

# God and Time

## A Neo-Bergsonian Perspective

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## Preface

This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text. It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my thesis has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. It does not exceed the prescribed word limit for the Faculty of Divinity Degree Committee.

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# Abstract

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The thesis uses key insights from the philosophy of Henri Bergson (1859-1941) to propose a new model of God's relation to time.

Chapter 1 is an introduction to Bergson's philosophy against the background of Russell's "The Philosophy of Bergson." It provides an exposition of two key themes from Bergson central to my argument: the relation between time and space (Chapters 2-4) and the relation between free will and determinism (Chapter 5).

Chapter 2 has a twofold task. First, it provides a Bergsonian response to McTaggart's argument for the unreality of time. Second, it uses the underlying metaphysics of McTaggart's argument to demonstrate that two distinct temporal realms can be extracted from Bergson's philosophy: (i) *la durée* and (ii) a mathematical time-ordering generally classified by analytic philosophy as the B-series.

Chapter 3 relates this double-tier framework to temporal ontologies in analytic philosophy. I argue that such a framework supports an "ontological idealism about time." I argue for relativizing temporal existence to distinct points or sets of points of spacetime that leads to a radical mind-dependence of temporal extension of objects.

Chapter 4 explores how the *durée*-based ontology argued for in Chapter 3 impacts the relation between God and time. I argue that analytic philosophy has failed to capture key ontological facets of the God-time relation and that a return to divine "causal knowledge" is required. I demonstrate that the existence of temporal objects comes from two sources: (i) their mind-dependent temporal aspect and (ii) timeless divinely-created *esse*.

Chapter 5 applies this framework to the problem of divine foreknowledge and human free will. I demonstrate that although Bergson's theory can defend the existence of human freedom, his thought needs to be supplanted with divine "causal knowledge" to guarantee divine omniscience.



*dedicated to 117 Sunnyside Road, Aberdeen*





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## Abbreviations

TFW	<i>Time and Free Will</i> (1889)
MM	<i>Matter and Memory</i> (1896)
IT	<i>L'idée de temps. Cours au Collège de France 1901-1902</i>
HIT	<i>Histoire de l'idée de temps. Cours au Collège de France 1902-1903</i>
HTM	<i>Histoire des théories de la mémoire. Cours au Collège de France 1903-1904</i>
EPL	<i>L'évolution du problème de la liberté. Cours au Collège de France 1904-1905</i>
CE	<i>Creative Evolution</i> (1907)
DS	<i>Duration and Simultaneity</i> (1922)
TS	<i>The Two Sources of Morality and Religion</i> (1932)
CM	<i>Creative Mind</i> (1934)

The first page number after the abbreviation refers to the English translation (where available), the second to the original.



# Introduction

On 11<sup>th</sup> March 1912, Bertrand Russell presented a paper entitled “The Philosophy of Bergson” to The Heretics Society in Cambridge.<sup>1</sup> In a later published version of his talk, he made the following claim:

One of the bad effects of an anti-intellectual philosophy, such as that of Bergson, is that it thrives upon the errors and confusions of the intellect. Hence it is led to prefer bad thinking to good, to declare every momentary difficulty insoluble, and to regard every foolish mistake as revealing the bankruptcy of intellect and the triumph of intuition.<sup>2</sup>

Over a hundred years later, Frédéric Worms came to Cambridge to give a paper<sup>3</sup> at a conference aiming to bring together scholars from analytic philosophy and Bergsonian studies, thereby undoing the rejection of Bergson by the early analytic philosophers. In the course of his paper, Worms joked that “Henri Bergson invented ‘analytic philosophy’ — but only to criticise it.” The division of knowledge into that attainable by particular immediate experience (“intuition”), and that accessible by general abstract reasoning (“analysis”), represents two ways of thinking about reality — the first path is Bergson’s own, the second was opted for by Russell and analytic philosophy.

One of the aims of this study is to bring those two paths together again. Recent years have seen a surprising renewal of interest in Bergson from analytic philosophers in many different areas — philosophy of memory, philosophy of biology, or philosophy of physics, to give just a few examples. However, no large-scale project of applying his thought about time to analytic philosophy of *religion* has yet been undertaken. This essay does just that.

Specifically, I return to classical questions regarding free will, God, and time: What is the relation between time and the human mind? Is time an illusion? Are we free? Can we be free if God is omniscient? Does the future exist and if so, does God know it? I propose a Bergsonian model of God’s relation to time which gives a new response to these quandaries. Methodologically, this study takes the route of what could be called a “creative synthesis:”<sup>4</sup> it

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<sup>1</sup> Russell and Carr, *The Philosophy of Bergson. By the Hon. Bertrand Russell; with a Reply by Mr. H. Wildon Carr and a Rejoinder by Mr. Russell.*

<sup>2</sup> Russell, ‘The Philosophy of Bergson’, 337.

<sup>3</sup> Worms, ‘Thinking in Bergson’s Philosophy’.

<sup>4</sup> I am grateful to Natalja Deng for this observation.

brings together six pieces of the puzzle independently defended, to resolve the freedom and foreknowledge problem:

- (i) Bergson's account of free will
- (ii) Bergson's account of the qualitative nature of consciousness
- (iii) Bergson's critique of "spatialised time"
- (iv) the mind-dependence of time
- (v) observer-relativisation of existence
- (vi) the dependence of all *esse* on God

This synthesis also explains why the perspective that I wish to defend is termed "Neo-Bergsonian." While I do engage in a historical exegesis of Bergson's philosophy, this essay works with something that could be called a "toy Bergson." What Bergson thought plays as much of a role as what I think he *should have* thought, and the vast majority of my arguments would have proceeded in more or less the same way even if (or perhaps especially if) Bergson had not written much else apart from *Time and Free Will* (1889). This project is close to Jonathan Bennett's approach of a "rational reconstruction" of a historical thinker:<sup>5</sup> I aim for a careful reading of Bergson, but the primary motivation of this project is the desire to bring him into new dialogues with contemporary analytic philosophy of religion.

The reason why I base my model on Bergson rather than anyone else is that his early thought contains, in a bundle, four of the six main components that I need. It also opens the way for bringing in discussions about analytic temporal ontologies, although there my engagement with the special theory of relativity diverges radically from Bergson's own. Some (or maybe all) of the six components from above are contentious, but I am not cherry-picking. I show that each of them, independently of the others, is a valid observation about reality and that when they are brought together, they can resolve the freedom and foreknowledge problem.

Theologically, the God that I work with has fairly minimal contours — I do not appeal to the vast majority of attributes postulated by classical theism, such as divine omnibenevolence, or the key tenets of trinitarian theology. I do, however, stipulatively posit the following hypotheses, each of which will be clarified in the course of this study:

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<sup>5</sup> Bennett uses this phrase to describe his methodology in Bennett, *A Study of Spinoza's Ethics*.



Hypothesis 1: God is timeless.

Hypothesis 2: God is omniscient.

Hypothesis 3: God is the source of being.

Despite the recent move by analytic philosophers away from Hypothesis 1 and the benefits this move might offer,<sup>6</sup> I believe that divine timelessness need not be rejected. Ryan Mullins has lately argued that “there are no successful Christian research programs that promote divine timelessness because divine timelessness is not compatible with any existent theory of time.”<sup>7</sup> The first half of this essay gives existence to a new theory of time compatible with timelessness, opening the possibility of further successful research programmes incorporating it.

There is one further stipulation:

Hypothesis 4: There are irreducibly mental facts.

By that I mean merely that mental and physical facts fall into separate categories and that not all facts in the first category are reducible to or supervenient on those in the second.

The final thing that this essay will not engage with is process theology. Although Bergson has frequently been classified together with process philosophers,<sup>8</sup> the model that I propose need not necessarily reject some of the traditional claims about God usually rejected by process theology. *Creatio ex nihilo* or divine omnipotence are examples of such claims.

This essay proceeds in five steps. The first chapter is an introduction to Bergson’s philosophy against the background of Russell’s critique. It provides an exposition of two key themes from Bergson central to my argument: the relation between time and space (Chapters 2-4) and the relation between free will and determinism (Chapter 5). The second chapter provides a Bergsonian response to McTaggart’s argument for the unreality of time and uses the underlying metaphysics of McTaggart’s argument to demonstrate that two temporal realms can be extracted from Bergson’s philosophy: (i) *la durée* and (ii) a mathematical time-ordering generally classified by analytic philosophy as the B-series. The third chapter relates the double-tier framework from the second chapter to temporal ontologies in analytic philosophy. The fourth chapter explores how the *durée*-based ontology argued for in Chapter 3 impacts the relation between God and time. I argue that analytic philosophy has failed to capture key

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<sup>6</sup> I argue for some of these benefits in Jeffrey, Lancaster-Thomas, and Moravec, ‘Fluctuating Maximal God’.

<sup>7</sup> Mullins, *The End of the Timeless God*, 12.

<sup>8</sup> For example Cobb and Griffin, *Process Theology. An Introductory Exposition*, 7.

ontological facets of the God-time relation and that a return to divine “causal knowledge” is required. I demonstrate that the existence of temporal objects comes from two sources: (i) their mind-dependent temporal extension and (ii) timeless divinely-created being. The final chapter applies this framework to the problem of divine foreknowledge and human free will. I demonstrate that although Bergson’s theory can safeguard human freedom, his thought needs to be supplanted with divine “causal knowledge” to guarantee divine omniscience.

The picture that results is one of an intimate connection between the qualitative nature of consciousness, time, the presence of divine creation, and human freedom.

# 1. Bergson, Russell, and Free Will

This chapter provides a preliminary exposition of Bergson's thought on time, space, and free will that will form the heart of this study. The introduction is not merely expository but already responds to mistaken presumptions made famous by Bertrand Russell's well-known critique of Bergsonian philosophy. Responding to this critique anew is necessary as it has for a long time been the only engaged critique of Bergsonian thought in analytic circles and its effects on analytic philosophy still linger. Dealing with its misunderstandings, which prevented a fruitful interaction between Bergsonian thought on time and analytic philosophy, is therefore required before the presentation of a new analytic "update" on Bergsonian thought that I am intending to offer in the following chapters.

The first part offers a presentation of Russell's assessment of Bergson. Then, an exposition of Bergson's thought on time and space is provided, followed by a re-evaluation of Russell's critique. Finally, I give an account of Bergson's thought on free will against the backdrop of the main views concerning free will in contemporary analytic philosophy.

## 1.1. Russell on Bergson

A crucial moment for the reception of Bergsonian thought within analytic thought was the publication of Bertrand Russell's "The Philosophy of Bergson" in *The Monist* in 1912<sup>9</sup> followed by a response from Karin Stephen (née Costelloe)<sup>10</sup> and later published together with a reply by Wildon Carr.<sup>11</sup> This article set the tone for the majority of later receptions of Bergson's thought in analytic philosophy.<sup>12</sup> The timing of this article was not coincidental as the year precedent to its publication saw the first English translation of *Creative Evolution*, which had not only been Bergson's most famous book but had also led to his attaining the status of an international philosophical celebrity. Once we have distilled Russell's argument from an ironising mockery of Bergsonian thought, it becomes clear that Russell's critique can be classified under two primary headings: The first has to do with what Russell calls an "anti-

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<sup>9</sup> Russell, 'The Philosophy of Bergson', 321–47; see also Russell, *History of Western Philosophy*, 756–65.

<sup>10</sup> Costelloe, 'An Answer to Mr Bertrand Russell's Article on the Philosophy of Bergson', 145–55.

<sup>11</sup> Russell and Carr, *The Philosophy of Bergson. By the Hon. Bertrand Russell; with a Reply by Mr. H. Wildon Carr and a Rejoinder by Mr. Russell.*

<sup>12</sup> For a detailed study, see Salmon, 'L'apogée de la réception de Bergson en Angleterre', 78–138; Petrov, 'Bertrand Russell's Criticism of Bergson's Views About Continuity and Discreteness'; Vrahimis, 'Russell's Critique of Bergson and the Divide Between "Analytic" and "Continental" Philosophy'.

intellectualist philosophy.” The second concerns Bergson’s writing on *number*,<sup>13</sup> which is inextricably tied to his writings on *space*.

Firstly, Russell accuses Bergson’s philosophical methodology of being an anti-intellectualist “philosophy of feeling.”<sup>14</sup> This accusation is reinforced by the centrality of the concept of “vital impulse” for Bergson’s conception of the *creative evolution*, which is severely criticised by Russell for its empirical unverifiability, and which further confirms his allegation that Bergson’s philosophy receives its force from poetic imagery, and not from sound philosophical argument.<sup>15</sup> Apart from giving a rather inaccurate reading of the terms “instinct” and “intellect,”<sup>16</sup> and a purposefully obscure presentation of Bergson’s key concept of *la durée*,<sup>17</sup> Russell attacks Bergson for what he takes to be a disdain for geometrical and mathematical ways of seeing reality. “Incapacity for mathematics,” Russell takes Bergson to say, “is therefore a sign of grace — fortunately a very common one.”<sup>18</sup> Furthermore, Russell also considers Bergson’s philosophical style to excessively rely on metaphorical imagery.<sup>19</sup>

Secondly, Russell’s most severe objection, and one which most explicitly betrays his miscomprehension of Bergson, is directed at the latter’s alleged misunderstanding of the concept of “number,” specifically a confusion between number itself and its visual representation. Russell argues that Bergson “does not know what number is, and has himself no clear idea of it,”<sup>20</sup> and blames his inaccurate knowledge of mathematics and a tendency to reduce mathematical objects to their visualisations for his “confusing a particular collection with the number of its terms, and this again with number in general.”<sup>21</sup> In more specific terms, Russell argues that Bergson’s insistence on the intrinsic connection between numbers and space relies on the following confusion:

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<sup>13</sup> Soulez and Worms, *Bergson. Biographie*, 119–31. Russell also raises a *third* critical point regarding Bergson’s theory of perception and his theory of “images” from MM (Russell, ‘The Philosophy of Bergson’, 343–45). Chapter 3 will circumvent the critique by quarantining off this stage of Bergson’s philosophy.

<sup>14</sup> Russell, ‘The Philosophy of Bergson’, 322.

<sup>15</sup> Russell, 346.

<sup>16</sup> The opposition between two fundamental tendencies of the human mind — “instinct” and “intuition” — appears, in different modifications, through the entirety of the Bergsonian corpus. The earliest trace of this opposition can be observed in TFW from 1889. In TFW Bergson opposes a “conscience réfléchie,” which operates on the external world, to a “conscience immédiate,” whose mode of being is temporality, *la durée* itself (Bouaniche, ‘Dossier Critique’, 205, note 23.).

<sup>17</sup> Russell, ‘The Philosophy of Bergson’, 327–28.

<sup>18</sup> Russell, 326.

<sup>19</sup> Russell, 332.

<sup>20</sup> Russell, 334.

<sup>21</sup> Russell, 335.

There are three entirely different things which are confused by Bergson ... , namely: (1) number, the general concept applicable to the various particular numbers; (2) the various particular numbers; (3) the various collections to which the various particular numbers are applicable. It is this last that is defined by Bergson when he says that number is a collection of units. The twelve apostles, the twelve tribes of Israel, the twelve months, the twelve signs of the zodiac, are all collections of units, yet no one of them is the number 12, still less is it number in general, ... . Hence when, following Bergson's advice, we "have recourse to an extended image" ... , we have still not obtained a picture of the number 12. The number 12, in fact, is something more abstract than any picture.<sup>22</sup>

Before Russell's objection may be addressed, it is necessary to examine what Bergson has to say on time and space, as what he says about them is vital to his understanding of numbers, which, in turn, are instrumental to his understanding of time.

## 1.2. Bergson on Time and Space<sup>23</sup>

At the root of Bergson's thought on time (that runs from TFW to TS) is a critique of what he refers to as "spatialized time." Bergson argues that philosophy has not paid enough attention to the differences between the nature of space and the nature of time:

[T]ime and space have been placed on the same level and treated as things of a kind; the procedure has been to study space, to determine its nature and function, and then to apply to time the conclusions thus reached. ... To pass from one to the other one had only to change a single word: "juxtaposition" was replaced by "succession."<sup>24</sup>

A good illustration of this, Bergson claims, is Kant's *Critique of Pure Reason*, where space and time are both taken to be homogeneous<sup>25</sup> and therefore devoid of any quality.<sup>26</sup> However, Bergson asks, if on the one hand time and space are both characterised as homogeneous and if, on the other hand, homogeneity is understood as the absence of any quality, what exactly is it

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<sup>22</sup> Russell, 335.

<sup>23</sup> An earlier version of this section appears in Moravec, 'A Perpetual Present: Henri Bergson and Atemporal Duration', 200–208.

<sup>24</sup> CM 4/5.

<sup>25</sup> By a "homogeneous medium," Bergson means "a medium that may be divided into units identical in size."

<sup>26</sup> Kant, *Critique of Pure Reason*, A19-49/B33-73; Kant, *Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as Science*, [4:321-322].

that makes time different from space?<sup>27</sup> Of course, as far as their *function* is concerned, Kant still says that whereas space is the *a priori* condition of outer sense, time is the condition of both outer and inner sense.<sup>28</sup> However, the *features* that he ascribes to each are more or less identical. Bergson thinks that symptomatic of this confusion is Kant's frequent appeal to the analogy of a line<sup>29</sup> as a helpful tool to schematise the progression of mental states:

we set [our states of consciousness] side by side in such a way as to perceive them simultaneously, no longer in one another, but alongside one another; in a word, we project time into space, we express duration [*la durée*] in terms of extensity, and succession thus takes the form of a continuous line or a chain, the parts of which touch without penetrating one another.<sup>30</sup>

Specifically, if we think of the mental states as forming a succession, we presume that some of them come “before” others. However, Bergson argues that for us to think of two of our mental states as related by a “before and after” relation, they both have to be given to consciousness at once, in the same mental act, similarly to the way that objects coexist in space:<sup>31</sup> “... [T]o conceive of things as taking place in terms of a succession of positioning (‘before,’ ‘after,’ etc.) is to presuppose a faculty of space.”<sup>32</sup> Bergson argues that the fact that such a confusion is taking place in Kant (whose thought he identifies as its main perpetuator),<sup>33</sup> is illustrated by the connection that Kant draws between “time” (as one of the two pure forms of sensible intuition) and “number” (a transcendental schema) through the concept of “counting.”<sup>34</sup> Bergson claims that the mind's ability to “count” requires a prior assimilation of the representation of space, not, as Kant thinks,<sup>35</sup> of time.<sup>36</sup>

Now, one might object that space is not essential to counting. After all, when asking, for example, how many days there are left until the end of the month, we can count “one, two

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<sup>27</sup> TFW 98/73.

<sup>28</sup> Kant, *Critique of Pure Reason*, A34/B51.

<sup>29</sup> Kant, A33/B50.

<sup>30</sup> TFW 101/75.

<sup>31</sup> TFW 101/76; DS 33/45-6. This is analogous to an objection against presentism, which asserts that for two events in time to stand in any relation (e.g., “before and after”), they must both *exist* (see Oaklander, *The Ontology of Time*, 83–100.).

<sup>32</sup> Ansell-Pearson, *Philosophy and the Adventure of the Virtual. Bergson and the Time of Life*, 28.

<sup>33</sup> EPL 317, 338.

<sup>34</sup> Kant, *Critique of Pure Reason*, A142-143/B182.

<sup>35</sup> Kant, A142-143/B182; A241/B300; Kant, *Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as Science*, [4:283].

<sup>36</sup> Worms, ‘Les trois dimensions de la question de l'espace dans l'œuvre de Bergson’, 94.

three, four...” without appealing to any spatial representation whatsoever.<sup>37</sup> Nevertheless, it is important to remember that Bergson primarily talks about the “faculty of space” in the Kantian sense, that is, the ability of the human mind to think in spatial terms, not about numbers in a theory of arithmetic. Furthermore, although spatiality may no longer play any role in the habit of enunciating numbers in succession, the mental faculty of conceiving spatially must have been part of the process whereby we learnt how to count. The fact that our ability to count presupposes space becomes obvious in situations requiring more complicated ways of counting than the simple enunciation of numbers: we appeal to the fingers on our hand or an abacus. Time is still *required* for counting — but Bergson’s claim is not that counting is *exclusively* based on space, rather that Kant should have observed a closer affinity between number and space than between number and time.

A good elucidation of this is provided by Bergson’s own example. Imagine counting sheep in a flock.<sup>38</sup> We can do so in two ways — with smaller numbers, we immediately appeal to their position *in space*, much in the way that we can immediately tell how many points are presented to us based on the pattern they are arranged in. Or we can try to count the sheep *in time* by going through them one by one and retaining the image of the previous sheep. Now, Bergson asks, where is the image of the previous sheep retained? Our consciousness passes from one to the other — the only way the previous one can be connected to the present act of counting is by being juxtaposed next to it in a homogeneous medium. Now, a homogeneous medium where things may be placed next to each other — as opposed to their changing over “time” — is necessarily space:

For if we picture to ourselves each of the sheep in the flock in succession and separately, we shall never have to do with more than a single sheep. In order that the number should go on increasing in proportion as we advance, we must retain the successive images and set them along each of the new units which we picture to ourselves: now, it is in space that such a juxtaposition takes place and not in pure duration.<sup>39</sup>

The “time” that we appeal to in counting is a primary example of what Bergson calls “spatialized time.” Time, understood as representable by a line progressing in space,<sup>40</sup> and

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<sup>37</sup> I am grateful to Hugh Mellor for raising this objection.

<sup>38</sup> TFW 76-7/57-8.

<sup>39</sup> TFW 77/57-8.

<sup>40</sup> Other formulations that betray our inherently “spatial” way of talking about time involve phrases like “time spinning,” “empty time,” or “cyclical time” (Klein, ‘Who Is Entitled to Talk About Time?’). Geach: “Time is

potentially homogeneous (i.e., divisible into intervals equal in length) is a concept whose primary purpose is practical utility.<sup>41</sup> For instance, our calendars are based on the possibility of representing successive appointments “coexisting together” on a single page of our journal, arranged in two-dimensional space. Bergson says that the notion of abstract homogeneous space enabling effective practical action on external objects is precisely what differentiates geometrically-informed humans from animals: Animals may perhaps have a notion of *extension* or *extensity*,<sup>42</sup> but not of space as a homogeneous medium devoid of qualities.<sup>43</sup>

Of course, one might protest that the journal example merely illustrates a difference between an object and its representation: one might still refer to a colour by the word “green” without necessarily committing oneself to the claim that such a reference turns green into “colour verbalised.” The objection about conflating time and representation of time will be treated in sections 3.2 and 4.5, but for the time being, it should be stressed that Bergson’s point here is not that time cannot be *represented*, but rather that when we do so by using a spatial object as a representation, we end up importing features of the representation into the object itself.

It is worth already noting here that Bergson would consider the difference between the A- and B-series from McTaggart’s argument for the unreality of time<sup>44</sup> (discussed in the following chapter) as severely contaminated by this spatialisation. Both the A- and B-series presume events which our consciousness presents to itself “all at once.” We then go on to decide whether these events are related to each other in virtue of one being earlier than another or of one being present, past or future.<sup>45</sup> In some cases, the spatialisation goes so far as to suggest that space and time are “at right angles to each other.”<sup>46</sup>

So, in view of Kantian time being “space-infected,” where can we find time proper? Bergson argues that the notion of spatial homogeneity is simply a “reaction against that

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often represented by a straight line. Such spatial pictures are very dangerous, because we may suppose that the case of drawing a diagram corresponds to a right to conceive some temporal analogue — to think, e.g., of time running backwards or looping the loop.” (Geach, ‘The Future’, 212–13.)

<sup>41</sup> For a list of all the characteristic features that Bergson ascribes to space, see Heidsieck, *Henri Bergson et la notion d’espace*, 44–50.

<sup>42</sup> TFW 96-7/71-2. For Bergson’s contemporary sources discussing the orientation of animals in space, see Bouaniche, ‘Dossier Critique’, 227, note 32.

<sup>43</sup> For a more recent treatment of the difference between “lived” space and the homogeneous time of physics, see Moss, ‘Brain, Body and World Image and the Psychology of the Body’, 74–76.

<sup>44</sup> McTaggart, ‘The Unreality of Time’.

<sup>45</sup> For a treatment that investigates the A and B opposition on Bergsonian grounds, see Williams, ‘The Metaphysics of A- and B-Time’; Williams, ‘A Bergsonian Approach to A- and B-Time’.

<sup>46</sup> Williams, ‘The Myth of Passage’, 457.



heterogeneity which is the very ground of our experience”<sup>47</sup> — this heterogeneity consists of Bergson’s key concept of *la durée*, which will now be examined.

Bergson does not simply assert that *all* temporality is reducible to or infected by spatiality. Quite the contrary, Bergson argues that the representation of all temporal phenomena requires *la durée*. This notion emerges for the first time in TFW<sup>48</sup> and reappears in all of Bergson’s major works. It is a notion notoriously difficult succinctly to describe, not least due to its opposition to ordinary conceptual ways of thinking implicated by language. Nevertheless, it is not an *obscure* notion, and language can successfully point us to what the term itself refers to. For the time being — and bearing in mind that the picture will become much more complicated in the following chapters — in TFW *la durée* is coextensive with the stream of mental states. To get started, Bergson characterizes *la durée* in the following ways:

It is ... [an] indivisible and indestructible continuity of a melody where the past enters into the present and forms with it an undivided whole which remains undivided and even indivisible in spite of what is added at every instant, ... [A]s soon as we seek an intellectual representation of it we line up, one after another, states which have become distinct like the beads of a necklace ... .<sup>49</sup>

It is a succession of states each one of which announces what follows and contains what precedes. Strictly speaking they do not constitute multiple states until I have got beyond them and turned around to observe their trail.<sup>50</sup>

[It is a] qualitative multiplicity, with no likeness to number; an organic evolution which is yet not an increasing quantity; a pure heterogeneity within which there are no distinct qualities. In a word, the moments of inner duration are not external to one another.<sup>51</sup>

In *la durée*, the preceding states of consciousness qualitatively influence the ones that follow. For example, whenever we read a new book, our attitude and aesthetic feeling derived from the act of reading it contain the series of mental states (emotions, memories) we had before we started reading. Similarly, whenever we read the same book again, the memories of past

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<sup>47</sup> TFW 97/72.

<sup>48</sup> TFW 73/54.

<sup>49</sup> CM 55/76.

<sup>50</sup> CM 137/183.

<sup>51</sup> TFW 226/170.

instances of its reading are “included” in the act of reading it at present. “Included” not in the sense of containment, but in that the present reading of the book would have been different without the past reading. This is what Bergson means when he asserts that “the past enters into the present” and it is for this reason that the state of *la durée* is unrepeatably different at every point of its development: it is a “pure heterogeneity.” The notion of “qualitative multiplicity” that Bergson uses to describe *la durée* requires a qualification:

The notion of “qualitative plurality” might seem a contradictory one, since to speak of a “plurality” at all is to envisage the particulars which compose it as being in some sense juxtaposed, or collected together. Bergson however is compelled to use whatever resources language offers him, in order to describe duration; to grasp the notion of “pure duration,” one must conceive of a succession, which is not separated into a series of discrete states; it is a series of qualitative transformations which flow into each other ...<sup>52</sup>

Furthermore, this ever-changing development of consciousness is gradual and continuous. Take the example of falling in love with someone: we can never clearly identify the precise moment at which our feeling of mild affection “turned” into love — the transition from one to the other is similar to the development of colours in the colour spectrum, which Bergson uses as a frequent metaphor for *la durée*.<sup>53</sup>

This metaphor also illustrates that *la durée* (i) is indivisible, (ii) proceeds in succession, and that (iii) it is a multiplicity. (i) The colour spectrum consists of a gradual change from one colour to another<sup>54</sup> — all divisions of the spectrum into distinct colours (“green,” “dark blue,” “yellow”), are imprecise. They result from the casting of a “spatial” net over the heterogeneous continuity of the spectrum in order to extract distinct elements from it. (ii) Nevertheless, the fact that the elements composing the spectrum cannot be divided does not exclude their *succession*, the change that happens as we go from one side of the spectrum to another; thus there is, paradoxically, a succession (continuous change) with no distinct elements that succeed (since in our immediate phenomenological perception of change, as opposed to its stratified representation, there are no distinct elements). (iii) Even though the spectrum is indivisible, it is nevertheless a multiplicity, otherwise it would simply be one, consisting of a single colour.

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<sup>52</sup> Pilkington, *Bergson and His Influence. A Reassessment*, 3–4.

<sup>53</sup> See for example TFW 58-9/42-3; IT 129.

<sup>54</sup> The metaphor obviously fails to grasp the causal influence of one mental state on another, which is present in *la durée*.

The colour spectrum can also be used to emphasise another paramount aspect of *la durée*, that of what Vladimir Jankélévitch refers to as “the retrospective illusion.”<sup>55</sup> Consider the experience of looking at an LED lamp that gradually goes through the entire colour spectrum. What is the most accurate description of the way the change of the lamp is presented in our consciousness? When we look at it, we perceive an indivisible shift of one quality to another — we can only distinguish distinct colours by “jumping back” a few seconds and identifying that the colour, say, green has just turned into blue. Furthermore, we can lay out all of our memories of the colours in the past and turn them into the colour spectrum itself which is spread out in two-dimensional or three-dimensional space. It is only *on this* spectrum itself that we may impose divisions and establish relations of before and after. This is what Bergson has in mind when he says that “Strictly speaking [states of consciousness] do not constitute multiple states until I have got beyond them and turned around to observe their trail.” “When we think we are dividing [*la durée*], we are dividing its spatial transcription ... .”<sup>56</sup> In the moment of looking at the lamp, we cannot differentiate the individual colours. The relation between the LED lamp and the spatially represented colour spectrum it goes through is analogous to that between *la durée* and the image it has left of itself in the past:

The duration *wherein we see ourselves acting*, and in which it is useful that we should see ourselves, is a duration whose elements are dissociated and juxtaposed. The duration *wherein we act* is a duration wherein our states melt into each other.<sup>57</sup>

Finally, since language consists of words that designate individual objects external to one another and since, as has been shown above, *la durée* does not consist of individual units, language cannot fully represent it.<sup>58</sup> We can still use metaphorical language to talk about it (as has been done in the previous paragraphs), but all of these characterisations must, by definition, inevitably fall short of *durée*'s full description.<sup>59</sup>

Now, one might point out that here we see a prime example of an incompatibility between the analytic method and Bergson's philosophy. Am I not simply making an unjustified

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<sup>55</sup> Jankélévitch, *Henri Bergson*, 11–17; see also Zaslavsky, ‘Bergson, le finalisme et la philosophie analytique’, 340–41.

<sup>56</sup> “Quand on croit la diviser, on divise [sa] transcription spatiale ... .” (Milet, *Bergson et le calcul infinitésimal ou La raison et le temps*, 55, my translation.)

<sup>57</sup> MM 186/207.

<sup>58</sup> Worms, ‘Les trois dimensions de la question de l'espace dans l'œuvre de Bergson’, 90–91.

<sup>59</sup> See Pariente, *Le Langage et l'individuel*, 11–30.

ontological claim, positing a chimeric notion that language and logic cannot grasp? The ontology of *la durée* will be treated at length in Chapter 3, but for the time being it is merely being argued that our consciousness is *durée*-like. For example, our feeling of nostalgia, with all its nuances developing over time, cannot be captured by, say, conceptual analysis, but can be very well captured by Proust's *In Search of Lost Time*. Our emotions and feelings are real and we can try to describe them using metaphors, similes, poetry, or music. Bergson's key point is that something invaluable is lost when we try to grasp our consciousness through conceptual forms inappropriate to it. This does not mean that the conceptual, geometrical and spatial apparatus should be banished altogether, but rather that it should simply be carefully understood in its appropriate domain.<sup>60</sup>

Bergson replaces the Kantian division between homogeneous space and homogeneous time with a distinction between two different types of multiplicities. On the one hand, there is space, characterised by juxtaposition, division and susceptibility to counting, a numerical multiplicity devoid of any quality.<sup>61</sup> On the other hand, there is *la durée* which is developing and indivisible — it is a non-numerical qualitative multiplicity.<sup>62</sup> In TFW, these two multiplicities correspond to the relation between the external world of objects and the internal world of consciousness:

... there are two kinds of multiplicity: that of material objects, to which the conception of number is immediately applicable; and the multiplicity of states of consciousness, which cannot be regarded as numerical without the help of some symbolical representation, in which a necessary element is space.<sup>63</sup>

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<sup>60</sup> Bergson does not claim that once we have attained *durée* by introspection, we cannot use language to *talk about* it (see IT 18, 82-5.). As Léonard Constant stressed in one of the first reviews of Bergson's courses at the Collège de France: "However, in order that we do not fall into arbitrariness, we must not lose all contact with conceptual thought; and the results at which we arrive [by the introspective observation of *la durée*] must always, *as much as possible*, be translatable into concepts." ("Cependant, afin de ne pas tomber dans l'arbitraire, il ne faut pas perdre tout point de contact avec la pensée conceptuelle ; et les résultats auxquels on arrivera devront toujours, *autant que possible*, être traduisibles en concepts." (Léonard Constant, 'L'idée de temps. Collège de France. - Cours de M. Bergson', *Revue de philosophie* 2, no. 6 (1902): 832, my translation, my italics.)

<sup>61</sup> See Worms, 'Bergson entre Russell et Husserl: Un troisième terme?', 86.

<sup>62</sup> This distinction which plays a crucial role in Deleuze's *Bergsonism* from 1966 is based on a development of Riemann's differentiation of "discrete" and "continuous" multiplicities presented in his *Habilitationsschrift* from 1854 (see Riemann, 'On the Hypotheses Which Lie at the Foundations of Geometry', 4A/4-4A/20.). Bergson would have been reading this thesis in Dedekind's translation from 1867. For a discussion of the relation between Riemann's and Bergson's multiplicities see Ansell-Pearson, *Philosophy and the Adventure of the Virtual. Bergson and the Time of Life*, 15-16; Deleuze, *Le bergsonisme*, 29-44.

<sup>63</sup> TFW 87/65.

These two multiplicities are also distinguished by a condition of *divisibility*. Whereas matter can be repeatedly divided without changing in kind (e.g., half a litre of water is the same type of matter as a litre of water), this cannot be done with *la durée*, "... which divide[s] only by changing in kind."<sup>64</sup> An emotion lasting only half the number of days we have experienced it would have been a completely different emotion. Neither does it make sense to speak of "half an emotion."<sup>65</sup>

Similarly to Kant, Bergson argues — at least in TFW — that matter does not endure without the synthesis effected on it by *la durée*.<sup>66</sup> Kołakowski comments:

If we could imagine a world without a conscious observer ... this would be perfectly identical with itself at every moment, but there would be no transition from one moment to another. Only the memory and thus consciousness maintains the continuity of the world.<sup>67</sup>

The two multiplicities are thus in an obverse relation: "within our ego, there is succession without mutual externality; outside the ego, in pure space, mutual externality without succession: ... ."<sup>68</sup> To clarify, Bergson does not claim that *tense* (i.e., the distinction between past, present, and future) is merely dependent on our consciousness, that it does not form a part of reality and that while it should not be "banished altogether, [it should be] merely replaced where it belongs: namely, in our heads."<sup>69</sup> Neither does he say that "becoming is mind-dependent, because it is not an attribute of physical events per se but requires the occurrence of states of *conceptualised awareness*."<sup>70</sup> Bergson's point is different. On his view, we would be unable to talk about time *at all* without taking the role of our consciousness, which connects the successive states of pure spatiality, into consideration; this is precisely what differentiates

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<sup>64</sup> Deleuze, *Bergsonism*, 40.

<sup>65</sup> Jankélévitch, *Henri Bergson*, 8.

<sup>66</sup> "Although Bergson sharply distinguished his conception of duration from Kant's treatment of time in TFW, he nevertheless considers it to be a feature of a synthesising consciousness; outside of us there is only space and simultaneity." (Ansell-Pearson, *Philosophy and the Adventure of the Virtual. Bergson and the Time of Life*, 35.)

<sup>67</sup> Kołakowski, *Bergson*, 16–17.

<sup>68</sup> TFW 108/81.

<sup>69</sup> Mellor, 'The Unreality of Tense', 51.

<sup>70</sup> Grünbaum, 'The Status of Temporal Becoming', 375. While Bergson does not *merely* say that consciousness is required for becoming, he does base the possibility of temporal becoming on the presence of consciousness, *not* on the indeterminacy of events in the external world. Grünbaum is thus mistaken to put him in a group with "A. S. Eddington, ..., H. Reichenbach, H. Bondi and G. J. Whitrow" (Grünbaum, 389.), and take him as saying that "the indeterminacy of the laws of physics is both a sufficient and necessary condition of becoming." (Grünbaum, 389.) Bergson does not base temporal becoming on aspects of the external world but on the existence of becoming in *la durée*.

space from time. *La durée* is “fundamental time,”<sup>71</sup> because without it there would be no representation of time — spatialised or not — in the first place. In this respect, despite their different philosophical backgrounds and separation by half a century of philosophical development, Bergson’s position on this particular issue is identical to that of J. R. Lucas, who insists that

... not only is time a necessary concomitant of my existing as a conscious being, but some relation to my existence as a conscious being is a necessary condition of time’s being time. This is one of the most fundamental ways in which time differs from space. We could conceive of a space ... that was totally unrelated to us ... . But we cannot similarly divorce ourselves from time, or abstract time from all connexion with ourselves. ... [I]t is one of the most fundamental ways in which time differs from space, and it gives time a unity deeper than anything we can establish for space.<sup>72</sup>

Apart from stipulating the realm of *la durée* and that of numerical multiplicity, which intrudes into the pure heterogeneity of our mental states as a “ghost of space haunting the reflexive consciousness,”<sup>73</sup> Bergson also diagnoses how this happens. He argues that the phenomenon of *movement* is one where space and *la durée* come dangerously close; *dangerously* so, because they inter-mix; once *durée* has been tarnished by space, it takes an “unusual effort”<sup>74</sup> for it to clear itself of it. Frédéric Worms observes that the process of our consciousness grasping movement takes place in a twofold manner. On the one hand, there is what he calls “temporalisation of space” (*temporalisation de l’espace*<sup>75</sup>) — the moving body is grasped by our *durée*; it is only thanks to the synthesising consciousness that movement can be perceived in the external world in the first place. Imagine watching the movement of a clock pendulum from left to right:

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 myself a process of organization or interpenetration of conscious states is going on, which constitutes true duration [*la durée*]. 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

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<sup>71</sup> DS 30/42.

<sup>72</sup> Lucas, *A Treatise on Time and Space*, §7.

<sup>73</sup> TFW 99/74.

<sup>74</sup> MM 187/209.

<sup>75</sup> Worms, ‘Les trois dimensions de la question de l’espace dans l’œuvre de Bergson’, 93.

present oscillation. Now, let us withdraw for a moment the ego which thinks these so-called successive oscillations: there will never be more than a single oscillation, and indeed only a single position, of the pendulum, and hence no duration.<sup>76</sup>

On the other hand, this process also causes the “spatialisation of *la durée*” (*spatialisation de la durée*<sup>77</sup>). Bergson claims that movements of objects are given to consciousness as undivided singular qualities.<sup>78</sup> By shifting our attention from the indivisible qualitative impression of the moving object (which can best be observed in the example of quickly moving objects, e.g., of a falling star<sup>79</sup>) to the trajectory in space traversed by that movement, we inevitably come to identify it with the trajectory itself. Furthermore, since the retrospectively-identified moments of our *durée* are connectible with positions of space where the object was at different points of the trajectory and since this trajectory (*qua* a curve or a line in space) is geometrically divisible, we come to think that this divisibility applies to *la durée* synthesising the movement too.<sup>80</sup> We thereby make two mistakes: first, we fail to see that all movement is first given to us as pure quality. Second, we import all the categories pertaining to the completed trajectory of the moving object (homogeneity, divisibility, juxtaposition etc.) to *la durée*.<sup>81</sup> This point is succinctly summed up by Costelloe in her defence of Bergson against Russell:

It is claimed [by Russell] that if we try to describe change we have always to regard it as *change completed* and not *in process of changing*. But change completed is something *unchanging*. We can therefore only describe what is unchanging, never change itself.<sup>82</sup>

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<sup>76</sup> TFW 108/80-81.

<sup>77</sup> Worms, ‘Les trois dimensions de la question de l’espace dans l’œuvre de Bergson’, 93.

<sup>78</sup> MM 188-193/209-15

<sup>79</sup> DS 35/49; IT 38; Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 124.

<sup>80</sup> See DS 30-47/41-67; CM 118-121/157-62.

<sup>81</sup> This methodological clarification of the relation between qualitative *movement* and quantitative *trajectory* of the movement lies at the root of Bergson’s solution to Zeno’s paradoxes. These paradoxes appear in various forms in almost every one of Bergson’s works (TFW 112-15/84-6; CM 120-21/160-61; MM 191-3/213-15; IT 33-6). The literature on Bergson’s solution is quite vast but see especially Milet, *Bergson et le calcul infinitésimal ou La raison et le temps*, 40–61 for a discussion of the relation between the solution proposed by Bergson and the one provided by infinitesimal calculus and criticised by François Évellin, one of Bergson’s close friends (Évellin, *Infini et quantité. Étude sur le concept de l’infini en philosophie et dans les sciences.*). Briefly, Bergson resolves them by appealing to (at least) the following principles: (i) all movement is indivisible, (ii) there are no instants underlying temporal progress, (iii) although the trajectory of movement, being spatial, may be divided infinitely, the same cannot be done with the movement itself.

<sup>82</sup> Costelloe, ‘An Answer to Mr Bertrand Russell’s Article on the Philosophy of Bergson’, 148.

For all these reasons, Bergson argues that *la durée* is metaphysically inaccessible to mathematical treatment, especially to mechanics. In measuring speed, for example, we focus on simultaneities between the *positions* of moving objects to establish relations between them, but temporality (based on *la durée*) which constituted the movement in the first place does not appear in the equations.<sup>83</sup> Once the movement is over, we note the position of the body at point A and then at point B and then compare these with the positions of, say, the hands of a clock; the movement itself which happens “between the extremes”<sup>84</sup> disappears. “Velocity is therefore only a measurement of immobilities in comparison, it indicates the extremities of movement, not the interval.”<sup>85</sup> Mechanics always operate with acts accomplished, never with acts *being* accomplished<sup>86</sup> and since the *fait accompli* refers merely to the trace of *la durée* in the past and not to *la durée* itself, *la durée* cannot appear in mechanical equations.<sup>87</sup>

This is also why Bergson refers to measurable homogeneous time as a “*concept bâtard*,”<sup>88</sup> a “spurious concept.”<sup>89</sup> It is an “adulterated time.”<sup>90</sup> Bergson contends that the process whereby science “measures time” is perfectly legitimate for practical purposes (e.g., synchronisations of schedules with clocks or predictions of future natural phenomena), but leads to the metaphysical illusion of measuring time itself — the “time” (*t*) which appears in mathematics and mechanics is not *la durée*, it is a compromise between fundamental temporality (*la durée*) and space (e.g., the trajectory). Bergson will develop this point later in DS, but already in TFW, he identifies the notion of “simultaneity” as the key ingredient in this “concept bâtard:” simultaneity is the “point of contact between our internal *durée* ... and external time”<sup>91</sup> such that a moment in the trace of our *durée* can be retrospectively identified

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<sup>83</sup> DS 40/57.

<sup>84</sup> Mullarkey, *Bergson and Philosophy*, 15.

<sup>85</sup> Mullarkey, 16.

<sup>86</sup> TFW 119-20/89.

<sup>87</sup> For an extensive treatment of Bergson’s engagement with mathematics and mechanics during his teaching in Clermont-Ferrand and Paris, see Soulez and Worms, *Bergson. Biographie*, 49–94.

<sup>88</sup> Bouaniche: “The notion of a ‘spurious concept’ has without doubt been taken from Plato’s *Timaeus*. ... In the *Timaeus*, Plato in fact describes the creation of the world situated in an intermediate zone where the sensible and the intelligible, two pure elements, intermix. Similarly, the notion of homogeneous time is presented as a mixture of two pure terms, space and *la durée*.” (“La notion de ‘concept bâtard’ est sans doute reprise du *Timée* de Platon. ... Dans le *Timée*, Platon expose en effet une genèse du monde située dans une zone intermédiaire où se mélangent ces deux éléments purs que sont le sensible et l’intelligible. De même ici, la notion de temps homogène se présente comme une mixte des deux termes purs d’espace et de durée.” (Bouaniche, ‘Dossier Critique’, 228, note 37, my translation.)

<sup>89</sup> TFW 98/73.

<sup>90</sup> Jankélévitch, *Henri Bergson*, 39.

<sup>91</sup> “La simultanéité est donc le trait d’union, le point de contact, entre la durée interne, qui est la durée réelle, et le temps extérieur ... .” (Bergson, ‘Compte Rendu de “La Genèse de l’idée de Temps de J.-M. Guyau”’.)



as having been simultaneous with a distinct point of spatialized time in the external world. This leads us to presume that *la durée* itself is identical with measurable time.<sup>92</sup>

It is important to bear in mind that Bergson's accusation against the mathematical description of time is not that it is logically inconsistent, but that it fails to grasp the fundamental experience of change.<sup>93</sup> This is not dissimilar from the relation between Bergson's solution to Zeno's paradoxes and the solution offered by mathematics: Bergson does not doubt that calculus has offered the way to deal with these, but according to him it is sufficient for us to "return to the immediate data of consciousness and to *affirm* that movement in its reality is not space, but time."<sup>94</sup> Similarly, in his later interaction with Einstein, Bergson will not *contest* the mathematical and physical conclusions of the special theory of relativity. He will simply point out that "real time" (*la durée*), which escapes the physicists' equations, is necessary to establish them in the first place.<sup>95</sup> The time of relativity and *la durée* are two different things (see footnote 210).

Or to put it differently — it is not that mathematics and physics are wrong in their treatment of what they refer to by the variable "*t*." Rather, there is more to time and temporality than what physics and mathematics will ever be able to tell us. And, as we shall see later, this "more" will turn out to be of paramount importance in considering questions of human free will and determinism.

### 1.3. Russell Reconsidered

It is now a suitable time to return to Russell's objections. Some of these have been briefly dealt with by other scholars,<sup>96</sup> but in this context, they will serve as a useful framework to further clarify key claims of Bergson's philosophical method.

First, as regards the charge of anti-intellectualism and obscurity directed at Bergson, it is interesting to note that CM, which can be seen as a self-reflexive bookend on the Bergsonian

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<sup>92</sup> Similar views are expressed by P. Lynds in his hotly-debated article from 2003: "... [I]t is the human observer who subjectively projects, imposes and assigns a precise instant in time upon a physical process, for example, in order to gain a meaningful subjective picture or 'mental snapshot' of the relative position of a body in relative motion. ... [I]t is then due to nature's very exclusion of time as a fundamental physical quantity, that time as it is measured in physics ... , motion and physical continuity are indeed possible." (Lynds, 'Time and Classical and Quantum Mechanics: Indeterminacy vs. Discontinuity', 343.) The eerie affinity between his argument and Bergson's philosophy is observed by Olma, 'Physical Bergsonism and the Worldliness of Time'.

