* 34 (1984): 104-128.

Whitrow, G.S. *The Natural Philosophy of Time*. New York: Oxford University Press, 1961.

Zeno. *Fragments*. Translated by Philip Wheelwright. In *The Presocratics*, edited by Philip Wheelwright. Upper Saddle River, NJ: Prentice Hall, 1966.