

A+

# TIME

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As human beings we are all familiar with the concept of time. Haven't you waited in the rain for a late bus? Seen American sprinters lose in the Olympic Games? Seen your head become less and less covered with hair? That we seem to experience time is undeniable.

"And yet, Lord, we perceive intervals of time, and compare them, and say some are shorter, and others longer."<sup>1</sup>

*unclear* To deny the existence of time is to deny any empirically verifiable experience. We must be careful not to follow in Berkeley's misguided footsteps. Although we may be restricted from knowing what the world is truly like, we cannot then assume or deduce that it does not exist. As we may or may not be able to know if time is objectively real, we cannot assume that it does not exist. Certainly it has subjective existence. Anything we can think of must have subjective existence. (We remember from Descartes' Ontological argument that predication / made of an object presupposes that object's existence.) Therefore, our discussion of time presupposes the existence of time. Nevertheless, we have yet to determine at what level of reality time exists: is its existence subjective or is it objective? What is the nature of time? We ask these questions even though we know very well how to use the term "time." We cannot hope that nobody will ask us what time is<sup>2</sup> and be content with our "everyday" knowledge. As philosophers we must stop and reflect on this concept; we must try to give an account of its meaning. Asking questions is useful because it helps us to break out of the framework in which we see time and gain new perspectives on this most commonly employed concept.<sup>3</sup>

Since it is our basic concept of time which we will be examining, it should be useful to provide an account of our use of "time." Time seems to be a character and relation of events. It is that thing with respect to which events are distinguished as simultaneous or successive. Without time we could never retire since the notion of being older (or born before) someone else would be nonsensical. Carl Lewis could never have won all those medals

<sup>1</sup> Augustine. "What is Time?" in *Metaphysics*. ed. Ronald C. Hoy and L.N. Oaklander. (Belmont, CA: Wadsworth Publishing Co., 1991), p. 23.

<sup>2</sup> Augustine explained that he knew what time was if no one asked him but did not know what it was when he was asked.

<sup>3</sup> In this paper I will not even attempt to provide a full account of each philosopher's philosophy of time. To do so would require much more space and time than is appropriate for this paper. Secondly, such an endeavor would not necessarily produce a coherent paper. Finally, I have reconstructed arguments of each philosopher for the purpose of informing or propelling a discussion of a particular aspect of time. In other words, I have found it rewarding to work independently through certain time problems and to simply "use" the philosophers discussed in class wherever appropriate or necessary.

if there were no time (or relation) between the event of his coming across the finish line and that of the other runners finishing the race. Without some notion of a relation between event one and event two viz. that of "before" and "after" we cannot predicate change and permanence. Yet, is this before- after or earlier - later relation sufficient for time? J.M.E. McTaggart said that this relation, which he defined as a B series, is not sufficient. After all, B series relations must always hold true. The death of Queen Anne will always be earlier than my birth at any point in time. My birth might have been present in 1969, future at the death of Queen Anne, and past today, but it will always be later than the death of Queen Anne. B series relations are timelessly true. They will not allow for change, and "there could be no time if nothing changed."<sup>4</sup> Events can only change in their A series relations.

2 McTaggart proposes that the A series is sufficient and necessary for time. The A series is the relations of past, present, and future. Obviously, we can figure out before and after relations from past - present - future relations. For example, if event x is past, y is less past and z is present, then x is earlier than both y and z. However, if we say that x is future and y is earlier than x, we do not know if y is past, present, or even future. We can derive the B series from the A series but not the A from the B. McTaggart, in requiring events themselves to change, saw that they could only change in the fact of whether they were past, present, or future events, in their A characteristics.

Donald Williams questioned McTaggart's requiring events to change. An object can change in time. It can be big at  $T_1$  and small at  $T_2$ . But can an event change in time? Can time change in time? It would have to be in some sort of hypertime. Yet, if we accepted the passage idea that events can pass from future to past, then we will be forced to hold it for the hypertime as well and we will have to provide another hypertime to which the hypertime can relatively move. Williams rejected the A series. He could not accept that time "passed" from past to present to future.

McTaggart proceeded from his requirement of an A series for change to a denial of the possibility of an A series, and thus a denial of change and time. He said an event must have

<sup>4</sup> McTaggart, J.M.E. "Time is Not Real" in Metaphysics, p. 44.