<sup>93</sup> Costelloe, 'An Answer to Mr Bertrand Russell's Article on the Philosophy of Bergson', 148.

<sup>94</sup> "Il suffit de recourir aux données immédiates de l'expérience, et de *constater* que le mouvement dans sa réalité même n'est pas de l'espace, mais du temps." (Bouaniche, 'Dossier Critique', 231, my translation, italics original.)

<sup>95</sup> DS 104/150.

<sup>96</sup> Soulez and Worms, *Bergson. Biographie*, 119–31.

corpus, opens with the claim that “[w]hat philosophy has lacked most of all is precision.”<sup>97</sup> This remark is brilliantly elucidated by F. C. T. Moore, who opposes this Bergsonian “precision” to the (Cartesian) view of method as formal, analytic, and largely independent of the subject matter. The precision that Bergson speaks about has to do with appropriately approaching the contingency and particularity of reality, as opposed to studying mere symbols or representations of that reality. “Philosophical positions, claims Bergson, tend to lack precision because, in trying to be *abstract*, they tend to remain indifferent to or unaffected by facts, . . . .”<sup>98</sup> Here, Moore means *specific* or *particular* facts. However, this in no way implies that Bergson does not have a positive role for abstract ways of reasoning; his primary objective is appropriately to separate domains whose inaccurate mutual misapplication creates false problems:

[My aim was] to constitute a metaphysics having a common frontier with science and therefore being able to lend itself to verification on a great many points . . . . I have asked science simply to remain scientific and not take on an unconscious metaphysics which then presents itself to the ignorant or the half-educated under the mask of science.<sup>99</sup>

This intention is attested not only by Bergson’s detailed engagement with science (with mathematics and psychophysics in TFW, with psychology in MM, with biology in CE, and with physics in DS) but also by his repeated insistence on the significance of empirical research<sup>100</sup> and by a positive role for those categories of thought pertaining to space, as long as they remain in their appropriate domains of application.<sup>101</sup> In such a context, Russell’s remarks about the alleged Bergsonian disregard for scientific facts and mathematics, as well as the sneery claims that Bergson takes the intellect to be most visible and most functional in dreams,<sup>102</sup> perspicuously betray what Riggio takes to be a “superficial skimming of the Bergson

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<sup>97</sup> CM 1/1.

<sup>98</sup> Moore, *Bergson: Thinking Backwards*, 16.

<sup>99</sup> CM 51/71. See also HTM 26.

<sup>100</sup> Riggio praises Bergson — at least in MM — as someone “that we would today consider a model of the scientifically-informed philosopher.” (Riggio, ‘Lessons for the Relationship of Philosophy and Science From the Legacy of Henri Bergson’, 215.)

<sup>101</sup> As Worms notes, Bergson emphasises that it is precisely the nature of space as a homogeneous medium empty of all content that makes science possible (Worms, ‘Présentation’, 10.). For interpretations of Bergsonian philosophy that attempt to rescue him from the “anti-intellectualist” charge, see Husson, *L’intellectualisme de Bergson : genèse et développement de la notion bergsonienne d’intuition*; Milet, *Bergson et le calcul infinitésimal ou La raison et le temps*.

<sup>102</sup> Russell, ‘The Philosophy of Bergson’, 326.

corpus at best.”<sup>103</sup> The fact that such a superficiality plagues Russell’s reading can also be detected in his insistence that most of Bergson’s philosophy is driven by his being a “visualiser,” by being “always conducted by means of visual images,”<sup>104</sup> which is clearly refuted by the Bergsonian corpus: auditory images that Russell fails to locate in Bergson can be found in numerous places,<sup>105</sup> and the same goes for tactile sensations<sup>106</sup> and smells.<sup>107</sup> As will hopefully become apparent from the chapters that follow, it is precisely the attention to the relationship between method and subject-matter that allow Bergson’s philosophy to lend itself to interpretations bearing direct import on some of the key themes in analytic thought on time and free will, and, by extension, on the consideration of these matters in philosophy of religion.

Secondly, as regards the objection regarding number, we must observe what role Bergson’s discussion of number plays in the context of TFW. Bergson, who intentionally defines number as a collection of identical units,<sup>108</sup> is not primarily concerned with finding an internal contradiction in a theory of arithmetic, but with showing that on Kant’s own definition, number must necessarily be connected not with time but with space. More importantly, as Soulez argues, “Bergson is less concerned with knowing if distinguishing separate units *logically* implies the position in a space than with knowing if we can represent separate units without space.”<sup>109</sup> It is not a question of logical entailment, but one of which concepts are needed to grasp other concepts. The close connection between spatiality and number concerns the tendency to represent *la durée* spatially. As Soulez summarises Russell’s argument: “The Bergsonian critique applies to all modes of thinking by the means of symbols. Every system which defines a group of symbols and determines the rules for their manipulation ... falls under his critique. Russell’s argument, therefore, misses the point from the start.”<sup>110</sup> Bergson is concerned not with a theory of arithmetic, but with the role numbers play in representing *la durée*.

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<sup>103</sup> Riggio, ‘Lessons for the Relationship of Philosophy and Science From the Legacy of Henri Bergson’, 222.

<sup>104</sup> Russell, ‘The Philosophy of Bergson’, 330, 336.

<sup>105</sup> TFW 100-101/75.

<sup>106</sup> See for example the experiment of pricking one’s hand with a needle (TFW 42-3/31-2) or of tracing one’s hand across a sheet of paper in DS 34/48.

<sup>107</sup> TFW 161-2/121-2.

<sup>108</sup> TFW 75/56. This definition is not Bergson’s own, but can be found in Cournot, *Essai sur les fondements de nos connaissances*, 390 and Kant, *Critique of Pure Reason*, A142-143/B182.

<sup>109</sup> “Il s’agit moins de savoir pour Bergson si la distinction d’unités séparées implique *logiquement* la position d’un espace, que de savoir si nous pouvons nous représenter des unités séparées sans un espace.” (Soulez and Worms, *Bergson. Biographie*, 127, my translation.)

<sup>110</sup> “La critique bergsonienne concerne tout mode de pensée par symboles. Tout système qui définit un ensemble de symboles et détermine les règles de leur manipulation ... tomberait sous sa critique. La polémique de Russell est donc mal engagée dès le départ.” (Soulez and Worms, 126, my translation.)

There is a further reason why the presumed incompatibility between Bergsonian and analytic philosophy does not stand. As Jankélévitch points out, Bergson's philosophy itself resembles one of its key notions — that of *la durée*:<sup>111</sup> pivotal concepts appear and disappear in an organic development similarly to motifs disappearing and reappearing in a symphony. Some themes are abandoned, some are re-introduced and applied differently, some that were latently connected to others are newly emphasised. Thus, although it would be misleading to posit a complete separation between Bergson's later and earlier works, F. C. T. Moore is correct to acknowledge a significant shift in interest and methodology taking place in Bergson's essay *Introduction to Metaphysics* from 1903 (later published in CM), where *intuition*, as a form of direct access to reality contrasted with *analysis*, receives an unprecedentedly central role.<sup>112</sup> Frédéric Worms also recognizes that there is a shift in emphasis between the conceptual analysis, scientific rigour, and empiricism of TFW and MM, and the predominantly metaphysical concerns of CE, despite the fact that he argues against a separation as radical as that offered by F. C. T. Moore.<sup>113</sup> Worms argues that beginning to read Bergson's books from CE runs the risk of seriously misinterpreting his earlier works.<sup>114</sup> Such a move is clearly committed not only by Russell but unfortunately also by Costelloe, who attempts to defend Bergson against Russell by elaborating, amongst other concepts, on the notion of "creation,"<sup>115</sup> which becomes crucial after TFW and MM. The fact that it is important to appreciate this shift and not prioritise CE in creating dialogues between Bergsonian philosophy and analytic thought is also confirmed by the fact that F. C. T. Moore, who focuses almost exclusively on Bergson's early works, succeeds not only in showing that interaction between Bergson's philosophy and analytic questions is possible,<sup>116</sup> but also in demonstrating specific ways by which a possible relevance of Bergson's thought to empirical psychology could be established.<sup>117</sup> He concludes his study by asserting that "if certain of Bergson's arguments are accepted, some problems considered fundamental or deep in the analytic tradition of

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<sup>111</sup> Jankélévitch: "Bergson's philosophy is one of the rare philosophies in which the investigation's theory blends with the investigation itself." (Jankélévitch, *Henri Bergson*, 3.)

<sup>112</sup> Moore, *Bergson: Thinking Backwards*, 8.

<sup>113</sup> Worms, 'Bergson entre Russell et Husserl: Un troisième terme?', 93. Milet goes as far as to argue that one cannot fully understand Bergson's thought on duration without CM (Milet, *Bergson et le calcul infinitésimal ou La raison et le temps*, 33.).

<sup>114</sup> Worms, 'Bergson entre Russell et Husserl: Un troisième terme?', 93.

<sup>115</sup> Costelloe, 'An Answer to Mr Bertrand Russell's Article on the Philosophy of Bergson', 149–50.

<sup>116</sup> See his application of Bergsonian thought to the Sorites paradox, Buridan's Ass and The Weakness of the Will problem in Moore, *Bergson: Thinking Backwards*, 97–104.

<sup>117</sup> Moore, 51–52.

philosophy will now appear as relatively shallow.”<sup>118</sup> This study will show a similar point with regards to philosophy of religion.

The methodological emphasis on Bergson’s earlier works, especially TFW, is paramount for the successful interaction between analytic philosophy and Bergsonian thought that runs throughout this entire study. The motivation for this also rests primarily on the irrelevance of some of Bergson’s later observations to the issue of free will, observations regarding the “*élan vital*,” the centrality of his concept of “immersing ourselves” into the movement of things through intuition (which have already been extensively examined in a theological context anyway<sup>119</sup>), and his move towards much more speculative metaphysics, which indeed form the target of Russell’s critique. As a result, Bergson’s thought on religion and morality in TS, the role he accords to the vital impulse and teleology play little role here. It is not that these later concepts are uninteresting; rather, they are too vulnerable to the Russellian critique and risk being regarded as “nonsense” by most of the analytic philosophers this study engages with.

#### 1.4. The Framework of Free Will Debates

The fact that Russell’s complaint about Bergson’s philosophy not being “analytic enough” is misplaced will also become apparent when we look at Bergson’s writings on free will. The remainder of this chapter will demonstrate that Bergson’s thought on freedom and determinism, directly connected to his philosophy of time described earlier, has insights highly relevant to analytic accounts of these topics. Even though the critique below by no means captures the entirety of the debate concerning free will in analytic philosophy, it certainly captures those tenets of these debates that are transferred over into analytic philosophy *of religion*. Or in other words, although there are further ways of conceptualising the problem of free will in analytic philosophy *simpliciter* than those presented here, this study is only concerned with conceptualisations utilised by analytic philosophers for articulating the relationship between free will and divine foreknowledge that will be examined in the final chapter. My claim is that while arguments proceeding within the accepted methodological framework may be valid, the cornerstones that this framework is built on are, themselves, mistaken. I identify these cornerstones as the following four postulates:

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<sup>118</sup> Moore, 140.

<sup>119</sup> See especially Maritain, *Bergsonian Philosophy and Thomism*; Garrigou-Lagrange, *Le sens commun: la philosophie de l’être et les formules dogmatiques*.

**Postulate 1: Free will and determinism are absolute.** This means that one might reduce the vast majority of views on the problem of free will to one of the following four options: (i) free will is true and determinism is false, (ii) free will is true and determinism is true, (iii) free will is false and determinism is true, (iii) free will is false and determinism is false. Free will and determinism are thereby thought of as “all-or-nothing” problems.

**Postulate 2: The compatibility of free will and determinism is a general problem.** This means that it is possible to provide free will arguments in general without necessarily focusing on the particularity of individual acts and that since free will is a problem pertaining to reality as a whole, “study cases” can come from anywhere. The question is not “is this particular act free,” but rather “is there free will” or “is it possible for *any* act to be free”?

**Postulate 3: The principle of alternative possibilities.** This means that free will requires the ability to do otherwise, or in other words, when a particular decision-making process is taking place, there is more than one future possible.<sup>120</sup>

**Postulate 4: Laws of nature apply to mental states.** This means that mental states are considered as facts that can be subsumed under causal relationships.

Before going further, it would be helpful to provide a short typology of the variety of views regarding free will in analytic philosophy. The following should be considered merely as a selection of running “themes” that figure in analytic treatments of free will: the traditional subdivision into compatibilism and incompatibilism (primarily driven by responses to the question of whether we “can do otherwise”<sup>121</sup> (Postulate 3) and whether free will is compatible with determinism or not) no longer exhausts all the primary subdivisions. For example, compatibilism can be construed — instead of being able to do otherwise — as “being the sources of our own actions.”<sup>122</sup> The traditional positions have also themselves been adjusted and refined in recent literature to include “hybrid” views (such as Fischer’s

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<sup>120</sup> I understand Postulate 3 to be the claim that “free will requires the ability to do otherwise,” not the connected claim “*moral responsibility* requires the ability to do otherwise,” on which rests Frankfurt’s canonical argument in Frankfurt, ‘Alternate Possibilities and Moral Responsibility’. While there are different ways of understanding free will in analytic philosophy (e.g., “agent-causation,” “ultimate source compatibilism,” or Frankfurt-inspired hierarchical models (see Frankfurt, ‘Freedom of Will and the Concept of a Person’)), the “ability to do otherwise” has come to dominate the picture of free will in analytic philosophy of religion.

<sup>121</sup> Fischer et al., *Four Views on Free Will*, 1–2.

<sup>122</sup> Fischer et al., 1–2.

semicompatibilism<sup>123</sup>) as well as Platonic-inspired theories regarding our free will as acting towards “the good.”<sup>124</sup> The typology below merely aims to highlight the key analytic responses to problems of free will which end up being carried over into philosophy of religion, specifically the problem of divine foreknowledge.<sup>125</sup>

*Incompatibilism* is the claim that free will is not compatible with determinism.<sup>126</sup> This position can then, further, be divided into *libertarianism* (the belief that determinism is false and free will is true) and *hard determinism* (the belief that determinism is true and free will is false<sup>127</sup>). Rota defines *libertarians* as believing that “H is *free in the libertarian sense* iff at least sometimes, (i) there are multiple alternatives for H’s action, and (ii) it is up to H which alternative gets realized.”<sup>128</sup> Within the contemporary landscape, Kane identifies three significant incompatibilist libertarian views: (i) “agent causation,” where it is the “agent” or the agent’s “self” (as opposed to events leading up to the moment of taking a particular decision) that causes the action.<sup>129</sup> (ii) “non/causalist or simple determinism,” which Kane identifies as revolving around the claim that “free choices or actions are *uncaused* events which are nonetheless explicable in terms of an agent’s reasons or purposes”<sup>130</sup> and (iii) event-causal, where “agents cause their free actions via [their] reasons for doing so, but indeterministically.”<sup>131</sup>

*Compatibilism* is the claim that free will is compatible with determinism.<sup>132</sup> Here, the particular definition of free will can take on many different forms: from the “ability to do otherwise” to a particular aligning of our willing with specific motives or with the type of character we are/have. Historically, one can isolate at least three distinct positions. First, there

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<sup>123</sup> Fischer, ‘Compatibilism’.

<sup>124</sup> Wolf, *Freedom Within Reason*.

<sup>125</sup> A useful “flow-chart” framework is offered by Shanley: If we accept determinism (1), there are two options: (1a) We identify as “determinists” and claim that free will is an illusion or (1b) We identify as “compatibilists” and argue that causal determination is compatible with human freedom. If we reject determinism (2), there are two options: (2a) We identify as “incompatibilists” and emphasise the claim about the connection between determinism and lack of free will or (2b) We identify as libertarians and emphasise the claim about freedom existing (Shanley, ‘Beyond Libertarianism and Compatibilism: Thomas Aquinas on Created Freedom’, 70.).

<sup>126</sup> For the time being, I leave it open whether this determinism is physical, biological, logical, theological, or otherwise.

<sup>127</sup> See Pereboom, ‘Hard Incompatibilism’.

<sup>128</sup> Rota, ‘The Eternity Solution to the Problem of Human Freedom and Divine Foreknowledge’, 165; see also Leftow, *Time and Eternity*, 301; for a detailed discussion, see Pereboom, ‘Hard Incompatibilism’.

<sup>129</sup> See Kane, ‘Introduction: The Contours of Contemporary Free-Will Debates’, 20.

<sup>130</sup> Kane, 20.

<sup>131</sup> Kane, 20.

<sup>132</sup> For a detailed account, see Kane, 12–18.

is “classical compatibilism,”<sup>133</sup> mostly associated with Hobbes and Hume,<sup>134</sup> who claim that our freedom consists of the ability to do what we “will” if we were not prevented from doing so by any obstacles. Second, following the shortcomings of the definition of free will entailed by “classical compatibilism” when faced with problems like compulsions or addictions, the “hierarchical theories”<sup>135</sup> of free will were born. These were strongly based on Frankfurt’s seminal paper “Freedom of the Will and the Concept of a Person.”<sup>136</sup> Frankfurt claims that we are free when our second-order desires align with our first-order ones in a particular way. Third, one might isolate what Kane refers to as “reasons-response compatibilist views” which he defines as follows: “Such views require that for agents to be free and responsible, they must be ‘responsive to reasons,’ in the sense that they must be able to recognize and evaluate reasons for action, and be able to act in some manner that is sensitive to a suitable range of reasons.”<sup>137</sup>

Note that none of these positions endorses *all of* the four Postulates from above. For example, Postulate 1 is not endorsed by free will theories which consider indeterminacy to be an element in the process of decision-making. For instance, Kane states that we should

think, instead, of the indeterminism involved in free choice as an ingredient in a larger goal-directed or teleological process or activity, in which the indeterminism functions as a hindrance or obstacle to the attainment of the goal.<sup>138</sup>

Similarly, Postulate 2 is not endorsed by Frankfurt-type theories of free will; some acts may be free, whereas others might not, depending on how the different hierarchical levels of our wills align in a particular act. By parity, Postulate 3 is not required for certain versions of compatibilism (i.e., those that do not require free will to be defined in terms of the “ability to do otherwise”), while Postulate 4 does not seem explicitly to feature in any of the positions outlined above. What is decisive, however, is that each of the major views regarding free will in analytic philosophy of *religion* ends up endorsing *at least* one of them. This will become obvious in the next section, where Bergson’s critique will be applied to each one of the Postulates against the background of one of the philosophical positions on free will from above. If every view on free will in analytic philosophy of religion requires at least one of the Postulates and Bergson can show that *each* of the Postulates is false, then *every* view on free

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<sup>133</sup> Kane, 12.

<sup>134</sup> See for example Hume, *An Enquiry Concerning Human Understanding*, VIII.23.

<sup>135</sup> Kane, ‘Introduction: The Contours of Contemporary Free-Will Debates’, 14.

<sup>136</sup> Frankfurt, ‘Freedom of Will and the Concept of a Person’.

<sup>137</sup> Kane, ‘Introduction: The Contours of Contemporary Free-Will Debates’, 15.

<sup>138</sup> Kane, ‘Libertarianism’, 45.



will in analytic philosophy of religion is either deficient, standing on shaky grounds, or just outright false.

### 1.5. Bergson and Free Will in Analytic Philosophy

Bergson believes that the opposition between determinism and free will is illusory<sup>139</sup> and — similarly to the diagnosis provided by Kant,<sup>140</sup> who is his implicit interlocutor throughout TFW — regards it as something that could be termed an “antinomy.” In the closing paragraph of TFW, he diagnoses the root of the problem as follows:

All the difficulties of the problem and the problem itself, arise from the desire to endow duration [*la durée*] with the same attributes as extensity, to interpret a succession by simultaneity, and to express the idea of freedom in a language into which it is obviously untranslatable.<sup>141</sup>

Bergson attempts to show that re-establishing the appropriate boundaries between *la durée* and its spatial representation dissolves the problem.<sup>142</sup> He starts by observing that the law of causality states that the same causes always produce the same effects (although most philosophers would now argue that the same causes always assign the same *probability* to future effects). However, he goes on to point out that this clearly cannot apply to *la durée* since every retrospectively identified moment of *la durée* is unrepeatable and unique.<sup>143</sup> In other words, while the determinists<sup>144</sup> argue that the same cause always produces the same effect and the libertarians presume that the same cause can produce *different* effects, they are both wrong in assuming that the same cause will “appear a second time on the stage of consciousness.”<sup>145</sup> This reappearance on the stage of consciousness is central to Postulate 4, which we will return to in the final chapter.

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<sup>139</sup> For a historical background on the debates between libertarians and determinists, see Bouaniche, ‘Dossier Critique’, 233–34, note 1. Bergson’s key points of reference are Fouillé, *La Liberté et Déterminisme* and Boutroux, *De la contingence des lois de la nature*.

<sup>140</sup> Kant, *Critique of Pure Reason*, A532-558/B560-586.

<sup>141</sup> TFW 221/166.

<sup>142</sup> Bouaniche, ‘Dossier Critique’, 218–19, note 76.

<sup>143</sup> TFW 201/151.

<sup>144</sup> When Bergson talks about “determinists,” he means those who argue that at every given point in time, there is only one possible future. He only occasionally mentions probabilistic causation in his later works.

<sup>145</sup> TFW 199/150.

At the core of Bergson's thought on free will is a distinction between the "parasitic" and the "fundamental" self.<sup>146</sup> "The mind exists in two layers," Bergson says, "one facing towards and formed after the external, public realm, the other remaining behind in 'profound' seclusion: unfortunately, it is the former 'superficial self' that is [usually] gaining ground ... ."<sup>147</sup> The deepest level of the fundamental self is (at least in TFW) identical to *la durée*.<sup>148</sup> The parasitic self, by contrast, is inextricably permeated by the realm of homogeneous space. Its individual mental states are separated and distinctly labelled by language for purposes of social interaction.<sup>149</sup> For example, the varying shades of feelings comprising our affection for someone become "solidified"<sup>150</sup> and designated by a single word "love." Bergson argues that each one of us has our own way of loving and hating, but all of these individual nuances are designated by general terms:

But if he [= the psychologist focusing merely on the parasitic self] sees in these various states no more than is expressed in their name, if he retains only their impersonal aspect, he may set them side by side for ever without getting anything but a phantom self, the shadow of the ego projecting itself into space.<sup>151</sup>

It is precisely these individual states, regarded as constant and "solidified," that can be subsumed under causal relations. At the level of the fundamental self, the states are always different and thus escape the laws of causality — but in the parasitic self, which is the

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<sup>146</sup> TFW 163-7/123-7.

<sup>147</sup> Mullarkey, *Bergson and Philosophy*, 20.

<sup>148</sup> Bergson's TFW has frequently been criticised for locating free will in *la durée*. For example, G. Belot points out in a Freudian tone: "On the contrary, the 'fundamental self' is relatively fragmented; the more we delve into it, the more we find a plurality of consciences instead of a unity of conscience. It is there that we encounter, instead of free will, automatism; instead of desire, blind impulses; instead of harmony and *consensus*, incoherencies; contradictions, obscure battles of internal life." ("Le 'moi profond' est au contraire relativement fragmentaire; plus loin on le pénètre, et plus on trouve une pluralité de consciences à la place de l'unité de conscience. C'est là qu'on rencontre, au lieu de la liberté, l'automatisme; au lieu du vouloir, les impulsions aveugles; au lieu de l'harmonie et du *consensus*, les incohérences, les contradictions, les obscures batailles de la vie intérieure." (Belot, 'Une Théorie Nouvelle de La Liberté', my translation.)) Bergson responds to this objection in MM 185-8/206-9.

<sup>149</sup> As D. H. Mellor has suggested in conversation, the difference between mental states of the fundamental and parasitic self could be conceptualised using the type-token distinction. At the level of the parasitic self, the states (e.g., "hearing the kettle boil at  $t_1$ " and "hearing the kettle boil at  $t_2$ ") are sufficiently similar to constitute tokens of the same type and can easily enter into general causal relationships. However, once we approach the fundamental side of the spectrum, it is a mistake to consider, for instance, "being in love at  $t_1$  [with my first wife]" and "being in love at  $t_2$  [with my second wife]," as tokens of the same type, since the two mental states are radically different — we are tricked by language into thinking they are tokens of the same type simply because we apply the word "love" to both. We will return to the token-type distinction when we discuss Bergson's critique of Postulate 4 at the beginning of Chapter 5.

<sup>150</sup> TFW 130/97.

<sup>151</sup> TFW 165/124.

fundamental self projected into the spatial multiplicity, individual states are repeatable and distinct, and can thus partake of standard causal relations. As far as the parasitic self is concerned, Bergson says, we are “conscious automatons.”<sup>152</sup> “Here will be found, within the fundamental self, a parasitic self which continually encroaches upon the other. Many live this kind of life, and die without having known true freedom.”<sup>153</sup> The parasitic self is useful for the mesh of social interactions and habits of practical life, a mesh that Bergson refers to as a “veil” (*le voile*<sup>154</sup>), the totality of habits requiring spatial ways of thought which enable us to function efficiently.<sup>155</sup>

This is precisely why the Bergsonian must reject Postulate 1. For Bergson there is a continuum between free and determined acts in the proportion to which they are related to the parasitic and the fundamental selves — freedom and determinism are not absolute, they admit of degrees.<sup>156</sup> Each act is placed somewhere on a continuum between freedom and determinism. A single indivisible act is “both” free and determined in much the way that a single pint of thoroughly mixed shandy is “both” beer and lemonade: the extent to which it approaches either depends on the proportions between the two liquids. Of course, the “proportion” between determinism and free will cannot be quantified, since *la durée* is unquantifiable.

What’s more, Bergson says that most people, most of the time, merely operate on the level of the parasitic self — free acts are extremely exceptional.<sup>157</sup> However, there are moments when we are free, especially in moments of difficult decisions, moments when we can act from our fundamental self, when we can fully express who we are by delving into our fundamental self and letting our decision spring from there. “[B]ut the moments at which we thus grasp ourselves are rare, and that is just why we are rarely free.”<sup>158</sup> It is only at the deepest level of the fundamental self that *la durée*, the basis of our freedom, is located: “Without doubt, then at the surface of the ego, there is discontinuity. But as we delve deeper into ourselves, we arrive at continuity, fluidity, at interior *durée*.”<sup>159</sup> Appealing to William James’ observation that

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<sup>152</sup> TFW 168/126. This phrase, although not referenced by Bergson in TFW, is used by Huxley in Huxley, ‘On the Hypothesis That Animals Are Automata, and Its History’, 365.

<sup>153</sup> TFW 166/125.

<sup>154</sup> See for example IT 77.

<sup>155</sup> Bouaniche, ‘Dossier Critique’, 233, note 59.

<sup>156</sup> TFW 166/125.

<sup>157</sup> TFW 167/126.

<sup>158</sup> TFW 231/174.

<sup>159</sup> “Sans doute donc, à la surface de notre moi, il y a du discontinu. Mais à mesure que nous nous approfondissons, nous arrivons au continu, au fluide, à la durée intérieure.” (IT 49, my translation.)

consciousness is absent in acts where it is not particularly useful, Alfred Mele provides a helpful example:

If James is right, by the time drivers have developed the habit of signalling for turns they are about to make, they no longer consciously form intentions to signal for turns (in normal circumstances) and no longer are conscious of being about to signal or even of signalling (in normal circumstances).<sup>160</sup>

Simple actions and automatic reactions (for instance, those involved in Libet experiments<sup>161</sup>) cannot simply be subsumed under the same metaphysical description as deciding whether to marry someone or not, or how to string English words together to write Hamlet. The following critique which Bergson directs at his neo-Kantian contemporaries applies equally well to the vast majority of analyses of doing, acting, and deciding (whether to have tea or coffee, whether to mow one's lawn or not etc.) in contemporary free will debates:

As they look at only the commonest aspect of our conscious life, they perceive clearly marked states, which can recur in time like physical phenomena, and to which the law of causal determination applies, if we wish, in the same sense as it does to nature.<sup>162</sup>

Bergson's approach of positing a continuum between the extent to which an act is free and the extent to which it is determined — parallel to the continuum between the parasitic and the fundamental self — may be contrasted with the hierarchy of first and second-order volitions posited by Frankfurt.<sup>163</sup> Although Frankfurt's account may superficially resemble that of Bergson (in that our *true* personality consists in an appropriate alignment of our first and second-order desires), Bergson's account is radically different; not merely because Bergson does not speak about *volitions* or intentions (but about the agent as a whole), but mainly because for him actions are always placed on a continuum: there are no two (or three) hierarchically-arranged levels of the self. Bergson's approach should equally be contrasted with the general approach assumed by agent-causal<sup>164</sup> accounts of free will, which regard the agent as a single indivisible unit. For Bergson, the "agent" constantly changes; both in terms of the "content" of

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<sup>160</sup> Mele, *Effective Intentions. The Power of Conscious Will*, 37.

<sup>161</sup> Libet, 'The Timing of a Subjective Experience'; Libet, 'Unconscious Cerebral Initiative and the Role of Conscious Will in Voluntary Action'.

<sup>162</sup> TFW 238/178-9.

<sup>163</sup> See Frankfurt, 'Freedom of Will and the Concept of a Person'.

<sup>164</sup> For the classical formulation, see Chisholm, 'Human Freedom and the Self'.

their *durée* and in terms of the proportion between the participation of the parasitic self and that of the fundamental self in a particular act.

Far from stipulating these two selves as distinct (akin to the noumenal and the phenomenal self in Kant<sup>165</sup>), Bergson maintains that movement from one to the other is *gradual*. Contrary to spiritualism,<sup>166</sup> he does not argue for *absolute* freedom.<sup>167</sup> Completely free acts, springing from the most profound emotions, are rare. Most of the time we fly on autopilot. An act is free *to the extent* in which it is the fundamental self which partakes of it (e.g., showing our true character by saving someone from a burning house) and determined *to the extent* that it is referred to the parasitic self (e.g., stopping our car whenever we see a red light):

Bergson's position on the issue of free will and determinism is best characterised as a peculiar twist on compatibilism. ... Libertarians and determinists build their ideas equally on the axiom of their mutual incompatibility. ... Bergson, on the contrary, believes they are compatible because the characteristic that both constitutes *durée* and differentiates it from determinate homogeneity appears in different *degrees* at different moments of our conscious existence.<sup>168</sup>

Nevertheless, the claim about Bergson's position being a "peculiar twist on compatibilism" must be taken with a pinch of salt. He does indeed assert that free will and determinism are compatible; but they are compatible not in terms of "coexisting" side by side, but in terms of being intimately and uniquely intertwined in each individual act.

Furthermore, regardless of how "encrusted" we are by the automated habits of our parasitic self, the fundamental self can always unexpectedly rise to the surface. Once a free act has happened, we can retrospectively connect it with various causal chains. In the case of Kant's famous "malicious lie"<sup>169</sup> example, it does not particularly matter whether the person did or did not say the lie in the end, as we can always retrospectively identify a causal chain leading to either of the outcomes:

... if the event can always be explained afterwards by an arbitrary choice of antecedent event, a completely different event could have been equally well explained in the same circumstances by another choice of antecedent — nay, by

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<sup>165</sup> Kant, *Critique of Pure Reason*, A538-558/B567-586.

<sup>166</sup> Bergson argues mainly against Fouillé's *La liberté et déterminisme* and also against Lachelier's *Du fondement de l'induction* (1871).

<sup>167</sup> TFW 166/125.

<sup>168</sup> Mullarkey, *Bergson and Philosophy*, 26, my italics.

<sup>169</sup> Kant, *Critique of Pure Reason*, A554-555/B582-585.

the same antecedents otherwise cut out, otherwise distributed, otherwise perceived, — in short, by our retrospective attention.<sup>170</sup>

The following analogy will serve as a good conclusion to the foregoing discussions. Take the famous observation by Quételet that the number of deaths, crimes, marriages etc. in Paris remains fairly constant from year to year.<sup>171</sup> Now, consider a particular man deciding whether to marry or not. As Bergson argues, completely free acts are rare, since most people behave like conscious automata, gliding on the surface of the parasitic self where individual habits are connected by causal laws (e.g., the feeling of “love” is connected with the notion of “marriage,” so that when the person falls in love with someone, they follow the habit instilled into their parasitic self to marry the person they fell in love with). This explains why the number is pretty much constant. Nevertheless, there is no reason why the person in question could not escape the habits of the parasitic self and run away from the altar, as happens in many cases. Retrospectively, each one of his actions can be plotted onto a branching tree of possibilities and connected by an arbitrary set of antecedents. This does not mean that running away from the altar is required for freedom; what is required is a full introspective and self-reflective awareness of why we are getting married in the first place and certainty that we are not merely doing so out of habits we have unreflectively observed in other people.

The importance of observing that particular instances of relations between the agent’s self (being in a deep state of deliberation as opposed to driving on autopilot) and the particular act (deliberating whether to sacrifice one’s son to Yahweh as opposed to deciding whether to have coffee or tea) lie on a continuum further leads to a repudiation of Postulate 2. Specifically, questions of the form “Are we free or not?” should instead be reformulated as “(To what extent) was an act *a* performed by agent *S* free and (to what extent) was it determined?” Bergson thinks of a free act more as an “event” that “happens” rather than in terms of actions, intentions, decisions, possibilities, connections between causes and effects etc.<sup>172</sup> There is no free will “in general.”<sup>173</sup> This is why Bergson never aims to create a *definition* of free will, but rather provide its “characterisation.”<sup>174</sup> Bouaniche comments on Bergson’s indexicality of freedom to individual “events” or “acts” as follows:

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<sup>170</sup> CM 84/114.

<sup>171</sup> See Quételet, *Physique sociale ou Essai sur le développement des facultés de l’homme*.

<sup>172</sup> Čapek, ‘Les apories de la liberté bergsonienne’, 254.

<sup>173</sup> EPL 334.

<sup>174</sup> EPL 65-7; Bouaniche, ‘Dossier Critique’, 247, note 77.

We can never find freedom in *an* act. ... For Bergson, moments of crisis or of decision reveal the effectivity of a continuous process, which is their non-perceived ground.<sup>175</sup>

For Bergson, there is something essentially “artistic” about a truly free act:

[W]e are free when our acts spring from our whole personality, when they express it, when they have that indefinable resemblance to it which one sometimes finds between the artist and his work.<sup>176</sup>

The spatial representation of deciding (usually as a branching tree), a “refraction” of our *durée* into geometry, also commits both libertarians and determinists to the retrospective illusion: they look at the decision once it has been taken and then retrospectively identify motives and possibilities within it.

What exacerbates the retrospective illusion is the facility with which we think of free acts as a hesitation between several competing possible futures. We imagine branching trees of possibilities or “gardens of forking paths”<sup>177</sup> where our process of deciding becomes represented as an arrival at a crossroads followed by taking one of two already established directions.<sup>178</sup> This leads us directly to Postulate 3, a typical instance of which may be found in David Basinger:

[T]o say that a person (P) is free to perform an action (A), ..., is to say that P has it within her power to choose to perform A or choose not to perform A. *Both A and not A could actually occur; which will actually occur has not yet been determined.*<sup>179</sup>

The setting up of the framework is fairly straightforward; at time *t*, an agent reaches a point at which there are two possible futures at *t+1*. Postulate 3 also covers accounts of free will analysed in terms of counterfactuals (“Had such and such been the case, then agent S *would*

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<sup>175</sup> “[O]n ne trouvera jamais la liberté dans *un* acte. ... Pour Bergson, les moments de crise et de décision ne font que révéler l’effectivité d’un processus continu qui en est le fondement inaperçu.” (Bouaniche, 248, note from p. 180 of the original, my translation.)

<sup>176</sup> TFW 172/129. In a recent conference paper, Mark Sinclair referred to Bergson’s account of free will as “expressivist.” (Sinclair, ‘Express Yourself! Bergson on Freedom’.)

<sup>177</sup> See Borges, ‘The Garden of Forking Paths’.

<sup>178</sup> See Bergson’s famous discussion of the MOXY curve in TFW 175-8/133-5.

<sup>179</sup> Basinger, ‘Middle Knowledge and Classical Christian Thought’, 416, my italics.

have acted otherwise”), since in such a case the possible future is simply indexed to a different *t* in a different possible-world time-sequence.<sup>180</sup>

Bergson regards the idea of there *being two possible futures* between which an agent freely chooses — should they have free will — metaphysically suspect.<sup>181</sup> Apart from simple every-day decisions (deciding whether to have a coffee or not), there are rarely two future options solidified before us as determinate objects of choice. Most real difficult decisions consist of a continual oscillation between several tendencies of our self, which grows every moment by passing from one to the other.<sup>182</sup> Seeing free will as consisting of deciding between two or more options hides the reality of pure becoming; it results from a practical static representation of the inherently dynamic evolution of the decision-making process itself. To suppose that a spatial tree of branching possibilities could accurately represent the decision-making process is to think of this process as a “sort of stopping of time.”<sup>183</sup>

It might be objected that Bergson confuses us *not knowing* what the possibilities and actualities are with there *being no* possibilities or actualities. Although we will examine this objection in later chapters, at this stage we are limiting *la durée* to the human mind: the gap between the ontological and the epistemological, therefore, does not exist. Our qualitative progression of mental states is what it is known to be (by us) — and together with them the retrospectively identified actualities and potentialities which, nevertheless, *are not there* as *la durée* is developing. This observation must be connected with Bergson’s insistence on focusing the applicability of “free will” to specific acts. We are tricked into believing that freedom consists in deciding between several possibles by focusing on simple acts (choosing between having a coffee or not) and then using them as a model for all others. But in some more profound cases of human freedom, this seems outright absurd. For instance, Bergson asks: “When a musician composes a symphony was his work possible before being real?”<sup>184</sup> By

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<sup>180</sup> For a short summary of these discussions, see Johnson, ‘God, Fatalism, and Temporal Ontology’, 448–49.

<sup>181</sup> Bergson’s position on this changes in his later works. For example, in EPL, he says the following: “If our freedom is real, it is necessary that there are, at certain moments of our existence, possibilities of choices, points of bifurcation, where we have a choice between two or several different points of direction, independently of what is given.” (“Si notre liberté est réelle, il faut qu’il y ait à certains moments au moins de notre existence des possibilités absolues de choisir, des points de bifurcation où nous avons le choix entre deux ou plusieurs aiguillages différents et cela indépendamment de quoi ce soit de donné.” (EPL 336-7, my translation; see also Čapek, ‘Les apories de la liberté bergsonienne’, 251.))

<sup>182</sup> TFW 180-81/135-6.

<sup>183</sup> “L’hésitation entre elles se présente comme une sorte d’arrêt du temps.” (Čapek, ‘Les apories de la liberté bergsonienne’, 252.)

<sup>184</sup> CM 10/13.



applying the same method of tracing back effects to their causes *in the past*, we think that this can be done, *ontologically*, also when it comes to the future, if only we knew a little bit more:

[T]here is especially the idea that the possible is *less* than the real, and that, for this reason, the possibility of things precedes their existence. They would thus be capable of representation beforehand; they could be thought of before being realised. But it is the reverse that is true. ... [T]he possible is only the real with the addition of an act of mind which throws its image back into the past, once it has been enacted.<sup>185</sup>

As reality is created as something unforeseeable and new, its image is reflected behind it into the indefinite past; ... 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.<sup>186</sup>

Bergson provides an anecdote to drive his point home. He recalls how a journalist once asked him what he thought the next great work of literature was going to be. Bergson comments: “I saw distinctly that [the journalist] conceived the future work as being already stored up in some cupboard reserved for possibles ... .”<sup>187</sup>

Hamlet was doubtless possible before being realised, if that means there was no insurmountable obstacle to its realisation. In this particular sense one calls possible what is not impossible. ... But the possible thus understood is in no degree virtual, something ideally pre-existent. If you close the gate you know no one will cross the road; it does not follow that you can predict who will cross it when you open it. ... [I]t is clear that a mind in which the Hamlet of Shakespeare had taken shape in the form of possible would by that fact have created its reality: it would have thus been, by definition, Shakespeare himself.<sup>188</sup>

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<sup>185</sup> CM 81/109.

<sup>186</sup> CM 82/111.

<sup>187</sup> CM 81/110.

<sup>188</sup> CM 83/112-13. This idea is also captured by Geach who — although for reasons different from Bergson’s — suggests that it is better to think of preventative actions relating to the future as preventing “that” something happened (e.g., that someone fell off a bridge) instead of designating a particular future event by a phrase (someone’s falling of a bridge) and then saying that it was that thing that had been prevented (Geach, ‘The Future’, 211; Todd, ‘Geachianism’.).

In a recent analysis, the force of Bergson’s critique was taken up by Emmanuel Picavet and applied to current work in decision theory. Commenting on Bergson’s critique of the geometrical representation of decision-making, Picavet observes that thinking of a decision-making process as a hesitation between two possibles ends up bizarrely “reifying” these possibles into distinct things: “[W]e conceive them as pure objects of choice, simple things belonging to the external world, towards which we successively turn our deciding gaze.”<sup>189</sup> In reality, the two possibles which we are deciding between are never available *except* as already forming part of the fluid stream of mental states:

Now, the tracks ... are only given to the consciousness of a subject if they correspond to an experience of the subject. It is therefore inappropriate to consider them as being given *simultaneously*: we must recognise that they correspond more to successive experiences of consciousness.<sup>190</sup>

To further appreciate this point, consider the following example.<sup>191</sup> Say you are deciding between two jobs, one in Aberdeen and one in Birmingham, and you are struggling to make up your mind, that is, you are not immediately drawn to one or the other. We usually think of the two choices in this way:

<b>Aberdeen</b>	<b>Birmingham</b>
a <sub>1</sub> : close to the sea	b <sub>1</sub> : close to London
a <sub>2</sub> : lots of nice pubs	b <sub>2</sub> : we do not know anyone there
a <sub>3</sub> : horrible weather	b <sub>3</sub> : friends in the workplace
a <sub>4</sub> : nice long summers	b <sub>4</sub> : better career prospects
...	...

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<sup>189</sup> “[On] les conçoit comme de purs objets du choix, de simples choses du monde extérieur, vers lesquelles on tourne successivement le regard du décideur.” (Picavet, ‘Action et Décision : Le Sens Des Interrogations de Bergson’, 196, my translation.)

<sup>190</sup> “Or les vois ... ne sont en réalité données à la conscience du sujet que si elles correspondent à une expérience du sujet. Il est donc abusif de les considérer comme données *simultanément* : il faudrait reconnaître qu’elles correspondent plutôt à des expériences successives de la conscience.” (Picavet, 199, my translation; see also Picavet, *Choix rationel et vie publique : Pensée formelle et raison pratique*, 43.)

<sup>191</sup> It should be pointed out that the discussion that follows still does not go far enough in capturing what Bergson is trying to say, since the identification of individual aspects of “Aberdeen” and “Birmingham,” however “fine-graining,” still reifies the sub-elements of the decision-making process.

In this example,  $a_{1-n}$  describe individual features of the job in Aberdeen, and  $b_{1-n}$  of those in Birmingham that we have (or could have) listed on a sheet of paper to make our decision easier. The customary way of analysing the decision is to assume that the agent looks from one possibility to another and then considers which features matter more to them, perhaps even assigning values of preference, and then seeing that, say, Aberdeen, outweighs Birmingham:

$$[a_1(5 \text{ units}) + a_2(2 \text{ units}) + \dots] > [b_1(3 \text{ units}) + b_2(3 \text{ units}) + \dots]$$

Once we have performed the calculation, a decision naturally results.

However, the Bergsonian would find several faults with this analysis. Let us leave aside that the table above is inaccurate as such by definition; our picking out of these features is already a process that took place in time and that expressed our character (for example, it seems like the author of the list above cares a great deal about pubs and London). More importantly, however, the process of shifting from one factor to the other, thereby oscillating between “Aberdeen” and “Birmingham” ( $a_1$ , then  $b_1$ , then  $a_2$ , then  $b_2$  and so on, perhaps returning to some earlier features later) in fact changes the things we were deciding between. We started with two vague unspecified entities reified into “things” with distinct labels (Aberdeen, Birmingham), but then realised that the things change in the decision-making process. “Aberdeen” and “Birmingham” gradually took on more specific contours, became less blurry and began to produce different impressions on us; whereas Aberdeen started off at  $a_1$  as a place close to the sea, at  $a_4$  it becomes somewhere we consider not being great for our future career. Furthermore, it is not only Aberdeen and Birmingham *qua* possibilities of choice that change, it is *us too*. When considering factor  $a_1$ , we did not perhaps realise that not knowing anyone in Birmingham mattered to us that much — by the time we get to  $a_4$ , we discover that we are perhaps tired of working in places with bad career prospects or where one might not be able to go for a pint with friends. What the non-Bergsonian considers as a fixed agent S and two fixed reified possibilities A and B (taking a job in Aberdeen and in Birmingham respectively) is thought of by the Bergsonian as an indivisible process — a process in which everything changes — both us and the things we are deciding between:

[W]hen we have to determine a future state of consciousness, however superficial it may be, we can no longer view the antecedents in a static condition as *things*;

we must view them in a dynamic condition as processes since we are concerned with their influence alone.<sup>192</sup>

Appealing to an example from Amartya Sen,<sup>193</sup> Picavet demonstrates that the situation is even more complicated when we throw more factors into the set-up.<sup>194</sup> Suppose we keep the same parameters of the situation, but instead Aberdeen and Birmingham do not designate jobs that we have already been offered, but jobs we are intending to apply for, having stipulated that we can only send one application. Now, suppose we find out that we are more likely to be given the job in Birmingham rather than the one in Aberdeen. Do “Aberdeen” and “Birmingham” remain the same things that we were deciding between? Or does one appear in a different light from the other? Knowing the probability of one of the possibilities, in fact, changes the probability of that possibility itself.<sup>195</sup> This further illustrates that the decision-making process and the reified things being decided between form part of a whole:

What matters from now is not merely the nature of the consequences [of decision]; it is also the manner in which they appear conjointly, interconnected by the actions which lead to them. ... In these conditions, it is rather difficult to represent the choice between the options in the manner of (for example) the choice of a dish in a restaurant, since the options are in fact actions with uncertain consequences. ... To put it simply: we do not understand the decision if we only consider the objects of choice considered separate from the choice itself; we must also consider the manner in which they appear to the deciding agents.<sup>196</sup>

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<sup>192</sup> TFW 198/149, my italics.

<sup>193</sup> Sen, ‘Rationality and Uncertainty’.

<sup>194</sup> What follows is an adapted example from Sen quoted in Picavet, ‘Action et Décision : Le Sens Des Interrogations de Bergson’, 203–6.

<sup>195</sup> The situation could be even more complicated by telling the agent what their “new” probability (having found out the first probability) was going to be. For instance, if at  $t_1$  the probability of S choosing A is  $p$ , and we tell S that this is in fact the case at  $t_2$ , this changes what  $p$  in fact is at  $t_3$  (either because the agent wants to resist the probability out of spite or because it confirms their confidence in choosing A). I am grateful to Hugh Mellor for this observation.

<sup>196</sup> “Ce qui compte dès lors, ce ne peut pas être seulement la nature des conséquences ; c’est aussi la manière dont les conséquences possibles apparaissent conjointement, liées entre elles par les actions qui mènent à elles. ... Dans ces conditions, il est assez difficile de représenter le choix entre des options à la manière (par exemple) du choix d’un plat au restaurant, lorsque les options sont en fait des actions aux conséquences incertaines. ... Pour le dire simplement : on ne comprend pas vraiment la décision si l’on ne considère que des termes du choix mis à distance du choix lui-même ; il faut considérer aussi la manière dont ils apparaissent aux agents qui délibèrent.” (Picavet, ‘Action et Décision : Le Sens Des Interrogations de Bergson’, 205–6, my translation.)

And here, of course, the way these choices appear to the individual agents changes as the decision-making process progresses. “The experience of choice by a subject becomes itself a factor in the evaluation of the options proposed to this subject. ... The options do not exist independently of the movement of the mind in the choice under consideration.”<sup>197</sup>

The features of the retrospectively-identified objects of choice do not exist independently of our contemplation of them; we assign values to them depending on the preferences we have as unique individuals. Whereas an agent S might be able to cope with lots of horrible seagulls in Aberdeen because they prefer living by the seaside, this is not the case for agent T. The features of Aberdeen (including “the presence of evil seagulls”) are constant; but the features of Aberdeen *qua* an object of choice are not constant and depend on the character of the agent in whose decision-making process they feature. The preferences of the agent might change *in the course of* the decision-making process and *as a result* of the decision-making process. Perhaps the agent is suddenly overcome by a strange passion for seagull-watching. It is not only that the objects of choice exist merely *qua* objects of choice as seen through the preferential values of the decision-maker, but, more importantly, the values of the decision-maker are not fixed in advance of the decision. We, therefore, cannot say: “Well, S’s values are such and such, so these are S’s possibilities with their values assigned.” Of course, the *job* in Aberdeen and the *job* in Birmingham exist as two independent entities, but *as such* they do not feature in the agent’s decision-making process; and inasmuch as they feature in the decision-making process, the terms “Aberdeen” and “Birmingham” designate two constantly-changing impressions.

The tendency to picture the process of deciding using a schematic diagram of the branching-tree also illustrates the crucial distinction that Bergson posits between “symbol” and “image.” Bouaniche defines this distinction as follows:

An image is an adequate representation of reality; a symbol creates a correspondence between two elements of a heterogeneous nature. A line on a map is an “image” of the advance of an army, as the army has crossed space: the

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<sup>197</sup> “L’expérience du choix par un sujet devient alors lui-même un élément de l’évaluation des options proposées à ce sujet. ... [L]es options n’existent pas indépendamment du mouvement de l’esprit dans le choix que l’on considère.” (Picavet, 207, 209, my translation.)

branches of a given decision are, by contrast, a “symbol,” since when I choose, I do not travel on a path and its branches, but through temporal states.<sup>198</sup>

For Bergson, it is a mistake to draw any conclusions (e.g., about the number of antecedent possibilities or the point in time at which the decision was taken) from the diagram; we have made a mistake of using “diagrams which have for us become reality itself”<sup>199</sup> and need to return to and think about reality, not its symbolic representation. And we must be careful: Bergson warns that even when we do not explicitly appeal to such diagrams, they are almost always there at the back of our mind.<sup>200</sup> Bergson thinks that analysing free-will problems along the lines of these diagrams is the culprit behind the metaphysical problems of free will since we inevitably begin thinking of the *symbol* of the decision-making as an *image*.<sup>201</sup> According to Pariente, asking whether we “could have done otherwise” does not make sense, because

it presupposes the possibility of considering a schema of a representation to be adequate to the process inscribed in *la durée*, forgetting that one of them is successive, whereas the other is simultaneous; or, once again, because [the question] accords the same value of an image to what can only be a symbol.<sup>202</sup>

As Picavet comments:

The general formalism retained by decision-theorists is purely an instrument of representation or of projection, by which we enable ourselves to think of the decision as if it were a process external to consciousness, inscribed in time in the style of a physical phenomenon, and also inscribed in space in a certain way, due to the symbolism of trees of decision, [a symbolism], which assimilates choices to a trajectory leading across a hierarchised succession of branches. The mathematical formulation does not always rely on an explicit recourse to trees of

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<sup>198</sup> “L’image est une représentation adéquate de la réalité ; le symbole opère une mise en correspondance de deux éléments de nature hétérogène. Le trait sur la carte est une ‘image’ de l’avancée de l’armée, car celle-ci a bien parcouru de l’espace ; les embranchements d’un arbre de décision sont en revanche un ‘symbole,’ car quand je choisis, je ne passe pas par un chemin et des bifurcations, mais par des états temporels.” (Bouaniche, ‘Dossier Critique’, 244–45, note 53, my translation; see also Pariente, *Le Langage et l’individuel*, 15–16.)

<sup>199</sup> MM 187/209.

<sup>200</sup> TFW 177/133; Picavet, ‘Action et Décision : Le Sens Des Interrogations de Bergson’, 193.

<sup>201</sup> Picavet, 197–98.

<sup>202</sup> “Une telle question n’a pas de sens parce qu’elle présuppose la possibilité de tenir un schéma pour la représentation adéquate d’un processus inscrit dans la durée, en oubliant que l’un est successif et l’autre simultané ; ou encore, parce qu’elle accorde valeur d’image à ce qui ne peut être que symbole.” (Pariente, *Le Langage et l’individuel*, 17, my translation.)

decision. But it is always presupposed, even if we adopt a different form of notation or representation.<sup>203</sup>

This more general point, which is related to Bergson's claim that homogeneous space is "simply *conceived*, never *perceived* [*simplement conçu, jamais perçu*], [and that] it has exactly the value of a symbol"<sup>204</sup> can also be illustrated by a methodological point raised by D. C. Williams in his discussion of the passage of time. Williams argues that one of the reasons why many people struggle to accept the *stasis* theory of time is a "mismatch" between reality and its representation in the *stasis* theory:

[T]he conceptual scheme is indifferently flat and third-personal, like a map, while the experienced reality is centripetal and perspectival, piled and palpitating where we are, grey and retiring elsewhere.<sup>205</sup>

For the time being Williams' point about the illusion of perspective-centredness that our experience of time gives us is not contested. Nevertheless, the metaphor of the *map* and *reality* to illustrate the relation between the conceptual scheme of the *stasis* theory and our experience of time can be used to clarify Bergson's distinction between *symbol* and *reality*. Bergson would concede that the tree of branching possibilities adequately represents the past, but he would strongly disagree about the possibility of such a diagram representing our present decision-making. Bergson does not question the heuristic assets of the map. Nevertheless, he wants to provide an adequate account of reality, not of the map itself. He would also point out that we cannot use the schema to infer conclusions about the action itself — similarly to the impossibility of inferring many things about reality from a given map; no map can completely and adequately reflect reality, unless the map becomes, to use an example of Borges', so large as to coincide with reality itself.<sup>206</sup>

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<sup>203</sup> "Le formalisme général retenu par les théoriciens de la décision est un pur instrument de représentation ou de projection, par lequel nous nous rendons capables de penser la décision comme s'il agissait d'un processus extérieur à la conscience, inscrit dans le temps à façon d'un phénomène physique, et aussi inscrit dans l'espace en quelque manière, à cause du symbolisme des arbres de décision, qui assimile les choix à un parcours réglé à travers une succession hiérarchisée d'embranchements. La formalisation mathématique des choix ne s'appuie toujours sur le recours explicite aux arbres de décision. Mais il est toujours entendu, lorsqu'on adopte d'autres formes de notation ou de représentation." (Picavet, *Choix rationnel et vie publique : Pensée formelle et raison pratique*, 38, my translation.)

<sup>204</sup> CM 153/204.

<sup>205</sup> Williams, 'The Myth of Passage', 466.

<sup>206</sup> See Borges, 'On Exactitude in Science'.

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This chapter has argued that the early analytic rejection of Bergsonian philosophy motivated by Russell's critique is unjustified and proposed a new reconsideration of certain key insights from Bergson's works, liberated from the initial suspicion instilled into analytic circles by Russell. However, one might ask: even if Russell had not been careful enough a reader of Bergson, can we draw significant methodological conclusions from a relatively minor debate in analytic philosophy taking place over a hundred years ago? Is Bergson's philosophy relevant to contemporary treatments of time in analytic philosophy? We will put Bergson's writings about free will aside for a moment, and explore the question about Bergson and analytic philosophy of time in the next chapter.



## 2. Bergson and McTaggart<sup>207</sup>

This chapter aims to construct a Bergsonian response to McTaggart's argument for the unreality of time.<sup>208</sup> I will further explore the two categories of temporality stipulated in the previous chapter (*la durée* and "spatialised time") and demonstrate that (i) McTaggart's argument does not apply to *la durée* and that (ii) although it applies to "spatialised time," Bergson, unlike McTaggart, would not have regarded this as that much of a problem, thereby showing that B-series-oriented<sup>209</sup> philosophies of time can be fitted into the framework of Bergson's philosophy. This chapter will likewise respond to a caricature — frequently perpetuated by analytic philosophers — which presents Bergson as putting forward an A-theory of time. Since many philosophers in the analytic tradition have taken Bergson's claims about "spatialised" and "spatialising" time as applying to the B-theories, they have mistakenly classified him as an A-theorist.<sup>210</sup> In turn, the suspicion of A-theories, together with a general suspicion of Bergson's philosophy inculcated in the analytic context by Russell, significantly contributed to Bergson's disappearance from discussions about philosophy of time in the English-speaking world.

The delimitation of context is crucial for this chapter. While there have been various attempts at relating Bergson's philosophy to contemporary A and B-debates, their treatment of Bergson has not always been careful and has tended to extract individual arguments out of his overall metaphysical system.<sup>211</sup> The same has recently been forcefully argued about McTaggart.<sup>212</sup> This chapter will try to avoid two approaches to the paradox. On the one hand, I will not enter directly into contemporary debates about A- and B-theories of time. This is partially due to the fact that grasping the differences between A- and B-theories of time has

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<sup>207</sup> An updated version of this chapter is currently forthcoming as Moravec, 'Bergson and McTaggart's Argument'.

<sup>208</sup> McTaggart, 'The Unreality of Time'; McTaggart, *The Nature of Existence*, 2:§303-52; §521-89.

<sup>209</sup> By the B-series I understand the ordering of events by the relations of "before" and "after," by the A-series the relations of "being past," "being present," and "being future."

<sup>210</sup> See for example Williams, 'The Myth of Passage'; Grünbaum, 'The Status of Temporal Becoming'. The accusation of putting forward the "spatialising" objection against B-theories is particularly anachronistic when applied to Bergson since this objection appeared after philosophy of time began to grapple with the way time was understood by the special theory of relativity. It is an anachronism that Bergson himself had tried to avoid: "[In TFW] I did in fact show that measurable Time could be considered as 'a fourth dimension of Space.' It was, naturally, a question of pure Space, and not of the mixture Space-Time of the theory of Relativity, which is quite another thing." (CM 221, note 17, my italics/102, note 1)

<sup>211</sup> See for example Williams, 'A Bergsonian Approach to A- and B-Time'; A much more nuanced assessment of Bergson's philosophical framework can be found in Deppe, 'The Mind-Dependence of the Relational Structure of Time (or: What Henri Bergson Would Say to B-Theorists)'.

<sup>212</sup> See Ingthorsson, *McTaggart's Paradox*.

recently become rather difficult and many of the concerns that have traditionally served as criteria to distinguish them (e.g., the question about the reducibility of tense or entailment of a particular temporal ontology) are now extremely hard to pinpoint with precision.<sup>213</sup> On the other hand, I will not confront Bergson's philosophy with the whole of McTaggart's neo-Hegelian system and discussions about time that figure in it.<sup>214</sup> McTaggart's paradox proposes a real philosophical problem regardless of its setting within neo-Hegelianism (analytic philosophy has always treated it as such) and the fact that many of the notions that McTaggart operates with (especially the way he understands the C-series and/or eternity in *The Nature of Existence*<sup>215</sup>) have little, if any relevance to contemporary analytic philosophy of time. Instead, I provide a Bergsonian response to McTaggart's paradox as it was presented in "The Unreality of Time" from 1908. This should not only allow me partially to ignore questions about, for example, the truth-makers for propositions, or the status of tenseless language<sup>216</sup> but also to diagnose certain problems with the way time was understood by McTaggart — problems which were later carried over into contemporary A- and B-debates.<sup>217</sup>

For the sake of clarity, this chapter will operate with the following two terms which are based on the overall framework of Bergson's philosophy presented in the previous chapter:

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<sup>213</sup> See particularly Mullins, *The End of the Timeless God*, 22–25; Williams, 'The Metaphysics of A- and B-Time'; Williams, 'A Bergsonian Approach to A- and B-Time'.

<sup>214</sup> For an excellent discussion, see Thomas, 'British Idealist Monadologies and the Reality of Time: Hilda Oakeley against McTaggart, Leibniz and Others'.

<sup>215</sup> There is a significant shift between the role that the C-series plays in the constitution of the B-series in McTaggart's system. In the "Unreality of Time," McTaggart implies that the C-series has no intrinsic direction and merely determines the order of things. In *The Nature of Existence*, he argues that the C-series has some sort of direction, although this "direction" is not a temporal one (see McTaggart, 'The Unreality of Time', 426; McTaggart, *The Nature of Existence*, 2:§351, §526; Ingthorsson, *McTaggart's Paradox*, 54–56.). Bardon argues that the C-series — at least in "The Unreality of Time" — is roughly analogous to the English alphabet – its members are ordered (i.e., "B" comes between "A" and "C" regardless of whether we read the alphabet from A to Z or backwards), but although we are used to reading it in a particular direction (A, B, C...), there is nothing intrinsically directional about it: no contradiction would arise if we were to read it backwards (Z, Y, X...) (Bardon, *A Brief History of the Philosophy of Time*, 122.).

<sup>216</sup> Ingthorsson insists that the questions that now dominate the A- and B-debates were completely alien to those of McTaggart (Ingthorsson, *McTaggart's Paradox*, 60–76.). For an example of the shift from time as an ontological problem to a problem of philosophy of language, see Prior, 'Changes in Events and Changes in Things'.

<sup>217</sup> Bergson never interacted with McTaggart's argument. F. C. T. Moore attributes this silence to the fact that McTaggart's "Unreality of Time" (1908) was published long after TFW and MM, which deal with the major issues proposed by McTaggart. (Moore, *Bergson: Thinking Backwards*, 54.) Nothing suggests that Bergson and McTaggart met during Bergson's visit to Cambridge in 1920 (when McTaggart was still a fellow at Trinity College) to receive an honorary doctorate. There are no mentions of who suggested Bergson for the degree, no mentions of Bergson's visit in the minute book of the Special Board of Moral Science or the Moral Sciences Club, both of which are stored in the Cambridge University Library. For details of the award of Bergson's honorary degree, see the *Cambridge University Reporter*, 25<sup>th</sup> May 1920, p. 1021; 19<sup>th</sup> June 1920, pp. 1175-1180.

By “objective time” I understand the medium applicable to objects in the external world, the “array of possible ways ... in which [two objects] *a* and *b* can fail to be in contact when in the same place,”<sup>218</sup> regardless of the presence of the human mind. Objective time is the medium discussed in physics and mathematics whose values are denoted by the variable “*t*.” The nature of objective time is what A- and B-theorists disagree about; it is quantifiable, divisible into instants and segments, sharing many (though not all) properties with space,<sup>219</sup> representable diagrammatically and allowing, in the vast majority of cases, of clear cut-offs between temporally extended objects that exist in it. Objective time carries with it a particular notion of change, Russellian change, which I take, following Mellor, to consist of “things having, at different times, incompatible properties, i.e., properties that no one thing could have at the same time.”<sup>220</sup>

By “*la durée*” I understand what is sometimes referred to as “subjective time,” the internal flux of consciousness immediately accessible by phenomenological introspection,<sup>221</sup> regardless of the presence of the external world. As the previous chapter has demonstrated, *la durée* is indivisible, unquantifiable, indescribable by literal language, constantly changing, and not allowing of clear-cut distinctions between its “areas” or “segments.” Bergson’s description of *la durée* entails a particular definition of change, which will here be understood as the qualitative heterogeneous development of consciousness described earlier (see section 1.2).

As we will see, the lack of a clear distinction between the two notions — to which, arguably, Bergson is guilty of having contributed by talking of “Real Time,”<sup>222</sup> which he understood as *la durée* and contrasted with “spatialised time” — has led to the ongoingly-perpetuated confusion of regarding Bergson as an A-theorist; where Bergson talked about *la durée*, the B-theorists have taken him to refer to external measurable objective time.

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<sup>218</sup> Mellor, *Mind, Meaning, and Reality*, 163–64.

<sup>219</sup> For a discussion of which of these properties may be shared, see Schlesinger, ‘The Similarities Between Space and Time’.

<sup>220</sup> Mellor, *Mind, Meaning, and Reality*, 169.

<sup>221</sup> I leave undiscussed the specific details of this introspection. Bergson himself is surprisingly silent about this and a thorough account of “introspection” and “awareness” applicable to *la durée* is yet to be elaborated. A good framework for starting this engagement would be Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 28–59.

<sup>222</sup> Maritain frequently stresses the “negative power” of *la durée*, that is, its ability to reject the reduction of all temporality to the time available in physics: “Real time *is not* the spatialized time of our physics; and this is true indeed, for the various times of the physicist are mathematical entities which are built up on complex patterns of spatio-temporal measurement, and which are doubtless based on real time, but are not that time.” (Maritain, *Bergsonian Philosophy and Thomism*, 306.)

## 2.1. McTaggart's Argument

It is beyond the scope of this essay to provide a discussion of the metaphysics, methodology, and structure of McTaggart's paradox. It has also been done elsewhere in much more detail.<sup>223</sup> This section will merely focus on three key claims that McTaggart's argument rests on. The next section will provide a Bergsonian response to each one of them.

*Claim 1: There is no change in the B-series.* McTaggart argues that the "earlier than" and "later than" determinations of the B-series are insufficient to constitute change, which is a necessary condition of time's being time:

If N is ever earlier than O and later than M, it will always be, and has always been, earlier than O and later than M, since the relations of earlier and later are permanent. And as, by our present hypothesis, time is constituted by a B series alone, N will always have a position in a time series, and has always had one.<sup>224</sup>

Furthermore, McTaggart, disputing Russell's theory of change,<sup>225</sup> claims that if we try to look for change in the "numerically different moments of absolute time, supposing such moments exist,"<sup>226</sup> we will not find it there, since those moments of absolute time themselves do not change. The individual points of absolute time are related to each other by permanent relations and arranged in a sequence which, *itself*, does not change.

*Claim 2: The relations of past, present and future are mutually incompatible.* McTaggart argues that "past, present and future are incompatible determinations."<sup>227</sup> It is important to point out that, contrary to the way that McTaggart's paradox is usually understood, in his metaphysical system "past," "present," and "future" are *not* considered as monadic qualities predicated of individual substances,<sup>228</sup> but as *relations* — although it remains unclear what they are supposed to be relations *to*.<sup>229</sup> Ingthorsson comments:

Although McTaggart explicitly states that he takes future, present, and past to be relations, he is often accused of treating them as monadic properties. It is difficult

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<sup>223</sup> See for example Ingthorsson, *McTaggart's Paradox*; Dummett, 'A Defense of McTaggart's Proof of the Unreality of Time'; Mellor, 'The Unreality of Tense'; Dainton, *Time and Space*, 13–26.

<sup>224</sup> McTaggart, 'The Unreality of Time', 459; McTaggart, *The Nature of Existence*, 2:§313, §315, §324; Ingthorsson, *McTaggart's Paradox*, 38–40.

<sup>225</sup> See McTaggart, *The Nature of Existence*, 2:§318.

<sup>226</sup> McTaggart, 'The Unreality of Time', 460.

<sup>227</sup> McTaggart, 468.

<sup>228</sup> See McTaggart, *The Nature of Existence*, 2:§326; McTaggart, 'The Unreality of Time', 467–68.

<sup>229</sup> See Ingthorsson, *McTaggart's Paradox*, 44; Dainton, *Time and Space*, 19.

to understand from where this misunderstanding derives, because he is quite explicit in his own claims. ... I am inclined to think that the myth that McTaggart treats tenses as monadic properties owes its existence, originally, from a tendency — on behalf of commentators — to read expressions of the form “M is present, has been future, will be past” as inevitably implying some form of subject-predicate structure and to assume that every such predicate must denote a monadic property ... . Those who are acquainted ... with McTaggart’s argument through commentaries then propagate the myth.<sup>230</sup>

As a matter of fact, McTaggart himself briefly considers the possibility that these determinations could be monadic qualities and not relations,<sup>231</sup> but notes that the same problem with regards to the contradiction in the A-series would also apply:

If the characteristics of the A series were qualities, the same difficulty would arise as if they were relations. For, as before, they are not compatible, and, as before, every event has all of them. This can only be explained, as before, by saying that each event has them successively. And thus the same fallacy would have been committed as in the previous case.<sup>232</sup>

*Claim 3: Time is unreal.* Based on the fact that the A-series is both required for change (and therefore time) and that it is self-contradictory,<sup>233</sup> McTaggart concludes that time is unreal:

[McTaggart’s] conclusion is that he can decidedly prove that [the two aspects, A-series and B-series] cannot be reconciled as real characteristics of Reality because any attempt to do so will inevitably lead to contradiction. Instead, they can only be reconciled as Reality and Appearance, i.e., that Reality is Absolute while appearing to be Temporal. ... . In other words, a contradiction emerges only if one accepts the Hegelian characterisation of an Absolute Reality ... and nevertheless tries to construe a concept of such a reality as also being Temporal.<sup>234</sup>

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<sup>230</sup> Ingthorsson, *McTaggart’s Paradox*, 44–45.

<sup>231</sup> McTaggart, ‘The Unreality of Time’, 469.

<sup>232</sup> McTaggart, 469–70.

<sup>233</sup> See McTaggart, 468–70.

<sup>234</sup> Ingthorsson, *McTaggart’s Paradox*, 7.

## 2.2. *La Durée*, Memory, and Time

In a frequently overlooked footnote in the second volume of *The Nature of Existence*, McTaggart offers the following distinction:

By objectively real time, I mean a common time in which all existent things exist, so that they stand in temporal relations to each other. By subjectively real time, I mean one in which only the different states of a single self exist, so that it does not connect any self with anything outside it.<sup>235</sup>

Refuting the claim that “we are so immediately certain of the reality of time, that the certainty exceeds any certainty which can possibly be produced by arguments to the contrary,”<sup>236</sup> McTaggart contends instead that “... any theory which treated time as objectively real could only do so by treating time, *as we observe it*, as being either unreal or merely subjective.”<sup>237</sup> The Bergson-style response to the paradox proposed below — resting on the distinction between objective time and subjective time (equated with *la durée*) — will, on the contrary, propose that (i) time “*as we observe it*” (coextensive with *la durée*) is real and not subject to the contradiction and that (ii) *la durée* plays a constitutive role in the way that our temporally-objective concepts are built. This reverses the relation between objective and subjective time stipulated by McTaggart; objective time is secondary. Subjective time *qua durée* is not an illusory side-effect of objective time,<sup>238</sup> rather, it is the bedrock on which objective time is constructed.

The relation between *la durée* and objective time in TFW can be plotted onto the following threefold sequence of dependence, which moves in direct opposition to McTaggart’s claim that the timeless objective C-series, as a feature of Absolute Reality, is primary in the order of existence, and that it grounds the B-series and the A-series in Reality as Appearance.<sup>239</sup>

(i) At the deepest level, *la durée* is the immediately accessible stream of mental states, in which memories of past states are retained<sup>240</sup> and have an effect on the qualitative nature of

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<sup>235</sup> McTaggart, *The Nature of Existence*, 2:§343, footnote 1.

<sup>236</sup> McTaggart, 2:§342.

<sup>237</sup> McTaggart, 2:§343.

<sup>238</sup> Mellor: “The fact is that temporal, personal, and spatial A-concepts all depend on the corresponding B-concepts, not the other way round.” (Mellor, *Mind, Meaning, and Reality*, 173.)

<sup>239</sup> McTaggart, *The Nature of Existence*, 2:§526.

<sup>240</sup> Bergson does not provide many details of how this “retention” is supposed to work. For a non-Bergsonian account, see Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 123–27. For Dainton’s attempt at linking the standard accounts of “retention” and “extension” to Bergson, see Dainton, ‘Bergson on Temporal Experience and *Durée Réelle*’.

the ones that follow (see section 1.2). The retention of memories that we carry with us and their blending with the present gives us an immediate qualitative perception of change. In this respect, Bergson would have once again been in complete agreement with J. R. Lucas who asserts that the (rather nebulous and confused) qualitative changes in our stream of consciousness are in themselves sufficient to instantiate temporality.<sup>241</sup> Even if a philosopher completely banished time from the external world, he could not imagine the existence of a consciousness that would not, itself, instantiate an example of something that is intrinsically temporal. Bergson's point is much stronger than claiming that *la durée* necessarily *represents* temporality — rather, he claims that *la durée* is itself necessarily an ontological *instantiation* of it.<sup>242</sup> Or, on other words, the moment we imagine a possible world with consciousness in it (even if it were a consciousness existing as a disembodied spirit), in that very act, necessarily, we must imagine that in that possible world there exists something temporal. The intuition of a close link between temporality and consciousness, a link that is for Bergson equivalent to identity, is also what lies behind the frequent intuition of theologians that God, if He is to be *conscious*, may well exist outside of space (in the sense that his existence would not be limited or would not display the usual properties associated with spatial objects), but certainly may not exist outside of time (i.e., He must display at least some of the properties associated with objects existing in time).<sup>243</sup>

The inseparable link between temporality and consciousness is a point that McTaggart himself concedes; he accepts that our mental states cannot fail to *appear* to be in time, even when we doubt the existence of material reality.<sup>244</sup> Of course, McTaggart argues that we should beware of treating experience as reliable evidence for the nature of reality,<sup>245</sup> but this does not prevent us from treating experience as reliable evidence for that very experience itself. We may not infer from the fact that, for example, we experience a particular object *as present* that it *is present* (perceiving a star hundreds of lightyears away is a good example<sup>246</sup>), but we can surely

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<sup>241</sup> Lucas, *A Treatise on Time and Space*, §2.

<sup>242</sup> While it is difficult to fit Bergson into the absolutist/relationist distinction about time, if “time” is taken as *la durée*, then time is utterly dependent on events in it, i.e., Bergson is a relationist. For a detailed discussion, see Le Poidevin, ‘Relationism and Temporal Ontology: Physics or Metaphysics?’

<sup>243</sup> See Pike, *God and Timelessness*, 121–30.

<sup>244</sup> See McTaggart, *The Nature of Existence*, 2:§303-4; Ingthorsson, *McTaggart's Paradox*, 30.

<sup>245</sup> See Ingthorsson, *McTaggart's Paradox*, 52.

<sup>246</sup> For an excellent discussion of what it means to perceive something as present, see Butterfield, ‘Seeing the Present’. Mellor: “... [T]he idea that we see events as present comes from confusing what we see with the experience of seeing it, which is indeed always present. ... While as for *what* we see, that never looks present — or past, or future. We cannot for example see which of two celestial events is the earlier by seeing which looks more past.” (Mellor, *Mind, Meaning, and Reality*, 174.)

infer that our experience *itself* is present. To use an analogy, our immediate phenomenological evidence of tasting an apple gives us no grounds for inferring that we are eating an apple, but we may be certain about the phenomenological experience itself, i.e., we may be certain that our experience itself is apple-like: “Since the phenomenal is the realm of appearance, if experience seems to exhibit flow and passage, it does.”<sup>247</sup> Similarly, *la durée* gives us an immediate experience of change and development, which serves as evidence for change at least “in our heads.” Introspecting ourselves, we feel that more and more present experiences are added to the overall sum of our memory which, in turn, affects the nature of present experience, even if this does not yet give us grounds for inferring that there is change in the external world. The hole that McTaggart digs himself into by positing a subject and simultaneously affirming the unreality of time is brilliantly captured by Dummett:

[The conclusion that time is unreal] seems self-refuting in something of the way in which, as McTaggart himself points out, the view that evil is an illusion is self-refuting: that is, if there is no evil, the illusion that there is evil is certainly evil. ... Clearly, even if the world is really static, our apprehension of it changes. It does not help to say that we are even mistaken about what we think we see, because the fact would remain that we still make different mistakes at different times.<sup>248</sup>

(ii) At the second level, apart from giving us an immediate experience of qualitative change, *la durée*, in virtue of being the seat of memory, provides the synthesis required for our mind to retain external events, thereby enabling us to attribute temporality to the external world,<sup>249</sup> as is illustrated by the example with the pendulum discussed earlier (see section 1.2). Bergson thus follows Kant in iterating a radical mind-dependence of time. “If there is no change in consciousness, there is no time.”<sup>250</sup> Time is born at the point where our internal development of consciousness “comes into contact with the external world at its surface; ... .”<sup>251</sup> This is in direct agreement with Lucas’ earlier-quoted insistence that the crucial

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<sup>247</sup> Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 178.

<sup>248</sup> Dummett, ‘A Defense of McTaggart’s Proof of the Unreality of Time’, 503. Dainton: “How could we directly experience change and persistence unless experience itself encompasses a temporal interval?” (Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 114.)

<sup>249</sup> See for example HIT 79; EPL 339. Bergson does not think that this “synthesis” is a simple “glueing together” of distinct elements since these elements are only retrospectively identified as having been distinct. The *unity* of *la durée* is primary, before we start talking about it as being synthetic.

<sup>250</sup> “... quand il n’y a pas de changement dans la conscience il n’y a plus de temps.” (HIT 160, my translation.)

<sup>251</sup> TFW 163-4/123.



difference between time and space is that only the latter can exist without reference to the human mind.<sup>252</sup> Curiously enough, failing to realise this is precisely what McTaggart himself got criticised for by H. Oakeley: it is not only the case that without the presence of the human mind there is no experience of time but also that as soon as we stipulate the existence of the self, the experience of time inevitably follows:

McTaggart's conception of the experience of the self is in essence incompatible with the unreality of time. His logical argument for treating the perception of the temporal as error is based on the assumption that time is inseparable from change. I would suggest — in general agreement with M. Bergson, though from a somewhat different point of view — that it is impossible to separate the thought of existence from the condition of time as duration, ...<sup>253</sup>

The idea, shared by Kant, Oakeley, Bergson, and Lucas, that the existence of a conscious human mind with memory is both a necessary and a sufficient condition for temporality, has most recently been forcefully defended by Adrian Bardon. Bardon, appealing to Kant's Transcendental Deduction, contends that although some have considered the experience of temporal passage to be a projection,<sup>254</sup> that is, "[the act of] mistakenly representing some subjective phenomenal quality as instantiated in physical space or as belonging to an external object,"<sup>255</sup> it is a special kind of projection, one without which our grasp on the world would be impossible:

In the very first version of his Transcendental Deduction, [Kant] points out that the representation of any extended process or enduring object, or any coherent experience whatsoever, would be impossible if one forgot all one's experiences from one moment to the next, or failed to recognize that the perceptions one retains have been progressively combined.<sup>256</sup>

Although Bergson of course radically disagreed with Kant about the *nature* of temporality that lies at the bottom of our conscious experience (recall section 1.2: for Kant, the time of the synthesising consciousness is homogeneous and schematisable by counting, whereas for

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<sup>252</sup> Lucas, *A Treatise on Time and Space*, §7.

<sup>253</sup> Oakeley, 'Time and the Self in McTaggart's System', 182.

<sup>254</sup> See Falk, 'Perceiving Temporal Passage: An Indicator of the Nature of Consciousness', 116.

<sup>255</sup> Bardon, 'Time-Awareness and Projection in Mellor and Kant', 61; see also Bardon, *A Brief History of the Philosophy of Time*, 102.

<sup>256</sup> Bardon, 'Time-Awareness and Projection in Mellor and Kant', 68; see also Kant, *Critique of Pure Reason*, A102-103; Wolff, 'A Reconstruction of the Argument of the Subjective Deduction', 116.

Bergson it is heterogeneous and radically non-numerical), he agreed that the presence of memory is necessary for the existence of time. This follows regardless of whether we think of consciousness as the homogeneous *a priori* condition of sensibility in the case of Kant or as the heterogeneous flux of *la durée* in the case of Bergson.<sup>257</sup> The following comment by R. P. Wolff regarding the role that memory plays in counting for Kant applies equally to Bergson's earlier-discussed example of counting sheep:

When I count a row of twelve stones, I look at the first one and say "one." Then I look at the second, think of the first, and say "two" . . . . The process is repeated up to "twelve," at which time I am aware of myself as having performed a series of *connected* acts. If I merely found myself saying "twelve" after a while, or if I could recall previous utterances of "one," etc., but didn't recognize them as the earlier stages of a single activity whose culmination was the "twelve," then I could not know that I had just counted twelve objects. . . .<sup>258</sup>

(iii) Finally, at the third level, once we have moved from the immediate perception of change in *la durée* to the synthesis of mental states as memories of external events to establish temporality, the mind looks back at the trace of *la durée* in our memory to identify distinct events juxtaposed next to each other and accessible to consciousness at once, similarly to the way that a historian has direct and immediate access to successive events in the past.<sup>259</sup> This fixation and identification of distinct temporal positions can only be "achieved on the fixed memory of the duration [*la durée*], on the immobile track the mobility of the duration [*la durée*] leaves behind it, not on the duration [*la durée*] itself."<sup>260</sup> From this arrangement of temporal positions we remove the changing flux of our immediate experience of time. Deppe provides a helpful elucidation of this by observing the relationship between a melody and a sheet of music: a particular melody can be converted to the sheet of music that represents it for practical purposes, but something crucial is lost — namely, the experience of listening to the music, which is qualitatively different from the experience of reading the melody recorded (or rather

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<sup>257</sup> Ansell-Pearson, *Philosophy and the Adventure of the Virtual. Bergson and the Time of Life*, 35.

<sup>258</sup> Wolff, 'A Reconstruction of the Argument of the Subjective Deduction', 116; see also Bardon, 'Time-Awareness and Projection in Mellor and Kant', 69; Kant, *Critique of Pure Reason*, A103.

<sup>259</sup> This illustration comes from Katherin Rogers: "Augustine proposes that God's knowledge of the future and, presumably, of all time, is like our knowledge of the past. In a way, even the limited human knower can encompass an extended period of time in a single, present thought. Consider 'the Norman Conquest.' In a single concept we capture the crossing of the Channel, Stamford Bridge, Hastings, etc." (Rogers, 'Eternity Has No Duration', 15.)

<sup>260</sup> CM 141/189.

the melody which *has been* recorded) on the sheet.<sup>261</sup> We convert “... experienced successivity and continuous emergence of moments into ordered and easily accessible juxtaposition in a similar way that a sheet of music does with a melody.”<sup>262</sup> Furthermore, we extrapolate the structure that underlies the series of past events in our consciousness into the future — a series of events  $e_{-3}$ ,  $e_{-2}$ ,  $e_{-1}$  etc., with  $e_0$  as our presently experienced event, is believed to continue into the future as  $e_1$ ,  $e_2$ ,  $e_3$  etc. I leave it open whether this particular series  $e_{-3}$ - $e_3$  corresponds to the B-series or the C-series (see footnote 215); either way, each of these is by McTaggart considered to be non-temporal since nothing changes in it. The phenomenological aspect of the B-series and the C-series is similar to the phenomenological experience of states retained in our memory, states which “stand permanently in transitive and asymmetric relations to each other, but those relations [do] not deserve to be called temporal relations because they are not associated with any kind of change.”<sup>263</sup>

As has been mentioned earlier, for Bergson the conception of a series that is based on the way that our mind structures the past and extrapolates the ensuing structure into the future is primarily driven by practical utility.<sup>264</sup> Nevertheless, he would re-iterate that metaphysically, the following threefold sequence cannot be reversed:

- (i) *la durée*
- (ii) the synthesis of the mental states in *la durée* related to the events in the external world we are contemplating and then, once they have become past, spatially representing
- (iii) the removal of the phenomenologically characteristic features of qualitative change of the (i)-stage

Whilst we can conceive of events in the four-dimensional space-time block as existing without the experience of the human mind, our ability to imagine this four-dimensional block in the

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<sup>261</sup> Bergson: “That time implies succession I do not deny. But that succession is first presented to our consciousness, like the distinction of a ‘before’ and ‘after’ set side by side, is what I cannot admit. When we listen to a melody we have the purest impression of succession we could possibly have ... and yet it is the very continuity of the melody and the impossibility of breaking it up which make that impression on us.” (CM 124/166.)

<sup>262</sup> Deppe, ‘The Mind-Dependence of the Relational Structure of Time (or: What Henri Bergson Would Say to B-Theorists)’, 121.

<sup>263</sup> Ingthorsson, *McTaggart’s Paradox*, 35. Ingthorsson’s phrase “associated with” is slightly misleading — they are “associated with” change in that the positions play a role in McTaggart’s theory of error and the C-series. A better way of putting it is that “they do not deserve to be called temporal relations because they themselves do not change.”

<sup>264</sup> See for example CM 64/89.

first place requires the process of mental retention of past events in our own experience and the extrapolation of the relations that underlie them across the space-time block. As Deppe argues, although the A-series determinations are usually thought of as being more perspicuously related to the human mind, the B-series ones nevertheless also require the prior mental synthesis of events and thus cannot be separated from the existence of the mind.<sup>265</sup> Mind-dependence, therefore, cannot be used as a conclusive criterion to distinguish between the A-series and the B-series, as they are both mind-dependent in one way or another — the A-series directly, the B-series derivatively.<sup>266</sup> It must be stressed, therefore, that the following remark on Bergson's philosophy by D. C. Williams is deeply mistaken:

He [the temporalist, i.e, Bergson] is more likely to mean ... that over and above the sheer spread of events, with their several qualities, along the time axis, which is analogous enough to the spread of space, there is something extra, something active and dynamic, which is often and perhaps best described as "passage."<sup>267</sup>

The order of dependence for Bergson is exactly the opposite: it is not the case that we start with a spread of events in a four-dimensional continuum and then seek to "add" passage, temporal "now," or direction into it, but rather, we must start with the qualitative and perhaps confused sense of irreversible temporal passage and then use this as a bedrock on which to create the logical construct of the four-dimensional block.

Now, it could be argued that criticising McTaggart for failing to see that our immediate subject-dependent feeling of passage comes before the B-series rests merely on a superficial reading of his texts. In another neglected footnote of *The Nature of Existence*, McTaggart explicitly states that the notion of passage in the A-series has to be present to us before we may start to construct the B-series:

We cannot have time without change, and the only possible change is from future to present, and from present to past. Thus until the terms are taken as passing from future to present, and from present to past, they cannot be taken as in time, or as earlier and later; and not only the conception of presentness, but those of

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<sup>265</sup> See Deppe, 'The Mind-Dependence of the Relational Structure of Time (or: What Henri Bergson Would Say to B-Theorists)'.  
<sup>266</sup> The precise sense of this "mind-dependence" will be discussed in Chapter 3.

<sup>267</sup> Williams, 'The Myth of Passage', 460.

pastness and futurity, must be reached before the conceptions of earlier and later, and not *vice versa*.<sup>268</sup>

Does this mean that McTaggart anticipates Bergson's view that *la durée* must come before the B-series? It must be stressed that the A-series and *la durée* are two different things. As we will see in section 2.4, *la durée* is more fundamental than the A-series, as the separation of the temporal manifold into distinct events required by the A-series can only be accomplished once we have made the move to spatialised time. The Bergsonian "passage" is construed as *la durée* (i.e., indivisible, gradual, heterogeneous etc.), the McTaggartian "passage" is already indexed to distinct, divided, discontinuous events to which relations of future and past apply.

By combining the premise that the A-series results in a contradiction with the premise that the B-series is non-temporal, McTaggart concluded that time is unreal. Nevertheless, he believed that the atemporal C-series underlying these is real and not subject to the conditions of Appearance: "There is nevertheless a real series of constituents that stand in linear, asymmetric, and transitive relations that gives the series a *sense* of direction (but ultimately a sense that will be misperceived as temporal). This series is the C-series."<sup>269</sup> Nevertheless, as Ingthorsson observes, the attempt to exclude the purely apparent temporal progress — furnished by the consciousness of an experiencing subject — from Absolute Reality, thereby ignoring the role that our mind plays in establishing objective time, McTaggart ends up with another rather embarrassing paradox:

The C series is presented as a series of discrete entities between which there hold the external relations of "inclusive of" and "inclusive in" relations, and there is nothing in this model which would explain why each of the terms of this series would appear to have the characteristic of being a state of one and the same self which is progressing through a series of states. Indeed, McTaggart should have noticed ... that his model indicates the absence of a self that has experiences; it is a model of experiences had by nothing. We are faced with an argument that says that the continuity of experience can arise only if there is an enduring self.<sup>270</sup>

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<sup>268</sup> McTaggart, *The Nature of Existence*, 2:§610, footnote 1.

<sup>269</sup> Ingthorsson, *McTaggart's Paradox*, 54.

<sup>270</sup> Ingthorsson, 59; see also Oakeley, 'The Philosophy of Time and the Timeless in McTaggart's Nature of Existence'; Oakeley, 'Time and the Self in McTaggart's System'.

### 2.3. A Bergsonian Response to McTaggart's Argument

Now that the centrality of *la durée* for time has been established, how can we respond to Claims 1-3 from section 2.1?

Regarding Claim 1, i.e., that there is no change in the B-series, Bergson would happily concede this point. The B-series is a secondary structure extrapolated from *la durée* and applicable to the external world for reasons of practical utility; there is no change in it, simply because change proper may only be found in *la durée*, whereas objective time is, by its very nature and origin, characterised by the removal of the immediate phenomenology of change and the extrapolation of the structure underlying the unchangeable record of the past into the future, perhaps with qualifications regarding the modal status of future events. Contrary to what his remarks in some of his early works suggest, Bergson would not regard the existence of the B-series as particularly precarious — as long as we bear in mind that it is merely derivative and dependent on *la durée*. He acknowledges that there is a static realm which stems from real, lived temporality (he calls this realm “spatialised time” or occasionally simply “space”), but simply warns us against the metaphysical stumbling blocks of reducing all temporal phenomena to it. As Worms puts it:

[T]he challenge of the philosophy of *la durée* will not consist only in criticising space, or in overcoming it, but also in justifying it and situating it in metaphysics, in a theory of knowledge and psychology, which it attempts to ground and which are articulated in it as in a philosophy of mind in its own right.<sup>271</sup>

Regarding Claim 2, i.e., that the determinations of past, present, and future are mutually incompatible, Bergson would have without doubt responded that McTaggart confuses *la durée* (as internal immediately accessible temporality) with objective time (as the external projected construct created by the human mind for practical utility). The fact that underlying McTaggart's argument about a single “time” is a division between two realms that Bergson neatly delineates as internal temporality (*la durée*) and external stasis (objective time, or more specifically, B-time) is rather well captured by Lucas' observation that McTaggart is subject to “philosophical schizophrenia.”<sup>272</sup> “Although we can fault McTaggart's arguments, his

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<sup>271</sup> “[L]’épreuve de la philosophie de la durée ne consistera pas seulement à critiquer [l’espace], ou à le dépasser, mais aussi et surtout à le justifier et à le situer dans la métaphysique, la théorie de la connaissance et la psychologie qu’elle permet de fonder et qui s’articulent en elle comme en une philosophie de l’esprit à part entière.” (Worms, ‘Les trois dimensions de la question de l’espace dans l’œuvre de Bergson’, 91, my translation.)

<sup>272</sup> Lucas, *A Treatise on Time and Space*, §52.

predicament is a real one. He feels the pull of Platonism, but senses that time is essentially unplatonic.”<sup>273</sup>

Now, as I have argued above, Bergson would agree with McTaggart that the B-series (which he would have identified with “spatialised time”) is not subject to the paradox, but at the same time changeless. Nevertheless, if *la durée* is where we should be looking for to find change, can we be certain that *la durée* is not subject to the same contradiction that McTaggart finds in the A-series?

The best way to see that *la durée* is conceptually immunised against McTaggart’s paradox is to start with thinking through his own example of the Death of Queen Anne:

Take any event — the death of Queen Anne, for example — and consider what change can take place in its characteristics. That it is a death, that it is the death of Anne Stuart, that it has such causes, that it has such effects — every characteristic of this sort never changes. ... But in one respect it does change. It began by being a future event. It became every moment an event in the nearer future. At last it was present. Then it became past, and will always remain so, though every moment it becomes further and further past.<sup>274</sup>

Now, let us consider the characteristics of the death of Queen Anne as they figure in *la durée*, as they are directly experienced. First, when the death of Queen Anne is future, its contours are rather vague — we see or have heard about Queen Anne, we know she is going to die at some point, but we do not know what our experience of her death is going to be like, how we are going to respond to it emotionally, or who will be present at the death-bed. Perhaps we have never experienced anyone dying before. The event of her death exists in our *durée* as merely a vague anticipation of a “something” we cannot quite describe or picture to ourselves with much precision — not because we lack information, but purely because the event has not yet taken place. Second, when the death of Queen Anne is present in *la durée* (i.e., when it is being contemplated or felt by us), it is directly accessible to our consciousness — we think about it, we are just reading the news in the newspaper, or we are directly perceiving her final breath. The precise characteristics of the event (nebulous when the Queen’s death was far away) are being formed because they are currently happening. Finally, once it has become a memory, its

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<sup>273</sup> Lucas, §52, my italics. Dainton: “In effect, [McTaggart’s] starting premise is that the world is fundamentally Parmenidean. He then considers whether such a world can *also* possess a dynamic Heraclitean character, while retaining its essentially timeless Parmenidean nature, and, not surprisingly, he concludes that it cannot.” (Dainton, *Time and Space*, 26.)

<sup>274</sup> McTaggart, ‘The Unreality of Time’, 460.

characteristics become more precise and fixed and we can describe the properties of the event with complete clarity. This clarity increases even further if we acquire further information about the event, for instance, about the number of people present at the death-bed, the cause of her death, or who was in a position to prevent it.

Straight away, three crucial points immediately strike us when considering the Death “from the inside” of our temporal experience:

First, note that the “events” of future-death, present-death and past-death *in our durée* are different from each other. The event of the death in memory is characterised by fixity, by a set of properties that exhaustively describe the event, and by a clear identification of causal chains leading up to it. The event in the future, on the other hand, is characterised by a vague anticipation, based on an extrapolation about already-known elements in memory (individual instances of “queens,” “deaths,” and of seeings of Queen Anne), but with blurry outlines.