*good expo*

*nic  
clear & concise*

the successive A characteristics of past, present, and future. Of course, that would be a contradiction since these characteristics are incompatible.<sup>5</sup> Since reality must be free of contradiction, McTaggart concluded that change can be no part of reality. Hold on, does an event need to possess all the A characteristics at one time? My birth was present in 1969 but is now past. An event can possess all three characteristics, just not as seen from one point of view, or at one time. 3

McTaggart denies that the contradiction is circumvented. Since every event must have all three characteristics, then each of the moments from which we described the original event (relatively) must also be an event. These events must be past, present, and future. If we escape the contradiction on this second level, it is only through reference to a third level. The contradiction cannot be avoided, at least in this manner, because we are led into an infinite regress. Nevertheless, it is interesting to note that an event's possessing of a characteristic is something that must be done in time. When I say that I was born I do not mean that there is some event viz. my birth and it once possessed the quality of futurity, then presentness, then pastness. What I mean is that the event has been, and is no longer a fact of the world. This interpretation of McTaggart has a bearing on the hypothesis of the space-time manifold. 4 ✓

*unclear* Donald Williams believed in such a space-time manifold. This hypothesis is one that holds the objective world does not happen. All events are just real. (It is only the consciousness of human beings coming upon different parts of the manifold that makes it seem to come alive.) It is this constant moving of consciousness across the manifold that produces the the present. Consciousness can be thought of as a spotlight. All events are out there in the dark, and each is lit for just a moment. There is no "passage" except that of our consciousness from one event to the next. If the A series is contradictory, it cannot be real. Therefore, change and time cannot be real. These notions of time and change seem closely connected. Indeed, when Parmenides denied the objective reality of change he denied the reality of time as well.<sup>6</sup> 5

*He doesn't say this.*  
*This is Eddington + Grünbaum*

<sup>5</sup> Perhaps an intuition of time could be past, present, and future at once because we would be freed from the perspectives placed upon us by being at only one time and place. We would not have to describe events relative to that time and place through B relations like "earlier than now is past" and "later than now is future."

<sup>6</sup> Note that not even Parmenides denied the subjective reality of change and time. After all, he employed these concepts in his writings obviously with the intention that they be understood by others. ✓

Parmenides holds that reality consists of timeless entities. He starts with two paths of inquiry: "it is" and "it is not." These are obviously mutually exclusive. Parmenides shows that the only possible path is that of "it is" by rejecting "it is not."

"The one is the way of how it is, and how it is not possible for it not to be; this is the way of persuasion, for it attends truth. The other is the way of how it is not, and how it is necessary for it not to be; this, I tell you, is a way wholly unknowable."<sup>7</sup>

I cannot say that an apple is an apple and is not an apple. I would be inconsistent and thus, would have said nothing. A statement and its negation cannot both be true. Since reality must be noncontradictory, reality must be a timeless totality, an "it is." Parmenides denied change because it would somehow involve the "what is not." A change of place would involve moving into empty space or "what is not." A change of color would mean that the new attribute came from the "what is not" and the old attribute would go to the "what is not." If a leaf is green today and brown tomorrow, then where does the color of brown go? It must have gone into that "which is not." From where did the color of brown come? It was not part of the leaf before. It previously "was not." Every change would involve the passage of "what is" into "what is not" and any attempt to describe change would be an unintelligible expression. Reality must remain the same; it cannot change. Reality or "it is" is timeless. After all, if nothing changes, then how are we to explain the passage of time. If the same things hold true, past and present are meaningless. Change seems to be epistemically prior to time.<sup>8</sup>

It is undeniable that we seem to experience time and change. We see those hairs falling out. Parmenides will tell us this is only an illusion for the world is a timeless, unchanging whole.

"Motion, change, and plurality were, according to [Parmenides], mere illusions."<sup>9</sup>

Parmenides explains away our common sense notions by making them out to be like Plato's knowledge of shadows on the cave wall. Like the British empiricists he tells us that we do not and cannot have any true knowledge of the real world. Time is merely a fact about the way we human beings perceive the world. Nevertheless, this experiential awareness of time is sufficient for the existence of change. The fact that we can think of change and imagine

<sup>7</sup> Parmenides, "Being Is Not Temporal." in Metaphysics, p. 8.

<sup>8</sup> Aristotle will show us that the relation of time and change is, in fact, a double dependency for change is also dependent upon time, albeit not epistemically but logically.

<sup>9</sup> Salmon, Wesley C. "A Contemporary Exposition of Zeno's Paradoxes" in Metaphysics, p. 11.

*very perceptive  
and imaginative  
expo*

✓  
6

7  
✓

what it is for a thing to change is enough to show that it does exist on at least one level of reality viz. the subjective. We need time to explain what we experience. When we see the leaves on trees green and also brown, we do not simply accept this as a fact of the continuing illusion under which we live. We want to explain and provide order to our world. We use logic to provide such order and logic dictates that an object cannot both be X and not be X.<sup>10</sup> However, the leaf is both green and not green. The notion of time is needed to distinguish between two leaves. There is a leaf at time  $T_1$  and a leaf at time  $T_2$ . Time allows us to account for such discrepancies as "changes" in objects and avoid contradiction. If we viewed no change, we would not logically need the concept of time to accommodate it.