Second, — and this is a point that will be explored in more detail in the final chapter — if we have free will, an important characteristic that distinguishes the death-as-future and death-as-past in our *durée* is the possibility of our causal contribution. The death-as-past can no longer be changed. The death-as-future, on the other hand, can be changed, either by our killing Queen Anne earlier, by finding a medicine that could save her, or by altering the qualitative characteristics of the event itself, perhaps by moving the dying queen to a different room. The idea that there are fixed and clearly defined events of which “Death of Queen Anne” is an example and over which glide the determinations of “future,” “present,” and “past” would perhaps work in a world in which we would merely exist as “big viewers” without the ability to change anything, but we cannot conceptualise the world in this way when our actions can contribute both to the existence and the character of events to come.

Third, Bergson would consider even the notion of an “event” of the Death of Queen Anne in *la durée* to be a metaphysically dubious entity. Not only is it susceptible to the problem of vagueness (Did it begin when the Queen got ill or when her heartbeat dropped to a particular value?), but, more importantly, its existence significantly depends on the way we use language. Since our previous experiences of other people’s deaths were all unique (the death of a statesman was different from the death of our relative) and can all be subsumed under the same concept (“death”), we come to believe that the phrase “Death of Queen Anne” refers to the same entity regardless of whether the term is considered before, after, or during her death:

[T]he word with well-defined outlines, the rough and ready word [*le mot brutal*], which stores up the stable, common and consequently impersonal element in the



impressions of mankind, overwhelms or at least covers over the delicate and fugitive impressions of our individual consciousness.<sup>275</sup>

But the actual impressions in *la durée* referred to by “Death of Queen Anne” differ depending on whether the event is being anticipated, experienced or remembered.<sup>276</sup>

Bringing all of the three points together, it seems reasonable to conclude that our *durée* contains (at different points of objective time) three distinct qualitative entities, or “substances” in McTaggart’s language:

Substance<sub>1</sub>: The vague anticipation of the death of someone we know as Queen Anne, characterised by a certain openness (our ability to change the character of the event) and an extrapolation of past experiences of deaths and instances of seeing Queen Anne. This substance is always present, but represents the event as “future.”

Substance<sub>2</sub>: The immediate experience of the death of Queen Anne. This is, trivially, always “present.”

Substance<sub>3</sub>: The memory of the death of Queen Anne, that is, the precise set of properties that characterise the event with an exact date in B-time and fixity (our inability to change the character of the event). This substance is always present, but represents the event as “past.”

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<sup>275</sup> TFW 132/98.

<sup>276</sup> Note that Bergson’s point is not only one about the application of rigid concepts to fluid reality, but also one about our being tricked by language into thinking that the objects being referred to by identical concepts are themselves identical. Whilst this is much easier to see with words like “sadness,” “love,” or “pain” (we intuitively feel that every instance of “love” is unique), Bergson claims that this is the case with *all* moments of *la durée*. Here, since the external event (before or after its happening) is designated by the phrase “The Death of Queen Anne,” we mistakenly think that the mental events of anticipating it, contemplating it, and remembering it are identical too. Bergson is not opposed to *all* conceptual thought. He is primarily concerned with specifying the metaphysical problems resulting from rigidly applying concepts to *la durée*, but within the typology of concepts, he distinguishes some that are more suitable than others. For more on Bergson’s discussion of “fluid concepts” (EPL 101; IT 104), see Bouaniche et al., ‘Dossier critique’, 436–39, note 15; Pariente, *Le Langage et l’individuel*, 21–25. This goes directly against Russell’s earlier accusation of “anti-intellectualism.” Bergson explicitly says: “I claim that this work [i.e., delving into intuition] of the spirit which transcends logic must not be illogical, and must always be able to reduce the largest part of our own selves to logical terms in such a way that there will always be in this work something clearly expressible and communicable, and something, a small part, almost nothing, and, however, the most important [part], which cannot be communicated, ... .” (“Ce que je prétends c’est que ce travail de l’esprit qui transcende la logique, ne doit pas être illogique, et doit pouvoir toujours réduire la plus grande partie de nous-mêmes en termes logiques ; de telle sorte qu’il y a toujours dans ce travail quelque chose de clairement exprimable et communicable, et quelque chose, peu de chose, presque rien, et cependant le plus important, qui ne se pourra pas communiquer, ... .” (IT 82, my translation.)

These three are different substances, composed of pure qualities in *la durée*. And now we move to the crucial step in the Bergsonian response to McTaggart's paradox. If Substance<sub>1</sub>, Substance<sub>2</sub> and Substance<sub>3</sub> are different in *la durée*, then there is no one thing to which the three determinations could attach and thus generate a contradiction. Of course, there is the event of the death of Queen Anne described in objective-time terms but that does not concern us here, since we have already conceded that objective time should be analysed using the non-contradictory B-series terms, and not the A-series ones. Here we are talking merely about *la durée*. McTaggart insists that

... changes must happen to the events of such a nature that the occurrence of these changes does not hinder the events from being events, and the same events, both before and after the change.<sup>277</sup>

However, when this dictum is applied to *la durée* (and not events in the external world, say, the rising of the moon, to use McTaggart's original example<sup>278</sup>), it becomes clear that the mental "event" of the death of Queen Anne is different before being experienced and after being experienced, simply because the "event" is constituted by different pure qualities in each case. To use an analogy: when reading a detective story, the objective order of words on the pages of the book remains the same before and after reading it. But once we have read it, the qualitative impression of reading the same order of words for the second time is different, since, for example, we now know who the murderer is and cannot regard their character without constantly thinking that they are about to kill someone.

By shifting to the contents of subjectively experienced time (*la durée*), which is composed of pure qualities, we see that anticipations of objective-time events, their experiences, and memories do not have the same qualities and are thus not the same "things." Of course, the events being anticipated, experienced, etc. may have identical descriptions in objective time, but, as McTaggart has shown, external time (or B-time) is immune from contradiction — although it does not seem to satisfy his intuitive conception of what "change" should consist of.

Symptomatic of McTaggart's confusion is the fact that he used an example of an event in his own past (namely, the Death of Queen Anne). One can see that he has been tricked by the retrospective illusion (i.e., the view that in *la durée* future possibilities in the present are

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<sup>277</sup> McTaggart, 'The Unreality of Time', 460.

<sup>278</sup> McTaggart, *The Nature of Existence*, 2:§337-8.

qualitatively identical to their past recognition in our memory (see section 1.2)) pertaining to his own experience of the Death of Queen Anne — which was entirely in his past — into taking the event as fixed, precisely defined (see quote above about “every characteristic of this thought never changes”) and then imagining placing himself at different points of the time-axis either before, at, or after the event. Similarly, we can place ourselves, mentally, before reading the detective story and after reading it, and designate the substance of the reading by a single word “detective story,” but this merely obscures the fact that, in *la durée*, this substance was something completely different *before* the reading (e.g., vague anticipation about who the murderer might be) than it was *after* the reading. The anticipation is replaced by a perception, which is replaced by memory. Had McTaggart used an event that was *actually* future for him (say, the death of Bertrand Russell), one would be surprised to see him maintain “[t]hat it is a death, that it is the death of [Bertrand Russell], that it has such causes, that it has such effects — every characteristic of this sort never changes.”

The fact that McTaggart falls prey to the illusion of retrospectivity is also evidenced by the role he accords to the C-series. Both in the *Nature of Existence* and in “The Relation of Time and Eternity” from 1909,<sup>279</sup> McTaggart seems to think of the entirety of the C-series (the whole of past, present, and future) as somehow like our own past — the C-series is simply the totality of time considered as completed, unchangeable and unchanging. Ingthorsson comments:

In McTaggart’s view, the last stage of the C series is a mental stage which is *inclusive* of all previous stages of the universe but is not itself *included* in any further stages, ... . At that point, the illusion of passage is lifted and we will indeed be aware of reality, *sub specie aeternitatis*, as the complete and perfect whole he indeed believes it to be.<sup>280</sup>

Recall again that the idea that the future is already “there,” waiting for our *durée* to reach, the idea that the future is existent from an ontological point of view but inaccessible epistemically, is precisely what Bergson cautions against: “[W]e imagine that everything which occurs could have been foreseen by any sufficiently informed mind, and that, in the form of an idea, it was thus pre-existent to its realization.”<sup>281</sup> Of course, the question of whether this is true of the

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<sup>279</sup> McTaggart, ‘The Relation of Time and Eternity’.

<sup>280</sup> Ingthorsson, *McTaggart’s Paradox*, 70.

<sup>281</sup> CM 10-11/13-14. The most extreme version of this can be found in Williams who claims that “... each of us proceeds through time only as a fence proceeds across a farm: that is, part of our being, and the fence’s, occupy successive instants and points, respectively.” (Williams, ‘The Myth of Passage’, 463.)

external world of objects depends much on the question of determinism and determinateness in the universe, which will be put aside until the final chapter. Nevertheless, it is manifestly true when applied to *la durée*, which is immediately accessible and not subject to the separation of epistemology and ontology. It is what it appears to be: as Worms emphasises, the “immediate data of consciousness” in TFW’s subtitle must be thought of as data *of* consciousness (i.e., *composing* consciousness), not *being given to* consciousness.<sup>282</sup> What is preventing us from knowing what the weather will be like tomorrow is perhaps lack of information about today’s and yesterday’s weather and the laws of meteorology; what is preventing us from knowing the qualitative impression that tomorrow’s weather will make on us is the necessity to live up through all of the development of our consciousness which will impact the way we feel about tomorrow’s weather, “because [our] state tomorrow will include all the life [we] will have lived up until that moment.”<sup>283</sup>

McTaggart defined an event as the “content of a position in time,”<sup>284</sup> but, once we stipulate two different realms (*la durée* and objective time of the B-series), “time” in this definition becomes ambiguous. If “time” is understood as external objective time, then, without the presence of human beings, the contents of all events represented in it are indeed somewhat “static” — but, as McTaggart claims, this does not lead to a contradiction. If, on the other hand, “time” is taken as *la durée*, then the purely qualitative *contents* that this *durée* takes at different positions of objective time clearly change, in which case they are to be regarded, as has been argued above, as different events. And since they are different events, no contradiction arises from attaching the same determinations to them — as is in fact the case with the determination of “presentness.”

As a matter of fact, McTaggart himself almost reaches a similar conclusion, although without the delineation of objective time and *la durée*. Regrettably, the point is also made in a completely different context, in the section of the paper where he argues against the claim that “past,” “present,” and “future” are not relations, but qualities (see section 2.1):

No doubt my anticipation of an experience M, the experience itself, and the memory of the experience are three states which have different qualities. But it is

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<sup>282</sup> Worms, ‘Présentation’, 9. Barnard: “Durée is accessed through a subtle intuitive introspective awareness, not simply as the contents of our consciousness, but rather as the dynamic essence of who we really are, both the inner knower and what that inner knower knows.” (Barnard, *Living Consciousness. The Metaphysical Vision of Henri Bergson*, 7.)

<sup>283</sup> CM 8/11.

<sup>284</sup> McTaggart, ‘The Unreality of Time’, 458.

not the future M, the present M, and the past M, which have these three different qualities. The qualities are possessed by three distinct events — the anticipation of M, the experience of M itself, and the memory of M, each of which is in turn future, present, and past.<sup>285</sup>

This observation coheres perfectly with what I have been arguing for, with the sole exception that the last phrase of McTaggart’s quotation should be rephrased as “...and the memory of M, each of which is *earlier or later than the others*.”

McTaggart simply uses this to conclude that “... this gives no support to the view that the changes of the A series are changes of qualities”<sup>286</sup> and does not discuss the matter further, but it must be re-iterated, following the analysis of the three different substances or contents denoted by the single phrase “Death of Queen Anne” from above, that it is incorrect to say that *each of the events* in *la durée* is in turn future, present and past. The “anticipation of M” is never past — the “something,” which is presently anticipated is always future, although it can *retrospectively* be regarded as *having been* anticipated. Similarly, the “experience of M” is never future, although, of course, it can be regarded as having been future once it is past.

Now, a significant objection may be proposed against the view that *la durée* escapes the contradiction that McTaggart finds in the A-series. Recall that the Bergsonian response relied on the fact that *la durée* is primarily construed as unceasing novelty: every “moment” (and, of course, Bergson would speak of “moments” of consciousness only very cautiously) of *la durée* is different. The “Death of Queen Anne anticipated” is qualitatively different from “The Death of Queen Anne experienced,” which, in turn, differs from “The Death of Queen Anne remembered.” But this seems to pose the following rather strange dilemma: either what I have said above is wrong and the three “contents” of *la durée* (or “substances” to use McTaggart’s language) are identical, in which case McTaggart’s paradox ensues. Alternatively, what I have said above is correct and the “three deaths” are different, but in that case, a particular problem arises for episodic memory.<sup>287</sup> If the three substances are not the same, how are we able to keep track of the same event through time? How do we know that the current perception, the memory, and anticipation relate to *the same event*? Note that appealing to the Bergsonian emphasis on the radical difference between events-qua-anticipated and events-qua-remembered is not sufficient to respond to the paradox since McTaggart’s

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<sup>285</sup> McTaggart, 469.

<sup>286</sup> McTaggart, 469.

<sup>287</sup> For a discussion, see Le Poidevin, *The Images of Time. An Essay on Temporal Representation*, 57–62.

contradiction gets off the ground even if only *two* of the determinations (*past* and *present*) are attached to the same event. So either they attach to the same event in *la durée* — in which case *la durée* is subject to the contradiction as much as A-series is — or they do not, in which case we are unable to keep track of changes through time.

Bergsonian philosophy offers two possible solutions to this problem. The first option is to appeal to Bergson's rather complex theory of memory and perception from MM. In MM, using the concept of "images," he offers a sophisticated account of how the qualitative development of *la durée*, always different at every point in its content, is nevertheless able to relate to identical objects in the external world perceived previously. Unfortunately, a thorough account of this response is far beyond the scope of this study.<sup>288</sup> However, for the present purposes, there is another easier way out of this conundrum, which Bergson develops in length in IT. One could respond by clarifying that although *la durée* is pure heterogeneous quality and so it *is* indeed the case that every "part" of it is different from another, this does not mean that we are unable to generalise *over* the pure qualitative substratum. Although there are three different substances, they present *enough similarities* to warrant our ability to track them through time.<sup>289</sup> The three substances are different, but not *completely* different. As Bergson says:

In one sense, nothing resembles anything, since all objects are different. In another sense everything resembles everything, since one will always find, by climbing enough on the ladder of generalities, some artificial genus into which two different objects taken at random can go.<sup>290</sup>

This means that although the contents of our *durée* are always different (and thus exclude the possibility of *the same* relation being attached to every moment in it), they may nevertheless be sufficiently similar to allow our recognition. For instance, two triangle-shaped objects may all be sufficiently similar to allow us to call them "triangles," but still differ in the totality of their qualities: by one being, say, green and another red, or by one being wonkier than the other. Similarly, "the Death of Queen Anne experienced" is fundamentally different from "the Death of Queen Anne remembered," but similar enough to warrant our recognition — if nothing else then at least by the fact that we refer to each by the same set of words.

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<sup>288</sup> The literature on this is rather vast, but see especially Başar, 'Bergson's Intuition Memory and Episodic Memory'; Heymans, 'Les "Deux Mémoires" de M. Bergson'; Wolff, 'La Théorie de la mémoire chez Bergson'.

<sup>289</sup> For Bergson's full account of tracking changes through time, see IT 125-33.

<sup>290</sup> CM 40/56.

We are now in a position to evaluate Claim 3, the claim that time is unreal. It should now be clear that for Bergson there are two distinct realms, two radically different ways of understanding temporality, even though he would, unlike the B-theorist, refuse to call the first of these “time.”

First, there is what is called “real time” by Hugh Mellor, and what Bergson calls “spatialised time.” This is B-time, the objective time of physics and mathematics. It is time *conceived*.<sup>291</sup> McTaggart concedes that this time, although lacking the quality of “change,” is not subject to a contradiction. We can call this time “real” if we are prepared to pay the price of accepting that it lacks what McTaggart regarded as the fundamental aspect of change, namely, an intuitive sense of experienced temporal becoming.<sup>292</sup> Bergson would accept the existence of this “time” although he would refuse to *call it* “time” and would regard it primarily as a utilitarian tool that enables us to function in society, use language, make calculations about the positions of planets, and perform scientific experiments. Nevertheless, it is not suitable for the analysis of lived conscious experience. Williams raises the following critique:

Most of the effect of the prophets of passage, on the other hand, is to melt back into the primitive magma of confusion and plurality *the best and sharpest instruments which the mind has forged*.<sup>293</sup>

Bergson would agree: the conception of time understood in physics is a “sharp instrument” in our analysis of external reality, as well as in our use of language and survival in general.<sup>294</sup> However, he would caution that if not enough attention is paid to another more fundamental realm of temporality, namely *la durée*, “le temps fondamental,”<sup>295</sup> unresolvable metaphysical problems soon arise: “[H]abits that are primarily utilitarian, once they find their way into the sphere of speculation, tend to create fictitious problems, ... .”<sup>296</sup> As Deppe explains:

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<sup>291</sup> CM 153/204.

<sup>292</sup> Etienne Klein has recently called into question the obviousness of the connection between our conception of time and the variable “*t*” used to represent it. The “thing” that Newton designates by the variable “*t*” and calls “time” has very few features in common with what we normally experience as “time.” To give just a few examples of these differences, the “time” we experience does not have a consistent affine structure, has an obvious single direction (which was certainly doubted by Newton regarding “*t*”), and it is difficult to quantify it without appeal to a clock (Klein, ‘Who Is Entitled to Talk About Time?’; see also Merleau-Ponty, *Signes*, 317.).

<sup>293</sup> Williams, ‘The Myth of Passage’, 472.

<sup>294</sup> CM 39/54-5.

<sup>295</sup> DS 30/42.

<sup>296</sup> MM 16/9.

This setting may give an idea of how the juxtaposing structure [of B-time] of an earlier/later ordering of moments in fact facilitates our handling of time within our everyday acting. Within this exposure, however, the relational structure appeared to be merely secondary, applied by us *to* our original experience [i.e., *la durée*].<sup>297</sup>

Furthermore, quantum mechanics aside,<sup>298</sup> this “time” can — at least in thought — be contracted, conceptualised without an ontologically privileged “present” and in some cases even considered reversible.<sup>299</sup> What Bergson would disagree with is that this exhausts all there is to temporality.

Second, there is what is called “real time” by Bergson, i.e., *la durée*. This is what analytic philosophy has generally dismissed as subjective time. It is time *perceived*.<sup>300</sup> It is intimately connected with our own perception of the world and ourselves; it is the time of the immediate data of consciousness. As we have seen earlier, since *la durée* does not have the topological features applicable to objective time (e.g., divisibility into events and their subsequent conceptual juxtaposition), it is not subject to the contradiction that McTaggart finds in the A-series. In order for McTaggart’s paradox to get off the ground, we would need to identify discrete events to which the contradictory determinations could attach. But this is impossible in *la durée*. *La durée* offers an immediate, intuitive qualitative account of experienced change. Our own experience frequently provides us with confirmation of the disconnection between *la durée* and objective time, for example, when we experience surprise at the fact that (objective) time has gone by much faster than we thought (on the basis of our immediate conscious experience).

Furthermore, unlike the time that operates in physics (again, putting questions about quantum mechanics in brackets), there cannot even be a question about *la durée* being reversible. Although we can form a logically coherent story about processes in the external world going backwards (e.g., there is no *logical* contradiction in imagining a fallen apple rising

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<sup>297</sup> Deppe, ‘The Mind-Dependence of the Relational Structure of Time (or: What Henri Bergson Would Say to B-Theorists)’, 120.

<sup>298</sup> Although the literature on this is quite vast, for a discussion of recent discoveries in quantum mechanics suggesting the possibility of an irreversible arrow of time in reality, see ’t Hooft, ‘Time, the Arrow of Time, and Quantum Mechanics’.

<sup>299</sup> See for example Price, *Time’s Arrow and Archimedes’ Point*; Price, ‘The Flow of Time’. Bergson himself discusses this in DS 112-13/164-5.

<sup>300</sup> CM 153/204.



back to the branch and then turning into an apple-tree flower<sup>301</sup>), we cannot do that with *la durée* as this would entail reversing our memory of the past and anticipation of the future, and lead to the following absurd picture: we would have direct immediate access to events existing in “the future,” although we could not do anything about them. We would then feel them “coming towards us” and gradually becoming more and more blurry. At the point at which they became present, we would immediately forget them but somehow obtain the feeling that there is something we can do about them, that we can causally contribute to them.<sup>302</sup> As a matter of fact, even when Williams briefly considers the possibility of time-reversal, he is forced to admit that this is impossible to do with consciousness:

F. Scott Fitzgerald tells the story of Benjamin Button who was born in the last stages of senility and got younger all his life till he died a dwindling embryo. Fitzgerald imagined the reversal to be so imperfect that Benjamin’s stream of consciousness ran, not backward with his body’s gross development, but in the common clockwise manner.<sup>303</sup>

To conclude, one might say that McTaggart is led to the conclusion about the unreality of time (itself entailed by the premise that anything real must not be self-contradictory) by mixing two different times, each of which is immune from contradiction. The categories and observations pertaining to the two realms must be kept distinct.

## 2.4. Bergson and The A-series

A few things need to be said about the way that the arguments above relate to the relationship between the “two realms” of Bergson’s philosophy (i.e., *la durée* and objective time) and the contemporary debate about A- and B-theories of time. So far I have been arguing that “objective time” is the B-conception of time, coextensive with Bergson’s idea of “spatialised time,” and that it is opposed to *la durée*. Does this mean that *la durée* is coextensive with an A-conception of time?

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<sup>301</sup> Dummett, ‘Bringing About the Past’, 339; Lucas, *A Treatise on Time and Space*, §8; Dainton, *Time and Space*, 45, 48.

<sup>302</sup> See Lucas, *A Treatise on Time and Space*, §8; Dainton, *The Phenomenal Self*, 51–73; Dainton, *Time and Space*, 116–17.

<sup>303</sup> Williams, ‘The Myth of Passage’, 468–69. For a more sophisticated — but, in the end, equally philosophically incoherent — attempt at “reversed chronology,” see Amis, *Time’s Arrow*.

Although the view of Bergson as an A-theorist has frequently been assumed by analytic philosophers,<sup>304</sup> it is a gross misrepresentation of Bergson's thought. As a matter of fact, Bergson would likely have identified the A-theory as far more troublesome than the B-theory. When Bergson's writings dealing with the philosophy of time were written (especially TFW (1889) and MM (1896)), the B-theory was not yet around and therefore his writings, despite all anachronisms, should primarily be read as being directed at the "intuitive" conception of time — which is the A-theory. Moreover, although both space and time analysed using a non-*durée*-based topology (i.e. as divisible, analogous to a line, etc.) are severely criticised in Bergson's early works (TFW and MM), in his later writings they come to adopt a positive role — as social tools enabling survival, social communication, and scientific research, but, at the same time, as hiding the true nature of temporality which resides in *la durée*. It is therefore likely that McTaggart's A-series would have been regarded by Bergson as a naïve attempt to "have it all." On the one hand, the A-series retains the B-theoretical topology (ordering of distinct separable juxtaposed events), but at the same time, it tries to infuse it with features that only apply to *la durée* (the "feeling" of the past, present, and future, the entity of the present, the feeling of "flow" etc.). Perhaps tentatively, I would argue that it is the A-theory which is the *concept bâtard*<sup>305</sup> resulting from the mixture of pure spatiality and pure temporality, *not* the B-theory. For the Bergsonian, *both* the A-series and B-series are guilty of "spatialising" time — but whereas the B-theory is clear and explicit about its motivations and metaphysical grounding, the A-theory attempts to smuggle in concepts (such as "the flow" of time or the immediate phenomenology of change) that are only applicable to *la durée*. Ingthorsson claims that the contradiction in the A-series arises because "we try to construe a descriptive model that satisfies both the requirement of what an Absolute Reality must be like and what a Temporal Reality must be like."<sup>306</sup> Here the Bergsonian insight is to claim that Absolute Reality, as construed by McTaggart, will always necessarily be changeless, and our immediate perception of Temporal Reality will always be *durée*-like. But we should not subsume both under the same category.

Perhaps a good way to see how difficult it is to fit Bergson into the A- and B-typology is to consider the fact that at the core of the distinction between A- and B-theories is the goal of identifying a coherent description of time, which is mind-independent. However, as we have seen earlier (section 2.2), time is, in one way or another, utterly dependent on the synthesising

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<sup>304</sup> See Williams, 'A Bergsonian Approach to A- and B-Time', 387.

<sup>305</sup> TFW 98/73.

<sup>306</sup> Ingthorsson, *McTaggart's Paradox*, 69.

mind. In Kant and Bardon it is Intuition which brings about the existence of time by way of synthesising distinct moments of existence, in Bergson it is *la durée*. For example, let us take the question of whether the “flow of time” is part of the objective (i.e., mind-independent) description of reality. In McTaggart’s lingo, let us ask whether the “flow of time” is part of Absolute Reality or merely a part of Reality as Appearance. Huw Price helpfully distinguishes three theses that could justify the view that time objectively passes, theses that are frequently confused or not carefully delineated:

1. The view that the *present moment* is objectively distinguished.
2. The view that time has an objective *direction*; that it is an objective matter which of two non-simultaneous events is the *earlier* and which is the *later*.
3. The view that there is something objectively *dynamic*, flux-like, or “flow-like” about time.<sup>307</sup>

Roughly speaking, the A-theory maps onto the first of these claims (since the presence of the objective *now* is required for there to be an objective future and a past) and the B-theory can be identified with asserting exclusively claim 2 (since the B-series is supposed to provide an objective ordering of events in reality by relations of earlier and later), but rejecting the others. Does Bergson fit into any of these?

(1) First, let us consider the claim that there is a “now” in reality, existing either as a moving spotlight gliding over a row of houses<sup>308</sup> or as, simply, all there is, as the presentist claims. Bergson radically rejects the idea that the “now” is constituted by a point in spacetime<sup>309</sup> but rather argues that the “now” can only be located in the *durée* of an observer, as the extent of our present attention. We can, of course, retrospectively, identify a mathematical “point” at which we imagine ourselves and at which we found ourselves, say, either before or after the Death of Queen Anne, but in that case, we are merely operating on the trace of *la durée*, which is always static and B-theoretical, and not in *la durée*, which is always currently developing. For the A-theorist, “the present ... is an ontological / objective notion”<sup>310</sup> — for Bergson, it is a notion that cannot be located in reality without reference to the human *durée*. And even then, this extended “now” of an individual *durée* cannot be easily mapped onto the “now” of other

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<sup>307</sup> Price, ‘The Flow of Time’, 277.

<sup>308</sup> See Broad, *Scientific Thought*, 59.

<sup>309</sup> MM 137/152.

<sup>310</sup> Butterfield, ‘Seeing the Present’, 161.

*durées* — not least because each of them has a different length, as McTaggart also recognised in closing off the possibility of locating the objective now in the “specious present.”<sup>311</sup>

(2) Second, as regards the objective direction of time, Bergson, again, argues that without the human mind, there is nothing intrinsically directional about time in external reality. Once time has been translated into the B-theoretical construct, it can be accelerated, stopped, and reversed. In short, we can imagine moving in its spatialised conceptualisation in the same way we can imagine moving around in space.<sup>312</sup> Crucially, this theoretical construct plays an important role in our practical every-day survival but obscures the fundamental nature of *la durée*. It is, therefore, not the case, as D. C. Williams argues, that “[temporal passage] is [in Bergson] supposed necessary and sufficient for adding to the temporal dimension that intrinsic *sense*, from earlier to later, in which it is supposed to differ radically from any dimension of space.”<sup>313</sup> Rather, the immediately felt temporal passage is required for us ascribing temporality to the external world in the first place. Even if temporal passage were “added” to objective time, this would not make it any less “spatial” than the A-theory, since both already operate with distinct separable juxtaposed events.

(3) Finally, third, as regards the question of there being something objectively “flow-like” about time, Bergson would, again, struggle to understand what this is supposed to mean without reference to our lived experience. The “feeling” of temporal passage is something that can only be qualitatively felt in lived *durée*, it cannot be found in the order of events once these

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<sup>311</sup> See McTaggart, ‘The Unreality of Time’, 472; for a discussion, see Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 116–17, 120–23. Bergson: “My present, at this moment, is the sentence I am pronouncing. But it is so because I want to limit the field of my attention to my sentence. This attention can be made longer, or shorter, ... The distinction we make between our present and past is therefore, if not arbitrary, at least relative to the extent of the field which our attention to life can embrace.” (CM 126-7/169-70)

<sup>312</sup> Here Bergson would have been (and, as some references to his works suggests, probably *was*) in agreement with the emphasis that A. Eddington placed on the fact that consciousness seems to have a “private door” onto reality, which escapes the measurement of physics (Eddington, *The Nature of The Physical World*, 91.). Price discards the possibility of grounding the direction of time in human epistemology mainly because it conflicts with the contemporary philosophical preference for physicalism: “... [W]hat about conscious experience? Here the defender of an objective direction of time faces a dilemma: either consciousness is time-blind, too, in which case the internal phenomenology ‘as of’ an orientation of time doesn’t *actually* fix the direction of a mental life, or there is a radical discontinuity between consciousness on the one hand, and ordinary physical systems, on the other. The former option undermines the claim that our conscious experience could be a guide to existence or orientation of a privileged direction of time, while the latter seems contrary to the spirit of physicalism, in the sense that it implies that there is something that can be detected by a conscious instrument that cannot be detected by a physical instrument.” (Price, ‘The Flow of Time’, 299–300.)

<sup>313</sup> Williams, ‘A Bergsonian Approach to A- and B-Time’, 464.

have been converted into distinct entities. The idea of stipulating a “rate of flow”<sup>314</sup> of time is symptomatic of the category mistake between time and space.

This point can be stressed even more by clarifying the core of the “spatialising objection.” As I have already mentioned, many analytic philosophers have made an inference from the fact that B-theories are frequently accused of “spatialising time” and from the fact that Bergson frequently opposes his *durée* to “spatialised time,” to the conclusion that Bergson is one of the “time snobs”<sup>315</sup> who reject the B-conception of time.<sup>316</sup> This is misleading because for Bergson the spatialisation does not concern what I would call the “operational” features of space and time (e.g., the ability or inability to move in one direction or another, to locate a privileged location (*here / now*), to distinguish two different features of spacetime etc.), but rather its experienced topological properties (e.g., the ability to divide it into distinct units, to regard the arrangement of these as analogous to a line in space, to imagine it existing without reference to the human mind etc.)

What I have sketched above is perhaps not as radical as it may initially seem. The category of *la durée* is not a concept that has never appeared in analytic philosophy of time. It has just been discussed under the heading of “subjective time”<sup>317</sup> and mostly neglected, since it has primarily been regarded, suspiciously, as a problematic peculiarity of our human condition preventing us from fully embracing the “objective time” of physics and creating a coherent theory of time. For example, Russell comments — and his comments below are directed at “subjective time” — as follows:

[T]here is some sense ... in which time is an unimportant and superficial characteristic of reality. Past and future must be acknowledged to be as real as the present, and a certain emancipation from slavery to time is essential to philosophic thought. ... A truer image of the world, I think, is obtained by picturing things as entering into the stream of time from an eternal world outside, than from a view which regards time as the devouring tyrant of all that is. Both

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<sup>314</sup> See for example Schlesinger, ‘How Time Flies’.

<sup>315</sup> Williams, ‘The Myth of Passage’, 458.

<sup>316</sup> Williams: “[The view that the non-dynamic theory makes time a dimension of space] is close kin to Bergson’s allegation that the principle of the manifold ‘spatializes’ time.” (Williams, 470.)

<sup>317</sup> Lucas, *A Treatise on Time and Space*, §2.

in thought and feeling, even though time be real, to realise the unimportance of time is the gate of wisdom.<sup>318</sup>

This disdain for time (especially *subjective* time) has obscured the role it plays in undergirding a coherent picture of the world. Kant was aware of the role of the temporal nature of the human mind, but, relating it to the schema of number and thereby to homogeneity, not of its nature. Analytic philosophy was aware of its nature (i.e., as being an unreliable guide to objective time), but not its role, the fact that without this underlying and slightly chaotic heterogeneity, we would not be able to think any time at all. It is only in Bergson that the two come together.

Bergson provides an analysis that indexes the time of science and the time of immediate experience to two different structures underlying temporality and explains how they are related. McTaggart, ignoring the separation between the two realms of *la durée* and objective time, creates a conceptual framework that leads to a contradiction. So he concludes that the thing to which the conceptual network applies is not real. What he should have concluded is that there is, on the one hand, a reality to which this conceptual network is inapplicable and, on the other hand, a second reality that is dependent on the first, but results from the removal of its characteristically “change-like” features.

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This chapter has shown how *la durée* and spatialised time, introduced in Chapter 1, relate to McTaggart’s argument. However, we have already begun to see that there is a degree of ambiguity in some of the claims that Bergson has made along the way; is *la durée* required for the *representation* of the future, present, and past, or for the *existence* of the future and past? If the past exists and the future does not, is this existence *simpliciter* or existence “in our heads”? What is the relationship between the existence of “Death of Queen Anne anticipated, experienced, and remembered” and the existence of the Death of Queen Anne? These questions may only be answered by looking beyond the primarily representational structures of the A-series and B-series and exploring Bergson and temporal ontologies. This is the goal of the next chapter.

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<sup>318</sup> Russell, *Mysticism and Logic and Other Essays*, 21–22.

### 3. *La Durée* and Temporal Ontologies: Relativising Existence<sup>319</sup>

The previous chapter has shown that Bergson's distinction between *la durée* and "spatialised time" cuts across the differences between A- and B-theories of time. As we have seen, the A-series and the B-series are primarily views about the way that events in time may be *ordered*: either by the relations of "past," "present," and "future" in the case of the former or of "earlier" and "later" in the case of the latter. Since Bergson only allows for the possibility of "ordering" events in spatialised time and not in *la durée*,<sup>320</sup> it was demonstrated that *la durée* may not be subsumed under either the A-series or the B-series.

Nevertheless, questions about the *existence* of events in time, orderable or not, have still been left unanswered. If the A- and B-distinction is inapplicable to the relation between *la durée* and "spatialised time," how do we answer questions about the *existence* of temporal entities? One cannot evade this question by simply reiterating that since there are no distinct events in *la durée*, there can be no ordering (what is not there may not be ordered) — although *la durée* is indivisible, there is still a vague distinction between the past, the present, and the future. Inquiring about which of these exist is still pertinent.

One may therefore still ask Bergson: If it is only past and perhaps present events that exist, do they exist only in *la durée*, "in our heads," or can they be assigned extramental reality? And if so, how does the existence of events in *la durée* relate to external "spatialised" time? Do Bergson's frequent claims about the non-existence of the future<sup>321</sup> represent a striking incompatibility with discoveries about the nature of time in physics, incompatibilities that, it must be said, Bergson has unsuccessfully attempted to resolve by incorporating Einstein's relativity into his philosophical framework?<sup>322</sup> These are questions that the Bergsonian overcoming of the A-series and the B-series cannot escape. Even worse, a thorough look at these problems seems to push Bergson into a strange dilemma: If, on the one hand, the

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<sup>319</sup> Few sections from the following two chapters are currently forthcoming in Moravec, 'Eternity, Relative Realities, and Ontological Idealism About Time'.

<sup>320</sup> This is where Bergson's "present *durée*" differs from the Jamesian "specious present"; not only does James not think of the specious present as indivisible, the crucial observation about the difference between the present as it is experienced and as it is thought of in the trace of *la durée* is a distinctly Bergsonian notion.

<sup>321</sup> Kołakowski: "[W]e may sum up Bergson's philosophy in a single idea: time is real. ... To say that time is real is to say, first, that the future does not exist in any sense." (Kołakowski, *Bergson*, 2.)

<sup>322</sup> For a discussion of Bergson's 'monstrous blunders,' as Einstein referred to them, see Lévy-Leblond, 'Le Boulet d'Einstein et les boulettes de Bergson'; Canales, *The Physicist and the Philosopher. Einstein, Bergson, and the Debate That Changed Our Understanding of Time*; Sherman, 'Who Speaks for Nature? On the Continued Importance of the Bergson-Einstein Debate'.

existence of temporal content is limited to the heterogeneous development of *la durée* “in our heads,” Bergson’s philosophy seems to lead in the direction of idealism, a philosophical position he attempted to refute in his second book.<sup>323</sup> If, on the other hand, the existence of temporal content pertains to the real existence of external events, regardless of the presence of *la durée*, then it seems that such existence can be analysed purely using the A- and B-series, making *la durée* otiose. In other words, although the A-series and the B-series, *qua* claims about the fundamental *ordering* of events, may not be exhaustive of the way Bergson’s philosophy explains the nature of temporality, the *ontological* query about whether the events ordered thereby *exist* may not be dissolved just by appealing to the machinery of “spatialised time” and *la durée*. This is a question the answer to which will have a knock-on effect on the available solutions to the problem of divine foreknowledge and free will to be discussed in Chapter 5.

The aim of this chapter is threefold. First, I will examine Bergson’s thought with regards to temporal ontologies available in analytic philosophy: eternalism, presentism, and the growing-block theory.<sup>324</sup> Second, I will show that the key insights of Bergson’s philosophy, specifically circumscribed to a particular set of ideas from his early works, can be combined with a largely unexplored strategy of frame-relativising existence briefly mentioned by Kristie Miller<sup>325</sup> and extensively studied by Mauro Dorato,<sup>326</sup> thus enabling my proposed reading of Bergson’s philosophy to escape the problems that plague more traditional versions of non-eternalist ontologies. In Chapter 4, I will add a final ingredient, the relation between God and time, to ensure that although my interpretation of Bergson commits him to ontological idealism *about time*, it does not commit him to ontological idealism *simpliciter*. This chapter, therefore, forms the beginning of a transition from the purely metaphysical section of this study (Chapters 1-3) to the one concerned with philosophy of religion (Chapters 4-5).

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<sup>323</sup> MM 9-16/1-9.

<sup>324</sup> The delineation of these views is taken from Miller, ‘Presentism, Eternalism, and the Growing Block’, 346–47. The claims about temporal existence discussed here apply also to the “moving spotlight,” as well as other typologies of temporal ontologies available in the literature using different terminology, for example, Dorato’s distinction between the “instant view of reality” and the “empty,” “half-full,” and “full” views of the future (Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*).

<sup>325</sup> Miller, ‘Presentism, Eternalism, and the Growing Block’, 354.

<sup>326</sup> Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*.



### 3.1. Temporal Ontologies and the A/B-Series

Bergson aside, one might question the legitimacy of the methodological separation between the A- and B-theories on the one hand, and the three types of temporal ontologies on the other hand. Indeed, a vast amount of literature treats these distinctions not as ranging over a different set of problems, but either as co-extensive or as subspecies of one another; most authors presume at least a partial coextension between the B-series and eternalism, and the A-series and either the growing block theory or presentism.<sup>327</sup> There are several reasons for this. For example, the B-theories classify events by the “earlier” and “later” relation, and since it is assumed that relations may only hold between things that *exist*,<sup>328</sup> the only available ontology capable of providing the co-actual (though not simultaneous<sup>329</sup>) existence of events at different parts of spacetime is eternalism. In the same vein, since the growing-block theory and presentism generally make claims about the existence or non-existence of the past, present, and future, they at least seem to require those very categories (i.e., “past,” “present,” and future”) furnished by the A-series.

Nevertheless, whilst this essay acknowledges a close link between the A/B-distinction and ontologies, it will not presume that the former maps directly onto a part or the entirety of the latter. This is first and foremost motivated by the fact that whilst the ontological philosophical positions themselves are rather easy to define (eternalism as the claim that “past, present, and future times and events exist,”<sup>330</sup> presentism as the claim that “only the present moment, and hence present objects and events, exist,”<sup>331</sup> and the growing-block as the claim that “past and present moments and events exist, but future moments and events do not exist”<sup>332</sup>), contemporary analytic philosophy has moved far away from the rather straightforward formulation of the questions of temporal ordering in McTaggart’s original argument. Current philosophy of time offers an intractable plethora of definitions of what the A-theories and B-theories are supposed to be about. To give just a few examples: (i) Oaklander identifies the A-theory as consisting of claims about temporal becoming and the B-theory as consisting of claims about temporal relations.<sup>333</sup> (ii) Clifford Williams uses the appeal to our experience of time to argue that there might not even be a significant difference between

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<sup>327</sup> See for example Craig, ‘Was Thomas Aquinas a B-Theorist of Time?’, 475.

<sup>328</sup> See for example Oaklander, *The Ontology of Time*, 43–45.

<sup>329</sup> For this distinction, see Leftow, *Time and Eternity*, 18; Oaklander, *The Ontology of Time*, 39.

<sup>330</sup> Miller, ‘Presentism, Eternalism, and the Growing Block’, 347.

<sup>331</sup> Miller, 346.

<sup>332</sup> Miller, 347.

<sup>333</sup> Oaklander, *The Ontology of Time*, 18.

them.<sup>334</sup> (iii) One also finds the formulation that the B-theory is not really about “the permanent or eternal existence of events, but only [about the fact] that statements that express tenseless truths do not change their truth value.”<sup>335</sup> (iv) Perhaps the A/B distinction is primarily concerned with the question of *which* determinations are “more fundamental” to the nature of time.<sup>336</sup> (v) In some cases, it is presumed that the debate has to do with tensed or tenseless “facts,”<sup>337</sup> in others that it is primarily a question about obtaining tensed or tenseless truthmakers for tensed or tenseless sentences or tokens thereof.<sup>338</sup> (vi) In the worst scenarios, one sees the A- and B-distinction simply reduced to the claim that the A-theory is the “intuitive one,” because it affirms the reality of change and coheres with the common-sense view about the past, present, and future, whereas the B-theory does not (an accusation the B-theorists have had to defend themselves against since the time of Russell<sup>339</sup>) and is, therefore, the “unintuitive” one. The list could continue.<sup>340</sup> Ryan Mullins recalls:

When I discussed an earlier version of [the second chapter of *The End of the Timeless God*] with the Metaphysics Reading Group at the University of Notre Dame, there was much debate in the room over the meaning of the A-theory and the B-theory. No consensus on the meaning of these theories was reached among the metaphysicians.<sup>341</sup>

There are further reasons that could motivate one to engage with questions about temporal ontology without entering the minefield separating the A- and the B-theorists. Mullins has recently argued that the A- and B-debates, being primarily theories about the truth of propositions, have obscured much more fundamental questions about temporal ontology.<sup>342</sup> He claims that “[t]he debate between A-theorists and B-theorists is relatively new in the history of ideas. The distinction that McTaggart made was not a common distinction in earlier eras.”<sup>343</sup> Since Bergson’s thought is not easily translatable into categories fundamental to the A- and B-

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<sup>334</sup> Williams, ‘The Metaphysics of A- and B-Time’; Williams, ‘A Bergsonian Approach to A- and B-Time’.

<sup>335</sup> Oaklander, *The Ontology of Time*, 25.

<sup>336</sup> Oaklander, 51.

<sup>337</sup> Oaklander, 61.

<sup>338</sup> Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 3.

<sup>339</sup> See Mullins, *The End of the Timeless God*, 23.

<sup>340</sup> For a succinct exposition of all the various claims involved in the A/B-distinction, see Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 1–16.

<sup>341</sup> Mullins, *The End of the Timeless God*, 23; for a similar point, see Williams, ‘The Metaphysics of A- and B-Time’.

<sup>342</sup> Mullins, *The End of the Timeless God*, 24.

<sup>343</sup> Mullins, 25.

distinction, as the previous chapter has shown, a fruitful dialogue between Bergson and analytic philosophy (of time and religion) may only be obtained by a return to questions regarding the common underlying ontological substratum.

It may still be objected that the link between ontology and the A/B-distinction is not as inseparable as it might seem. Indeed, this has become apparent in the historical development of the debates regarding A- and B-theories, which has seen a shift from providing “translation manuals”<sup>344</sup> for converting A-sentences into B-sentences to the problem of providing ontological *truthmakers* for those sentences themselves. Ryan Mullins may be right that the delineation of the difference between A- and B-theories is rather confusing, but their claims do not simply float free independent of ontology, seeing that the truth of propositions depends on the existence of things they are propositions about.

Despite this objection, I will still treat the ontological question independently of the A- and B-debates. There are three reasons for this. First, the A- and B-theories are almost always phrased in terms of the ordering of distinct events in the external world; it is unclear how this “ordering” should be articulated in terms of the stream of mental states of *la durée*. On the contrary, questions about the existence of the past, present, and future are still legitimate in the realm of *la durée*. In other words, we may ask questions raised by temporal ontologies about *la durée*, even though we might not do so with questions raised by the A/B distinction.

Secondly, although the three ontologies and the A- and B-theories may be *linked* (the B-theories seem to be almost universally equivocated with eternalism and A-theories with presentism), they are, nevertheless, responses to different questions: one about ordering, the other about existence. One, therefore, cannot *prima facie* exclude the possibility that an exploration of the ontology will reveal something that an exploration purely in terms of temporal ordering might not. Probing into a burger as a dietitian reveals different things than exploring it as a food critic, even when they both wolf down the same dish. Third, the fact that the two distinctions may come apart is also confirmed by examples where some aspects traditionally associated with either of the A/B-theories are combined with certain aspects of the non-corresponding ontological position. For example, one can take the moving spotlight theory as combining the eternalist claim about the co-actual existence of all events with the characteristically A-theoretical belief about there being “something special” about the present. Conversely, Michal Tooley has succeeded in combining the growing-block claim with the

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<sup>344</sup> Dolev, ‘The Tenseless Theory of Time: Insights and Limitations’, 263.

characteristically B-theoretical belief that about tenseless facts' being more fundamental in the description of reality.<sup>345</sup>

Lamentably, a shift away from the A/B-distinction to ontology does not make Bergson's categorisation any easier. In the case of the A- and B-series, Bergson did not really fit into either. However, in the case of the eternalist / presentist / growing-block distinction, a quick glance at the Bergsonian corpus suggests that he was committed to all three!

Some of Bergson's remarks clearly point to something like a growing-block theory. Apart from the frequent insistence on the non-existence of the future,<sup>346</sup> and the real, literal existence of the past,<sup>347</sup> Bergson's talk of "universal becoming" also fits rather nicely with his approval of the Aristotelian solution to the sea-battle paradox in his lectures at the Collège de France from 1904-1905.<sup>348</sup> There, Bergson seems to argue for something like a truthmaker-based solution to the problem:

"At this moment I am talking about philosophy" — here is a proposition which is true, because it conforms to what exists. If I say, "Yesterday at four o'clock I was out on a walk," provided that I was out on a walk at four o'clock, it would also be a proposition about what exists, since the past exists, ... . But if I say, "I will be out walking at four o'clock tomorrow," is the proposition true or is it false? Tomorrow does not exist; nothing that will take place tomorrow exists. Consequently, to ask whether the proposition "I will be out on a walk tomorrow" is true or false is to ask a meaningless question, since it is to ask whether the proposition conforms or not to what exists and tomorrow does not exist yet, does not exist now.<sup>349</sup>

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<sup>345</sup> Tooley, *Time, Tense and Causation*, 28–29; see also Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 23–32.