"And yet [time is] not apart from alteration, either. When we ourselves do not alter in our mind or do not notice that we alter, then it does not seem to us that any time has passed...."<sup>11</sup>

Suppose my memory was damaged in some terrible roller skating accident and would only retain the last 1/100 seconds of experience. Further suppose that I lost all prior memory so that the only actions or thoughts of which I am aware of are the one's which are co-present in any span of my memory. I could never notice change. Change requires the comparison of two events, or states of an object. My memory is too short for me to experience more than one distinct event. If I were watching a caterpillar become a butterfly, I would not notice change. At the moment of seeing a butterfly, the experience of seeing a caterpillar is long gone. Even the experience of seeing a slightly transformed caterpillar will not help me see change since the time it takes me to perceive anything is greater than the span of my memory. I can experience a slightly deformed butterfly but can never have any other notion to which to compare it. I can produce neither McTaggart's A nor B series. The notions of earlier or later will be nonsensical. Since I can experience only one event, I cannot imagine anything other than that one event. Notions of past and future and even present will mean nothing as well. I cannot produce a two place relation which is necessary for these notions, for I only ever have one place with which to relate.

*please, I have dropped legs.*

*4*

<sup>10</sup> It is purely with logic that Parmenides made his assertions about the world. I do not wish to imply that had Parmenides employed logic he would not have made the same assertions. In fact, it is his reliance solely upon logic that led him to deny change. This denial removed him from the logical necessity of postulating time with change.

<sup>11</sup> Aristotle. "Time Is a Measure of Change" in Metaphysics, p. 15.

I have explained how and why time and change are inseparable.<sup>12</sup> Nevertheless, no account has yet been given as to the exact nature of the relationship of time and change.<sup>13</sup> Aristotle defines time as the measure of motion.

"To be in time is to be measured by time, and time is a measure of change and rest."<sup>14</sup>

By motion he means any change of quality, quantity, or place. Obviously, there cannot be time without change for there cannot be the measurement of change without change itself. How could there be inches and miles without space? On the other hand, Aristotle did allow there to be change without time. He required that for the measurement of time, that there actually be a measurer, that there be some being who does the measuring. Without the existence of such a being there would be no time. There would potentially be time in that if there were someone to measure the change, then there would be time. Still, the fact that there can be change without time seems counterintuitive at this point. Yet it would only be counterintuitive if we were faced with such a situation. This can never happen because as soon as we are faced with change, we have time, as we are sentient beings who measure the change. If we were not around, then would change continue? We expect that it would. We are aware of machines which need little or no maintenance. Since they have done so in the past, we expect that they will continue to function in our absence. Would time also continue? It is not counterintuitive for Aristotle to maintain the absence of time in the absence of a being to witness change, for we know that if there were such an observer (if we were there), there then there would be time, that the potential for time would be actualized. ✓

Aristotle rejects the objective existence of time but only as an entity in and of itself. Aristotle gives time objective reality in having it be the dimension in which change occurs. Thus, time for Aristotle is not an independent frame in which events take place; it is merely a quality of the real world. Like any other quality, time does not have independent existence from the objects which possess

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<sup>12</sup> This does not imply that they are equal. Both Aristotle and Augustine determine that time and change are not equal just codependent.

<sup>13</sup> Neither has an account been given of the objective reality of time. Nevertheless, we are still exploring the general nature of time.

<sup>14</sup> Aristotle in Metaphysics, p. 18.

it.<sup>15</sup> Change has the quality of time but only potentially and this potential is actualized when the change is perceived. Time exists when we have this observer because of the observer's need to avoid contradiction. Without this need, there would be no time. Employing an example of Hume may aid us in understanding the potentiality of time. Hume held that secondary qualities do not exist in the world. For example, bananas do not possess yellowness; yellowness is simply the way in which we human beings perceive bananas. Although the yellowness is not in the bananas, we always perceive them as yellow. Therefore, there must be something about the banana that produces yellow and not red or blue. Hume explained this as the banana's "capacity" to produce yellowness within us. The idea of capacity can be applied to time as well. Change for Aristotle has the capacity to produce time within a sentient being. If the banana is never seen then its capacity to produce yellowness will not be actualized. Similarly, if change is not observed and measured, its capacity to produce time will not be actualized. Change needs a sentient being and the sentient being requires change for there to be time. I like to think of time as shirt size which is a notion which makes no sense unless there are shirts and people to wear them.

*sounds like  
Locke,  
not Hume*

Aristotle and Parmenides were basically in agreement over the relation of change and time. Nevertheless, their respective arguments are in opposition. Parmenides argued that change and thus time cannot have objective existence. Aristotle, on the other hand, argued that since change has objective existence, then so must time (at least potentially). In his Physics Aristotle refutes the argument of Parmenides by making a distinction between the existential, attributive, and identical "to be." X can (yes, it can) come to be from what is not. Pale can come to be from what is not (not pale.)<sup>16</sup> Aristotle took the common sense notion of time and defended it from the "reason" of Parmenides. He must defend it from the paradoxes of Zeno as well.

The Racecourse Paradox seems designed to refute the doctrine that space and time are continuous. The two racers obviously must cover half of any distance which they are running before they can run the whole of it, and they must run half of that distance and so

<sup>15</sup> We could assume the existence of Platonic forms.

<sup>16</sup> Physics, 191.b.5 - 15.