<sup>346</sup> CM 73-86/99-116.

<sup>347</sup> Dainton: "[Bergson] spends a good deal of effort in Part 3 of *Matter and Memory* attempting to overcome resistance to the idea that the past is fully real, ... ." (Dainton, 'Bergson on Temporal Experience and *Durée Réelle*', 99.)

<sup>348</sup> EPL 97-112. See Aristotle, *The Categories. On Interpretation*, IX, 135.

<sup>349</sup> "En ce moment je parle philosophie", voilà une proposition qui est vraie parce qu'elle conforme à ce qui existe. Si je dis: 'Hier à quatre heures je me suis promené', en admettant que je me sois promené à quatre heures, voilà une affirmation qui est vraie parce qu'elle est conforme à ce qui existe, car le passé existe, ... . Mais lorsque je dis: 'Demain à quatre heures je me promènerai', la proposition est-elle vraie, est-elle fausse? Demain n'existe pas; rien de ce qui se passera demain n'existe. Par conséquent demander si cette proposition: 'Je me promènerai demain' est vraie ou fausse, c'est poser une question qui n'a pas de sens parce que c'est demander si cette proposition est conforme ou contraire à ce qui existe et que demain n'existe pas encore, n'existe pas maintenant." (EPL 105, my translation.)

However, Bergson does insist at various places that without the synthesis of *la durée*, “everything is in a present which seems to be constantly starting afresh.”<sup>350</sup> For example, in MM, he argues that when the brain is taken merely as a material object, without the presence of memory, it “never occupies more than the present moment.”<sup>351</sup> Once we remove *la durée* from the world, “this universe dies and is born again miraculously at each moment ... .”<sup>352</sup> If *la durée* is *the only thing* that lends the past the ability to connect to the present and if *la durée* exists in the mind, does this mean that in the external world only the present moment exists? And, conversely, is it not the case that *la durée* is required for the connection of the different presents to create a coherent unified reality (see section 2.2)? Although one of the chief projects of MM was to surmount the opposition between idealism and realism, Bergson fails to treat the question of *temporal existence* — he just about discusses existence *simpliciter*,<sup>353</sup> but without further qualifications about the existential status of the present, past or future. Bergson’s primary question in MM is in overcoming the opposition between existence “inside the head” and “outside the head,” *not* between existence in the past and/or the present and/or the future.

Finally, one can even find passages that could give Bergson’s *durée* an eerily eternalist twist. I have previously appealed to the following observation in Bergson to argue that divine eternity — conceived along the Boethian lines of *tota simul et perfecta possessio*<sup>354</sup> — to which all things are present, may justify the belief that the category of *la durée* can be stretched to apply to the entirety of all times:<sup>355</sup>

Do we not sometimes perceive in ourselves, in sleep, two contemporaneous and distinct persons one of whom sleeps a few minutes, while the other’s dream fills days and weeks? And would not the whole of history be contained in a very short time for a consciousness at a higher degree of tension than our own, which should watch the development of humanity while contracting, so to speak, into the great phases of its evolution?<sup>356</sup>

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<sup>350</sup> CM 106/141-2.

<sup>351</sup> MM 149/165.

<sup>352</sup> MM 149/165.

<sup>353</sup> “[T]he capital problem of existence [is] a problem we can only glance at, for otherwise it would lead us step by step into the heart of metaphysics. [It is] matters of experience ... which alone concern us here. ... .” (MM 146-7/163.)

<sup>354</sup> Boethius, *The Consolation of Philosophy*, 422.

<sup>355</sup> See Moravec, ‘A Perpetual Present: Henri Bergson and Atemporal Duration’.

<sup>356</sup> MM 207-8/233.

If all things can be present to a *durée* at a higher degree of tension (God's ever-present *durée*), does their presence to such a *durée* not in turn require their existence? Does Bergson simply confuse the representation of temporality (events existing "for a consciousness") and temporality (events existing *simpliciter*)? To be fair to Bergson, one must avoid the temptation to conflate an ontology of events with a theory of representations of those events. A very large scope of history can be *represented* by something very short, without this entailing that all the moments of time are *themselves* co-actual. Nonetheless, eternalism offers the most straightforward explanation for the presence of all events to the hypothetical *durée* that Bergson talks about.<sup>357</sup>

What is going on? Perhaps one could simply say that Bergson is just being inconsistent. This conjecture would be supported by Bergson's autobiographical assessment of the development of *la durée* across his works:

I have written each one of my books whilst forgetting all the others. I throw myself into thinking about a problem: I start from "la durée" and I try to throw light on the problem, either by contrast or by similarity with it. Unfortunately, you see, my books are not always mutually coherent: the "time" of CE does not "bond" well with that of TFW.<sup>358</sup>

However, as will become clear below, these apparent inconsistencies in Bergson's philosophy point to a much more complicated relationship between *la durée* and the world.

### 3.2. *La Durée* and the External World

It is important to bear in mind that these inconsistencies cannot be resolved without due attention not only to the chronological development of Bergson's thought but also to the philosophical development of the relation of mind (qua *durée*) to the external world.

Before providing an exegetical account of the development of the scope of *la durée* in the Bergsonian corpus, it is worth noting that what it means for temporal things to "exist" in analytic ontologies is also not as straightforward as I may have presented it in the previous

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<sup>357</sup> For examples of the inference from divine eternity to a B-theoretical view, see for example Mellor, 'History Without the Flow of Time'; Craig, 'Was Thomas Aquinas a B-Theorist of Time?'

<sup>358</sup> "J'ai fait chacun de mes livres en oubliant tous les autres. Je me plonge dans la méditation d'un problème ; je pars de la 'durée' et je cherche à éclairer ce problème, soit par contraste, soit par similitude avec elle. Malheureusement, voyez-vous, mes livres ne sont pas toujours cohérents entre eux: le 'temps' de l'*Évolution créatrice* ne 'colle' pas avec celui des *Données immédiates*." (Béguin and Thévenaz, *Henri Bergson: Essais et témoignages*, 360.)

section. For example, Miller argues that when it comes to properly understanding the disagreement between, say, presentists and eternalists, things are not always quite as simple as to warrant a reduction of the conflict to a disagreement about the extension of the existential quantifier:

Another way to interpret the claim that the two parties are talking past one another is that the domains of quantification are the same, but “exists” means something different in the mouths of each party. It is controversial whether “exist” *can* have different meanings and whether if it can, it actually does have different meanings in the mouths of presentists and eternalists ... . Even if it can and does, it is noteworthy both that neither eternalists nor presentists accept that this is an accurate diagnosis of the dialectic; nor does a stipulation about what “exist” means seem to result in an evaporation of the dispute between the parties.<sup>359</sup>

Similarly, Dorato — discussing Gödel’s unpublished works on the philosophical implications of relativity for the notion of “temporal becoming” — contends that Gödel seems to distinguish between “reality” and “existence,” thus making the issue of reducing ontological questions to existential quantification particularly difficult. For Gödel, all the temporal “nows” are “equally real” (this being implied by the fact that the past/present/future distinction is inevitably tied to a particular reference frame), but only the one “present” now “exists.” Gödel seems to think that “the real comes into existence in time.”<sup>360</sup>

To make sense of this coming into existence from a “mere” state of reality, we must assume that Gödel refers to the tenseless sense of existence presupposed by the existential quantification in standard predicate logic as “reality,” and considers “existence” as essentially tensed.<sup>361</sup>

Or in other words, change consists of equally real things coming to possess (and losing) the property of “existence.” But does this not look like a presentist or moving-spotlight position?

Let us return to Bergson. As has been mentioned before, when following the chronology of Bergson’s works from TFW through MM to CE as the primary points of reference, one observes that the category of *la durée* “moves out,” or, more precisely, Bergson extends the

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<sup>359</sup> Miller, ‘Presentism, Eternalism, and the Growing Block’, 349.

<sup>360</sup> Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 119.

<sup>361</sup> Dorato, 119.

applicability of *la durée* from consciousness to the external world and, subsequently, to the whole of evolutionary history:

In his earlier work, particularly the 1889 [TFW], Bergson confined *durée* — and its flowing and distinctively unified character — to consciousness alone; he explicitly contrasted the dynamic character of experience with the static character of the physical realm. In his later work, beginning with the 1896 [MM], he abandoned the earlier dualism in favour of a form of panpsychist monism.<sup>362</sup>

At the risk of committing an ironic transgression of the main dicta of the Bergsonian method by chopping up Bergson’s philosophy — a philosophy regarded by the Jankélévitchian reading as something of an instance of *la durée* itself<sup>363</sup> — into distinct segments, the process of “ontologisation” of *la durée*, so strongly emphasised by Deleuze,<sup>364</sup> can roughly be partitioned into three crucial moments which I will here designate as “stages.” Each one of these, mostly revolving around one of Bergson’s major works, may also be characterised by a particular Bergsonian example, all of which exemplify *la durée*, but each of which illustrates the relation between the mind and the world in a significantly different way.<sup>365</sup>

**Stage 1** corresponds to TFW from 1889. The paradigm example of the relation between *la durée* and the world is that of the movement of the pendulum requiring the synthesis of memory (see p. 16). Here we find a radical dualism between the internal and the external, with *la durée* constituting true or “real” time that affects synthesis on individual instantaneous static slices of external reality. In the external world, we can find “displacement” (i.e., the set of facts about the positions of the pendulum at different points of spatialised time), but not real “movement:”

Thus in consciousness we find states which succeed, without being distinguished from one another; and in space simultaneities which, without succeeding, are distinguished from one another, in the sense that one has ceased to exist when the

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<sup>362</sup> Dainton, ‘Bergson on Temporal Experience and *Durée Réelle*’, 94. Similarly, Merleau-Ponty says that *la durée* gradually becomes a “reduction” through which all things come to be observed and studied (Merleau-Ponty, *Signes*, 300.).

<sup>363</sup> See Jankélévitch, *Henri Bergson*.

<sup>364</sup> Deleuze, *Le bergsonisme*. See also During, ‘Dossier critique’, 279–80, note 1.

<sup>365</sup> The following typology differs from that suggested by Deleuze (Deleuze, *Le bergsonisme*, 75–79.), who phrases the gradual extending of *la durée* in terms of (i) monism, dualism, and pluralism, (ii) different rhythms of *la durée* and (iii) the move from purely psychological claims of TFW to ontological ones from MM onwards. Where Deleuze’s account focuses on the *nature* of the different *durées* and their mutual relations, my classification focuses on the existence of the “stuff” which *la durée* as a category describes.



other appears. Outside us, mutual externality without succession; within us, succession without mutual externality.<sup>366</sup>

In other words, without the human mind, there would be no time. The quote above, however, requires some clarification. By speaking of “simultaneities ... distinguished from one another,” Bergson does not mean the simultaneity of different moments of the external world (if reality is “reborn every minute,” then surely these minutes are not all mutually simultaneous!), but the simultaneity of events or objects in each one of these slices of reality that is being reborn. “Mutual externality without succession” refers to the fact that the individual “slices of reality”<sup>367</sup> are “disconnected” without a mind that connects them into a succession, in much the same way that it connects the individual sheep in the act of counting. “Succession without mutual externality” refers to the fact that in *la durée*, there is a clear unified development of elements which seamlessly follow one another, and in which earlier ones qualitatively affect the ones that follow. Moreover, *la durée* should not be considered as something that this synthesis is effected *on*, it is primarily given as a simple unity and only then, in the second instance, retrospectively divided into separate moments.<sup>368</sup> The talk of “multiplicities” is only permitted once we have performed the abstraction on the immediately given indivisibility (see footnote 249). As Bergson later says:

Everyone will concede that in fact we do not conceive of time without a *before* and *after*: time is succession. Now, we have shown that where there is no memory, no consciousness, real or virtual, affirmed or imagined, actually present

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<sup>366</sup> TFW 227/171.

<sup>367</sup> These “slices” may be understood in terms of disconnected “planes of simultaneity.” On a more speculative note, one may only wonder what Bergson’s engagement with relativity would have looked like had he become acquainted with it immediately after writing TFW and not after CE, by which point the externalisation of *la durée* seems to commit him to something like a global growing-block theory of time.

<sup>368</sup> Bergson rejects models that try to “build up” the unity of the phenomenal flow from prior distinct units. The Bergsonian “specious present” (unlike that of William James) is indivisible (see section 1.2), the divisibility applies only to the memory of what *was* the specious present. For a discussion of alternative models that start with units, see Dainton, *Time and Space*, 103–20; Dainton, *Stream of Consciousness. Unity and Continuity in Conscious Experience*, 136–61. Dainton himself observes the following: “A stream of consciousness is extended through time, and we can, if we choose, regard time as divided into instants and intervals in exactly the same manner as the real numbers. If we do this, there is no limit on how finely a given stream of consciousness can be divided into different intervals. But the legitimacy of purely formal manoeuvre does not mean that all the intervals thus recognized in thought correspond to anything recognizable in experience.” (Dainton, 171.) Bergson would have agreed with this, though he would point out that the first two sentences of the quotation apply to memory, the second to present experience. Dainton specifically discusses the account of phenomenal continuity in Husserl, which — despite Husserl’s oft-quoted 1911 remark that the Göttingen Circle were “the true Bergsonians” — differs significantly from Bergson. For a discussion, see Winkler, ‘Husserl and Bergson on Time and Consciousness’.

or ideally stipulated, there cannot be a before and an after: there is one *or* the other, but not both: and we need both to have time.<sup>369</sup>

And by this, Bergson means time *simpliciter*, objective or *durée*. Note that Bergson's point is much stronger than simply stating that the human mind is required for there to be a *representation* of time (a trivial point which may, in the end, be reduced to something like “the human mind representing time is required for time to be represented by the human mind”), thus reducing claims about *la durée* to phenomenology. Bergson says more — for him, the human subjectivity is *constituted* by *la durée*, it is an instantiation of temporality: the *representation of time qua durée* is homomorphic — it instantiates what it represents.

TFW establishes a separation between the external “spatialised” multiplicity and the internal *durée*, in the process resolving a whole host of problems to do with free will, Zeno's paradoxes, and more general stumbling blocks of Kantian metaphysics.<sup>370</sup> However, as Kouba points out, the book leaves unresolved the question of how *la durée* (in TFW equated with the human mind) and the spatial exteriority (the external world) are related:

In principle, one could say that in TFW, Bergson succeeds in preserving the fundamental dichotomy which he has exposed. The relation between consciousness which endures and extended objects which do not is reduced to the distinction between two essentially different realities, even though an analysis of concrete experience affirms a permanent exchange between them, an “endosmosis.” ... Between the two realities, a hierarchy has been well defined, but their mutual relation remains obscure.<sup>371</sup>

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<sup>369</sup> DS 45-6/66.

<sup>370</sup> A deeper engagement between contemporary analytic philosophy of mind and Bergson's theory of perception (especially MM) would be required to clarify whether, in a sense, the states of *la durée* are not reducible to external reality. My separation of the different stages of Bergsonian philosophy works in a more or less dualist framework (see Hypothesis 4 from my introduction), but, say, for an identity theorist, an emergentist or a supervenience theorist, mental states are part of the “outside stuff” of reality. The simplest way to respond to this is simply to stipulate (with Bergson at Stage 1) that mental states are constituted by *la durée*. *La durée* is the ontological foundation of all temporality. Since there is no *durée* and consequently no temporality in the external world, we cannot find mental states there. This, of course, changes in Stages 2 and 3, where the “stuff” maintains its own connections between the before and after and thus constitute temporality. For Bergson's own thoughts on the relation between brain states and mental states, see for example EPL 301-2.

<sup>371</sup> “En principe, on peut constater que dans l'*Essai*, Bergson réussit à préserver la dichotomie fondamentale qu'il a exposée. Le rapport entre la conscience qui dure et les objets étendus qui ne durent pas est ramené à la distinction entre deux réalités essentiellement différentes, bien que l'analyse de l'expérience concrète constate un échange permanent entre elles, une 'endosmose.' ... Entre les deux réalités, la hiérarchie est très bien définie mais leur rapport mutuel reste assez obscur.” (Kouba, 'Le Mouvement Entre Temps et Espace (Bergson Aux Prises Avec Sa Découverte)', 211, my translation.)

At **Stage 2**, roughly coextensive with MM from 1896, Bergson relates the two realities to each other by demonstrating that the matter constitutive of the external world has a *durée* of its own,<sup>372</sup> an independently existing *durée* phenomenologically inaccessible to us.<sup>373</sup> This undertaking is driven by the idea of *durées* at different degrees of “tension” from that of our own.<sup>374</sup> As Arnaud Bouaniche comments:

If external phenomena “appear” to succeed [in TFW], it is always from the point of view of the observing consciousness. It is therefore us who attribute *durée* to things, it is us who introduce succession in them by making them participate in our own temporality, whereas in themselves, they know only simultaneity or the present. In MM (1896), however, Bergson attributes to matter a *durée* of its own, analogous to our consciousness, revealed by our perception which contracts moments of matter.<sup>375</sup>

The paradigm example here is the colour red — which is by us perceived as a singular item of consciousness (say, a patch of the colour red), but in itself consist of millions of vibrations of the ray of light reflecting off the surface of the red patch:<sup>376</sup>

The duration lived by our consciousness is a duration with its own determined rhythm, a duration very different from the time of the physicist, which can store up, in a given interval, as great a number of phenomena as we please. In the space of a second, red light ... accomplishes 400 billion successive vibrations. If we would form some idea of this number, we should have to separate the vibrations sufficiently to allow our consciousness to count them or at least to record explicitly their succession, and we should then enquire how many days or months or years this succession would occupy.<sup>377</sup>

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<sup>372</sup> See Kouba, 214.

<sup>373</sup> See Deleuze, *Le bergsonisme*, 73.

<sup>374</sup> See Riquier, ‘Dossier critique’, 230, note 19.

<sup>375</sup> “Si les phénomènes extérieures ‘paraissent’ se succéder [dans l’*Essai*], c’est toujours du point de vue d’une conscience spectatrice. C’est donc nous qui attribuons une durée aux choses, nous qui introduisons la succession en elles en les faisant participer à notre propre temporalité, tandis qu’en elles-mêmes, elles ne connaissent que la simultanéité ou le présent. Dans *Matière et mémoire* (1896), Bergson attribuera cependant à la matière une durée propre, analogue à celle de notre conscience, révélée par notre perception qui contracte des moments de la matière.” (Bouaniche, ‘Dossier Critique’, 229, note 42, my translation.)

<sup>376</sup> It is also important to note that despite Bergson’s frequent appeal to a fixed set of examples throughout his works, the pendulum one never reappears after TFW. I am grateful to Frédéric Worms for this observation.

<sup>377</sup> MM 205/230-31.

The synthesis required for gluing together the before and after can now be located in the matter itself, which now provides its own *durée*-like continuity:

It is necessary to concede that beyond the infinitely variable succession of our perception, objects have their own succession, their *own* relation to what precedes and what follows, that is to say, their own relation to other objects, ...<sup>378</sup>

Similarly, the way that “movement” is understood changes between TFW and MM. Whereas in TFW “movement” was understood as something peculiar to and inevitably grounded in consciousness (recall the pendulum example), now it is accorded to external matter itself. There is “real movement” outside the mind and the philosophy of *la durée* consists merely in criticising inappropriate ways of treating it by metaphysicians. Matter becomes a reality analogous to consciousness, qualitative in its own right, with a *durée* of its own:<sup>379</sup>

Motion, as studied in mechanics, is but an abstraction or a symbol, a common measure, a common denominator, permitting the comparison of all real movements with each other; yet these movements, *regarded in themselves*, are indivisibles which occupy duration [*la durée*], involve a before and an after, and link together the successive moments of time by a thread of variable quality which cannot be without some likeness to the continuity of our own consciousness.<sup>380</sup>

By parity, the negotiation of the separation between the “spatialisation” and *la durée* is moved *into* matter itself, a metaphysical negotiation not requiring to take into account the human mind:

My interior consciousness is no longer needed to grasp the internal duality of movement: the movement itself is differentiated from its trajectory, and it is *in exteriority* where it is necessary to separate “real movement” from “space traversed.”<sup>381</sup>

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<sup>378</sup> “Il nous faut admettre qu’au-delà de la succession infiniment variable de notre perception, les objets ont leur propre succession, leur *propre* relation à ce qui précède et à ce qui suit, c’est-à-dire leur rapport aux autres objets, ... .” (Kouba, ‘Le Mouvement Entre Temps et Espace (Bergson Aux Prises Avec Sa Découverte)’, 216, my translation.)

<sup>379</sup> See Worms, ‘Les trois dimensions de la question de l’espace dans l’œuvre de Bergson’, 105; HIT 255.

<sup>380</sup> MM 202-3/227.

<sup>381</sup> “Il n’y a plus besoin de ma conscience intérieure pour saisir la dualité interne du mouvement : il se distingue de lui-même de sa trajectoire, et c’est *dans l’extériorité* qu’il faut dissocier le ‘mouvement réel’ de ‘l’espace parcouru.’” (Worms, ‘Les trois dimensions de la question de l’espace dans l’œuvre de Bergson’, 106, my translation.)

But Bergson does not stop there. At **Stage 3**, the plurality of *durées* is affirmed and extended to the entirety of the evolutionary development, thus creating what F. C. T. Moore refers to as a “super-phenomenology” of everything.<sup>382</sup> *La durée* becomes “a fundamental feature of the Universe as a whole.”<sup>383</sup> This roughly corresponds to CE from 1907. A succinct summary of this development may be found in Deleuze:

In a key text from 1903, he insists on the progress made since *Time and Free Will*: Psychological duration, our duration, is now only one case among others, among an infinity of others, ... . We can see that, as in *Matter and Memory*, psychology is now only an opening onto ontology, a springboard for an “installation” in being ... . The idea of a virtual coexistence of all the levels of the past, of all the levels of tension, is thus extended to the whole of the universe ... . Everything happens as if the universe were a tremendous Memory. ... This extension of virtual coexistence to an infinity of specific durations stands out clearly in *Creative Evolution*, where life itself is compared to a memory, the genera or species corresponding to coexisting degrees of this vital memory.<sup>384</sup>

In CE, *la durée* no longer just *describes* the merely phenomenological experience of the passage of time “inside our heads,” rather, a multiplicity of real *durées* in the universe “outside our heads” is what *grounds* the phenomenology of our own *durée*.<sup>385</sup> The human *durée* and that of — or *those of* — matter (which was at Stage 1 regarded as the domain of juxtaposition, externality, spatialised time etc.) and living organisms are now placed on the same scale, simply differentiated by different degrees of “tension.”<sup>386</sup> Our *durée* is no longer special. Nevertheless, the move from Stage 2 to Stage 3 is not as radical as the step from Stage 1 to Stage 2. The main shift to Stage 3 consists in extending the applicability of *la durée* diachronically across the evolutionary development and synchronically elaborating a hierarchy of *durées* that was merely hinted at in the previous stage. At Stage 2, *la durée* has already been “ontologised” and Stage 3 drives home the consequences of this “ontologisation.” Since it is now organisms, plants, matter etc. that provide their own continuity, their own “memory,” one can begin to see that CE was by many taken to postulate a deeply panpsychist project.<sup>387</sup> One

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<sup>382</sup> Moore, *Bergson: Thinking Backwards*, 9.

<sup>383</sup> Moore, 116

<sup>384</sup> Deleuze, *Bergsonism*, 76–77.

<sup>385</sup> Deleuze adds that our *durée* “reveals” the existence and nature of other *durées* in the universe (Deleuze, *Le bergsonisme*, 24, 77.).

<sup>386</sup> See Worms, ‘Les trois dimensions de la question de l’espace dans l’œuvre de Bergson’, 111.

<sup>387</sup> See for example Dolbeault, ‘Bergson’s Panpsychism’.

can already see that Bergson's philosophy heading in this direction in the conclusion to MM,<sup>388</sup> where he argues that "the material universe itself, defined as the totality of images, is a kind of consciousness."<sup>389</sup>

### 3.3. Ontological and Epistemological Idealisms

Given the foregoing discussion, one can begin to see how impossible it is to classify *la durée*, where ontology and epistemology are inseparable, with one of the analytic ontologies, all of which aim at mind-independent descriptions of time. There are two further problems with the application of Bergson's insights to the analytic discussion.

The first problem has to do with methodology. For the purposes of Bergson's fruitful interaction with analytic philosophy, where does one stop the extending of *la durée* from Stage 1 to Stage 3? Do we follow Bergson all the way to Stage 3 and affirm a universal becoming, a full realism about time, and something like a growing-block theory, where the "growing block" is *la durée*: a "growing *durée* theory"? Or do we leave him at Stage 2 and affirm the reality of time without the human mind, which is only *one* of two instances of *la durée*? Perhaps controversially within the context of Bergsonian scholarship, this study will opt for the "minimal" option and leave Bergson immediately after Stage 1. That is, I limit the existence of *la durée* to human consciousness and deny it of the external world. There are at least three reasons for this. The first has to do with the principal aim not only of this chapter but of this entire essay — to find a coherent solution to the problem of free will and divine foreknowledge. As we will see in Chapter 5, it is precisely the separation between the external *durée*-less multiplicity and the internal *durée* that will permit the resolution of the problem. The second reason may betray a lack of courage on the part of the author, but following Bergson to Stage 3 would likely make his philosophy immediately vulnerable to the various accusations directed at him by Russell and other early analytic philosophers.<sup>390</sup> As has been shown in Chapter 1, it was Bergson's later works written in Stage 3 that have gained him fame and were the first to be translated and read (and intensely criticised) by analytic thinkers. The time has perhaps come to focus on themes central to his earlier works and see whether they are applicable to current debates in analytic philosophy of time and religion, thereby avoiding the necessity to ward off various objections against panpsychism, the idea of grounding mind-

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<sup>388</sup> MM 226-33/254-65.

<sup>389</sup> MM 235/264.

<sup>390</sup> For an extensive treatment, see Salmon, 'L'apogée de la réception de Bergson en Angleterre'.

independent becoming based on the shift from determinism and determinateness,<sup>391</sup> or lack of a clear distinction between the subject and object in MM.<sup>392</sup> Thirdly, affirming the reality of a large-scale *durée* outside the mind makes Bergson's position vulnerable to innumerable objections from the special theory of relativity, since Bergson argues that although there are *durées* at different degrees of "tension," they still partake of a single unique universal *durée*, with its own present:

The instances of *durée* enduring only billionths or trillionths of a second (or less), which are to be found at the atomic and sub-atomic levels, *flow synchronously with the instances of durée which exist at the macro-level.*<sup>393</sup>

Stipulating a hierarchy of *durées* that compose the *single* universal becoming of the entire universe may perhaps work in Newtonian physics, but it is difficult to see how it can be made compatible with relativity's removal of a single objective present. The "edge," however vaguely extended, of the growing flux of being is not simultaneous throughout the universe, a point which is difficult to make compatible with Bergson's stipulation of *la durée* of the entire material world:

It seems as if all the *durées* distributed throughout the universe were more and more punctuated by the bass line which constitutes the *durée* of the material universe: as if this counterpoint-like relation, manifested locally by the phenomenon of perception and by the evidence of a lived simultaneity between the flux of consciousness and the flux of nature, indicated ways of an intuitive grasp on the coexistence and actual communication of the *durées*.<sup>394</sup>

The material universe, as much as it endures "of a piece," so to speak, is an extensive expression of an intensive unity of coexistent *durées* of different contractions.<sup>395</sup>

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<sup>391</sup> See for example Grünbaum, 'The Status of Temporal Becoming', 389.

<sup>392</sup> See Russell, 'The Philosophy of Bergson', 345.

<sup>393</sup> Dainton, 'Bergson on Temporal Experience and *Durée Réelle*', 99, my italics.

<sup>394</sup> "Tout se passe alors comme si les durées distribuées dans l'univers étaient scandées de loin en loin par la basse continue que constitue la durée de l'univers matériel ; comme si ce rapport contrapuntique, manifesté localement par le phénomène de la perception et l'évidence d'une simultanéité vécue entre le flux de la conscience et les flux de la nature, indiquait les voies d'une saisie intuitive de la coexistence et de la communication effective des durées . . . ." (Dainton, 'Dossier critique', 242, my translation.)

<sup>395</sup> "L'univers matériel, en tant qu'il dure pour ainsi dire d'une pièce, est l'expression extensive de l'unité intensive des durées coexistantes, variablement contractées." (Dainton, 244, my translation.)

Indeed, it was precisely the attempt at harmonising the various “fictional times”<sup>396</sup> of different reference frames that have led Bergson mistakenly to postulate a unique single real time of the universe.<sup>397</sup>

[According to Bergson] there are indeed a multiplicity of actual durations, ..., but equally, there is a single time or duration which encompasses them, and which discloses them as such ... .<sup>398</sup>

Understandably, this was one of several mistakes committed in the course of his engagement with Einstein that have lamentably contributed to the discrediting of the relevance of his views on time in analytic philosophy. I believe that this issue can be neatly resolved by limiting *la durée* to the mind of the observer; in this way, the Einsteinian observers with their own *durées* can happily coexist together in different reference frames.<sup>399</sup> The mismatch between their *durées* (say, in the twin paradox, which Bergson merely reduced to a thought experiment, unaware of its empirical verifiability<sup>400</sup>) remains resolved using spatialised time. The immediate temporal experience of this mismatch (say, one of the twins being surprised by how quickly the other has aged) has no more import than the mismatch between *la durée* and spatialised time in everyday life — say, when one realises with surprise how quickly objective time flies at a party.

The last observation also brings us to the second problem. As section 3.2 has indicated, one of the motivations for the move from Stage 1 to Stages 2 and 3 was to deal with the problems regarding the relationship between the mind and the external world. How can these problems be resolved now that the solutions devised by Bergson in Stages 2 and 3 become unavailable? Specifically, recall that one of the aims of moving to Stage 2 was to respond to a lurking worry about idealism. If we limit the existence of *la durée* only to the mind, how do we explain the existence of positions (say, of the pendulum) in spatialised time in the external world without attributing *la durée* to the world itself? The second problem may, therefore, be stated as a list of questions: Is Bergson of Stage 1 an idealist? And if so, is he an ontological

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<sup>396</sup> See During, 249, note 1.

<sup>397</sup> During, 243; see also Durie, ‘Introduction’, xii.

<sup>398</sup> Durie, ‘Introduction’, xxi.

<sup>399</sup> One might here object that Einstein’s theory does not rest on the existence of *real* observers, who may easily be replaced by, say, machines. This is a point which will be treated in the following section.

<sup>400</sup> See During, ‘Dossier critique’, 243; Lévy-Leblond, ‘Le Boulet d’Einstein et les boulettes de Bergson’, 246–52.



or an epistemological idealist? Or is he confusing the two? And whichever he is, how does this relate to the analytic ontologies outlined above?

Let us start with the following definitions:<sup>401</sup>

By ontological idealism (OI), I understand the claim that the mind is the ultimate foundation of all reality, or even exhaustive of reality.

By epistemological idealism (EI), I understand the claim that something exists independently of the mind, but that everything we can *know* about this mind-independent “reality” is so permeated by the formative or constructive activities of the mind that all claims to knowledge must be considered, in some sense, to be a form of knowledge about the content of the mind.

Guyer and Horstmann, who have provided the basis for these definitions classify Berkeley as holding OI and Kant as holding EI.<sup>402</sup> Each one of these positions can further be refined by limiting the particular type of idealism in question to be an idealism *about* something, in the case of this essay, about time. Therefore:

By ontological idealism about time (OIT), I understand the claim that *la durée* is the ultimate ontological foundation of time (however understood), or perhaps even exhaustive of time (however understood).

By epistemological idealism about time (EIT), I understand the claim that although something related to “time” exists independently of the mind, everything we can know about this temporally extended “reality” is so permeated by the formative or constructive activities of *la durée* that all claims to knowledge about such a reality are, in some sense, a form of knowledge about the contents of *la durée*.

Or in more simple terms, OIT implies that there *is* no time without *la durée*, EIT implies that there is no *representation* of time without *la durée*, that is, that knowledge about any temporal object is partially knowledge about our own mind. Both OIT and EIT are thus “smaller-scale” idealisms, they imply idealism about a certain part of reality, but not about reality as a whole.

Bergson’s *durée*, whose extension will from now be limited to Stage 1, is clearly an example of EIT. As we have learnt in section 2.2, introspection gives us immediate access to

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<sup>401</sup> These definitions are based on and use exact wording from Guyer and Horstmann, ‘Idealism’.

<sup>402</sup> Guyer and Horstmann; see also Brook, ‘Kant and Time-Order Idealism’.

change in consciousness (*la durée*), which is then transformed into the representational spatialised structure appealed to by the A/B-theories. We start with the immediate indivisible experience of change and *then* break it up for the purposes of practical knowledge. The “something” existing independently of the mind consists of the external world “reborn at every instant,”<sup>403</sup> it is only represented as temporal once it has come into contact with *la durée*.

How about OIT? Here the picture is much more complex. With Stages 2 and 3, the answer is evident — Bergson would certainly deny OIT since the universe endures independently of the human mind. Conversely, one certainly cannot accuse him of holding OI at Stage 1. Take the example of the pendulum: although Bergson argues that the *movement* of the pendulum does not exist without the mind since the movement is always grounded in *la durée*, he would nevertheless say that the *positions* of the pendulum are still *there* — perhaps one could go as far as to claim that he denies EI about the *positions* of the pendulum. To make matters even more complicated, in some of his writings from Stages 2 and 3, he seems to make unwarranted conclusions from epistemology to ontology and thus glide back and forth between OI and EI. For example, he frequently seems to use the fact that we do not know the entire set of facts about the future (epistemological premise) to support the *non-existence* of the future (an ontological conclusion).<sup>404</sup> The most flagrant example of this confusion is his proof against the possibility of nothingness from CE,<sup>405</sup> where he fallaciously argues from the epistemological impossibility of conceiving nothingness (the conception of nothingness requires someone to conceive it, i.e., a conceiving mind, which, itself implies the existence of something, i.e., the conceiving mind itself) to its ontological impossibility.<sup>406</sup> Although one could here attempt to defend Bergson by saying that the non-existence of the future is an inference to the best explanation (in that its non-existence best explains the lack of knowledge), this would be completely unsupported by Bergson’s actual statements in the relevant sections of CE.

However, things are much simpler if we limit Bergson’s writings to Stage 1, where it seems coherent to ascribe OIT to his thought. *La durée* in TFW is both the immediately accessible ontological source of time since it is *itself* an instantiation of temporality (OIT) as well as the basis for the synthesis of individual unconnected positions of spatialised time in the

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<sup>403</sup> DS 30/41. See also Barnard, *Living Consciousness. The Metaphysical Vision of Henri Bergson*, 39–40.

<sup>404</sup> CM 84-5/113-14; DS 43/61.

<sup>405</sup> CE 272-98/272-98.

<sup>406</sup> This argument is vehemently refuted in Maritain, *Bergsonian Philosophy and Thomism*, 90.

external world (EIT); nevertheless, the positions of time in the external world (e.g., the positions of the pendulum) still exist (not-OI).<sup>407</sup>

Before continuing, let us summarise where the argument has proceeded so far. We have seen that the distinction between temporal ontologies, that is, theories about what exists in time, are more fundamental than the distinction between A/B-theories, a distinction that Bergson has been shown to evade in Chapter 2. We have also seen that the development of Bergson's positions on the relation between the mind and the world makes it necessary to stipulate a cut-off point in this development — this cut-off point was placed after Stage 1.<sup>408</sup> Finally, we have seen that at the end of Stage 1, although Bergson does not propose an ontological idealism *simpliciter* (OI), he does hold onto both an epistemological and an ontological idealism *about time* (EIT and OIT). With Bergson's insights thus circumscribed and refined, have we come any closer to answering the fundamental questions raised by analytic temporal ontologies?

### 3.4. Observer-Relativising Temporal Dimensions

The main function of the three analytic temporal ontologies outlined earlier lies in providing answers to the question “Does  $x$  exist?” where  $x$  refers to an object or event in objective time.<sup>409</sup> Thus, for example, for all  $x$ , eternalism would answer in the affirmative (provided, of course, that the events or objects in question do in fact exist) and index the existence of  $x$  to a set of points in objective time, i.e., in the “spatialised” structure shared by the A and B-theories and discussed in Chapter 2. Similarly, the growing-block theorist would only answer in the affirmative where  $x$  refers to a past or a present event, but in the negative where  $x$  refers to a future event.

However, formulating the question about temporal ontologies by asking “Does  $x$  exist?” presents two problems — the first for philosophy of religion (which will be treated in the following chapter), the second for Bergson's philosophy limited to Stage 1.

First, Ryan Mullins has recently argued that with the exception of Wycliffe, most of the classical theists who affirmed divine eternity were presentists,<sup>410</sup> and points out that the claim

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<sup>407</sup> I leave undecided the question about the extent of EI in Bergson — here EI is limited only to time (i.e., EIT).

<sup>408</sup> This does not mean that Bergson's later works will not be appealed to from this point, but that some of the conclusions of those books will be rejected.

<sup>409</sup> The problem is different when it comes to the existence of timeless objects, such as numbers, propositions or universals, the discussion of which is beyond the scope of this work. Bergson treats this topic in EPL 107-8.

<sup>410</sup> Mullins, *The End of the Timeless God*, 74.

endorsed by many contemporary theologians about medieval theists holding eternalism is deeply anachronistic.<sup>411</sup> As a matter of fact, the compatibility of divine atemporality and presentism has been recently explicitly defended by Leftow.<sup>412</sup> But note that, intuitively, there seems to be an immediate problem with trying to square divine eternity with non-eternalist ontologies. If all events co-exist with eternity, but at the same time do not exist at individual points in time (past and future for the presentist, future for the growing block theorist), it seems that in such a set-up we cannot provide a definite answer to the “Does *x* exist?” question. Take an event *y* in the future. On the presentist view, the answer to “Does *y* exist?” is negative. However, since *y* must co-exist with eternity for God to know it, it seems that we should answer in the affirmative. A succinct formulation of this problem can be found in Prior:

I simply cannot see how presentness, pastness or futurity of any state of affairs can be in any way relative to the *persons to whom* this state of affairs is known. What makes this quite impossible to stomach is precisely the truth ... that the future has an openness to alternatives which the past has not; such openness is just not the sort of thing that can be present for one observer and absent for another — either it exists or it doesn't and there's an end to it; ... . So I don't understand what is meant by saying that contingent future occurrences are neither contingent nor future *as* God sees them, though I do understand what would be meant if it were said that they are neither contingent nor future *when* God sees them. How, in fact, could God *know* a state of affairs to be present and beyond alteration, until it *is* present and beyond alteration ... ?<sup>413</sup>

To clarify, Mullins does point out that the claim about events co-existing with eternity is, in classical theism, primarily one about divine *knowledge*, not about *ontology*:

When the Christian tradition says that all moments are present to God in eternity — at least with regard to God's omniscience — it is not meant to say something about the ontology of time. Rather it is saying something about God's mode of cognition.<sup>414</sup>

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<sup>411</sup> Mullins, 75.

<sup>412</sup> See his most recent Leftow, ‘Presentism, Atemporality, and Time's Way’; see also Leftow, ‘Aquinas on Time and Eternity’.

<sup>413</sup> Prior, ‘The Formalities Of Omniscience’, 128; see also Shanley, ‘Eternal Knowledge of the Temporal in Aquinas’, 203.

<sup>414</sup> Mullins, *The End of the Timeless God*, 86.

However, even though we may have evaded the apparent contradiction in answering “Does *x* exist?” both in the affirmative and in the negative by arguing that presentism really has to do with ontology in the temporal realm, whereas eternity has to do with divine *knowledge* of the temporal realm, the ontological question about things existing in eternity still remains unanswered. Besides, separating epistemology and ontology to dissolve the contradiction is not as easy as one might think. Knowledge is factive. “Truth goes with existence.”<sup>415</sup> One thus cannot simply put the truthmaker problem in brackets and argue for different senses of “being present” (the one epistemic, the other ontological). One suggested solution to this problem is to accept eternalism. For example, Craig contends that this was, in fact, Aquinas’ original solution to the foreknowledge problem:

[T]he presence of all events to God does not seem to be merely epistemic; rather Aquinas’ understanding of foreknowledge seems to require that the past and future be ontologically on a par with presently existing reality.<sup>416</sup>

[T]he entire temporal series would seem to exist timelessly, on the analogy of a spatial extension, and as such is known by God.<sup>417</sup>

Similarly, Mellor argues that the “tenseless” view of time, most closely affiliated to the eternalist ontology, does seem to resolve a whole host of problems regarding divine knowledge of the world: “Whenever I write this article, if it tenselessly exists at all it exists always, and God can know it at any time.”<sup>418</sup> However, if Mullins is right about the fact that classical theism affirms a non-eternalist ontology, it is still legitimate to ask whether there is a way of squaring divine eternity with a non-eternalist ontology without obtaining contradictory replies to the “Does *x* exist?” question. We will return to this problem in more detail in the following chapter, although the ontological solution proposed below will already begin to indicate how the matter may be resolved.

Secondly, an identical ambiguity regarding answers to “Does *x* exist?” is present in Bergson, although here the stating of the problem is slightly less complicated. Take a particular event in the past, say, watching a film a week ago. Do the individual scenes of the film exist? On the one hand, Bergson’s repeated claims about the past existing (see section 3.1) seem to force an affirmative answer — the event exists in the past of my *durée* (in my memory), which

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<sup>415</sup> Mellor, ‘Special Relativity and Present Truth’, 74.

<sup>416</sup> Craig, ‘Was Thomas Aquinas a B-Theorist of Time?’, 480.

<sup>417</sup> Craig, 482.

<sup>418</sup> Mellor, ‘History Without the Flow of Time’, 74.

I “carry with me.” On the other hand, Bergson’s statements about matter being “reborn at every instant” (see the previous section) seem to require an answer in the negative — surely, if matter is reborn at every instant, the same must be the case for individual scenes in the film, themselves constituted by matter or matter-related phenomena indexed to the spatialised A/B-structure (see Chapter 2), say, rays of light passing through the translucent film and then refracting off the surface of the wall and into my retina. Note that the conflict in question cannot be dealt with simply by saying that this situation is approximately analogous to the colour red example (see section 3.2), whose light-wave oscillations, connecting “before” and “after,” provide their own continuity without any need for the human *durée*; this option is now off the table since we have left Bergson before Stage 2, and denied an independent existence of *la durée* in the external world.

Is there a way to solve both of these problems? Can we generate an ontology of time that, on the one hand, harmonises with Bergson’s *durée* at Stage 1 and is thus faithful to our immediate phenomenological experience of time and, on the other hand, fits into classical theist positions about the relation of time and eternity? Although one might say that simply accepting eternalism *à la* Craig or Mellor quoted above (thereby simply rejecting Bergsonian philosophy *tout court*) is the way to go, I will argue that there is an alternative option that is not only compatible with Bergson’s philosophy at Stage 1 but also furnishes a model that can generate a more powerful solution to the problem of divine foreknowledge and human free will. This model, based on a *durée*-oriented development of Mauro Dorato’s “ontologisation” of space-time points in *Time and Reality* from 1995, consists of changing the fundamental question about the existence of temporal objects from “Does *x* exist?” to “*Whom* does *x* exist *for*?”, thus taking up Prior’s challenge about presentness, pastness, and futurity of a set of affairs being relative to the persons by whom this set of affairs is known. In a peculiar twist, the following argument could be considered as staging what Bergson would have (and should have) said to Einstein, had the unfortunate 1920s exchange taken place 20 years earlier, before Bergson moved to Stage 2.

Following the formulation of the special theory of relativity, philosophers of time have recognised that simultaneity and succession cannot be extended as absolute relations throughout the universe, but may only be limited to a given frame of reference. That is, one cannot meaningfully answer questions of the form “Is *x* simultaneous with *y*?”, but only questions of the form “*Given a particular reference frame*, is *x* simultaneous with *y*?” Note that the relativity of the *ordering* of events (already rather problematic for the A-theorist) poses

a particular *ontological* problem for the presentist observed by Putnam,<sup>419</sup> which Miller summarises as follows:

[S]uppose that John and Bert co-exist, that is, each judges the other to be simultaneous with himself. Suppose that according to Bert, Mary co-exists with Bert. Suppose existence is transitive — if  $x$  co-exists with  $y$ , and  $y$  co-exists with  $z$ , then  $x$  co-exists with  $z$ . Then it follows that John co-exists with Mary. But it is consistent with all that we have said that from John’s frame of reference, Mary does not co-exist with John but instead Mary is located earlier, or later, than John. So if John is committed to Mary’s existence, then he is committed to the existence of objects that are not, relative to his frame of reference, in the present. Since we can set up long chains of observers located in different frames of reference, we can derive the conclusion that John ought to be committed to the existence of objects he takes to be very distantly located in the past or future, and likewise for all the other observers in the chain.<sup>420</sup>

Contrary to the seemingly inevitable inference from relativity to eternalism put forward by Miller,<sup>421</sup> in the remainder of this chapter, I wish to defend the following argument, which demonstrates that the “Does  $x$  exist?” question (where  $x$  refers to a temporally extended object), to which eternalism is the answer, is not a well-formulated one and should instead be replaced with a different question that partially relativizes the existence of  $x$  to the *durée* of a particular human observer, thus appealing to Bergson’s OIT from Stage 1:

P1: The temporal dimension of a given segment of spacetime is an instance of spatialised time.

P2: Spatialised time is ontologically dependent for its existence on *la durée*.<sup>422</sup> (OIT)

P3 (from P1 & P2): The temporal dimension of a given segment of spacetime is dependent for its existence on *la durée*.

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<sup>419</sup> See Putnam, ‘Time and Physical Geometry’; Rietdijk, ‘A Rigorous Proof of Determinism Derived from the Special Theory of Relativity’.

<sup>420</sup> Miller, ‘Presentism, Eternalism, and the Growing Block’, 352.

<sup>421</sup> Mellor provides three examples of failed attempts at avoiding the inference from special relativity to the existence of all things on a par in Mellor, ‘Special Relativity and Present Truth’, 75–76.

<sup>422</sup> The relations of “being relative to” and “being dependent on” are transitive. Furthermore: let R designate “being relative to.” Then: if  $aRb$ , then  $(a \ \& \ c)Rb$ . For example, if the property of “being to the left of Lewis” is relative to Lewis, then so is the property of “being to the left of Lewis and liking coffee.”

P4: *La durée* is human-observer-relative.

P5 (from P3 & P4): The temporal dimension of a given segment of spacetime is human-observer-relative.

P6: All temporally extended objects<sup>423</sup> are partially constituted by a temporal dimension forming a segment of spacetime, whose existence is human-observer-relative.