*dense* — *why two? Need only one*



on. Since space is infinitely divisible, an infinite regress <sup>occurs</sup> ~~can be reached in~~-requiring the runners to run one half of a distance before running that distance. Yet, it is obvious that the smallest part of the smallest distance must still be crossed before any greater distance can be crossed. Even an infinite division of any quantity will not reach zero. How can the runners begin the race ? They must have already run some distance before they can go any distance.

There is also a corresponding infinite regress of time that it takes in which to cover those distances. Before two minutes pass, one minute must pass, and there can be no smallest unit. The generalization can be made to the world at large. Nothing can move or change, since in order for an object to change from X to Y, it must already be at X+1 and to change from X+1 to Y it must already be at X+2..... and so on.<sup>17</sup> Dense time does not seem to be possible. Change is disallowed. Aristotle's subjective experience of change motivated him either to refute the race paradox or to find a different conception of the nature of time viz. as discrete.

Aristotle did the former. He acknowledged that time could not be discrete else he would fall prey to the arrow paradox. If each moment in time were indivisible then at any one of those moments there could be no change. At time  $T_1$  the arrow would be at one place, at another time  $T_2$  the arrow would be at only one place. If the arrow is always at rest, (at some atomic moment of time) then when does it move ? There are only successive moments in which the arrow is also at rest. Having atomic or discrete time leads us to the same paradoxical conclusions as the racecourse paradox viz. that there can be no motion or change, and thus no time. Nevertheless, Aristotle saw that at least the present must be thought of as discrete for if it had extended duration it could be divided and there would be only past and future parts leaving nothing as truly present.

Why did Aristotle feel that time could be divided ? Because it is a continuous quantity. Time is a measure of change; change is a measure of substance, and substance is continuous

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<sup>17</sup> Of course, I am only presenting one form of this paradox. Salmon suggests that the Paradoxes fit into one of two groups: those designed to refute space and time as continuous and those designed to refute space and time as discrete. It is necessary to provide but one representative example. For consistency, it is to this paradox I will refer to in discussing other philosophers.

because it exists in space. Space is certainly <sup>dense</sup> continuous because between any two points in space we can always have another (at least by stipulation). It is in the nature of continuous quantities to be divisible. So, with his indivisible present or "now," he links the divisible past and future to form a continuous whole. Yet, continuous time is divisible. Aristotle avoids paradox by not requiring that time be infinitely divided, just that it be potentially divisible. The division could not be actualized for that would entail an actual infinity. Since infinity entails indefiniteness, an actual infinity would entail an actual indefiniteness. Yet, anything that is actual should be definite. It is only because it is potentially actual, that we call it infinite. Besides, we do not actualize the divisibility of space to deny space. Why then should motion and time fall prey to such in the paradoxes of Zeno? Augustine's account of time will provide us with enough insight into the nature of time to return and tackle Zeno's paradox anew. It is to St. Augustine's account to which we now turn.

Aristotle surely knew how to use everyday temporal expressions. He was also willing to question those notions but not part with them. I believe that our everyday notions provide a good starting point for enquiries into time. There are no more primitive terms in which to describe or define time. Aristotle chose change as more basic than time because this is what we are faced with in our common experience. It makes good sense to use the better known to elucidate the less known. We often use models (physical and theoretical) to explain difficult principles and concepts. Aristotle in choosing change as a basic principle was able to provide at least a plausible account of time. He maintained the objective reality of time. Augustine, on the other hand, was led to paradoxical conclusions.<sup>18</sup> Augustine explained time in terms of a spatial metaphor and like Parmenides and Zeno before him, Augustine "lost" time by doing so.

Augustine's premises seem self evident:

1. The past and the future are in some sense not real
2. The present has no duration.

How are past and future not real? They are not objective aspects of the world but exist

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<sup>18</sup> Augustine apparently was not aware of these. Nevertheless, Augustine's argument leads to paradoxical conclusions whether or not he was aware of these or not.

merely in our minds. Parmenides is right: we can only measure what is. The past is gone. Pittsburgh's industrial era is in the past; it is not real, for I see no black smoke outside my window. The future has not yet actually occurred. My marriage is in the future and as such is not real; much to my chagrin there is nobody sharing my bed at night. The spatial model Augustine used to understand time led him to this conclusion. The past and future are not before us to be measured; only the present is here.

Suppose, now, the voice of a body begins to sound, and does sound, and sounds on, and list, it ceases; it is silence now, and that voice is past, and is no more a voice. Before it sounded it was to come, and could not be measured, because as yet it was not, and now it cannot because it is no longer. Then, therefore while it sounded, it might; because there then was what might be measured. But even then it was not at a stay; for it was passing on, and passing away."<sup>19</sup>

Yet, what do we mean by present? To what do we refer? Language exists for us to express our thoughts and feelings to each other. In order to do this effectively, we must agree upon the meaning of the words we use. We can agree on "present" but only by stipulation. With no context we cannot determine to what the present refers. For example, when I say that I am presently happy do I mean that I am happy at this point in my life viz. in my twenties? or do I mean this week? This day? This hour? This minute? This second? I can stipulate one but is there a "true" present?<sup>20</sup>

Since they have duration, periods of time, no matter how small they are can always be subdivided. Since we will never find a point at which we can stop dividing, we will never find a present. We have defined past and future as being before and after the present respectively.<sup>21</sup> Nevertheless, there is no present to be found. Past and future must infinitely converge upon each other but never meet.

"If an instant of time be conceived, which cannot be divided into the smallest particles of moments, that alone is it, which may be called present. Which yet flies with such speed from future to past, as not to be lengthened out with the least stay."<sup>22</sup>

If no point in time can be said to be distinct from any other and thus called present, how can

<sup>19</sup> Augustine in Metaphysics, p. 26.

<sup>20</sup> Examples can be found in Augustine in Metaphysics, p. 23 and also in Gale, Richard. Philosophy of Time. (Garden City, NY: Anchor, 1967), p. 4.

<sup>21</sup> Augustine defined past as being earlier than the present and the future as later than the present. With only a B series and a stipulated present, Augustine had a full fledged A series.

<sup>22</sup> Augustine in Metaphysics, p. 23.

there be any point in time at all ?<sup>23</sup> It is as if we were in an ocean of orange Jello with one piece of green Jello in it. We go to stand on that one piece of green Jello into which we immediately begin to sink. In the green Jello we may see a spot of (unappetizing) blue Jello and go to stand on it. Again, we begin to sink into the blue Jello. In the blue Jello we see a spot of red Jello go over to it and sink again. You see, we will continue to sink. There will never be a point at which we will stop finding new Jello islands. Whatever we take to be an island will really be the ocean and we will always have to find a new island within each ocean. I can specify a certain point in time say 8:00. If there are points in time, then there should be some next point after 8:00. But what is this next point ? Is it 8:00:01 ? No, there are an infinite set of points in between 8:00 and 8:00:01. We cannot think of the continuum of time as a set of points arranged in succession.

*nicé example*

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"The points are not in the movement as parts....they are simply projected by us beneath the movement....they are not, therefore, properly speaking, positions, but suppositions."<sup>24</sup>

Yet, this is precisely what the racecourse paradox relies upon. To go from X to Z we must first go halfway to Y. Nevertheless, there is no solid Y, as soon as we specify Y we begin to "sink into it." The paradox is escaped once again.

Augustine established that the present is durationless. Yet, has he proved his other premise that the ~~and~~ past and future are unreal ? This premise relies upon the assumption that temporal entities can exist only when present. Obviously, since past and future cannot be present, they do not exist. Since they do not exist, they are not real. If we conclude that only the present is real and that the present is durationless, we will lose time. In having only an eternal now, we cannot accommodate change and will be forced to conclude the unreality of time. Since I am loath to conclude this and since the logic of the argument seems incontestable, I must question Augustine's premises. I have already established the durationlessness and "absence" of the present. Thus, it is the unreality of past and future which I must question.

<sup>23</sup> I do not mean to question whether or not there is any point in discussing time, that it is a fruitless and useless concept. I do mean to make it clear that discrete or atomic time is impossible except by artificial stipulation. There cannot be distinct "units" of time.

<sup>24</sup> Bergson, Henri. "Time is the Flux of Duration" in Metaphysics, p. 39.

Past and future are unreal because they are not present. Yet, what does it mean to be present? The notion is an artificial stipulation of human beings. Augustine reasoned that it is this human factor which distinguishes past, present, and future. Thus, time is but a protraction of the mind.<sup>25</sup> That which we experience at any moment is present; the memory of experience is past; and expectation of experience is future. I will establish the unreality of past and future not by reference to the fact that they have already or have not yet passed by. I will demonstrate that with any specification of present, or of real time, no past or future time can also be real.

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The future does seem to be expectation; it is basically a cause-effect attribution from induction. We have dropped things many times and we have seen them fall every time. (I assume that no one who is reading this paper has been in an Air Force bomber doing an elliptical dive.) Thus, when we drop the ball now, there is an expectation that it will fall. At the moment of dropping or even of planning to drop the object's hitting the ground is still in the future. We expect something to happen. This can be generalized to life. Events have happened to us in the past and we expect that they will in the future as well. In particular, I expect my death. Every human being on Earth has eventually died after so long, nevertheless, I am sure that this event is not real for me. I am writing this paper and everyone else in this computer cluster agrees with me that I am alive. (I really asked them.) If I use "present" in reference to the span of several minutes, then it is not the case that my death is (presently) real. I must have been alive to write these sentences. I cannot be both dead and alive, alive and not alive. If the future were real, all events would be "actualized" and terrible contradictions like this would arise. Since no two states of an object can exist at the same time, past as well as future must be unreal. Past events can have no more reality than future events else we run into terrible contradictions.