**C: (from P5 & P6): Existence of temporally extended objects is human-observer-relative.**

The conclusion, roughly speaking, states that for non-timeless garden-variety objects (i.e., objects excluding numbers, universals and the like<sup>424</sup>), asking, “Does *x* exist?”, is incomplete. We should instead ask, “Does *x* exist for a human observer *S*?” Let us look at the individual premises of the argument and the intermediary conclusions.

*P1: The temporal dimension of a given segment of spacetime is an instance of spatialised time.* The fact that the temporal dimension of a given frame of reference (a system of coordinates with conventionally fixed points of reference) is Bergson’s “spatialised time” should now be fairly clear from the foregoing discussion. It displays all the features that Bergson accords to spatialised time, be it divisibility, susceptibility to mathematical representability by geometric objects (lines, angles etc.), applicability to material objects, inability to capture the heterogeneous development of mental states etc. Chapter 2 has clearly demonstrated that the B-series is an instance of “spatialised time” — and, as Leftow observes, “every temporal frame of reference generates its own unique B-series.”<sup>425</sup> Note again that the “spatialisation” here is not caused by the fact that objective time forms a part of *spacetime* (see the discussion in Chapter 1, especially Mellor’s claim that “time’s being a dimension of spacetime does not make it spatial,”<sup>426</sup> as well as the discussion of D. C. Williams in Chapter 2),

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<sup>423</sup> In what follows I treat temporal “events,” “entities,” and “objects” as interchangeable terms. By each of these, I understand a “thing” in spacetime that has three spatial and one temporal dimensions, none of the values of which are zero. That is, my usage of “event,” though comprising the fact that it is located in spacetime, or, as Maudlin puts it, is a “place-in-space-at-a-time” (Maudlin, *Philosophy of Physics: Space and Time*, 60.), departs slightly from the usual terminology of physics (where an “event” in spacetime is taken to be instantaneous), since I do not discuss instantaneous events.

<sup>424</sup> For a discussion of how the existence of these relates to time, see Leftow, *Time and Eternity*, 39–49.

<sup>425</sup> Leftow, ‘Aquinas on Time and Eternity’, 393, footnote 10.

<sup>426</sup> Mellor, *Mind, Meaning, and Reality*, 164.



but by the internal topological features that constitute objective time (as opposed to those that constitute *la durée*).

*P2: Spatialised time is ontologically dependent for its existence on la durée.* This was demonstrated in Chapter 2. Recall that *la durée*, an ineliminable and irreducible instance of change, is the ontological ground of all temporality (spatialised or not), it is therefore also the basis for the spatialised structure used by A/B-theorists to capture objective time. But, as Bergson argues (in Stage 1), without *la durée*'s synthesis of successive states of the external world, the set of those successive states would not exist as a unified structure; it would simply consist of individual disconnected instantaneous slices of reality existing each by itself without any connection to the others.<sup>427</sup> In the case of relativity, every instance of the B-structure of objective time (dependent on the human mind) is a subset of Minkowski spacetime: the “instantaneous” visions, therefore, are best understood as planes of simultaneity relativized to particular space-time points. This is precisely what constituted a part of the disagreement between Bergson and Einstein; although Einstein insisted that the “observer” (say, in the famous train and lightning thought experiment) is only introduced as an *illustration* (and could easily be replaced by a measuring instrument recording the light-signals and noting positions of simultaneity/succession), for Bergson *a real human mind* qua *la durée* is required to synthesise various spatial positions of objects for there to be relations of simultaneity and succession in the first place: “[F]or Bergson, the physicist’s time is no time at all when it is separated from duration.”<sup>428</sup> Succession and simultaneity, according to Bergson, require a human mind; not only to represent them (EIT) but also to ontologically ground them (OIT).

*P3: The temporal dimension of a given segment of spacetime is dependent for its existence on la durée.*<sup>429</sup> The conclusion reached from the two preceding premises means that every instance of the B-structure (i.e., the ordering of events by “before” and “after” relations)

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<sup>427</sup> See for example Kouba, ‘Le Mouvement Entre Temps et Espace (Bergson Aux Prises Avec Sa Découverte)’, 209; Durie, ‘Introduction’, viii.

<sup>428</sup> Durie, ‘Introduction’, xiv, xx.

<sup>429</sup> Strictly speaking, one should speak not of “a reference frame relative to a particular instance of *la durée*”, but perhaps of “a reference frame relative to a particular instance of *la durée* at a given present moment,” since there may not be a one-to-one correspondence between an observer and a reference frame. If *la durée* is limited to the present, speeds up and slows down, does each one of these “presents” generate its own retrospective B-series-like reference frame? In what follows, I leave this question undecided for two reasons. First, the reference frames are generated by appealing to the hypothetical transmission of light signals between physical clocks — the moments measured out by these clocks (in a given reference frame) are constant and regular; *la durée* merely serves to synthesise these into a unified whole. Second, since *la durée* (as opposed to its trace analysable directly by the B-structure) is located in the *present*, it is questionable whether one should methodologically differentiate between “*la durée*” and a “*la durée* at a given present moment.”

should be relativized to a particular instance of *la durée*. This means that the ordering of events by relations of “before” and “after” is different depending on which particular *durée* constituting it we pick to relativize it — for some *durées* two events could be related by a simultaneity relation, for others, they could be related by a “before and after” relation. Note that the difference between (i) a reference frame being mind-dependent and (ii) the relations between whatever occupies different points of the reference frame being mind-dependent, is otiose. This is because a particular reference frame is defined using temporal relations which are themselves mind-dependent. A reference frame, in this context, can thus be understood as a “triadic” B-series; one that involves the dyadic relation of “before” and “after” with the added relation of this dyadic relation to a particular observer whose mind is required for its ontological constitution.

*P4: La durée is human-observer-relative.* This premise is a restating of Bergson at Stage 1: every human mind is a different *durée*. Recall that we have limited Bergson’s claims about *la durée* to human observers, thus excluding the possibility of non-human *durées* at different degrees of “tension.” In Stages 2-3 Bergson says that all *durées* ontologically instantiate time, but it is only at Stage 1 where this ontological instantiation refers to the human mind. Here it is worth pointing out that Bergson would have probably agreed with some of Grünbaum’s claims about the mind-dependence of temporal becoming. Grünbaum argues that “becoming is mind-dependent, because it is not an attribute of physical events per se, but requires the occurrence of states of *conceptualised awareness*.”<sup>430</sup> Bergson would simply say that this claim is trivial since *any* temporal notion (*la durée* or objective time) is always mind-dependent (OIT). However, he would likely have been in agreement with him about the fact that a reference to a real human observer is required to establish the existence of the present moment (perhaps with a partial disagreement about the idea of “conceptual awareness”):

What qualifies a physical event at a time *t* as belonging to the present or as now is not some physical attribute of the event or some relation it sustains to other purely physical events; instead what so qualifies the event is that at least one human or other mind-possessing organism *M* experiences the event at the time *t* such that at the time *t*, *M* is conceptually aware of the following fact: this having of the experience of the event *coincides temporally* with his awareness of the fact that has it at all.<sup>431</sup>

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<sup>430</sup> Grünbaum, ‘The Status of Temporal Becoming’, 375.

<sup>431</sup> Grünbaum, 381.

Bergson would, nevertheless, disagree with Grünbaum's insistence that temporal precedence (i.e., two events in spacetime ordered by reference-frame-relative B-relation) is not mind-dependent; the synthesising consciousness with memory is required to establish the relations of before and after in the first place.

*P6: All temporally extended objects are partially constituted by a temporal dimension forming a segment of spacetime, whose existence is human-observer-relative.* This premise implies the controversial claim that co-existence is not transitive. To see this, take a particular human observer, Emma, a temporal dimension relative to her position in spacetime (five minutes) and two temporally extended objects/events that co-exist in that human observer's temporal dimension, Emma's watching an advert on the living-room TV and boiling an egg in the kitchen. Suppose Emma lives on a particularly large spaceship where her kitchen is half a light-year away from her living room. In that case, her boiling egg does not coexist with the advert for another observer, Eleanor, who is passing on a different spaceship past Emma's: the temporal dimension constituting the temporal extension of the four-dimensional event of the boiling egg event may exist in her *durée* when the event of the advert on the TV does not, depending on whether she flies past the kitchen or the living-room first. The earlier-suggested possibility of not treating temporal co-existence as a transitive relation is briefly considered by Miller, but later rejected on the basis of its counter-intuitiveness:

[I]t can be argued that what we have learned from S[pecial] T[h]eory of R[elativity] is that all talk should be frame-relativized, and therefore that talk of existence and co-existence ought to be frame-relativized. ... The idea that existence itself is not transitive is counterintuitive. It is, after all, the idea that although  $x$  exists relative to Peter, and Peter and Bert exist relative to one another, nevertheless  $x$  does not exist relative to Bert.<sup>432</sup>

Similarly, Dorato, raising a potential objection against his own position says:

The main point raised by the full-view theorist [i.e., the eternalist] is that a relativization of ontological notions is much more dubious than one concerning an epistemic or semantic notion, because we resist thinking that the determinateness of what *is* can depend on a spacetime point or, worse, on an inertial frame. Frames should not carry such a heavy metaphysical weight, because, after all, the partitions into past and future they induce by an orthogonal

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<sup>432</sup> Miller, 'Presentism, Eternalism, and the Growing Block', 354.

hyperplane of simultaneity do not represent possible worlds, but rather different spatio-temporal “coordinatizations” of the *same* world.<sup>433</sup>

Two things need to be said: first, following relativity, the counterintuitiveness of many basic notions must simply be accepted as a fact, especially if they cohere with other scientific facts. Secondly, there is a way of making the notion of frame-relativising existence more plausible, which is precisely what Dorato himself demonstrates. Space does not permit me to present his argument in full,<sup>434</sup> but, in summary, he draws an intrinsic connection between the notions of determinedness and determinateness which, for him, are always relativized to a particular space-time point,<sup>435</sup> thus contradicting much of what was said in Prior’s earlier quote on p. 94. Once space-time points are understood not purely epistemically or semantically, but ontologically, we can place the weight of relativizing ontological qualifications about existence and non-existence onto them and subsequently, onto reference frames consisting of sets of these space-time points, thus not necessarily following the inference from relativity to eternalism:

[I]f we interpret the claim of unreality of the future as meaning that the future is (wholly, or partially) *indeterminate* or *undetermined* not with [respect] to a spatial hypersurface, but with respect to a spacetime point, the formulation of the relativist non-full [i.e., non-eternalist] views is not outright incoherent.<sup>436</sup>

There is no one single existent reality that all the different “visions” dependent on individual space-time points are visions *of*.<sup>437</sup> We thus end up with what Le Poidevin has fittingly captured in a review of Dorato’s book as “relative realities.”<sup>438</sup> This is not that different from Kit Fine’s suggestion that once we abandon the idea of a single unified reality, we may well stipulate that every given standpoint (“standpoint” in the context here being coextensive with a given coordinate system generated by an observer’s mind) gives rise to its own reality, without this necessarily running into contradictions with the special theory of relativity: “Each (representative) standpoint will give rise to its own reality and no one can be singled out as being *the* standpoint of reality.”<sup>439</sup>

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<sup>433</sup> Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 124.

<sup>434</sup> For a summary of his argument, see Dorato, 210.

<sup>435</sup> Dorato, 124–25.

<sup>436</sup> Dorato, 147.

<sup>437</sup> Dorato, 128, 152.

<sup>438</sup> Le Poidevin, ‘Relative Realities’.

<sup>439</sup> Fine, ‘Tense and Reality’, 305.

*C: Existence of temporally extended objects is human-observer-relative.* Tooley argues that the notions of “existing” and “not existing” are insufficient: they must be coupled with the notion of existing *as of* a given time.<sup>440</sup> He is right, but we need to take a step further. Since the objective time *as of* which things exist is relative to a given *durée* (which is instantiated by actual real human beings “in flesh and blood” so to speak), I argue that existence and non-existence in time should be relativized to a human observer with memory, i.e., replaced with “existence/non-existence *for whom*.” This obviously entails something like a local growing-block theory of time, although one relativized to sets of space-time points with *durées* in them — the past and present exist only insofar as they are the present and past of a particular instance of *la durée* occupying a set of space-time points.

Note that in this respect my view follows Dorato in the relativization of existence (with the difference that for him existence is relative to space-time points, whereas on my account existence is relative to human observers occupying particular worldlines and generating frames of reference consisting of specific space-time points), but goes against his attempt to exclude the human mind from the picture.<sup>441</sup> For instance, Dorato says the following:

In spacetime physics, talk of observers, often associated with misleading “anthropocentric” philosophies of relativity according to which the human observer has a special role in the universe ... , can be replaced completely in favour of talk involving clocks and coincidences of light rays. The latter talk, still extrinsic because based on frames, can in its turn be replaced by an intrinsic, geometric formulation of the theory. This can only be welcomed in the present approach because we want the formulation of the relativistic non-full views to be as mind- and observer-independent as possible.<sup>442</sup>

Leaving aside the question of whether the human observer has a “special” role in the universe,<sup>443</sup> it should now become clear from the previous chapters that the human mind *does* have a special role in the ontological foundation of temporality. For example, Dorato defines temporal becoming as consisting of two ingredients: “One is a mind-independent distinction between past and future. The other is a mind-independent, continuous change of the instant of separation, the present.”<sup>444</sup> Bergson would argue that by their very nature, neither of these two

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<sup>440</sup> Tooley, *Time, Tense and Causation*, 37–40.

<sup>441</sup> See for example Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 139.

<sup>442</sup> Dorato, 137.

<sup>443</sup> In the quotation above, Dorato refers to Prigogine and Stengers, *Order out of Chaos*.

<sup>444</sup> Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 10.

ingredients can ever be mind-independent. The point can be made even more pertinent by returning to the distinction between two “real times” discussed in section 2.3. As has been argued there, physics operates with objective “real time.” Once *la durée* has established the fundamental temporal relations of precedence and posteriority that link any two states of the external world at a given time and used this to build objective time, physicists can calculate using objective time without reference to *la durée*. *La durée*, which is the ontological foundation of time *simpliciter* never features in the mathematical equations that represent it.<sup>445</sup> The relation between *la durée* and objective time is primarily a metaphysical question, one an answer to which cannot be answered by physics. This is related to a point raised about Bergson’s engagement with Einstein by Lévy-Leblond, who argues that Bergson was unjustified in stressing to the physicist that notions of simultaneity and succession are inevitably tied to the prior lived experience of *la durée* since

physics is physics and we cannot accuse it of not providing responses to global questions about where it originates from. Quite the contrary, it is precisely by reducing its field of enquiry and its level of conceptualisation that it manages to give a representation of the world, which is certainly partial, but reliable.<sup>446</sup>

A methodological point needs to be said to the Bergsonian scholar who has begun to detect eerie echoes of Bergson’s engagement with relativity: Was it not the dangerous fusion of *la durée* and relativity that led to Bergson’s outright wrong conclusions such as denying the empirical possibility of the twin paradox<sup>447</sup> and the postulation of a single real time in the universe?<sup>448</sup> Would the Bergsonian scholar not be better off following Lévy-Leblond’s suggestion that it is better to avoid attempts at subsuming physics into the Bergsonian metaphysical system and instead opt for something like Gaston Bachelard’s radical separation between scientific and common or intuitive knowledge?<sup>449</sup> Although the point regarding methodologically subsuming relativity under an *a priori* philosophy is certainly true, what my project of fusing *la durée* with the reference-frame-relativization of existence attempted is

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<sup>445</sup> TFW 193/145.

<sup>446</sup> “[L]a physique n’est que la physique et on ne saurait lui reprocher de ne pas fournir une réponse globale aux questions d’où elle part. Bien au contraire, c’est en réduisant son champ d’investigation et son niveau de conceptualisation qu’elle arrive à donner du monde une représentation certainement partielle, mais fiable.” (Lévy-Leblond, ‘Le Boulet d’Einstein et les boulettes de Bergson’, 245, my translation.)

<sup>447</sup> DS 127-34/183-98.

<sup>448</sup> For a summary of the type of mistakes that Bergson committed, see Maudlin, *Philosophy of Physics: Space and Time*, 79–80.

<sup>449</sup> See Lévy-Leblond, ‘Le Boulet d’Einstein et les boulettes de Bergson’, 255.

precisely the opposite: I am subsuming Bergson's *durée* under the physical theory and not the other way around. That way, I am merely "attaching" the human-mind-dependent *durée* to individual points in spacetime rather than — as Bergson did — trying to locate a single "real time"<sup>450</sup> hiding under the spacetime as a whole and somehow disclosed through *a priori* reasoning about individual *durées*. (This "attachment" is merely methodological and not ontological, since, ontologically, it is the subsets of the space-time structure that are "attached" to individual instances of *la durée*.) In this respect, my model maintains the link between human consciousness and time (be it as *la durée* or as objective time) that Bergson affirmed in the third chapter of *Duration and Simultaneity*<sup>451</sup> but rejects the two unacceptable conclusions that Bergson affirmed there: (i) Langevin's twin paradox can, on the theory suggested above, simply be interpreted as a mismatch between *la durée* and objective time — the earth-twin's surprise at the unequal ageing of the space-twin is, (a) if based on spatialised time (noting that the space-twin's clocks are mismatched) explicable by physics, (b) if based on a surprise about the *durée* of the earth-twin not being in sync with the clock of the other one, no more different than the mismatch we sometimes experience between our *durée* and objective time in a single reference frame ("Oh gosh, is that the time?!"). (ii) A single "real time" is rejected simply because "reality" is relativized to a given *durée* occupying a particular set of space-time points.

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This chapter has shown that Bergson's philosophy cannot be easily subsumed under either of the available analytic ontologies of time. The examination of the possibility of such submission has, however, revealed a further inescapable link between the existence of the human mind and time. I suggested that Bergson's philosophy, when circumscribed to his early works, can be taken to imply an ontological ("no mind" = "no time") and therefore an epistemological idealism about time, both of which, when combined with the relativization of existence, results in the surprising conclusion that the existence of temporal objects is human-observer-relative. We started by asking whether Bergson's philosophy fits better into eternalism, presentism, or the growing-block theory and ended with something that is best described as a "mind-dependent local growing-block theory indexed to the *durées* of individual observers occupying various worldlines in spacetime."

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<sup>450</sup> For a discussion of the notion of 'Real time,' see During, 'Dossier critique', 278–79, note 24.

<sup>451</sup> DS 30-47/41-67.

The questions that this conclusion opens up are numerous: Does the claim about temporal objects' existence being relative to a human observer not look like an ontological idealism *simpliciter*? Have we not incautiously slipped from claiming that the "existence in time" of an object is observer-relative to claiming that the "existence of an object" is relative to an observer existing in time? And how does this relate to the presence of all things to eternity hinted at earlier? These are questions that the next chapter will turn to.



## 4. Eternity and Ontological Idealism About Time

The previous chapter concluded with the observation that for any object existing in spacetime, its existence must be relativized to a human observer whose mind is defined as *la durée*.<sup>452</sup> In other words, for every temporally extended object or event, we cannot simply ask “Does it exist?”, rather, we must reformulate the question as “Whom does it exist *for*?” This partially-idealist ontology presents several problems. For example, it is difficult to see how to prevent an idealism about the temporal aspect of objects from sliding into an ontological idealism about all objects *simpliciter*. One might also wonder whether such an ontology can ensure objectivity between various observers with *la durée* or, perhaps most problematically, how to avoid the route from “existence of objects being partially relativized to observers’ *durée*” to “*la durée* ‘producing’ existing objects.”

This chapter argues that the temporal ontology outlined in the previous chapter is incomplete and deficient without an appeal to the nature of the relation between any existing thing and God. More specifically, I will argue that an appeal to God’s “creative knowledge” of the world, most clearly elucidated in a series of canonical papers by Shanley<sup>453</sup> and recently by Matthews Grant<sup>454</sup> is required to make the fusion of Bergson’s philosophy and partial relativizing of existence coherent. The lack of a single coherent ontology of extra-mental temporal objects in Bergson (see footnote 353) will here be supplanted with the idea of God as the Creator of everything in the temporal realm. Bergson dedicates MM to explaining how to overcome the apparent dualism between *la durée* (internal fluid multiplicity) and spatialised time (external static multiplicity) that was left unresolved by the conclusions of TFW. This, in the end, led him to posit a single flux of the universe that is impossible to harmonise with the special theory of relativity. What I propose, following the delimitation of Bergson’s philosophy to Stage 1, is to keep *la durée* in the human mind, but account for the continued existence of material objects not by their having a *durée* of their own, as Bergson does in MM, but by matter’s being the product of divine creative activity.

According to Ryan Mullins, “it makes no sense to ask what God’s relationship to *x* is if one does not have a clue what *x* in fact is.”<sup>455</sup> I argue that the articulation of a coherent theory

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<sup>452</sup> Note that for Bergson, the relation between *la durée* and the mind is one of identity; unlike in Kant, the synthesising *durée* is not a distinct or separate “faculty” of the mind.

<sup>453</sup> See especially Shanley, ‘Eternal Knowledge of the Temporal in Aquinas’; Shanley, ‘Aquinas on God’s Causal Knowledge: A Reply to Stump and Kretzmann’; Shanley, ‘Divine Causation and Human Freedom in Aquinas’.

<sup>454</sup> Matthews Grant, *Free Will and God’s Universal Causality. The Dual Sources Account*.

<sup>455</sup> Mullins, *The End of the Timeless God*, 11.

of time requires starting from God as the Creator of the world composed of objects existing in time. I do agree that fixing the precise *meaning* or *meanings* of the word “time” is an irreplaceable building block in the process of this articulation, but Mullins’ claim about us “not having a clue what time is” seems far-fetched, since we do all seem to share a pre-theoretical notion of what “time” roughly refers to. To put things in context; whereas the aim of Chapter 2 was to provide an analysis of what “time” is (or, more specifically, what objective time and *la durée* are), Chapters 3 and 4 articulate a theory of time which provides further information about the nature of the thing(s) being referred to by the term(s) “time(s).”

This chapter will create a metaphysical groundwork for the solution to the problem of divine foreknowledge and human free will presented in the concluding chapter, by bringing together three ingredients. The first is Bergson’s *durée*, which provides the synthetic “glue” that makes the existence of objects or events *qua* temporal objects possible.<sup>456</sup> The second is the relativization of objects’ existence to a particular *durée* defended in the previous chapter. In this respect, *la durée* functions a bit like Arthur Eddington’s “private door”<sup>457</sup> (see footnote 312) in that it enables us to discover the temporality of the universe — but, unlike Eddington’s “private door,” this is only because our *durée* has put time into the universe in the first place.<sup>458</sup> The third ingredient is the dependence of things’ non-*durée*-relative features on the divine mind articulated by Aquinas. Recall the different questions of analytic temporal ontologies. The defining question of the growing-block theory and presentism is “Does *x* exist?,” whereas its equivalent on an eternalist theory is “At what time [i.e., at what point(s) of the B-structural spacetime] does *x* exist?” The Bergsonian EIT and OIT convert the defining question to be “Whom does *x* exist *for*?” The answer regarding a particular *x* depends on the particular *durée* of which we ask this question: the Death of Queen Anne exists for my and McTaggart’s consciousness, but it did not exist for Mary Queen of Scots.<sup>459</sup>

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<sup>456</sup> Bizarrely, although the human mind (or soul) is crucial for Augustine’s writing on time (McGinnis, ‘Creation and Eternity in Medieval Philosophy’, 78.), Bergson never refers to Augustine, not even in his lectures on the history of theories of time (HIT). Kołakowski comments: “[I]t is strange that Bergson ... never made a reference to [St Augustine’s *Confessions*] ... which, at various points, is so close to his own struggling with the same intractable puzzle. The only conceivable reason is that Bergson had simply never heard of, let alone read, the *Confessions*.” (Kołakowski, *Bergson*, 17.)

<sup>457</sup> Eddington, *The Nature of The Physical World*, 91.

<sup>458</sup> This is not unrelated to Anthony Quinton’s argument demonstrating that whereas it does not seem like reality need be *spatially* unified, we cannot construct a picture of a temporally un-unified reality; the temporal unification of reality relating to a single subject is indispensable. See Quinton, ‘Spaces and Times’, especially 145-7.

<sup>459</sup> It is worth noting that the account of “anticipation” from Chapter 2 creates space for the existence of future objects, as long as they are related to *la durée qua* anticipations. For example, although the Death of Queen Anne did not exist for Mary Queen of Scots, when I am writing this (15<sup>th</sup> April 2020), the end of the Covid-19 lockdown exists for my *durée*, though merely as an indeterminate anticipation.

Two important delimitations are required: First, this chapter is not an exegetical exercise in medieval theology. Much as I am aware of the perils connected with de-contextualising and re-contextualising Aquinas' and Scotus thought,<sup>460</sup> I will merely be using some themes from their works as a springboard to offer a feasible solution to the free will and foreknowledge problem based on my reading of Bergson's philosophy. This is also motivated by the fact that many of the metaphysical facets of the medieval debates have become obsolete after the discovery of the special theory of relativity and that engagement with some conclusions of this theory is required to obtain a fully coherent ontology of time. I agree with Leftow's claim that "[i]f bringing contemporary conceptuality into an exposition of a historic thinker were ruled out a priori, then there just would be no way to develop [Aquinas'] answers to contemporary philosophical questions."<sup>461</sup>

Second, one may protest that the "Thomist" and "Bergsonian" ingredients are inherently incompatible, as has been indicated by the shortcomings of early 20<sup>th</sup>-century Roman Catholic engagements with Bergson.<sup>462</sup> Maritain's *Bergsonian Philosophy and Thomism* (first edition published in 1913) provides a very good example.<sup>463</sup> Space does not permit me to do justice to the full force of Maritain's critique, so I merely offer a few remarks highlighting the way that my methodology avoids it. First, the vast majority of issues that separate Bergson and Maritain (e.g., the critique of intelligence,<sup>464</sup> the opposition of truth and intellect,<sup>465</sup> an emphasis on the notions of *élan vital* or creative evolution<sup>466</sup>) are cordoned off by confining Bergson to Stage 1. Other examples of methodological moves criticised by Maritain that do not play any role in my argument are the reliance on *intuition*,<sup>467</sup> the abandoning of concepts,<sup>468</sup> the chasm between intellect and intuition,<sup>469</sup> or, perhaps, more importantly, the claim that *la durée* is the "substance" lying at the foundation not just of us as

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<sup>460</sup> See for example Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 202–4.

<sup>461</sup> Leftow, 'Aquinas on Time and Eternity', 397.

<sup>462</sup> For a summary of these debates, see Maritain, *Bergsonian Philosophy and Thomism*, 16–19; for a discussion of the controversy resulting in Bergson's books being placed on the Index, see Neveu, 'Bergson et l'Index'.

<sup>463</sup> Maritain, *Bergsonian Philosophy and Thomism*.

<sup>464</sup> Maritain, 16.

<sup>465</sup> Maritain, 21–22.

<sup>466</sup> Maritain, 19.

<sup>467</sup> See especially Maritain, 108–16.

<sup>468</sup> See especially Maritain, 65–72.

<sup>469</sup> See especially Maritain, 27–45.

human beings, but also of the material world.<sup>470</sup> Such a delimitation also renders irrelevant the extensive debates about the “anti-intellectualism”<sup>471</sup> of Bergson that Maritain engages in.<sup>472</sup>

#### 4.1. Time and Eternity

The most suitable place to start considering the intricacies of God’s relation to time is the medieval dispute between Scotus and Aquinas about the compatibility of two seemingly contradictory notions: a dynamic view of time and the presence of all things to eternity. The problem is roughly the following: on the one hand, medieval scholastics assumed, for the most part, what looks like a presentist ontology,<sup>473</sup> whilst at the same time affirming that all things are somehow present to eternity where they exist “all at once,” which seems to require something like eternalism.

We can begin to see this tension by closely examining Aquinas’ appeal to two famous metaphors: the first, of his own making, is that of the relation between the circumference of the circle and its centre as a tool to elucidate the relation between time and eternity:

[S]ince our time lies with motion, eternity, which is completely outside motion, in no way belongs to time. Furthermore, since the being of what is eternal does not pass away, eternity is present in its presentiality to any time or instant of time. We may see an example of sorts in the case of a circle. Let us consider a determined point on the circumference of a circle. Although it is indivisible, it does not co-exist simultaneously with any other point as to position, since it is the order of position that produces the continuity of the circumference. On the other hand, the center of the circle, which is no part of the circumference, is directly opposed to any given determinate point on the circumference. Hence, whatever is found in any part of time coexists with what is eternal as being present to it, although with respect to some other time it be past or future. Something can be present to what is eternal only by being present to the whole of it, since the eternal does not have the duration of succession. The divine intellect, therefore, sees in the whole of its eternity, as being present to it, whatever takes place through the

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<sup>470</sup> See Maritain, 67–68.

<sup>471</sup> See Maritain, 132–79.

<sup>472</sup> The charge of ‘anti-intellectualism’ also played a crucial role in Russell’s engagement with Bergson. For a detailed discussion, see Salmon, ‘L’apogée de la réception de Bergson en Angleterre’, 152–54; Husson, *L’intellectualisme de Bergson : genèse et développement de la notion bergsonienne d’intuition*.

<sup>473</sup> This is affirmed by Mullins, *The End of the Timeless God*, 74–86. Mullins, quoting Pasnau (Pasnau, *Metaphysical Themes 1274-1671*.) argues that Wycliffe was the only scholastic philosopher to whom we can ascribe something like an eternalist ontology.

whole course of time. And yet what takes place in a certain part of time was not always existent. It remains, therefore, that God has a knowledge of those things that according to the march of time do not yet exist.<sup>474</sup>

The above-quoted metaphor of the circumference of the circle seems to commit Aquinas to some sort of presence of things to eternity. Aquinas wants to say that things are not present to God simply in their causes or as divine ideas, they are directly present to His cognition, eternally available for His contemplation.<sup>475</sup> Commenting on Craig's reading of Aquinas' *Summa Theologiae* IaQ14a13,<sup>476</sup> Leftow claims the following:

[Aquinas] is seemingly saying that God is aware of temporal (including future) things *because* they are contained in eternity and so really present for him to see, even as you see this page because it is really present for you to see.<sup>477</sup>

For the time being, let us put aside the question of whether this type of epistemic presence requires a literal "coexistence."<sup>478</sup> Aquinas mainly wants to oppose his notion of "presence" to, for example, the claim that things are present to God merely as ideas, put forward by Bonaventure<sup>479</sup> and Albert the Great<sup>480</sup> or the claim that God knows things merely in their causes, in the way that, for example, an astronomer can know the future position of a given star even though that position is not yet present.<sup>481</sup>

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<sup>474</sup> Aquinas, *Summa Contra Gentiles*, I.66.7; see also Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 198; de Finance, 'La Présence Des Choses à l'éternité d'après Les Scolastiques', 28; Stump and Kretzmann, 'Eternity', 441.

<sup>475</sup> For the development of Aquinas' ideas on this topic from the *Commentary on the Sentences to De Veritate*, see de Finance, 'La Présence Des Choses à l'éternité d'après Les Scolastiques', 26–28.

<sup>476</sup> Craig, 'Was Thomas Aquinas a B-Theorist of Time?'

<sup>477</sup> Leftow, 'Aquinas on Time and Eternity', 389. Craig claims that "the presence of all events to God does not seem to be merely epistemic; rather Aquinas' understanding of foreknowledge seems to require that the past and future be ontologically on a par with presently existing reality." (Craig, 'Was Thomas Aquinas a B-Theorist of Time?', 480.)

<sup>478</sup> For an objection against this, see Pasnau, 'On Existing All at Once', 17.

<sup>479</sup> de Finance, 'La Présence Des Choses à l'éternité d'après Les Scolastiques', 30–31.

<sup>480</sup> de Finance, 32. The differences between Bonaventure and Albert on the one hand and Aquinas on the other are not as great as they are sometimes taken to be: "Even according to Thomas himself, God knows things through his ideas, that is to say, his own essence inasmuch as it is representative of things." ("[P]our Thomas lui-même Dieu ne connaît les choses qu'à travers ses idées, c'est-à-dire sa propre essence en tant que représentative des êtres." (de Finance, 34, my translation.))

<sup>481</sup> de Finance, 'La Présence Des Choses à l'éternité d'après Les Scolastiques', 29. Mullins' insistence that "it is not clear that anyone prior to the nineteenth century actually held the view that all times are literally present to God" (Mullins, *The End of the Timeless God*, 84.) seems questionable; one may disagree with de Finance about his ascription of the belief in "objective presence" (présence objective) of things to eternity to Aquinas, but it is difficult to see how *not* to read in this way the views that he ascribes to Peter John Olivi (de Finance, 'La Présence Des Choses à l'éternité d'après Les Scolastiques', 35.). All things considered, however, the seeming falsity of

The second metaphor appealed to by Aquinas that he took over from Boethius' *Consolation of Philosophy* is that of an observer standing on top of a mountain. Boethius writes that God "looks forward on all things as though from the highest peak of the world."<sup>482</sup> Whereas humans may be likened to travellers who travel through the valley and see various sections of the road one step after another, God sees the entirety of the road from the peak of eternity, *quasi ab aeternitatis specula*:<sup>483</sup>

If someone were to see many people walking successively down a road during a given period of time, in each part of that time he would see as present some of those who walked past, so that in the whole period of his watching he would see as present all of those who walked past him. Yet he would not simultaneously see them all as present, because the time of his seeing is not completely simultaneous. However, if all his seeing could exist at once, he would simultaneously see all the passers-by as present, even though they themselves would not all pass as simultaneously present. Therefore, since the vision of divine knowledge is measured by eternity, which is all simultaneous and yet includes the whole of

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Mullins' claim is not so straightforward: although the rough opposition between, on the one hand, "epistemic," or "objective" types of presence (i.e., things' being present to God in virtue of their being known by Him, in their causes or as ideas) and "real," "physical," or "literal" presence (i.e., things being somehow "coexistent with/next to/in" eternity) is clear, it seems much more difficult to elucidate what the more nuanced difference between "physical" (Suarez, according to de Finance), "real" (Olivi and perhaps Aquinas) and "literal" (Mullins) presence is supposed to mean. This terminological conundrum is even more aggravated by the examples that Aquinas himself uses. In addition to the "mountain" and "circle" metaphors discussed above, in the *Commentary on the Sentences* (Aquinas, *In Quatuor Libros Sententiarum*, 1:Id38Q1a45.), he says that divine knowledge of successive contingent things may be likened to five men who, successively, observe five contingent events. Intuitively, we should understand the presence of these individual contingent things to the five individual men as all of the above ("literal," "objective," "real," "physical," and "epistemic"), but our intuitions fail us when we try to picture the presence of these things once the five men's views are "fused" to create a model of the way that all successive things are equally "present" to God. This is also because — if omniscience conceived in terms of perfect knowledge of causes or as ideas are unavailable to us — finding a coherent picture of things' "real" presence to someone's knowledge *without* appealing to their usual ontological reality is rather difficult. Mullins' remark that this is primarily a question about God's mode of cognition, and not about ontology (Mullins, *The End of the Timeless God*, 86.) does not help. Unless we can come up with a picture of epistemic presence that does not require real or physical presence of the garden variety (without adopting the views of things known in their causes or as ideas that Aquinas rejects), Aquinas's authentic position remains a dead-end. For a discussion of the problem involved in working out what this "presence" precisely means, see Goris, 'Divine Foreknowledge, Providence, Predestination, and Human Freedom', 110–11; Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 242–44. Goris takes this "presence" to be literal, although he claims that the relation of "things being present to eternity" is in Aquinas taken in an analogical, not a univocal sense since this type of "presence" is radically different from the types of presence we are used to in our everyday experience (Goris, 251.).

<sup>482</sup> Boethius, *The Consolation of Philosophy*, Book V, Prose 6, 427.

<sup>483</sup> Aquinas, *In Quatuor Libros Sententiarum*, 1:Id38Q1a5. For further references to this metaphor, see Aquinas, *On Evil*, Q16a7; Aquinas, *Summa Theologiae*, 1964, 4. Knowledge in God (Ia.14-18):IaQ14a13.

time without being absent from any part of it, it follows that God sees whatever happens in time, not as future, but as present.<sup>484</sup>

When observing these two metaphors one may already begin to see the tension between the dynamic view of time and the presence of things to eternity. On the one hand, Aquinas affirms an ontology of time that is closest both to the picture of the A-theories discussed in Chapter 2 and, more importantly, to the presentist ontologies discussed in Chapter 3. The texts that could be quoted in support of this are innumerable, but, for example, in *De Veritate*, he claims that “[a]lthough a contingent does not exercise an act of existence as long as it is future, as soon as it is present it has both existence and truth, and in this condition stands under the divine vision.”<sup>485</sup> Similarly, in *Summa Theologiae*, he writes:

The “now” remains unchanged in substance throughout time, but takes on different forms, because, just as time corresponds to movement, so the “now” corresponds to the thing moving. Now the thing moving remains in substance the same throughout the course of time, but it differs in position, first here and then there, its movement consisting in the change of position. ... But eternity remains unchanged both in substance and in form. Eternity therefore differs from the “now” of time.<sup>486</sup>

Although we may not need to go as far as Leftow<sup>487</sup> or Goris<sup>488</sup> who use both of the texts above to conclude that Aquinas’ was something like a proto-A-theorist of time, the picture that emerges from such texts is one of what would most closely be associated with presentism. Besides, according to Pasnau, the belief that only the present exists is not specific to Aquinas but forms part of the metaphysical milieu in which he was operating.<sup>489</sup>

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<sup>484</sup> Aquinas, *The Disputed Questions on Truth*, Q2a12.

<sup>485</sup> Aquinas, Q2a12, ad 9.

<sup>486</sup> Aquinas, *Summa Theologiae*, 1964, 2. Existence and the Nature of God (Ia.2-11):IaQ10a4, ad 2.

<sup>487</sup> Commenting on a passage from the *Summa Theologiae*, Leftow proposes: “Thomas declares the essence of time to lie in the flow or passage of the present successively ‘lighting on’ different positions in the temporal series. This is an A-theory of time and passage.” (Leftow, ‘Aquinas on Time and Eternity’, 388.) While Chapter 2 questioned the equivalence of “presentism” and “A-theory,” the entity of the present is nevertheless still required for the articulation of the A-series in the McTaggartian sense and this is how Leftow uses the term “A-theory.”

<sup>488</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God’s Foreknowledge and Irresistible Will*, 94.

<sup>489</sup> Pasnau: “The assumption that only the present exists seems so engrained in pre-modern thought that it is hard to believe anyone would question it.” (Pasnau, *Metaphysical Themes 1274-1671*, 389; see also Mullins, *The End of the Timeless God*, 74–76.) Goris also observes that although the Boethian picture of eternity endorsed by Aquinas seems to cohere best with a tenseless theory of time, it is precisely *presentism* that they both required for the solution to the problem of future contingents relying on future-oriented propositions lacking a truth-value. (Goris, ‘Divine Foreknowledge, Providence, Predestination, and Human Freedom’, 107–8.)

On the other hand, however, the commitment to the “presence” of things to eternity (however defined), elucidated by the circle metaphor from above, seems to cohere best with a tenseless theory of time. Craig explicitly asserts that this is exactly what Aquinas believed<sup>490</sup> and insists that we cannot simply get out of this dilemma by taking the “presence” of things merely in the epistemic sense:

[T]he presence of all events to God does not seem to be merely epistemic; rather Aquinas’ understanding of foreknowledge seems to require that the past and future be ontologically on a par with presently existing reality.<sup>491</sup>

This, Craig argues, is evidenced by the fact that even in passages where Aquinas discusses the temporal aspects of things’ existence in an epistemic context, he stresses that God knows particulars as they *actually are*, i.e., as existing. To support this interpretation, Craig refers to the following passage from *Compendium Theologiae*:

[G]od has certain knowledge of contingent things. For even before they come to be, he sees them as they are actual in their existing, and not only as they are future things and in their causes virtually, as we can know some future things. Contingent things, as future things existing virtually in their causes, are not determined to one thing, so that we can have certain knowledge of them. But as actual in their existing, they are now determined to one thing, and we can have certain knowledge of them.<sup>492</sup>

Summarising all of the above, Craig concludes that “Thomas held to a B-theory of time.”<sup>493</sup> Once again, we may not go as far as Craig to argue that Aquinas was a proto-B-theorist,<sup>494</sup> but it is difficult to either imagine how the presence of things to eternity squares with a presentist ontology of time, or to at least conclude that this is what Aquinas *should have* believed. One struggles to escape either of these conclusions in particular when observing the pedagogical tools of the top of the mountain and of the circumference of the circle that Aquinas utilises. One need merely to observe that whereas the *road* that the traveller walks on may be visually accessible from the top of the mountain, the individual steps of the traveller are still

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<sup>490</sup> Craig, ‘Was Thomas Aquinas a B-Theorist of Time?’, 478.

<sup>491</sup> Craig, 480.

<sup>492</sup> Aquinas, *Compendium of Theology*, I.133.

<sup>493</sup> Craig, ‘Was Thomas Aquinas a B-Theorist of Time?’, 483. Since Craig does not differentiate between “B-theory” and “eternalism,” his claims about Aquinas in this context should be taken as implying eternalism.

<sup>494</sup> For a critique of the anachronism in ascribing eternalism to classical theologians, see Mullins, *The End of the Timeless God*, 75.



successive.<sup>495</sup> Similarly, Aquinas’ metaphor of the circle relies on the circle *having been drawn*, not *being drawn*<sup>496</sup> — if all of its points exist on a par (as they do in a circle), then it cannot serve as a useful analogy for points of time which, at least according to medieval presentists, do not all exist on a par. And, conversely, if the circle is merely in the process of being drawn (as a schoolchild draws a circle with a compass), then they are not all “yet” present to eternity.

It is precisely the circle metaphor that forms the springboard for Scotus’ critique and his opposition to the “real” or “literal” presence of things to God.<sup>497</sup> Scotus says the following:

Let us imagine a straight line with two end-points *a* and *b*, let point *a* be stationary and point *b* be moved around it in a circle ... , then *b* creates the circumference, in the way that this is done by geometers, who take the moving point to create the line. On this assumption, if nothing is left of the circumference caused by the moving of point *b* and there is only this point *b* on the circumference (such that whenever that point ceases to be anywhere there is then nothing [left] of the circumference [at that point]), then the circumference is never simultaneously present to the centre, but only a [given] point of the circumference is present to the centre. But if the whole circumference were simultaneous, the whole would be present to the centre. Therefore: since time is not a static [*stans*] but a flowing circumference, in which only a particular instant is in act, nothing of it is ever present to eternity (which is its centre, so to speak) except the [particular] instant which is like [the] present; and yet if *per impossibile* one were to hypothesise the whole of time standing simultaneously, the whole would be present to eternity as its centre.<sup>498</sup>

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<sup>495</sup> See Padgett, ‘The Difference Creation Makes: Relative Timelessness Reconsidered’, 122.

<sup>496</sup> Shanley, ‘Eternal Knowledge of the Temporal in Aquinas’, 202.

<sup>497</sup> de Finance, ‘La Présence Des Choses à l’éternité d’après Les Scolastiques’, 35.

<sup>498</sup> “Quia si imaginemur lineam rectam habentem duo puncta terminatia *a* et *b*, sit *a* punctus immobilis et *b* circumducatur ..., *b* circumductum causat circumferentiam secundum imaginationem geometrarum, qui imaginantur punctum fluens causare lineam; hoc posito, si nihil remaneat de circumferentia per fluxum ipsius *b*, sed tantum in circumferentia sit punctus iste (ita quod quandocumque punctus ille desinet esse alicubi, tunc nihil circumferentiae est ibi), tunc numquam circumferentia est simul praesens centro, sed tantum aliquis punctus circumferentiae esset praesens centro; si tamen tota circumferentia esset simul, tota praesens esset centro. Ita hic: cum tempus non sit circumferentia stans sed fluens, cuius circumferentiae nihil est nisi instans actu, — nihil etiam eius erit praesens aeternitati (quae est quasi centrum) nisi illud instans quod est quae praesens; et tamen si per impossibile poneretur quod totum tempus esset simul stans, totum esset simul praesens aeternitati ut centro.” (Scotus, *Ordinatio I*, 4:d38 part 2 and d39 Q1-5, [35], (Appendix A, 441-2), my translation.) See also Rogers, ‘Anselmian Eternalism: The Presence of a Timeless God’, 8. The same example is discussed in de Molina, *On Divine Foreknowledge (Part IV of the Concordia)*, d49, §18.

Scotus' move is rather simple but powerful: "(1) only what actually exists ... can be present to God and (2) only the temporal present actually exists."<sup>499</sup> According to Scotus, therefore, "Aquinas' view of the eternal knowledge of things contradicts the reality of temporal becoming."<sup>500</sup> Since "coexistence presupposes existence," things cannot coexist with God in eternity if they do not yet exist or anymore exist.<sup>501</sup> Furthermore, Scotus says this problem is *particularly* difficult to deal with for Aquinas since the appeal to the presence *qua* divine ideas is one he had earlier rejected:<sup>502</sup>

Scotus objects to [Aquinas' view that the future and past is coextensive with eternity] because the future precisely *qua* future is non-existent now and just as God's omnipresence does not extend to non-existent places, so neither does the "now" of God's eternity coexist with the as yet non-existent future. Scotus objects to [Bonaventure's view that God knows the future through the ideas of creatures] because ideas are in the divine intellect prior to any creative decision on the part of his will.<sup>503</sup>

In short, however we try to get out of this conundrum, we seem to run into contradictions. Either we posit an eternity to which the entirety of the temporal realm is present, which commits us to eternalism about time. Or we posit presentism or growing-block theory of time, but this position entails that not all things are present to eternity and poses insurmountable obstacles to divine omniscience.

Before proceeding to the discussion of a potential solution to this conundrum offered by Brian Shanley, it is worth pointing out that this is a problem that my earlier attempt at relating *la durée* to eternity ran into. In a recent paper,<sup>504</sup> I used Bergson's idea of "*durées* of different tensions" to make sense of the hotly contested notion of "atemporal duration" proposed in Stump and Kretzmann's seminal paper from 1981.<sup>505</sup> The argument ran roughly as follows: *la durée* admits of different "tensions" — sometimes our "specious present" is wider than at other times. The number of individual events we can distinguish in it also depends on our particular physical constitution (e.g., we cannot notice the individual movements of a hummingbird's wing, but we can see the moving hand of a clock). I, therefore, proposed that

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<sup>499</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 200.

<sup>500</sup> Shanley, 201.

<sup>501</sup> de Finance, 'La Présence Des Choses à l'éternité d'après Les Scolastiques', 36–37.

<sup>502</sup> de Finance, 37.

<sup>503</sup> Wolter, 'Scotus' Paris Lectures on God's Knowledge of Future Events', 288.

<sup>504</sup> Moravec, 'A Perpetual Present: Henri Bergson and Atemporal Duration'.