After a certain extent there is no need to subdivide present into past and future (unreal) parts in order to prevent contradiction.<sup>26</sup> This need depends seems to depend on

<sup>25</sup> Augustine in *Metaphysics*, p. 26.

<sup>26</sup> Perhaps as human beings we can no longer appreciate distinctions even though we can intellectually make them. We can specify any present. Nevertheless, our need to avoid contradiction becomes less and less acute.

the context in which the distinction might be made. In a discussion of geological processes "present" can refer to the past 10,000 years. There is no need to make distinctions any finer than this. On the other hand, on December 31 we are very concerned with the last second of the last hour of the last day of the year. It is only at this second that the ball drops, the horns blow, and we say it is now 1992 or whatever year it may be. Like Aristotle we should realize that time need not be infinitely divided though it is possible to do so. We should only divide as long as there is some need to avoid contradiction. The plain fact that we are able to divide time is insufficient grounds for doing it. 12

We have already seen that the only reality of present is in the mind, now we see that the only reality of past and future are in the mind as well. Augustine held the reality of the present. Can I deny the reality of the present? I do not mean to do so not in the same manner in which Augustine denies the reality of past and future viz. that they are not present. I would deny the objective reality of the present because I cannot find any point in time, much less one that can be called present. We saw that the notion of present is dependent upon perspective of the person employing the term.<sup>27</sup> Even in Williams, present is dependent upon the consciousness of the person, not upon anything about the manifold. However, I do not wish to be too hasty in dismissing the reality of the present for although I can find no objective reality for it, some must be assumed, for it is only this that makes possible any time. Augustine's placing of time in the consciousness of man does not "save" time. For there must still be objective time in which his memory and expectation can operate. Henri Bergson claims that it is this employment of artificial concepts like "present" that leads us into paradoxical conclusions like Augustine's disappearance of time. right

Bergson holds that the employment of concepts distorts objects which they purport to describe. It is already obvious that the concepts of past, present, and future are very relative and do not describe anything objectively real. They are merely tools for us human beings so that we can easily refer to events.

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<sup>27</sup> Of course, past and future can also be relative. World War II is past for us but present for those living in the 1940's and future for those in the 1920's

"We do not, in general, aim at knowing for the sake of knowing, but at knowing in order to take a stand, gain a profit, in fact to satisfy an interest."<sup>28</sup>

Bergson explained that our ordinary notions of time, as all our concepts, are for practical purposes. We employ ~~the use of~~ concepts and language in order to communicate with one another, to describe our physical world in scientific terms. These concepts do not help us to delve deeper into the mystery of nature or time, they merely help us to use nature or time better. We think of time as passing and this way of thinking about it does help us to describe our experience and relate it to others. "That Andy Warhol movie is very long." "Time passes more quickly when you are having fun." Bergson describes this use of concepts as analysis, an intellectual activity which attempts to grasp objects by portraying the features the object has in common with other objects. Analysis always sees an object from some perspective. I am reminded of Rudolf Carnap. If we invoke this philosopher, we can think of analysis as always placing the object in some conceptual or linguistic framework. Bergson warns us that these concepts and symbols cannot be used in metaphysical investigations. He advises us to throw off the linguistic frameworks and look at the object directly, to intuit it.<sup>29</sup>

I am rather skeptical of the mystical notion of intuition<sup>30</sup> but an understanding of it is essential for comprehension of Bergson's motivation and reasoning in maintaining that metaphysics is the science which uses intuition.

"If there exists a means of possessing a reality absolutely instead of knowing it relatively, of placing oneself within it, instead of adopting points of view toward it, having the intuition of it instead of making the analysis of it, in short, of grasping it over and above all expression, translation, or symbolic representation; metaphysics is that very means."<sup>31</sup>

Bergson defines intuition as "the kind of intellectual sympathy by which one is transported into the interior of an object to coincide with what is unique and consequently inexpressible

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<sup>28</sup> Bergson in Metaphysics, p. 38.

<sup>29</sup> Bergson in Metaphysics, p. 34 - 35.

<sup>30</sup> I will provide my own account of intuition. Nevertheless, my two main criticisms are 1. He is inconsistent in his description of intuition. I will show that concepts are primary and intuition secondary in the process. 2. Bergson does not tell us how to have an intuition. This very foreign notion deserved to be better explained. My conception is a level of understanding that must be broken back down into intellectual components in order to be communicated. The receiver of the communication must reconstruct the intellectual knowledge into an understanding, conscious awareness, or intuition.

<sup>31</sup> Bergson in Metaphysics, p. 38.

in it"<sup>32</sup> Bergson employs a powerful spatial metaphor to distinguish analysis from intuition. He contrasts entering into an object with moving around it. The former is done only through intuition. In analysis an object can look both large and small depending on the point of observation. This knowledge is relative. Bergson provides a good case for the fact that the accumulation of even a great many of these perspectives will not reveal the true character of an object; only intuition can provide one with such absolute knowledge.<sup>33</sup>

My favorite example of Bergson's is one in which he points out that an examination of the translations of a poem into other languages can never provide one with the true meaning of the poem. The words in those other languages have connotations that will never precisely match that of the word in the original language. The foreign words are simply not equipped to convey the same exact message. They will distort the message by leaving out shades of meaning or adding some where there were none intended. It is for this reason that Bergson defines metaphysics as the science which dispenses with symbols. He concludes that if we want to grasp the true nature of the world, we must do so without expressions, translations, pictures, models, or symbolic devices.