<sup>505</sup> Stump and Kretzmann, 'Eternity'.

eternity should be considered as a highly “contracted” *durée*<sup>506</sup> — this would enable eternity to coexist with all *durées* developing in the temporal realm at different tensions and yet give it all the features that Stump and Kretzmann require (perfect simultaneity, indivisibility and “life”). However, already there my argument had to be limited to a mere analogy pointing to the inaccessible phenomenology of divine omniscience. Thinking of our *durée* and the divine eternal *durée* as infinitely contracted may have clarified the phenomenology of omniscience, but failed to generate a satisfactory ontology. The shortcomings of using Bergson’s earlier-quoted passage about *durées* at different tensions (see p. 79) for ontological purposes falls flat for obvious reasons: *la durée* is constantly developing (i.e., it does have an extended “present”), whereas eternity is a super-extended “present” that coexists with all of such developing presents. So what is actually present? We run into Scotus’ objection again.

## 4.2. Causal Knowledge

In an engagement with Stump and Kretzmann on the topic of divine knowledge and human freedom, Brian Shanley takes up the conundrum of the discussion from above and demonstrates that what is needed in the debate about the presence of things to God is a certain repositioning or rephrasing of the problems, since one of the discussion’s most crucial and most overlooked elements consists of the fact that all temporal things depend for their existence on God the Creator.<sup>507</sup> Shanley argues that without this repositioning, it is indeed difficult to see how things existing in time can be related to an eternal God.

The central metaphysical presupposition of the entirety of Aquinas’ theological system is the claim that all things are dependent for God on their being. Aquinas explicitly argues that things need to be *kept in being* by God:

The second [way things are kept in existence] is a *per se* and direct way of preserving a thing in existence, insofar, namely, as the thing preserved is so dependent that without the preserver it could not exist. This is the way that all creatures need God to keep them in existence. For the *esse* of all creaturely beings so depends upon God that they could not continue to exist even for a moment,

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<sup>506</sup> See for example MM 207-8/233.

<sup>507</sup> de Finance: “The problem of the relations between time and eternity requires an ontological solution, one formulated in terms of being. It is only an aspect of a more general problem of the virtual inclusion of all participated being in the *Ipsium Esse subsistens*.” (“Le problème des rapports du temps à l’éternité n’est susceptible que d’une solution ontologique, d’une solution formulée en termes d’être. Il n’est qu’un aspect du problème plus général de l’inclusion virtuelle de tout être participé dans l’*Ipsium Esse subsistens*.” (de Finance, ‘La Présence Des Choses à l’éternité d’après Les Scolastiques’, 62, my translation.))

but would fall away into nothingness unless they were sustained in existence by his power, ...<sup>508</sup>

God, according to Aquinas, must not be thought of as relating to things external to Him and observing them or manipulating them. Rather, without God's sustained preservation, the things would not *be* at all:

For other [i.e., non-divine] agents act as existing externally: since they do not act except by moving and altering a thing qualitatively in some way with respect to its exterior, they work from without. But God acts in all things from within, because he acts by creating. Now to create is to give existence (*esse*) to the thing created. So since *esse* is innermost in each thing, God, who by acting gives *esse* acts in things from within.<sup>509</sup>

This crucial insight, Shanley argues, is absent from all analytic discussions of the relation between the world and the way God knows it. Too much emphasis on God “seeing things” (e.g., in the Boethian mountain metaphor from above<sup>510</sup>) perpetuates the picture of God as a “big viewer”<sup>511</sup> who first created the realm of being after which it unfolded without His constant intervention, and is then reduced to simply observing what happens within it — all theological problems are thereby reduced to explaining how God can know all of these external happenings infallibly, including His knowledge of the future. This way of looking at the foreknowledge problem is also criticised by Geach:

I am not denying that God is omniscient about the future; I think God knows the future by *controlling* it. God's knowledge of the future is like man's knowledge of his own intentional actions, *not like that of an ideal spectator*.<sup>512</sup>

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<sup>508</sup> Aquinas, *Summa Theologiae*, 1975, 14. Divine Government (Ia2ae.103-9):IaQ104a1; see also Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 293; for the most recent articulation of this position, see Matthews Grant, *Free Will and God's Universal Causality. The Dual Sources Account*.

<sup>509</sup> Aquinas, *Commentary on the Gospel of John*, Chapter 1, Lecture 5, no. 133.

<sup>510</sup> See for example Leftow, *Time and Eternity*, 159–62.

<sup>511</sup> For a discussion of the ‘arch-perceiver,’ see Khamara, ‘Eternity and Omniscience’, 213–14; Geach, ‘The Future’, 215.

<sup>512</sup> Geach, *Providence and Evil*, 57, first italics original, second mine; see also Shanley, ‘Eternal Knowledge of the Temporal in Aquinas’, 204.

Shanley argues that the image of God as a spectator not only illegitimately separates God's creative action in the world and His knowledge of it,<sup>513</sup> but also generates all the innumerable problems that the Scotist-flavoured critiques point out.

When observing the analytic appropriations of Aquinas' thought, one sees this implicit presupposition resurface again and again. For example, Craig argues that "God ... does not experience events successively as past, present, and future, as we do; rather the whole time line, ... , is stretched out before Him."<sup>514</sup> — implying that the relation of God to His creation is similar to that of our own experience of looking at external reality stretched out in space before us. This way of analysing the God-world relation is also latently encoded in Stump and Kretzmann's ET-Simultaneity<sup>515</sup> and the talk of God "observing" from one dimension things that independently happen in another one.<sup>516</sup> "To start with time and eternity," Shanley says, "as two distinct realms or reference frames ... which must then somehow be brought together and coordinated is to misconstrue the issue from the start."<sup>517</sup> Finally, the project of relating two independently existing realms (God and things) also forms part and parcel of all the various conceptions of tying together eternity and time,<sup>518</sup> especially those that conceive of the relationship along the lines of different "frames of reference"<sup>519</sup> or simply as a "fifth dimension" in which things exist.<sup>520</sup> Endeavours to conceive God's knowledge as "immediate," i.e., not depending on time-lagging causal signals,<sup>521</sup> further perpetuates the picture of independently existing things that God must somehow figure out a way of knowing as best as He can.

When reading Aquinas' two metaphors, we must be very cautious. First, Aquinas' choice of the circle metaphor does not rely so much on construing the relationship between the drawn circle and its centre as two independent objects that must somehow be related, but rather

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<sup>513</sup> Shanley: "There is no mental process whereby God first speculatively considers the various possibilities, ... then practically decides to execute one plan ... and finally contemplates the finished product." (Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 217.)

<sup>514</sup> Craig, 'Was Thomas Aquinas a B-Theorist of Time?', 478.

<sup>515</sup> See Stump and Kretzmann, 'Eternity'.

<sup>516</sup> For a critique of the notion of 'observing' in Stump and Kretzmann's ET-simultaneity, see especially Lewis, 'Eternity Again: A Reply to Stump and Kretzmann'.

<sup>517</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 223.

<sup>518</sup> See for example Mellor, 'History Without the Flow of Time', 73–75; Chase, 'Time and Eternity from Plotinus and Boethius to Einstein', 100–104; Padgett, 'The Difference Creation Makes: Relative Timelessness Reconsidered', 120–23; Goris, 'Divine Foreknowledge, Providence, Predestination, and Human Freedom', 106–8.

<sup>519</sup> Leftow, 'Aquinas on Time and Eternity', 390–93.

<sup>520</sup> See Rogers, 'Anselm on Eternity as the Fifth Dimension'; Rogers, 'Anselmian Eternalism: The Presence of a Timeless God'; for a discussion of Rogers' position, see Mullins, *The End of the Timeless God*, 127–55; for a different reading of Anselm and eternity as another dimension, see Leftow, *Time and Eternity*, 213–214; 227–234.

<sup>521</sup> See for example Leftow, *Time and Eternity*, 169.

of the centre of the circle as a *source* to which, through an appropriate setting of a distance, all the points on the circumference owe their existence. It should not surprise us that a metaphor — in particular a metaphor for the relationship between things and their Creator —, while useful in one domain, creates inconsistencies in another: in this instance the picture of the centre and the circumference as two coexisting entities. The same should be said of the mountain metaphor, particularly considering the fact that whereas Boethius' motivation behind its usage is primarily epistemological (i.e., to explain how God *knows* things), Aquinas' usage of it is set within the context of an ontological relation between God and things.<sup>522</sup>

To keep together the idea that God is the source of being for all things and the consequent idea that God knows everything He creates, Shanley argues for what he calls God's "causal knowledge."<sup>523</sup> God acts in the temporal realm not purely as a formal and efficient cause; His primary causation is the causation of *esse*.<sup>524</sup> Shanley believes that this is the key to resolving the conundrum about how God might know the future which, according to Aquinas, does not yet exist:

God's eternal knowledge of the future is as its creative cause. The creative-causal activity of God is the hidden key and metaphysical presupposition for all that Aquinas says about how God knows the future.<sup>525</sup>

[The divine intellect's relation to the world] is the obverse of our own: whereas our knowledge passively presupposes the existence of its object and is measured by it, God's causal knowledge actively precedes and measures what it knows. ... God does not know things because they are, but rather things are because they are creatively known by him.<sup>526</sup>

Although Aquinas does occasionally speak of God's knowledge of the world in terms of divine *vision*,<sup>527</sup> he holds God's *scientia visionis*<sup>528</sup> as inseparable from "*scientia approbationis*:"

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<sup>522</sup> For an excellent discussion, see Khamara, 'Eternity and Omniscience', 204–10.

<sup>523</sup> See for example Shanley, 'Aquinas on God's Causal Knowledge: A Reply to Stump and Kretzmann'.

<sup>524</sup> Shanley, 'Divine Causation and Human Freedom in Aquinas', 104–5.

<sup>525</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 199–200.

<sup>526</sup> Shanley, 213; see also Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 65; Matthews Grant, *Free Will and God's Universal Causality. The Dual Sources Account*, 148.

<sup>527</sup> See for example Aquinas, *The Disputed Questions on Truth*, Q2a12, Q2a13.

<sup>528</sup> For a further distinction between 'scientia visionis' and 'scientia simplicis intelligentiae' (which extends to things that God does not will, but that He could possibly will), see Aquinas, Q2a9, ad 2, 3.

God's knowledge is causal and practical by virtue of an act of the divine will (*voluntate adjuncta*) bringing into being what is known. Aquinas calls this causal-willing knowledge *scientia approbationis*. God knows the world through the divine essence by knowing what he wills to exist; God's knowledge about any contingent fact is a kind of self-knowledge about his will (and his causality) with regard to any contingent fact.<sup>529</sup>

Furthermore, Aquinas proposes two different and seemingly independent approaches to the problem of future contingents. Shanley suspects that these two ways of dealing with the problem have been obscured, conflated or separated due to various historical disputes between Aquinas' commentators (especially concerning, but not limited to, the *De Auxiliis* controversy<sup>530</sup>) as well as the fact that Aquinas' position and importance accorded to these two ways of dealing with the problems shifts from the *Commentary on the Sentences*<sup>531</sup> to his later works. The first of these is based on the Boethian idea of the presence of all things to God, modelled on our "vision" and illustrated by the circle metaphor from above. The second, however, which Shanley argues gets neglected, is based on the causal account of God's knowledge: "[A]quinas's approach to how God knows future contingents requires *both* that God be eternal and that God be the cause of what he knows: God knows future contingents precisely as their eternal cause."<sup>532</sup> Or, more generally, God knows the future, because He is its creative cause. *Scientia Dei est causa rerum*:<sup>533</sup> "where God causes *esse*, there his knowledge extends:"<sup>534</sup>

From this it follows that the coexistence and presence of time to eternity does not mean that all temporal things exist at the same time as each other or at the same time as God. It is rather that only when considered precisely as the effect of God's creative activity and thus taken up into the measure of divine eternity, do all temporal beings become present to and coexist with God.<sup>535</sup>

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<sup>529</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 215–16.

<sup>530</sup> Shanley, 'Aquinas on God's Causal Knowledge: A Reply to Stump and Kretzmann', 450–51.

<sup>531</sup> See Shanley, 452.

<sup>532</sup> Shanley, 451.

<sup>533</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 205; Aquinas, *The Disputed Questions on Truth*, Q2a14; Aquinas, *Summa Theologiae*, 1964, 4. Knowledge in God (Ia.14-18):IaQ14a8.

<sup>534</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 211; see also Matthews Grant, *Free Will and God's Universal Causality. The Dual Sources Account*, 15–33.

<sup>535</sup> Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 219.

This type of causation of *esse* is, of course, unique to God. Norman Kretzmann provides a helpful illustration:

When you make a salad, you are the (efficient) cause of the salad. And since without you that particular salad would not have been, it might seem right, if a little stilted, to say that you are for that salad the cause of being. But putting it that way exaggerates your role, which might be described more accurately as your being for that salad *a* cause of being. ... You've given certain natural things a new inessential (accidental) form: ... But neither you nor any other ordinary individual agent is for *lettuce* the cause of being. All ordinary artificial production can be analysed along the same lines, in terms of altering and moving pre-existing stuff that is ultimately natural.<sup>536</sup>

Instead of both the metaphor of the mountain-top and that of the circle and its circumference, a more appropriate model to think of the knowledge that the Creator has of the temporal realm, a model which overcomes the overly representationalist picture of divine knowledge,<sup>537</sup> is the relationship between the artist and the knowledge they have of their own work,<sup>538</sup> with the important clarification that the artist merely knows the *form* of the artwork they create, but not its *matter*<sup>539</sup> since “divine art produces not only the form but also the matter, it contains not only the likeness of form but also that of matter. Consequently, God knows things in regard to both their matter and their form; ... .”<sup>540</sup>

Before turning to the next section, one last matter needs to be addressed. The difficulty may be formulated as follows: If all things are present to God (not least in virtue of their being created by Him), then He Himself must be present to all things.<sup>541</sup> This brings us directly into the heart of the problem of divine omnipresence. Regardless of what Aquinas' original position on this topic was (see footnote 481), can the talk of divine *causal knowledge* of things deal with the relationship between the cause (God) and the things caused?

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<sup>536</sup> Kretzmann, *The Metaphysics of Creation: Aquinas's Natural Theology in Summa Contra Gentiles II*, 72.

<sup>537</sup> Shanley, 'Aquinas on God's Causal Knowledge: A Reply to Stump and Kretzmann', 455.

<sup>538</sup> For a discussion, see Moravec, 'Aquinas and Kripke on the Genealogy of Essential Properties'.

<sup>539</sup> Aquinas, *In Quatuor Libros Sententiarum*, 1:Id38Q1a3, ad1.

<sup>540</sup> Aquinas, *The Disputed Questions on Truth*, Q2a5. Divine knowledge of *individuated* matter is also the reason why God knows the particular and not only the universal, as Aquinas argued against Avicenna.

<sup>541</sup> This view is explicitly stated by Scotus in his critique of Aquinas. For Aquinas' own formulation of this inference, see Aquinas, *Summa Theologiae*, 1964, 4. Knowledge in God (Ia.14-18):IaQ14a13; Aquinas, *The Disputed Questions on Truth*, Q2a12; Aquinas, *In Quatuor Libros Sententiarum*, 1:Id38a5.



Analytic literature offers at least three ways in which divine presence to things may be fleshed out. The first, which Wierenga ascribes to the views that Anselm puts forward in Chapters 20-22 of the *Monologion*, explains divine omnipresence in terms of *knowledge*. God is *present* at every place, but not *contained* at every place, Anselm says.<sup>542</sup> God is mainly *present* everywhere because He can *sense* what is happening in all places.<sup>543</sup> As Wierenga suggests, “God exists in a place or is present in a place just in case he has immediate knowledge of what is happening in that place. Omnipresence, then, consists in having immediate knowledge of what is happening everywhere.”<sup>544</sup>

The second option is to think of divine presence to things in terms of *power*. Wierenga identifies this as part of the set of views on omnipresence put forward by Aquinas, who argued that God’s presence must be understood “in terms of God’s power, knowledge, and essence.”<sup>545</sup> Aquinas argues that

God exists in everything by power inasmuch as everything is subject to his power, by presence inasmuch as everything is naked and open to his gaze, and by substance inasmuch as he exists in everything causing their existence, as we said earlier.<sup>546</sup>

The third option is that of thinking of the relationship between God and the world along the analogy of our relationship to our own body. The first variant of this may be found in Hartshorne who argued that God’s knowledge of the world is similar to the type of immediate knowledge we have of our thoughts and feelings and His power is similar to the one we have over our actions.<sup>547</sup> This is not completely different from Swinburne’s “limited embodiment.” On Swinburne’s view “restricted embodiment means both that God is able to move directly any object (capable of motion) without the intermediaries and that he knows directly (again without causal intermediaries) the qualities exemplified in any region at any time.”<sup>548</sup> Furthermore, according to Swinburne, “God can move any part of the universe directly, as a basic action.”<sup>549</sup>

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<sup>542</sup> Wierenga, ‘Omnipresence’, 2010, 258.

<sup>543</sup> Wierenga, ‘Omnipresence’, 2007, 282.

<sup>544</sup> Wierenga, ‘Anselm on Omnipresence’, 30–41; See also Hudson, ‘Omnipresence’, 200–201.

<sup>545</sup> Wierenga, ‘Omnipresence’, 2007, 258; see also Wierenga, ‘Omnipresence’, 2010, 282–83.

<sup>546</sup> Aquinas, *Summa Theologiae*, 1964, 2. Existence and the Nature of God (Ia.2-11):IaQ8a4.

<sup>547</sup> For a discussion see Wierenga, ‘Omnipresence’, 2010, 260; Wierenga, ‘Omnipresence’, 2007, 283–84.

<sup>548</sup> Hudson, ‘Omnipresence’, 203.

<sup>549</sup> Wierenga, ‘Omnipresence’, 2010, 260; For a recent formulation of Swinburne’s views, see Swinburne, *The Coherence of Theism*, 99–128.

The fourth and most recent account is offered by Hudson. Although Hudson's proposal is highly complex, it is based on the ordinary, everyday "literal" physical presence of things to each other. Using this basic and familiar notion he arrives at a sophisticated account of "being present at" as a relation of "entension," which is a "non-derivative literal location relation"<sup>550</sup> capturing the fact that an object may be wholly located at a particular region of space and, at the same time, be wholly located at every subregion of that region.<sup>551</sup> Space does not permit me to provide details of Hudson's account; it suffices to say that basing divine omnipresence on *literal* presence in space is problematic, since, due to the connection between space and time postulated by relativity, it seems inconsistent with divine timelessness from the start.

One may already begin to see that none of these options takes seriously enough Shanley's dictum of primarily considering the relationship between God and things through the lens of creation. The relation of "being present to" methodologically presumes that any two things thus related may exist independently, which is inappropriate in the case of God and things. In each of the options above, the formulation of the question begins by positing God and things and then working out how the former might know the latter. What is most stupefying is how little attention in these discussions is paid to the *third* type of divine presence that Aquinas emphasises in the quotation above that is appealed to by Wierenga; God is present not only as someone who has power over things and who knows them but primarily as one who is the cause of their being. The fact that in the case of God the three are coextensive means, on the one hand, that it is incredibly difficult for us to find analogies to create a satisfactory account of the presence of things to the divine mind (although here the "artist" metaphor is as important as the "circle" or "mountain" one), but, on the other hand, that the analytic problem of omnipresence is perhaps a badly formulated one from the start since it does not take into account the fundamental dependence of being on God.

### 4.3. Problems

Now that we have seen the inexorable role that divine creative activity must play in the construction of a temporal ontology, a list of questions immediately arises: How does the dependence of things on God square with the Bergsonian idealist ontology proposed in the previous chapter? Have I not argued there that the existence of objects in time should be

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<sup>550</sup> Hudson, 'Omnipresence', 212.

<sup>551</sup> See Hudson, 206.

relativized to a human observer whose mind is *la durée*? Does that not contradict the orthodox claim that things existing in time owe their existence to *God*?

The rest of this chapter will take up the claim about the ontological dependence of things on God discussed above and fuse it with the Bergsonian idealist ontology proposed in Chapter 3. How can these bits of the puzzle be put together? There are two key observations about Bergson's *durée* and Aquinas' thought on time that will point us in the right direction.

First, we have seen that one of the reasons that have pushed Bergson to move to Stage 2 and ascribe *la durée* to things in the world was the inexplicable mystery of what exactly it is that *la durée* synthesises:

Hence we must not say that external things *endure*, but rather that there is in them some inexpressible reason [*quelque inexprimable raison*] in virtue of which we cannot examine them at successive moments of our own duration without observing that they have changed.<sup>552</sup>

Take the pendulum example that Bergson uses in TFW.<sup>553</sup> Bergson argues that the individual positions may only be considered as forming a single movement due to their being retained or synthesised by *la durée*. But what exactly is it that *la durée* is synthesising? In Stages 2 and 3, the answer will consist of our contracting the moments of external events' independently-existing *durées* at different degrees of tension, but how do we answer this at Stage 1? What is this "inexpressible reason," in virtue of which we synthesise whatever it is that comes to be recognised as the individual positions of the pendulum, once the movement of the pendulum becomes memory?

The second point consists of an observation about the ontological status that Aquinas himself ascribes to time. Wippel argues that Aquinas' ontology utilises, among other things, a distinction between three types of objects:

One type enjoys complete and total being outside the mind; that is, independently from the mind's consideration. In illustration Thomas cites complete entities such as human beings or stones. A second type enjoys no reality in itself independently from the mind, for instance, dreams or chimeras. A third kind has a foundation in extramental reality, but depends upon the intellect's operation for its complete realization. As illustrations Thomas cites universals and time. Each of these

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<sup>552</sup> TFW 227/171.

<sup>553</sup> TFW 108/80-81.

enjoys some foundation in extramental reality; but that which makes time to be time, or a universal to be universal, depends upon an intellectual operation.<sup>554</sup>

Let us apply this classification to the foregoing discussion. So far we have seen two main views about the ontological status of time. The first is exemplified by the predominant analytic approach, which requires a satisfactory description of time to be mind-independent. On the other hand, we have also observed that McTaggart's argument concludes in an idealism about time, that is, McTaggart treats time as entirely dependent on the human mind and not part of (Absolute) Reality. Where do Aquinas and Bergson stand on this typology? It might seem, *prima facie*, that they both occupy some sort of middle ground — on Aquinas' terms, time has a foundation in extramental movement (i.e., it is not *completely* a product of the human mind, as McTaggart would have it), but, on the other hand, following Aristotle, Aquinas argues that for time to be time, it needs the human mind for its completion. We could say a similar thing

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<sup>554</sup> Wippel, 'Truth in Thomas Aquinas', 296; for a summary of Aquinas' thought on truth, see Moravec, 'Aquinas and Kripke on the Genealogy of Essential Properties'. The view that time is dependent on the human mind seems contradicted by what Leftow observes about Aquinas' writings in his *Commentary on Aristotle's Physics* (Leftow, 'Aquinas on Time and Eternity', 388.), where Aquinas argues that the passage of time is part of extramental reality since it depends on the motion of the heavenly spheres, which revolve independently of the human mind. In no. 573, Aquinas explicitly states that time's flow *cannot* be "consequent upon the motion of the soul." (Aquinas, *Commentary on Aristotle's Physics*, IV.17, §573.) On the other hand, in his *Commentary on the Sentences* he describes the third type of thing as follows: "[These things] possess a foundation in a thing outside of the soul, but that which completes their definition from a formal point of view is an operation of the soul, as we can see in the case of the universal. Humanity, [for example], is something in reality, but it is not there where it has a *ratio* of a universal, because there does not exist outside of the soul a humanity common to a plurality of individuals; but according to the way that it is received in the intellect, an intention is added to it by an operation of the intellect in virtue of which it is called a *species*; and the same is the case for time, which has a foundation in movement, namely that it is the before and after of movement, but as regards that which is formal concerning time, namely the fact of counting it, it is accomplished by an operation of the intellect which counts." ("Quaedam autem sunt quae habent fundamentum in re extra animam, sed complementum rationis eorum quantum ad id quod est formale, est per operationem animae, ut patet in universali. Humanitas enim est aliquid in re, non tamen ibi habet rationem universalis, cum non sit extra animam aliqua humanitas multis communis; sed secundum quod accipitur in intellectu, adjungitur ei per operationem intellectus intentio, secundum quam dicitur species: et similiter est de tempore, quod habet fundamentum in motu, scilicet prius et posterius ipsius motus; sed quantum ad id quod est formale in tempore, scilicet numeratio, completur per operationem intellectus numerantis." (Aquinas, *In Quatuor Libros Sententiarum*, 1:Id19Q5a1, my translation.)) The two texts, however, do not stand in tension, since Aquinas distinguishes between *movement* and *time* (as the number of movement). That is why he, like Aristotle, distinguishes *movement* as being a part of mind-independent extramental reality and depending on substance, and (counted) *time* (as the number of "before and after"), which, although it depends on this very movement, requires the human mind for its completion. This distinction runs throughout §572-581 of the *Commentary on the Physics*, just to give one more example: "[T]ime is nothing else than the number of motion in respect to before and after. For we perceive time, as was said, when we number the before and after in motion. Therefore, it is clear that time is not motion, but is consequent upon motion insofar as it is numbered. Hence time is the number of motion." (Aquinas, *Commentary on Aristotle's Physics*, IV.1, §580.) For Bergson's treatment of this question in Aristotle, see IT 58-9.

about Bergson's "time" of Stage 1 — on the one hand, it is not completely mind-independent (as is the case from Stage 2 onwards), but, on the other hand, it has some sort of quasi-temporal "stuff" "coming in" from the external world: for instance, the individual disconnected positions of the pendulum are not themselves "produced" by the human mind. Whereas this "middle ground" reading may work for Aquinas, it is much more complicated for Bergson — not only because of the distinction the previous chapter has made between OIT and EIT but also because "Bergson's time" is equivocal: Is this "middle ground" between analytic philosophy and McTaggart occupied by objective time or by *la durée*? Or both?

Before further questions start arising, let us introduce a key distinction absent from the discussions in Chapter 3. I concluded that the "existence of temporally extended objects is human-observer-relative." (p. 103) Even when we refine this conclusion with the observation about time's having foundation in extramental reality — to avoid sliding into outright idealism where the mind "produces" objects or where the representations of these objects are all there is — to the more nuanced claim that the "existence of temporally extended objects is *partially* observer-relative," we still face an ambiguity between which of the following this conclusion means:

- I. Temporally extended objects depend for their existence on the mind of an observer.
- II. Objects *qua temporally extended* depend for their existence on the mind of an observer.<sup>555</sup>

The first claim states that any object existing in time is dependent for its existence on the human mind. This is ontological idealism *simpliciter*: since *all* objects (excluding numbers, universals and the like) exist in time, on this view, all objects are "produced" by the human mind. This view would be rejected both by Aquinas and by Bergson, including Bergson of Stage 1, and I will not defend it here, partially because idealism *simpliciter* has historically come to be regarded with suspicion by Bergsonians, analytic philosophers, and Thomists, all of whom this chapter is trying to bring together.

The second claim is equivalent to: "Those aspects of the constitution of an object which are inherently temporal depend for their existence on the human mind." It is *this* position that

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<sup>555</sup> A helpful analogy to illustrate the difference between the two statements would be the following: What I have been arguing for so far is as ambiguous as a theory denoted by the phrase "idealism about coloured objects." Is it idealism about colour (i.e., an idealism about a property) or idealism about objects which are coloured (i.e., an idealism about objects by virtue of those objects having that property)?

is equivalent to the ontological idealism about time (OIT) argued for in the previous chapter and that I will defend. Recall the definition of OIT:

By ontological idealism about time (OIT), I understand the claim that *la durée* is the ultimate ontological foundation of time (however understood), or perhaps even exhaustive of time (however understood).<sup>556</sup>

Let us apply this definition to a particular four-dimensional object in spacetime, for example, an apple lying on my desk. As time passes, the apple displays several features: colour, mass, smell, taste, chemical composition, origin, etc. It also has spatial extension (shape, spatial coordinates) and temporal extension (it lies on the table from 14:00 until 14:30, when I eat it). What OIT claims is that the event's temporal extension, which partially constitutes the event *qua* event, depends for its existence on *la durée*; the "apple lying on the table in front of me" requires the human mind to exist as a unified event, as opposed to existing as an infinite number of disconnected series of positions in space, neither of which is that event. Of course, one could object that these positions *conjointly* make up the event, but it is precisely the *conjunction* that ontologically depends on the human mind. The same may be said of Bergson's example of the pendulum. Consider the event of the pendulum swinging from "A" to "B." Certain features of this event have foundation in extramental reality: the existence of the pendulum itself, its shape, size, weight, chemical composition. Its individual disconnected positions in spacetime are also mind-independent. Nevertheless, a synthesising *durée* of an observer is required in order for these individual positions to be joined together into a single event of "the movement of the pendulum from A to B." The movement of the pendulum is a "compound" of retrospectively-identified individual positions in B-structural spacetime<sup>557</sup> and *la durée* as a "temporal glue" that holds all of these together.

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<sup>556</sup> A helpful analogy may here, once again, be provided by the example of colours. "Colours" stand halfway between being purely products of the human mind (e.g., as dreams or hallucinations) and being objective properties of objects, such as mass or chemical composition. The best way to think about them is to say that colours have a foundation in extramental reality (namely in the way that the surfaces of objects reflect light), but that they require (properly functioning) human perception for their completion. For more on this, see McGinn, *The Subjective View. Secondary Qualities and Indexical Thoughts*; Adams, 'Idealism Vindicated'. This colour example is, of course, merely an analogy, since colours do not form a necessary feature of objects. If we suddenly removed colour from the universe, the erstwhile coloured objects would still be objects.

<sup>557</sup> As will be emphasised below, it is important to remember that these individual positions may only be identified retrospectively, since, as Bergson argues (see Chapters 1 and 2), the current perception of an event is always indivisible, the successive spatial positions may only be identified once the event has become part of our memory.

But a further qualification is required. Recall that Bergson insists that the individual positions may only be identified *retrospectively* on the trace of *la durée* (see section 1.2) since any currently-perceived object is always indivisible. So if the *currently-perceived* object is a compound of *la durée* and a “something” (which is *later* represented as a series of successive positions in B-structural spacetime), what is this “something”? And where does it come from? When we subtract the mind-dependent temporal extension from the currently-perceived object, what are we left with?

#### 4.4. Composition of Temporally-Extended Objects

These questions may be answered by an appeal to the notion of the timeless God as the source of being for things in the temporal realm. I argue that temporal objects should be considered as a “compound” of the temporal glue provided by *la durée*, which is indexed to individual human observers, and of “everything else” that comes from God as the source of being. To put it in other words, in order for the event of “the movement of the pendulum from A to B” to exist, two things need to come together: (i) the creative activity of God that timelessly provides the presently-synthesised and retrospectively-identified positions of the pendulum, which may (post-synthesis) be understood timelessly using the B-structure<sup>558</sup> and (ii) *la durée* which synthesises this timeless being. It is in conformity to the human mind that the event of the “movement of the pendulum” is born. And likewise for all other temporal objects.

The first three chapters of this study have explained how *la durée* synthesises “stuff” coming in from the external world — “stuff” that is later, when remembered, analysed using the medium of objective time — to produce temporal continuity. *La durée*, as the fundamental temporal continuity partially constituting the synthesised compound, has been described in much detail. However, how should we describe the “other” part of the compound, the “stuff” that comes from God?

One may respond to this question in a Kantian tone. Perhaps we are quite ignorant about what it exactly is that God creates — perhaps *la durée* that holds this “stuff” together is so fundamental to our access to reality that we cannot imagine what the world would look like without it. We might not be able “see through” the temporal lens into the quasi-*Ding-an-sich* “stuff” that is provided by God and then later synthesised by *la durée*. Similarly to the way that

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<sup>558</sup> For example, Aquinas says that God’s eternal causation should be understood as the divine will that its effects should exist “at *some time*, whenever the divine wisdom has determined.” (Aquinas, *The Disputed Questions on Truth*, Q2a4 ad 5.) This “at some time” may be understood using the B-structure.

we cannot even begin to imagine the way that God “knows” things,<sup>559</sup> we perhaps have no access to what it is that God creates before this gets “glued” together by *la durée* and then retrospectively analysed using the B-structure. One could perhaps argue that the role of this mysterious foundation in McTaggart is played by the C-series; no matter how hard we try, we cannot escape the “illusion” of time in order to see Absolute Reality as it really is. On my reading, the methodological role that the C-series plays in McTaggart would simply be replaced by God. God is the *timeless* ontological foundation of everything temporal in reality — our access to everything He creates is so inescapably temporal that there is very little we can say about the creative activity itself;<sup>560</sup> we are merely left with having to affirm that, once the divine creative activity has happened, we recognise that it has taken place (i.e., we realise that our *durée* has synthesised non-temporal *esse* to form a temporally extended object that is now retained in our memory) and that we may analyse it using objective time (i.e., we can remember that we looked at the apple for 10 seconds when the clock stroke).

Nevertheless, there are some things we *can* say about the machinery of divine creation and its relation to *la durée*. We may describe the situation as follows: For every particular event in spacetime, which is retrospectively (i.e., once it has come to form part of our past) indexed to the B-structure, God is recognised as *having been* the source of its existence; every individual point of spacetime can retrospectively be recognised as *having depended* on God.<sup>561</sup>

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<sup>559</sup> See for example Geach, *Providence and Evil*, 42–44.

<sup>560</sup> Something that comes very close to this position is defended in Pieper and Wieck, ‘On the “Negative” Element in the Philosophy of Thomas Aquinas’.

<sup>561</sup> By way of limitation, I leave aside the question pertaining to the problem of “empty times” and “empty spaces,” that is, the question whether it is possible for a time or space without *anything* in it to exist. Aquinas argued that since time is connected to movement and movement must be created by the First Mover, time (as well as space) is only possible where some sort of creation (i.e., giving *esse*) has already taken place. For example: “[O]utside the entire universe of creatures, there is no time, time having been produced simultaneously with that universe; hence, we do not have to look for the reason why it was produced now and not before, so as to be led to concede the infinity of time; . . . .” (Aquinas, *Summa Contra Gentiles*, II.35.6.) This, of course, brings us back to the dispute about “absolute time” and the Leibniz-Clarke debate, neither of which I have space to discuss here. However, I am inclined to agree with Alexander who, in his introduction to the Leibniz-Clarke correspondence, points out that due to the inseparable connection between matter/energy and spacetime, a connection postulated by the General Theory of Relativity (i.e., the observation that the geometry of spacetime itself is dependent on the “stuff” that fills it), Einstein’s theory seems to put some rather paradoxical implications on the Leibniz-Clarke dispute itself (Alexander, ‘Introduction’, iv.). This view is shared by Pannenberg: “[T]he insight into the interrelatedness of space and time with masses and energies will remain a lasting contribution to the understanding of the conditions of finite reality even in the discourse of philosophers and theologians. God created time and space as dimensions of the existence of finite entities.” (Pannenberg, ‘Eternity, Time and Space’, 105.) The potential existence of “empty spaces” would, of course, be a problem for divine omnipresence. Wierenga argues that Aquinas’ insistence that “God fills all places by giving existence to everything occupying those places” (“*immo per hoc replet omnia loca, quod dat esse omnibus locatis, quae replent omnia loca*” (Aquinas, *Summa Theologiae*, 1964, 2. Existence and the Nature of God (Ia.2-11):IaQ8a2; Wierenga, ‘Anselm on Omnipresence’, 39–40.)



This would be true even if there were no human minds. However, for a set of these points to exist as a *temporally extended* object (as opposed to a set of disconnected positions<sup>562</sup>), it needs to have previously been synthesised by *la durée*. We do not perceive instants of time, only God can do this since His creative and sustaining activity extends even to subatomic particles. Furthermore, these individual “instantaneous segments” of a temporal object can only be identified *retrospectively* as “having depended” for their being on God.<sup>563</sup> It is in this respect that “time,” understood either as *la durée* (confined to the present) or “objective time” (based on the past trace of *la durée*) depends on extramental reality (provided by God), but requires the human mind (*la durée*) for its completion.

We have seen that the question about the existence of a temporal object *x* must be reformulated as “Whom does *x* exist for?” In the first instance, the answer to “Does *x* exist for God?” is affirmative for all *x*, since He is the source of being of every single thing that occupies even the infinitesimally small regions of spacetime. Thus, for example, a single movement of a hummingbird’s wing exists for God, but not for us: all we get is the object of the hummingbird’s wing’s *movement*. In the second instance, the answer to “Does *x* exist for S?” (where “S” refers to a human observer) depends on the particular parameters of that observer’s *durée*, for instance, the *durée*’s location in spacetime, its “degree of tension” etc. And finally, as Chapter 3 demonstrated, “Does *x* exist (*simpliciter*)?” is not a well-formulated question.

The model of the way that *la durée* and divine creation come together to form temporally extended objects has one rather surprising consequence that merits our attention. This can be summed up by saying that “Divine creation always happens in *a* present.” This

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implies that “if there are empty places, on this account, God does not exist in them.” (Wierenga, 40.) Unfortunately, space does not permit me to discuss this problem here, but two things should be mentioned in passing: the first is that the problem may simply be dealt with by stipulating that even an empty place has “being of some sort” and must, therefore, have been created by God. The second is that the matter cannot be resolved without a full discussion of the difference between “place” and “space” in Aquinas’ usage; the notion of “space” (*locus*) which Aquinas takes over from Aristotle does not map directly onto “(a bit of) space” as analytic philosophy understands it. For a discussion, see Bergson’s own short Latin thesis on this topic (Bergson, ‘L’Idée de lieu chez Aristote’; See also Pannenberg, ‘Eternity, Time and Space’.).

<sup>562</sup> Bergson: “How could a link, a relation between two terms, exist otherwise than in a mind? I understand that A exists by itself, that B exists by itself, but a mind is required to establish the relation between A and B.” (“[U]ne relation, un rapport entre deux termes, comment pourrait-il exister autrement que dans un esprit ? Je conçois que A existe par lui-même, que B existe par lui-même, mais la relation de A à B, il faut un esprit qui l’établisse.” (EPL 332, my translation.))

<sup>563</sup> In Chapter 2, I argued that every existing thing implies logically the presence of *la durée*. In my earlier paper (Moravec, ‘A Perpetual Present: Henri Bergson and Atemporal Duration’.), I argued that divine eternity, and the way through which it observes the world, may be considered as a limit-case of *la durée*, which is phenomenologically inaccessible to us. This phenomenological inaccessibility is here strengthened by the fact that the divine *durée* is the source of being, unlike ours, which merely synthesises *esse* that depends on God.

may sound trivial, but a few clarifications are required: the first is that the statement is not equivalent to claiming that “Divine creation always happens in *the* present,” since my model dispenses with an objective present. The “presentness” of anything always has to be relativized to a particular *durée*. As Bergson insists, *la durée* is always tied inextricably to *our* present — its past is merely an instance of spatialised time that allows of geometrical division into distinct events. *La durée* is metaphysically “located” in our present; it is in *our* present where God provides or creates “stuff” that our *durée* synthesises. Once this has happened, the individual temporal objects are retained in memory and their temporal extension can be analysed by the B-structure.<sup>564</sup> This is why throughout the preceding text I have been so careful to say that the individual *instants* or *moments* of time proceeding from divine eternity are only *retrospectively* identified as being “instants” or “moments.” When our *durée* is synthesising them, they cannot be understood using objective time. The vaguely-outlined present of a particular *durée* is the point of contact between divine being-giving activity and its perfection in our mind; or in other words, God’s *durée* and ours are always “present” to each other, regardless of where in spacetime we are located. This also explains why God cannot change “the past:” if the divine creative activity is located in *a present*, the past is always relative to a particular present *durée* and merely captures an item of memory (*souvenir*) of the divine creative activity. However, since there is no objective single region of “the past” in spacetime *as a whole*, the exclusion of divine creative activity from the region of the past does not imply the inability of God to act in any region of spacetime. Here, what Eleonore Stump says is exceptionally instructive:

God cannot change the past — but it is God *in particular* that cannot change the past. ... An omnipotent, omniscient, eternal entity can affect temporal events, but it can affect events only as they are actually occurring. As for a past event, the time at which it was actually occurring is the time at which it is present to such an entity; and so the Battle of Waterloo is present to God, and God can affect the battle. Suppose that he does so. God can bring it about that Napoleon wins, though we know that he does not do so, because whatever God does at Waterloo is over and done with as we see it. So God cannot alter the past, but he can alter the course of the Battle at Waterloo.<sup>565</sup>

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<sup>564</sup> The notion of “a present” as the point of contact between our flowing time and eternity is one that Chase ascribes to the Neoplatonist tradition (see Chase, ‘Time and Eternity from Plotinus and Boethius to Einstein’, 98.). This similarity between my view and that discussed by Chase cannot be extended too far. The Neoplatonic picture still rests on the notion of an objective present in reality, which my view rejects.

<sup>565</sup> Stump, *Aquinas*, 156–57.

Using the same language, the Bergsonian model of divine creative activity can be reformulated thus:

God cannot change what is related to a particular instance of *la durée* as the past — but it is God *in particular* that cannot change that. An omnipotent, omniscient, eternal entity can affect temporal events, but it can affect events only as they are part of *la durée*, which is always present. As for an event which is past, i.e., related to the always-present *durée qua* objective spatialised time, the point of the B-structural time at which it was present to our *durée* is the moment of objective time at which it is present to the *durée* of such an entity; and so the Battle of Waterloo is part of *la durée* of God [in which all of history is contained], and God can affect the battle. Etc.

#### 4.5. Objections

Several objections can be raised against the model that I have proposed.

The first comes from the formulation of the special theory of relativity. According to relativity, time is not separate from space, instead, they are simply two aspects of the same thing,<sup>566</sup> namely of Minkowski spacetime. In the formulation of the invariant relativistic interval,<sup>567</sup> one of them converts into the other depending on the speeds involved in describing a particular event. Can we really separate the “temporal” and “spatial” features of every event as neatly as I have suggested with the apple example above? Or is the boundary between the object’s spatial and temporal features dependent on the specific conditions under which we are describing the situation, for example, if the apple is being described as we glance at it from a light-speed spaceship? One possible solution to this problem would be to appeal to Bergson’s claims from MM, where he argues for a metaphysical continuum between “time” and “space.” For Bergson, they are just two limit cases of *la durée*.<sup>568</sup> However, as before, this solution is not available to us, because we have closed off Bergson’s philosophy at Stage 1. More importantly, as many critics have pointed out concerning Bergson’s debate with Einstein,<sup>569</sup> *la durée* and the “time” of relativity (for example, as it enters, when suitably described by one

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<sup>566</sup> See for example Leftow, *Time and Eternity*, 36.

<sup>567</sup> For a succinct description, see Maudlin, *Philosophy of Physics: Space and Time*, 67–71; Mozersky, ‘Time, Tense and Special Relativity’, 223–30; Dainton, *Time and Space*, 322–23.

<sup>568</sup> See for example the fourth chapter of MM.

<sup>569</sup> For a discussion, see During, ‘Dossier critique’, 278–79, note 24.

of the four coordinates of Minkowski spacetime, the invariant relativistic interval) are two quite different things in any case.

The best way to respond to this problem is simply to stick with relativity itself; barring limit conditions (i.e., conditions that involve objects travelling at the speed of light), any event will always have at least a partial temporal extension; this temporal extension can be captured by objective time, differentiated from space and the two might be related using the interval. Even though the “time” discussed by relativity is not *la durée*, it is a particular instance of objective time, which — as we have seen in Chapter 2 — is inextricably connected with *la durée*. In other words, the existence of a given temporal event logically implies that such an event is being observed by an observer with *la durée* (see Chapter 3); once that event has joined the past of that observer, it can be analysed using objective time which, again, is in complete accordance with the way objective time is treated by physics; for example, it is subject to the relativity of simultaneity or the applicability of Lorentz transformations to translate the spatio-(B-structural)-temporal description of the event into a different set of coordinates.

The second objection may be stated as follows: Does the picture advanced here not lead to giving humans a status of “co-creators,” thereby leaving a slightly heretical aftertaste? Does it mean that we participate in divine creation, that is, that God could not create any temporal objects without the cooperation of humans? Here the analogy with colours, discussed above, is helpful once again. If the perception of colours is grounded in the properties of external objects and yet requires the human mind for the colours to be fully realized, what does it mean to say that God cannot create, for instance, a red object? I discussed a similar example in an earlier paper by appealing to Kripke’s example of the epistemological and ontological relations between “molecular motion,” “heat,” and “sensation of heat.”<sup>570</sup> Kripke asks, does God need to do anything additional in order for “molecular motion” to be “heat”? It seems that He does not: in the act of creating molecular motion, He creates heat. What He additionally needs to do is to arrange for “molecular motion” to be felt as “*sensation of heat*” by human beings. The situation here is rather similar — for God to create a particular object which exists in objective time, He merely needs to create whatever it is that may retrospectively be recognised by human beings as the four-dimensional space-time worm existing in the B-structure. However, for this to be a *temporally extended* object, He needs to create humans with *la durée* in order for them to recognise the object as such.<sup>571</sup>

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<sup>570</sup> Moravec, ‘Aquinas and Kripke on the Genealogy of Essential Properties’.

<sup>571</sup> The position advocated here is one of “partial” co-operation in creating the effect: God provides the timeless *esse*, the human mind provides the temporal extension. This is different from (although not rejected by) Matthews

Consider a third objection: does my model imply that it is only *us* who know temporal objects *qua* temporal objects? Is this not the problem in Avicenna that Aquinas criticised, namely the position that God only knows the particular through the universal?<sup>572</sup> Are we not limiting divine omniscience by stipulating that the genuinely temporal character of reality is only accessible to *la durée*? Shanley says that temporal features of objects are only accidents pertaining to the particularity of individual substances and must, therefore, be known by God:

The range of God's causal knowledge extends to everything that has existence in any way, including individual entities, their accidents and their actions ...  
[Aquinas] treats temporal features as equivalent to any other accidental feature.<sup>573</sup>

There are two ways that we can respond to this. The first possibility is to concede the point; there are certain ways of knowing which are closed off to God;<sup>574</sup> the immediate phenomenological experience of a given temporal object may be as unavailable to the timeless God as the experience of, for example, “what it is like to be evil.” The second option is offered by the phenomenological account of divine knowledge that I argued for in an earlier paper,<sup>575</sup> where I claimed that divine knowledge should be thought of by analogy as a perfect overlapping of the past trace of *la durée* (which operates in the medium of spatialised time) and *la durée* itself; such an experience is inaccessible to humans since we are constantly subject to the separation of *memory* and *perception*.<sup>576</sup> The first of these is required for the analysis of

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Grant's recently articulated argument to show that there is no contradiction in assuming that a thing be *wholly* caused *both* by God *and* by creature — what he calls a “dual sources” account (Matthews Grant, *Free Will and God's Universal Causality. The Dual Sources Account*, 35–51.). Matthews Grant provides an analogy to show how *both* causes can contribute *wholly* to an effect: “Tolkien brought it about [in *The Hobbit*] that Smaug died by means of an arrow shot from Bard's bow, but the dragon and the archer, the bow and the arrow, and everything else in the story are with the same immediacy dependent on Tolkien.” (Matthews Grant, 38.) My position, however, need not necessarily invite Matthews Grant's objection that “God is not the cause of the forms in virtue of which the effect has its determinate features, [which means that] ..., he is not the cause of all entities distinct from himself,” (Matthews Grant, 40.) which goes against the orthodox position of God being the cause of *everything* distinct from Himself. True enough, God is not the immediate cause of the temporal extension of an event — but since He is the cause of the human whose *durée* grounds this extension, He is still *also* the cause of this extension. One of the causes of the effect (*la durée*) is dependent on the other cause of the effect (God).