With our new metaphysical insights, let us return once again to the paradoxes of Zeno. What more can we say now? Remember that whether we saw time as discrete or as continuous, we ran into a paradox. Bergson argues that we should not see time as either discrete or continuous but as both. We saw that if we supposed discrete time, or an infinite number of points of time, then we could not produce motion. (We could not even produce points in time.) Objects would be at rest at each of these "positions" and no sum of them could ever produce motion. If we looked at an object in motion, then we could only divide this into motion on a smaller scale.<sup>34</sup> A reconciliation of these perspectives will avoid both the arrow and the racecourse paradox. However, these viewpoints are incompatible.

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<sup>32</sup> Bergson in *Metaphysics*, p. 34.

<sup>33</sup> Benedetto Croce helps make the distinction: ".....grasping the uniqueness of an object without classifying it as an object of some particular kind, while thought involves using concepts to classify and generalize." ---Croce, Benedetto. *Aesthetics*, trans. Douglass Ainslie (New York: Macmillan Co., Ltd. 1909), p. 87. ✓

<sup>34</sup> It is useful to note that we are discussing the motion of time, the passing of time. We will see with Williams that this notion of time passing leads to serious problems.



How can time be a succession of states and a continuous flow ?<sup>35</sup> I agree with Bergson that we can have no sense of this intellectually.

? Will you give your my paper on this.

"No matter how I manipulate the two concepts, apportion them, combine them in various ways, practice on them the most delicate operations of mental chemistry, I shall never obtain anything which resembles then simple intuition I have of duration."<sup>36</sup>

Bergson names the intuition of time, duration, in order to distinguish it from conceptual time, duration being accessible only in direct experience. He defines it as a flowing succession of states that melt into each other to form an indivisible process. Allowing this intuition, or second pathway to knowledge of objective reality avoids both of Zeno's paradoxes. I accept Bergson's argument that intellectual knowledge is often distorted, narrow, and even illusory. Nevertheless, the proposition of another type of knowledge is too bold. Is it not enough that we are cognizant of the different perspectives, understand them, and appreciate that each is individually insufficient for a complete and accurate description of duration ?

Intuition calls for us to become literally one with an object. It calls for us to divest ourselves of all concepts. Can we really do this ? I am reminded of 2001: A Space Odyssey in which a person's consciousness entered into another object and became one with that object. I tried having an intuition of my stapler here on my desk. I really could not transcend my intellect and do this. I started to think about what it was to be a stapler. Yet, this was examination from various intellectual perspectives. I thought about the physics involved, the chemical composition of the stapler, the function of the stapler. I did start to gain insights into what it is to be a stapler. I reached a level of understanding. It is this level of understanding which, if anything, might be an intuition.

good

Notice that I require concepts for intuition; they must come first. In order to convey my understanding to another person would require careful explanation, carefully chosen examples and analogies, and especially carefully chosen words. It would be much easier if we could simply look into each other's minds and understand. We would all seek out the best and the brightest at Harvard and Pittsburgh since we could easily understand all that they do. This is not the way things works. One must learn to appreciate many different perspectives,

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<sup>35</sup> Bergson demonstrated that this is also the way in which we actually experience time. The past is always continuing into the present.

<sup>36</sup> Bergson in Metaphysics, p. 36.

at least as many and as relevant as the ones of the best and brightest, in order to reach the same level of understanding. Intuition for me is not in opposition to intellectual as an approach to and type of knowledge. It is, in fact, a state of intellectual knowledge for which to strive.

Bergson's notion of true knowledge of reality is vaguely Platonic. There are many beautiful things in the world. These things "participate"<sup>37</sup> in beauty but can never add up to it. We see equal things but never perfectly equal things. The only thing perfectly equal is the form Equal. The parallel to Bergson's account of analysis and intuition is that these particulars represent the forms they participate in in only one respect just as symbols place an object into a conceptual framework, put it into a certain perspective. One of the primary differences between the two accounts is that Plato seems to require the particulars in the "recollecting" of the forms. Bergson completely rejects the idea that symbols can recreate an object. He feels that they can come close to identifying the properties of an object but never the object itself. "From intuition one can pass to analysis, but not from analysis to intuition."<sup>38</sup> Nevertheless, it is a primary criticism of Bergson that this is not the only direction to go, and possibly a direction in which we cannot go. Bergson too must accept that the particulars can help us recollect the forms.

*unhelpful  
companion*

After reading Bergson one is faced with a bitter irony. Bergson has argued well for the use of intuition only in discovering the true reality. Nevertheless, how has he done this but through words? How could he have communicated the true nature of intuition to us through ideas? Bergson says that he has not analyzed intuition, for a recreation would never be possible. He describes his actions as "prompting" us to have an intuition of an intuition. This is remarkably similar to Plato's having instances of the forms remind us or help us recollect the form itself.<sup>39</sup> We cannot have had knowledge of the forms simply from the instances of them in the world. Therefore, we must have already had the knowledge beforehand and the

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<sup>37</sup> Bergson even uses this word on page 38. Bergson in Metaphysics.

<sup>38</sup> Bergson in Metaphysics, p. 35.

<sup>39</sup> The slave boy could not arrive at the idea of a square just from viewing instances of the idea of square unless he had some prior knowledge of the idea of square. Nevertheless, this knowledge was latent in the slave boy's mind. He needed to see the "particular" square in order to see the principle demonstrated and remind him, help him to recollect the idea of square. I have written on Plato, knowledge and the sensible world and have probably already said too much relative to the relevance of this issue. *right!*

instances simply remind of what is latent in our souls. Similarly, concepts cannot recreate an object, but they can help us to have (like Plato's *episteme*) a different type of knowledge.

It is sufficient to show that concepts distort reality. Perhaps it is the viewing of time from some perspective that leads us into paradoxes like Augustine's disappearance of time. If we think of time in spatial terms, then we will "lose" time; yet we realize that this is not the only way in which to view time. In *Metaphysics* we must find other models for time. We must examine time from other perspectives. I find it hard to accept that we can examine anything from no perspective, though this would be desirable. Just like the Recollection argument does a good job of explaining from where certain ideas come, Bergson's notion of intuition does a good job of resolving problems with an account of time; nevertheless both are highly questionable. *good*

It is not sufficient that we realize that it may be the perspective in which we view time that may be responsible for paradox. Bergson would object to this; he claims that the concepts might wrap tightly around an object but they will never let us in, never give us more than an "artificial recomposition."<sup>40</sup> Nevertheless, perhaps a tight wrap is the best for which we can hope. And if this is the best for which we can hope, then it is this level of understanding and consciousness which I will allow Bergson to call intuition. He has already admitted of his use of symbols to prompt intuition. Why can't we all do this? I accept the limitations of concepts, but maintain as does Bergson (in this one case) their necessity for reaching that level of consciousness called intuition. *very good*

As philosophers we must attempt to examine time from as many perspectives as possible. Some of these perspectives will lead us to deny the objective reality of time, and others will lead us to confirm it. Nevertheless, each perspective will bring to light aspects and problems of time. Through an examination of many of these aspects and problems we can begin to gain an understanding (perhaps an intuition) of the very nature of time. *different*

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<sup>40</sup> Bergson in *Metaphysics*, p. 37.

Thaddeus Pope

1. Don't go looking for needless trouble by committing yourself to very controversial theses. Do you really believe this!!! ?

2. He is neutral with respect to whether they are relations or monadic characteristics. *word to use*

3. This exposition is too condensed to do justice to his argument. He doesn't initially say that it has them successively, only that it has them, in which the 'has' apparently is tenseless. He then goes on to develop his vicious infinite regress argument when it is responded that it has them successively. *true my fault*

4. Inaccurate. He never says, nor does he have to, that a moment of time is an event. *true moment then need other moment (not E) might have to reverse make PIFL*

5. If temporal becoming is impossible, because contradictory, then nothing could undergo it, not even mental events.

6. Excellent. Notice how this dovetails with Augustine's belief in the non-being of the past and future. *true*

7. You repeat your mistaken referenced to Berkeley on p. 1. Berkeley believed that the real, external object is made up of the sensa (sensible ideas) of different minds. He would charge you with beginning the question against him here. *thoughtless simply denied the real world*

8. That they mean nothing to you does not show that they are without meaning. What is unclear is whether you are doing only exposition of Ar here or also mean to endorse this silliness. *> ?*

9. Misleading. It has the capacity to become time, not to produce it. That is done by the act of measuring change. Your comparisons with other philosophers always seems to land you in difficulty. Avoid it until you have a better grasp of the history of philosophy. *analogy to actualization of potentiality*

10. You stray off course here. One expects you to do something with your above exposition of Augustine but instead you go back to the racecourse paradox of Zeno. *do something cut Zeno to cover As/when arrive at way to conquer.*

11. All this shows is that the ~~future events are not real now~~, not that they are not real. Events in front of here do not exist here but they nevertheless are real because they exist at some place other than here. Analogously, events later than now do not occur now but they are real because they occur at some time other than now. *isn't this presupposing reality of the future (and past), the reality of which we are questioning only one can be real (at one time) then true have a not good infinite regression*

12. You misadvertise above what you will do. You do not accept the punctuality of the present and refute the claim that only the present is real, as you advertise above, but instead reject the former and accept the latter.

Grade: the highest possible! You show great talent for philosophy and should give serious thought to doing it for a living.