<sup>572</sup> Shanley, ‘Eternal Knowledge of the Temporal in Aquinas’, 210–11; see also Marmura, ‘Some Aspects of Avicenna's Theory of God's Knowledge of Particulars’.

<sup>573</sup> Shanley, ‘Eternal Knowledge of the Temporal in Aquinas’, 214.

<sup>574</sup> This response is directly linked to Zagzebski's seminal work on divine “omnisubjectivity” — for some of its formulations, see Zagzebski, ‘Omnisubjectivity: Why It Is a Divine Attribute’; Zagzebski, *Omnisubjectivity: A Defense of a Divine Attribute*; Zagzebski, ‘Omnisubjectivity’.

<sup>575</sup> Moravec, ‘A Perpetual Present: Henri Bergson and Atemporal Duration’.

<sup>576</sup> Pannenberg makes a similar point appealing to Augustine: “[T]he experience of duration ... is always coloured by memory and anticipation, as Augustine argued in his analysis of time in Book XI of his *Confessiones*, where the experience of duration in spite of the brokenness of temporal process is illustrated by the example of how we

things *qua* objects in spatialised time, the second for the knowledge of objects *qua* authentically temporal. In God both of these overlap in a way unimaginable to us. So God can know objects both *qua* four-dimensional worms in B-structural spacetime and *qua la durée*.

The final objection returns to a different version of a problem about representation that has resurfaced at various earlier stages of my argument. It consists of the affirmation that I have conflated the following two claims:

*La durée* is required for the existence of temporally extended objects.

*La durée* is required for the existence of *representations* of temporally extended objects.

It might be objected, for example, that what I say about *la durée* and the way it relates to the existence of temporally extended objects boils down to a silly triviality, which says something like the following: the mind which uses a temporal medium for the creation of its representations is required for there to be representations of temporally extended objects in the temporal medium:

As Dennett has insisted over and over, a representation can depict a property without having that property ... . A representation of red need not be red. A representation of a banana need not be a banana.<sup>577</sup>

In my case, the objection would go as follows: the thing which represents objects to itself as temporal is required for there to be representations of temporal objects. And even if we simply accept that my proposal leads to this self-evident claim, what is so special about time?

To reiterate the point made in section 2.2, the relation between the human mind and *la durée* is a biconditional: there is no mind which is not *la durée* and there is no *durée* without a mind. In one respect, this Bergsonian point is also deeply Kantian: any coherent philosophical notion of the world always “hides” *la durée* somewhere in the process whereby a unified conception of that world had been constructed. On the other hand, Bergson goes against Kant in that *la durée* is not a “medium” or a “filter” separating us from the world or from our fundamental self:<sup>578</sup> it is constitutive of the self (see section 1.5). So while a representation of

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experience the unity of a piece of music, a melody, an experience that would not be possible in our attention without the help of memory and anticipation. Such an experience of duration can be a reminder of eternity, the simultaneous presence and possession of the wholeness of life, although in our temporal experience such duration is always limited and gets interrupted.” (Pannenberg, ‘Eternity, Time and Space’, 103–4.)

<sup>577</sup> Brook, ‘Kant and Time-Order Idealism’, 122–23.

<sup>578</sup> See Kant, *Critique of Pure Reason*, B152–156.

a banana need not itself be a banana, and — contrary to what Costelloe said earlier (see p. 17) — a representation of change need not itself change, a representation of (any) temporal reality cannot exist without *the* fundamental temporal reality, which is *la durée*. It does not seem to me that this applies to other familiar features of the world: there is nothing *prima facie* contradictory in conceiving a world with, say, only two dimensions,<sup>579</sup> a world without colours, a world where objects have no mass or a world with no space at all. However, even disembodied spirits still have to “endure” in a certain way<sup>580</sup> and the one-dimensional character in Flatland still displays activities characteristically connected to time (he speaks, for example).

So there is something “special” about time. It is therefore not surprising that the ontological delineations between “*la durée*” and the objects which are a product of its synthesis are rather blurry. An earlier-used analogy will help to clarify this. Let us put God’s causal knowledge aside for the time being. If we replace all people in the universe with colour-blind individuals, it no longer makes sense to speak of colours “existing” in that universe at all. Nevertheless, the world as a whole, on that picture, would still be coherent. What would “exist” in that world is a “something” which, when placed in contact with a non-colour-blind human mind, becomes “colour.” By contrast, if we remove all minds *simpliciter* from the universe (thereby removing all instances of *la durée*), it no longer makes sense to speak of anything temporal as “existing” in that universe; the world stops being unified and disintegrates into disconnected slices of reality. The difference between the case of “colour” and “*durée*” is the following: the removal of the ability to perceive colours removes the “existence” of colours, but not the coherence of the world which contained them. A colour-blind observer is still an observer. A time-insensitive observer is not.

The objector might, however, come back and reformulate the problem as follows: What I am saying amounts to no more than the claim, that objects are temporal in virtue of being represented as temporal. Analogously to the example of colours, this is no different from claiming that objects have colours in virtue of being represented by the mind as having colours. Perhaps the characteristic “timeliness” of represented objects related to *la durée* is merely attached to timeless objects in the same way as the property of being red, for example, is attached to objects which, in themselves, intrinsically, do not possess any colour.

Here it is important to refer back to the role that the synthesis of *la durée* plays in the constitution of temporally extended objects; time is not simply a property that can be attached

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<sup>579</sup> See Abbott, *Flatland. A Romance of Many Dimensions*. Bergson makes a similar hypothesis about creatures living in two-dimensional plane representing time to themselves by introducing a third dimension in DS 104/150.

<sup>580</sup> See Lucas, *A Treatise on Time and Space*, §2.

and removed from objects, it is fundamentally constitutive of objects as such: *Objects exist in virtue of being represented as temporal*. As Bergson's example with the pendulum illustrated, without the synthesis of *la durée*, objects would merely be disunified fragmented slices of spatiality. The characteristic "timeliness" is not a mere property, it is intrinsically built into any given object. Asking what objects are once we eliminate their mind-dependent temporal dimension is much like asking what an undeveloped film "looks like:" no one has ever seen an undeveloped frame of film since the activity of human seeing is inseparably bound to rays of light, which destroy the undeveloped film. The fact that we cannot *conceive* of a possible timeless world with objects is, of course, not evidence for there not *being* such a world. It is just that when we mentally travel to its door with our garden-variety objects and let such objects walk in, taking off their temporal cloaks before entering, we no longer know what they are. We peep through the keyhole, see that *something* is there — Kant would say this something is a *noumenon* —, we can perhaps make out shapes of timeless objects (universals, numbers, etc.), whose home it is, but that's about it.<sup>581</sup> One should think of temporally extended reality not as a fence of wooden planks, each representing a particular feature of the object (chemical composition, origin, mass, temporal and spatial extension), but rather as a bridge with several bolts. In the case of the fence, one can remove individual planks at will while the structure remains standing. However, the fundamentality of temporal extension for the coherence of (the world of) objects is better captured by the bridge metaphor; some sections of the bridge (e.g., railings or statues on top of it) may be removed with the bridge remaining "a bridge" — however, there are others (such as time) which, when removed, cause the entire bridge to collapse.<sup>582</sup> A colourless object is still an object; a temporally unextended object is not.

#### 4.6. Re-Creationism

Before applying these findings to the problem of free will and divine foreknowledge, a few words need to be said about how the picture of divine creation suggested above relates to the theory of re-creationism or "continuous creation theory." This theory claims, roughly speaking, that "it is in the end impossible to distinguish God's bringing things to be from His sustaining

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<sup>581</sup> I am grateful to Pierre Bonnier for this metaphor.

<sup>582</sup> I have argued that *time* is one of such aspects. Perhaps there are others. Kant claimed that it is both time and *space* that play this fundamental role for the unity and coherence of the world. However, there does not seem anything particularly incoherent in conceiving a spaceless world occupied by temporal disembodied spirits; indeed even the point-like character of Abbot's flatland who occupies a zero-dimensional space (i.e., no space at all) still *speaks* in time. Bergson himself argues that one may not treat space and time equally when asking questions about how fundamental each is to our constitution of reality in IT 22-24.



them in existence,”<sup>583</sup> or that “God is continuously remaking the universe, and this is why the universe remains in existence.”<sup>584</sup> Furthermore, Kvanvig and McCann observe that calling this position “continuous creation” theory is rather misleading: “[G]od does not engage in one type of action to produce a thing and another to sustain it.”<sup>585</sup> Moreover, “It is not ... possible to limit the object of creation to the coming to be of the world, where this is supposed to be distinct from its being, for there is no such distinction.”<sup>586</sup>

Kvanvig and McCann argue that this is, in fact, the orthodox Christian position and quote a host of canonical texts in support of their view.<sup>587</sup> Furthermore, this position seems to fit quite well with the picture of an immutable God: “[G]od simply creates, and creates all that He does create; He does not start and stop. And if this is correct the world cannot persist after God has ceased creating it, for He cannot cease creating it.”<sup>588</sup> According to Kvanvig and McCann, things do not have a “self-sustaining” physical feature that would allow them to persist from one moment of time to another.<sup>589</sup> On the recreationist picture, by contrast, reality consists of God re-creating every single point of time.<sup>590</sup>

It might indeed seem that re-creationism should be considered as the default orthodox option. So why not accept it? The first objection against re-creationism consists in the charge of occasionalism, that is “the notion that God is the only cause in the world, and that things that look like causes in the world are only occasions for God to produce an effect.”<sup>591</sup> If Kvanvig and McCann are right, Pavelich argues, then “once a thing has been created, they are correct that it can itself become a cause, but if a thing is constantly created, there will never be a time when it can exert autonomous causal powers.”<sup>592</sup> Furthermore, the re-creationist picture seems to pose problems for the identity of objects across time. “Every thing at every moment is a new

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<sup>583</sup> Kvanvig and McCann, ‘Divine Conservation and the Persistence of the World’, 15; see also Kretzmann, *The Metaphysics of Creation: Aquinas’s Natural Theology in Summa Contra Gentiles II*, 91.

<sup>584</sup> Pavelich, ‘On the Idea That God Is Continuously Re-Creating the Universe’, 7. Leftow observes that on a tensed theory of time, this position is inevitable: “If time is a transient continuum and is God’s creation, God must be constantly creating the new extension of that continuum if in fact that continuum continues to continue.” (Leftow, *Time and Eternity*, 193.) Bergson himself engages with Descartes’ version of the theory in IT 55-58.

<sup>585</sup> Kvanvig and McCann, ‘Divine Conservation and the Persistence of the World’, 15.

<sup>586</sup> Kvanvig and McCann, 19.

<sup>587</sup> Kvanvig and McCann, 15. They refer to Colossians 1:17; Hebrews 1:3; Aquinas, *Summa Theologiae*, 1975, 14. Divine Government (Ia2ae.103-9):IaQ104a1; Augustine, *The Literal Meaning of Genesis*, 1:IV.12.

<sup>588</sup> Kvanvig and McCann, ‘Divine Conservation and the Persistence of the World’, 18.

<sup>589</sup> Kvanvig and McCann, 37–41.

<sup>590</sup> For a discussion of this position in Albert of Saxony, see Pasnau, *Metaphysical Themes 1274-1671*, 391–94; see also Cross, ‘Four-Dimensionalism and Identity Across Time: Henry of Ghent vs. Bonaventure’.

<sup>591</sup> Pavelich, ‘On the Idea That God Is Continuously Re-Creating the Universe’; see also Matthews Grant, *Free Will and God’s Universal Causality. The Dual Sources Account*, 35–51.

<sup>592</sup> Pavelich, ‘On the Idea That God Is Continuously Re-Creating the Universe’, 13.

thing, created *ex nihilo* by God.”<sup>593</sup> This leads to a fragmentation of reality. The final objection that Pavelich raises against re-creationism consists in the observation that it very heavily relies on a theory of time as discrete:

[T]he re-creationist faces a dilemma: either time is continuous or it is not. If it is continuous, then the re-creationist position cannot get off the ground at all since the world would not need re-creating — if time really exists, then there is no question as to why things persist through time. The re-creationist must therefore say that time is discontinuous but then the re-creationist’s talk of “re” creation makes no sense, and the re-creationist story, which purports to be an explanation of a temporal universe, is something else entirely: an account of a universe that does not contain time.<sup>594</sup>

Neither can the re-creationist, according to Pavelich, say that God exists in a timeless “frame” and the world, *in se* is not really temporal:

The image that emerges is one of God as a kind of filmmaker, who creates successive frames of a film, and does so in time, and then strings them together sequentially, generating time for the characters of the film.<sup>595</sup>

However, this runs into the usual problems connected with eternal creation of the temporal — not only is, on this view, the universe not “genuinely temporal,”<sup>596</sup> there is nothing that would prevent God from changing the past, in the same way that previous frames in a film may be edited at any point,<sup>597</sup> which goes against our intuitions about what “time” is:

While it may make sense to God that one earthly moment happened before another, we are working on the assumption that divine time is not ours — and hence it would not therefore make any earthly sense to say that there is a past or a future. ... The conclusion to reach from these considerations is that on a re-creationist picture, time — at least insofar as we can understand it — is not real.<sup>598</sup>

Although a fully coherent account of re-creationism on Bergsonian terms would need to be spelt out in more detail, my model is in general agreement with Kvanvig and McCann. The one

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<sup>593</sup> Pavelich, 14.

<sup>594</sup> Pavelich, 16.

<sup>595</sup> Pavelich, 17.

<sup>596</sup> Pavelich, 18.

<sup>597</sup> Pavelich, 18.

<sup>598</sup> Pavelich, 18.

reservation I have, based on the distinction between *la durée* and objective time discussed in Chapter 2, would be that the talk of “before” and “after” or “again” when related to God’s creation only applies to the trace of *la durée* which can be captured by the medium of B-structural objective time.

However, even though the similarities between the picture of God’s “causal knowledge” (coming together with *la durée* to constitute temporally extended objects) and re-creationism may be rather vague, the Bergsonian-idealist account of divine relation to the world can respond to the main objections from Pavelich. I will leave the objection from occasionalism until the next chapter. For the time being, let us consider the objection about re-creationism being tied to a particular theory of time. Here the Bergsonian division of *la durée* and B-structural time allows us simply to dissolve the question; enquiries about time being continuous or discrete apply merely to objective time.<sup>599</sup> The re-creative activity of God, indexed to individual discrete points of time, may only be retrospectively recognised because *when* it is happening (in our present constituted by *la durée*), it is completely indivisible. As a matter of fact, it does not particularly matter whether objective time is discrete or continuous, we may simply formulate the situation as follows: For every point of objective time, we can retrospectively recognise that it has been created by God. Whether there is a bijection between the set of these points and real numbers or natural numbers does not particularly matter. Furthermore, the image of God as a film-maker should be reversed: Bergson himself strongly argued against imagining the world with the help of the “cinematographic” metaphor.<sup>600</sup> The individual images have been strung together by *us*, not by God; and the existence of these individual frames or “slices” of reality, which “constantly begin anew,”<sup>601</sup> may only be recognised retrospectively, since, at the moment when they were being strung together, they were part of the indivisible present. Similarly, the idea of God changing “the past” is mistaken from Bergson’s point of view: as we have seen earlier (see p. 132), God always creates in a particular present of a given *durée*: it is not surprising that God cannot cause creative change somewhere where His creative activity is not located, namely, in the past. Similarly, the view that time is not real if there is no “future” and no “past” has already been dealt with in Chapter 2 by the differentiation between the “real” time of *la durée* and the “real” objective time.

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<sup>599</sup> Bergson’s talk of *durée* being “continuous” should not be understood in terms of discussions about there being or not being a third point between any two given points of time; what he means by this word is rather a fundamental “indivisibility,” or “un-interruption.”

<sup>600</sup> CM 7/9.

<sup>601</sup> MM 139/154.

As for re-creationism entailing a fragmentation of reality that is deemed to make impossible the identity of objects across time, a point which is suggested not only by Pavelich's claims about God always creating everything "anew"<sup>602</sup> but also by Bergson's repeated claims about the world being "reborn" at every minute, one may respond in two ways, using two different methods to ground the identity of objects. The first option, already mentioned in Chapter 2, is to appeal to Bergson's own theory of memory to guarantee the identity of objects across time in *la durée*. As mentioned in Chapter 2, this theory would require going in extensive detail into the metaphysical apparatus offered by Bergson in MM. I do not have space to do this here, although I do not doubt that this could be done. The second and much easier option is, instead, to try and ground the identity of objects across time in the B-structure. The route to pursue here could lead through Chisholm's writings on *entia successiva*, writings, it must be said, that are not totally disconnected from the medieval debates about divine creation and sustaining that have formed the core of this chapter. Chisholm, appealing to Bishop Butler, argues that it is only in the "loose and popular sense" that individual things persist; in the strict sense, the continuity across time is only granted to persons.<sup>603</sup> The continuity of objects as *entia successiva* may be analysed using Chisholm's definitional machinery, which is based on B-structural objective time.<sup>604</sup>

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The picture of the relation between God and time is now complete. Using the key elements of Bergson's philosophy introduced in Chapter 1, Chapter 2 has delineated two metaphysically different notions of "time:" objective time and *la durée*, and shown how they are related. Chapter 3 used the metaphysical role of *la durée* for the constitution of temporality to sketch an ontology of time that takes into account key insights from the special theory of relativity. Chapter 4 has now demonstrated how such an ontology fits into a theistic account of the relation between God and the world.

One may, however, begin to wonder what the point of all of this is. *Why Bergson?* The work done in the past two chapters, which has mainly appealed to *la durée* as the "great synthesiser" required for temporal objects to exist, may have equally well been done with Kant, perhaps with the upgrade of a qualitative differentiation of the (present) perception and (past)

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<sup>602</sup> Pavelich, 'On the Idea That God Is Continuously Re-Creating the Universe', 8.

<sup>603</sup> Chisholm, *Person and Object. A Metaphysical Study*, 92.

<sup>604</sup> For a full discussion, see Chisholm, 97–104.

memory. We must remember that Bergson's primary motivation for introducing *la durée* in TFW was to deal with the problem of *free will*. The rest of this essay will, therefore, use the complete ontology from this chapter to deal with the problem of divine omniscience and human free will. It is there that other key features of *la durée*, left unused since Chapter 2, will come into play.

## 5. *La Durée*, Eternity, and Foreknowledge

The only feature of *la durée* that the two previous chapters have been appealing to was its “synthesising” function; *la durée* is both an ontological instantiation of temporality and a necessary component of temporally extended objects. We have seen that *la durée* is not only constitutive of the self but that it also cannot be disassociated from external reality.

Putting the question of *noumena* aside, *la durée* has played a similar role as time — the *a priori* condition of sensibility — does in Kant’s metaphysical system. However, a key stepping-stone of Bergson’s entire philosophical enterprise is a critique of Kant and the way Kantian philosophy has understood time. Bergson argues that although Kant has understood the *functional role* that the human mind plays in temporal ontology (i.e., as required for the synthesis that makes our experience of the timeless reality “outside” possible), he has misunderstood its *qualitative nature*.<sup>605</sup> Chapters 3 and 4 have appealed to the mind’s *role* in temporal ontology, this final part of the project will explore the mind’s temporal *nature*. We will return to Bergson’s early writings on the relation between the qualitative nature of *la durée* and the problem of free will that were introduced at the beginning of this essay.

Once again, a few methodological delimitations are needed. First, I will not discuss the problem of moral responsibility and its connection to free will debates, since, following Bergson,<sup>606</sup> I take the question about our being free to be negotiable independently of the question about our being morally responsible. Second, there are two distinct routes that one might take when dealing with the problem of free will and divine foreknowledge: (i) we can start by demonstrating that we have free will and then try to work out how it is that a timeless God can know everything; the second option is (ii) to start with the claim that God knows everything and then attempt to explain how we may have free will. I opt for the first of these.

Section 1.4 has applied Bergson’s critique to Postulates 1-3 that contemporary free will discussions rest on. However, dismantling the first three Postulates is not enough. Saying that there is a continuum between freedom and determinism (against Postulate 1), that the problem of free will should instead be shifted to individual acts (against Postulate 2) and that free will does not consist of being able to do otherwise or of there being several futures possible at the

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<sup>605</sup> IT 67-9. See also Ansell-Pearson, *Philosophy and the Adventure of the Virtual. Bergson and the Time of Life*, 35.

<sup>606</sup> See Čapek, ‘Les apories de la liberté bergsonienne’, 255. For Bergson’s treatment of the topic — especially the difference between “liberté” and “libre arbitre” — see his texts quoted in Bouaniche, ‘Dossier Critique’, 297–98.

time of the decision-making (against Postulate 3), all of that is of no use if, in the abstract, free will might still not be *possible at all*.

This final chapter will first start by returning to van Inwagen's consequence argument; it will be shown that the argument rests on Postulate 4 (i.e., the claim that mental states can be subsumed under causal relationships, see section 1.4) and that Bergson's philosophy of *la durée* proves that Postulate 4 is false. Second, I will argue that all the four Postulates figure in free will discussions within analytic philosophy of *religion*, thereby extending Bergson's critique to them too. However, it will be demonstrated that although Bergson can remove one stumbling block of the free will and foreknowledge problem in analytic thought, another one arises that his philosophy simply cannot deal with. In the final section, I will propose my own solution to this problem.

## 5.1. Bergson and The Consequence Argument

Bergson insists that a given mental state can never reappear again. As Pariente puts it, "*la durée* is the only element in which the impossibility of all repetition is guaranteed."<sup>607</sup> Now, Bergson argues that the possibility of repetition is precisely what lies at the core of utilising logical inferences and laws of nature in dealing with the problem of free will: "To say that the same inner causes will reproduce the same effects is to assume that the same cause can appear a second time on the stage of consciousness."<sup>608</sup> Bergson asserts that Kant specifically was mistaken to take categories applicable to the external world and apply them to *la durée*:

He was thereby led to believe that the same states can recur in the depths of consciousness, just as the same physical phenomena are repeated in space; this at least is what he implicitly admitted when he ascribed to the causal relation the same meaning and the same function in the inner as in the outer world.<sup>609</sup>

To see that Bergson's critique of Kant applies equally well to the contemporary landscape, it is best to use the consequence argument against the compatibility of free will and determinism as a study-case. In its most general formulation, it says something like the following: We do not have control over the past and we do not control the link or the connection between the past

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<sup>607</sup> "[L]*a durée* est l'unique élément dans lequel soit garantie l'impossibilité de toute répétition." (Pariente, *Le Langage et l'individuel*, 19, my translation.)

<sup>608</sup> TFW 199/150.

<sup>609</sup> TFW 232/174-5.

and the future, therefore we do not control the future.<sup>610</sup> The argument has been formulated in many different variations; for our present purposes, let us use the most canonical version articulated by van Inwagen:

If determinism is true, then our acts are the consequences of the laws of nature and events in the remote past. But it is not up to us what went on before we were born; and neither is it up to us what the laws of nature are. Therefore, the consequences of these things (including our present acts) are not up to us.<sup>611</sup>

In propositional form, the argument may be reconstructed as follows:

P1: No one has power over the facts of the past and the laws of nature.

P2: No one has power over the fact that the facts of the past and the laws of nature entail every fact of the future (i.e., determinism is true and we have no control over whether it is true or not).

**C: Therefore, no one has power over the facts of the future.**<sup>612</sup>

Let us assume that the argument above applies to the external world. True enough, the past “facts” that — together with the laws of nature — entail the facts about the future are rather vague; one billiard ball hitting another is never composed of exactly the same number of atoms from one experiment to another and yet we can predict where the second one will travel when hit by the first. This problem may easily be evaded by saying that laws of nature<sup>613</sup> do not range

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<sup>610</sup> This formulation is based on Zagzebski, ‘Eternity and Fatalism’, 65.

<sup>611</sup> Van Inwagen, *An Essay on Free Will*, 16; for the original formulation, see Van Inwagen, ‘The Incompatibility of Free Will and Determinism’.

<sup>612</sup> This propositional reconstruction is based on McKenna and Coates, ‘Compatibilism’.

<sup>613</sup> I intentionally leave undecided which theory of “laws of nature” I ascribe to since the following discussion concerns merely their applicability to mental states — problems pertaining to physics (matter, nature, cosmology etc.) do not play a role here. Moreover, when observing the main theories about laws of nature, one begins to see that Bergson’s critique applies equally well to all those that posit the possibility of mental states being “fed into” their respective conceptions of laws. For example, on a regularity-type view of laws of nature (i.e., one that says that laws of nature consist of generalisations describing the regular conjunction of phenomena in the world, generalisations that supervene on stuff in the “Humean mosaic” (Lewis, *Philosophical Papers*, 2:ix.)), *la durée* cannot be “fed into” into such laws. Since mental states are unrepeatable tokens, there are no types (or universals) to generalise over: a generalisation over a single case is no generalisation at all. (The specific case of singular causation will be discussed below.) Of course, one might generalise over the *types* of mental states (and the resulting actions, for example, the marriage example discussed in Chapter 1), but these do not apply to *la durée*, only to the parasitic self. By contrast, on the necessitarian view (i.e., roughly speaking, one that claims that nature is governed by inviolable nomological necessity), it is impossible to see how such a conception of law could prohibit *any* connection between two phenomenologically accessible mental states: of course, the mental state of



over *particular* facts, events, actions or happenings, but over *types* thereof. While *strictly speaking* every billiard ball has a different mass and *strictly speaking*, it has a different shape, the differences between individual tokens of billiard balls are so negligible that they may be subsumed under a single type — “Billiard ball,” or rather “a sphere of roughly this and this shape and roughly this and this weight etc.”

Can the same be said about mental states? Recall that Postulate 4 says the following:

**Postulate 4: Laws of nature apply to mental states.** This means that mental states are considered as facts that can be subsumed under causal relationships.

If the above were true and laws of nature could thereby apply to mental states,<sup>614</sup> the consequence argument would equally well apply to *la durée*: We have no power over our past mental states and over the fact that past mental states entail future mental states. Since mental states entail our actions, we would have no power over our actions. In the way that instantiations of certain types of movements of a billiard ball in one direction determine the instantiation of later types of events of another billiard ball, we could say that types of mental states (e.g., “anger”) determine the future mental state and the action that results therefrom (“hitting someone”).

For Bergson, however, the difference between the internal and the external multiplicity (see section 1.2) is central for articulating free-will questions. Whereas states of the external world may be considered as several tokens of the same type, mental states are always uniquely tokened. Once a mental state has occurred in *la durée*, the type is never instantiated again: “Can the same situation ever repeat itself, the same external situation, the same internal situation, the same external situation and the same state of the soul [*état de l’âme*]?”<sup>615</sup> This is precisely why Bergson treats choice as an “exception to the law of causality.”<sup>616</sup> He argues that the usual notions of causality cannot apply to states of consciousness, because they rely on the possibility

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“feeling peckish” is frequently (and regularly) followed by the mental state of “I should get a snack,” but nothing conceptually prohibits it from being followed by “the thought of a speaking pumpkin.” Of course, the discussion of other theories about laws of nature (e.g., antirealism, antireductionism, system-based approach) would need to be provided if *la durée* was extended to the external world (Stages 2-3), but by closing off this possibility, the usual problems are here closed off with it.

<sup>614</sup> Van Inwagen himself briefly considers the possibility of including *psychological* laws in his typology of “laws of nature” (Van Inwagen, ‘The Incompatibility of Free Will and Determinism’, 187.), but this need not trouble us here, because: (i) he merely understands these to apply to the externally observable behaviour of agents, and (ii) even then, he rejects them from his set of “laws of nature” anyway.

<sup>615</sup> “Est-ce que jamais la même situation se reproduit, la même situation extérieure, la même situation interne, la même situation extérieure et le même état d’âme ?” (EPL 152, my translation.)

<sup>616</sup> Miravalle, ‘The Trinity’s Choice: Oppy, Bergson, and God’s Decision to Create’, 154.

of things reappearing in the same form again and being subsumed under causal laws, something which cannot be the case with states of consciousness:

The great category mistake enters in, says Bergson, when we insist on having causes for every conscious event. The error lies in conceiving our mental states as separate pieces, with some bits here and other bits there, all of which need to be connected with causes.<sup>617</sup>

Mental states are not even the type of thing that can enter into *logical* laws. For example, the propositions “I am happy” and “It is not the case that I am happy” can — as anyone who has just had to move to a new exciting city after saying goodbye to their friends knows — both be true at the same time, in the way that “I am less than two metres tall” and “I am either two or more metres tall” cannot. The consequence argument from above should, therefore, be contrasted with the following one:

P1: The facts about the past<sup>618</sup> come in two varieties: (i) facts occurring in objective time (i.e., facts about the external physical world) and (ii) facts occurring in *la durée* (mental states).<sup>619</sup>

P2: No one has power over the facts about the past. This applies both to (i) facts occurring in objective time and (ii) facts occurring in *la durée* (i.e., our past mental states are what they are and there is nothing we can do about them<sup>620</sup>).

P3: Laws of nature together with facts about the past do not entail facts occurring in *la durée*. (This follows from the fact that laws of nature only apply to external facts.)

**C: Laws of nature together with facts of the past do not entail every fact about the future (i.e., they do not entail future facts about *la durée*, but only external facts occurring in objective time).**

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<sup>617</sup> Miravalle, 163.

<sup>618</sup> In what follows I understand “facts about the past” as “facts about events that occur at times in the past.”

<sup>619</sup> This follows from Hypothesis 4 in my introduction.

<sup>620</sup> This analysis diverges radically from the picture of memory proposed by Bergson in MM, where he argues that our process of recalling memories changes those memories too. The past is not as fixed for Bergson as it is for van Inwagen.

Now, although we got the result we wanted (we neutralised the second premise of van Inwagen's consequence argument), we ended up with a rather bizarre picture.<sup>621</sup> Once we have stipulated that no laws of nature range over *la durée* and once we have split the set of facts about the past into those that pertain to objective time and those that pertain to *la durée*, our future has become strangely bifurcated: the future states of *la durée* (e.g., the feeling of satisfaction I will experience once I finish writing this chapter) are not entailed by laws of nature (or any other laws), but facts about the future occurring in objective time (e.g., the event of me opening a can of beer as a result of the satisfaction I experience once I finish writing this chapter) are. What a strange conclusion! It seemed like the division of facts of the past into those about *la durée* and those about the external world was completely harmless; sure, one set consists of uniquely-tokened types and the other of types with potentially several tokens, but both subsets were still *fixed*, determinate, and causally unaffected. But since the deterministic entailment of laws of nature applied to only one of these subsets, we have ended up with a future in which some facts are entailed by laws of nature (i.e., facts about the external world occurring in objective time) and some (i.e., facts about *la durée*) which are not. This is not only odd, but one cannot avoid smelling the rat of epiphenomenalism, which would render the mental incapable of causing anything physical.

Luckily, there is a way out of this problem. The solution proceeds in two steps. First, it suffices to observe that any action taking place in the future of objective time, for example, leaving the coffee shop, is entailed not only by facts about the past occurring in objective time (e.g., the location of the coffee shop and the opening times) but also facts occurring in *la durée* (e.g., our resentment towards the coffee shop owner). But note, as we have seen in section 2.3,

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<sup>621</sup> This picture is similar to that adopted by Donald Davidson in Davidson, 'Mental Events'. Davidson, following Kant, observes that while causes and effects are bound together by deterministic laws, there do not seem to be any deterministic laws linking mental states. Davidson's solution ("anomalous monism") is primarily linguistic: mental states and physical states (brain states) are — ontologically — the same, but linguistically described in different ways. They are not, however, the same when it comes to *laws* linking mental states and physical states. Although a discussion of the relation between Davidson's view and that espoused by Bergson — especially in MM — is beyond the scope of this work, for the present purposes it suffices to say that my position is not identical to that of Davidson, but they are not incompatible — perhaps even despite Bergson's worry about linguistic descriptions of mental states. They share certain claims, for example, about the nomological irreducibility of the mental to the physical (Davidson, 216.), a rejection of the possibility of exhaustively describing mental phenomena in purely physical terms (Davidson, 214.), the anomalousness of mental events (Davidson, 207.), or the fact that, when it comes to mental states, "lawlikeness is a matter of degree." (Davidson, 217.) However, my view remains undecided about the token-identity of mental and physical states — in principle, it is compatible both with Davidson's anomalous monism *or* with what he terms "anomalous dualism." (Davidson, 213.) In short: when it comes to nomology, I agree with Davidson, when it comes to ontology, I leave the question undecided.

that facts about *la durée* only ever exist in the present, *never in the past or future*. Therefore, at every given point of objective time, we have only the following sets of facts:

- (a) set of past objective-time facts
- (b) set of present objective-time facts
- (c) set of present *la durée*-facts
- (d) set of future objective-time facts

*There are only ever present la-durée facts.* The second step in the argument consists in eliminating the deterministic entailment of future objective-time facts. But this step is simple. Observe that facts about *la durée* in the present have a causal effect on objective-time facts about the future. Our feeling of longing to return to Scotland (a present fact about *la durée*) causes us to transport the set of atoms that composes our body to the set of atoms that compose the city of Edinburgh. So the set of future objective-time facts is causally dependent on present facts about *la durée*.

We should, therefore, reformulate the argument as follows:

P1: Every external event in the future (of objective time) is causally dependent on (i) past and present objective-time facts, (ii) present *la-durée* facts, and (iii) laws of nature.

P2: We *do* have power over present *la-durée* facts.

**C: We can have partial power over facts of the future.**

A few comments on some of what this argument entails:

What is this power, stipulated in P2, over the present facts of *la durée*? For Bergson this would doubtless consist of the power to descend into the fundamental self, introspect ourselves and deeply focus on the facts that constitute our character, letting them spring to the surface (see section 1.5). The “can” in the formulation of the argument points to Bergson’s negation of Postulates 1 and 2; our power to be free is not a given; it happens rarely and only at moments of intense deliberation. This is why the formulation “We *can* have power over present facts in *la durée*” is particularly fitting since at those rare moments when we have such power *la durée* perfectly expresses our character.

The argument above entails that if I have power over  $x$ , I have partial power over  $(x \ \& \ y)$ .<sup>622</sup> The “power” here, of course, must only be partial: If I have power over Cécile, but not over Danceny, it is still true that I have partial power over them as a couple. This “partiality” of power is precisely what is required for free will:

If men are to act freely there must be both some determinism and some indeterminism in the world. As Austin Farrer argued, men would not be capable of free action if all their instruments and the materials they acted upon behaved with individual capricious ways: we should be in the predicament of Alice trying to play croquet with live flamingoes for mallets and live hedgehogs for balls. But equally we could not play croquet if the ball and mallets moved and impinged on one another as the stars in their courses, in a way that could be predicted regardless of the rules of the game or the players’ aims.<sup>623</sup>

The conclusion of the argument above is straightforward; we have no power over some events or objects in the future (of our reference frame), namely, those that do not or cannot involve any human causal contribution either for practical reasons (an explosion on the surface of the sun) or for conceptual ones (events in the absolute elsewhere region of our light-cone). But we can have power over some — those that result from the conjunction of

- (i) our present deliberation (deciding whether to get a coffee or not) and
- (ii) facts occurring in objective time (it being three o’clock or the kettle boiling) and

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<sup>622</sup> A straightforward option of making this work is to talk of “partial power over,” as I do in what follows: if I have power over  $x$ , then I have *partial power* over the conjunction of  $x$  and  $y$ . An analogy here could be the following: If I can ruin the icing on a cake, I can partially ruin the whole cake. Another, though much more complicated, route would be to provide a more detailed definition of the predicate “having power over” and then extend it to the whole conjunction. Let  $P$  be the predicate “to have power over,” let  $x$  and  $y$  form part of a set of facts  $x \ \& \ y$ . Then, if  $P(x)$ , then  $P(x \ \& \ y)$ . An analogy here would be with the predicate “to be poisonous” — if the lemonade is poisonous, so is the shandy made from that lemonade and beer. This is, of course, only a brief sketch, as further conditions would need to be added on what  $P$  can take as arguments, such as “let there be nothing in  $y$  that explicitly prevents  $x \ \& \ y$  from being in the range of  $P$ ” (to prevent cases where the beer contains antidotes that cancel out the poison), a condition further specifying the relation of  $x$  and  $y$  (to prevent cases where one millilitre of poisonous lemonade stops being poisonous if diluted in five litres of beer), or a condition clarifying the nature of the conjunction of  $x$  and  $y$  (to prevent cases where  $x$  is my grandmother’s china cup and  $y$  is the country of South Africa). In any case, the point of the discussion here is as follows: I have power over *la durée*. Some facts about the external world depend on *la durée*. Therefore, I have power over (some of) the facts about the external world.

<sup>623</sup> Geach, *Providence and Evil*, 120.

(iii) the laws of nature (the laws of thermodynamics that enable the boiled water to extract caffeine out of coffee beans).

It is worth noting that Bergson says that although there is no *causation* (let alone necessitation) between states of consciousness, he does propose that there still is a certain type of “prefiguration” or “preformation”<sup>624</sup> (sometimes, in a particularly Plotinian idiom, “emanation”<sup>625</sup>) that links one state of consciousness to another. For Bergson, the future event is to a limited degree “contained” in the present one, but the prefiguring is imperfect and can always be aborted — the effect is only there in the state of a retrospectively recognisable possibility. Once the event has happened, there is no contradiction in linking it together within a network of causes and effects; but this may only happen retrospectively. For Bergson, the application of the term “causality” to mental states expresses merely, in an Anscombian fashion, “the derivativeness of an effect from its causes.”<sup>626</sup>

Before returning to philosophy of religion, it is worth taking an interesting detour. It seems that the type of “prefiguration” Bergson talks about is simply a mental-content version of *singular causation*, i.e., causation understood as *this* causing *that* (e.g., this glass of water spilling causing this paper to be soaked), as opposed to causal links ranging over multiple phenomena (water causing paper to disintegrate).<sup>627</sup> Armstrong defines singular causation as “a direct relationship between one token state of affairs and another such.”<sup>628</sup> This account of causality seems *prima facie* to resonate with what Bergson says about the one-off nature of the causal relationship linking any two (retrospectively and artificially individuated) mental states and with what has been argued about mental states being uniquely-tokened types. For example, in TFW, Bergson says that “a deep-seated inner cause produces its effect once for all and will never reproduce it.”<sup>629</sup> Once we accept that every mental state is a uniquely-tokened type, these singular types may *ex post facto* be linked by relations of cause and effect, without implying that they are (one of many) tokens of a particular type linked with another one (of many) token(s) of another type. Furthermore, if every single causal link between two states of *la durée* is singular, then laws of nature *qua* generalisations cannot range over it.<sup>630</sup>

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<sup>624</sup> IT 72-3.

<sup>625</sup> Bouaniche, ‘Dossier Critique’, 203, note 11.

<sup>626</sup> Anscombe, *Causality and Determination*, 7.

<sup>627</sup> Danks, ‘Singular Causation’, 201.

<sup>628</sup> Armstrong, *A World of States of Affairs*, 204.

<sup>629</sup> TFW 201/151.

<sup>630</sup> Danks, ‘Singular Causation’, 202.

On the other hand, one might complain that linking singular causation and the “prefiguration” of *la durée* simply misses Bergson’s original point of using the uniqueness of states of *la durée* to ensure that human agency escapes the “meshes of [natural] necessity.”<sup>631</sup> The point about singular causation escaping generalisations only works on a regularities-based view of laws of nature and one cannot exclude the possibility of conceptualising a necessitarian view of singular causation in *la durée* (see footnote 613). Worse still, in a recent article, García-Encinas has provided a fascinating argument to show that necessity can be built into singular causation too.<sup>632</sup> She faults Hume with presuming that if something cannot be known *a priori*, then it cannot be necessary. However, as she shows, this does not mean that something cannot be known *a posteriori* and in fact, *be* necessary. Quite the contrary, “[o]ur philosophical concept of causality includes a necessary connection between the related elements.”<sup>633</sup>

However, interestingly, by observing García-Encinas’ argument more closely and probing into the type of “necessity” she has in mind, we see that her argument comes very close to what Bergson is trying to say about the uniqueness of links tying together two different stages of *la durée*. Not all necessities are equal. García-Encinas appeals to Kripkean semantics to show that the link between a cause and effect is necessary in the same sense as the link between Hesperus and Phosphorus, i.e., that it is an example of *a posteriori* necessity. By establishing *a priori*<sup>634</sup> that a particular cause can only ever have a particular effect (the one that it in fact has) — just like Kripke *a priori* establishes that identity is necessary — she concludes that “causation conveys a necessary connection.”<sup>635</sup>

[C]ausation is necessary in the sense that a given *effect* cannot have a *different* cause from the one it actually has, for if it had *it would* be another effect (which is contradictory); and a given *cause* cannot have a *different* effect from the one it actually has, for if it had, it would be *another* cause (which is contradictory).<sup>636</sup>

Now, Bergson would doubtless agree with *this sense* of necessity — but this necessity is of a completely different type from the Humean version (seemingly implying determinism) that he was arguing against during his time. If “necessity” means nothing more than that *this* mental

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<sup>631</sup> MM 249/280.

<sup>632</sup> García-Encinas, ‘A Posteriori Necessity in Singular Causation and the Humean Argument’.

<sup>633</sup> García-Encinas, 54.

<sup>634</sup> “A metaphysically necessary connection between two particulars *a* and *b* would be known *a posteriori* if we knew *a posteriori* that they are causally related, and if we knew *a priori* that causation conveys a necessary connection.” (García-Encinas, 49.)

<sup>635</sup> García-Encinas, 49.

<sup>636</sup> García-Encinas, ‘A Posteriori Necessity in Singular Causation and the Humean Argument’.

state is what it is because it is causally linked to *that* mental state that preceded it (and that it can be no other), then this is not that far from what Bergson is trying to say about a mental state only producing its effect *once*.

Despite appearances, my intuition is that the conceptual similarity between the type of causation in *la durée* and singular causation should be regarded with caution, primarily as a helpful analogy, not as one of complete conceptual overlap. This is because it seems rather difficult to conceive of ways of linking the prefiguration of *la durée* with counterfactuals — something that does not seem altogether impossible in the case of singular causation.<sup>637</sup> Moreover, most analyses of singular causation focus exclusively on physical processes or events — more research would need to be done to show how one might conceptualise such a relationship when applied to purely mental phenomena; the link between singular causation and laws of nature is already difficult enough — the link between singular causation and mental states would probably be even more tricky to work out.

In either case, this does not need to trouble us here. I claim that causality does not apply to *la durée*. If it does, however, then it must be singular, not general, causality. If it is singular causality, then the type of necessity involved does not negate what Bergson says about free will but is deeply consonant with it.

## 5.2. Bergson and Free Will in Analytic Philosophy of Religion

Now that Postulate 4 has been discussed and the risk of the impossibility of free will has been averted, let us look at how Postulates 1-3 discussed at the beginning of this essay in section 1.4 feature in discussions regarding the problem of human free will and divine foreknowledge in analytic philosophy of religion. Note that whereas Bergson's dissolution of Postulate 4 may have warded off the consequence argument, one must still be cautious to see whether determinism does not return once we bring God into the picture. Recall the first three Postulates:

Postulate 1: Free will and determinism are absolute.

Postulate 2: The compatibility of free will and determinism is a general problem.

Postulate 3: The principle of alternative possibilities.

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<sup>637</sup> See Danks, 'Singular Causation', 204–8.



As an illustration of a formulation of the problem of free will and divine foreknowledge that commits itself to the first three, let us use a recent restatement of the problem by William Hasker.<sup>638</sup> Hasker argues that “[t]he problem of freedom and foreknowledge arises only if we presuppose a particular understanding of free will — roughly, a libertarian view incorporating the requirement of alternative possibilities.”<sup>639</sup> Using Alfred Freddoso’s terminology, Hasker points out that this leads to two types of problems: “the source question” and the “reconciliation question:” “The source question concerns the way in which God obtains knowledge of the future; the reconciliation question concerns the logical consistency of foreknowledge and free will.”<sup>640</sup> Hasker then formulates the standard argument as follows:

- “(1) Suppose that God infallibly believes at  $t_1$  that Cuthbert will purchase an iguana at  $t_3$ . (premise)
- (2) The proposition *God believes at  $t_1$  that Cuthbert will purchase an iguana at  $t_3$*  is accidentally necessary at  $t_2$ . (*from the principle of the necessity of the past*)
- (3) If a proposition  $p$  is accidentally necessary at  $t$  and  $p$  strictly implies  $q$ , then  $q$  is accidentally necessary at  $t$ . (*transfer of necessity principle*)
- (4) *God believes at  $t_1$  that Cuthbert will purchase an iguana at  $t_3$*  entails *Cuthbert will purchase an iguana at  $t_3$* . (*from the definition of infallibility*)
- (5) Thus the proposition *Cuthbert will purchase an iguana at  $t_3$*  is accidentally necessary at  $t_2$ . (2-4)
- (6) If the proposition *Cuthbert will purchase an iguana at  $t_3$*  is accidentally necessary at  $t_2$ , it is true at  $t_2$  that Cuthbert cannot do otherwise than purchase an iguana at  $t_3$ . (*premise*)
- (7) If when Cuthbert does an act he cannot do otherwise, he does not do it freely. (*principle of alternative possibilities*)
- (8) Therefore, Cuthbert does not purchase an iguana at  $t_3$  freely. (5-7).”<sup>641</sup>

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<sup>638</sup> Hasker, ‘Divine Knowledge and Human Freedom’.

<sup>639</sup> Hasker, 40.

<sup>640</sup> Hasker, 40.

<sup>641</sup> Hasker, 40–41. The argument is Hasker’s adaptation of Zagzebski, ‘Foreknowledge and Human Freedom’, 291–92. The example with Cuthbert and an iguana can be found in Flint, *Divine Providence: The Molinist*

What follows is a commentary on each one of these premises with a few explanations concerning the key terms and a demonstration of the fact that the argument falls prey to the first three Postulates that Bergson's philosophy rejects.

(ad 1) The notion of "accidental necessity" in premise (1) refers to, roughly speaking, the distinction between absolutely necessary propositions (those that are true regardless of any questions pertaining to temporality) and those that are necessarily true, i.e., cannot fail to be otherwise, in virtue of referring to events in the past: "Accidental necessity (derived from Ockham) represents the commonly held idea that the past is 'necessary' in the sense of being beyond anyone's control."<sup>642</sup> More importantly, however, already in premise (1), we can identify Postulate 2, namely, that the problem of free will and determinism is a general problem (see section 1.4). The particular qualitative features of the action in question do not matter; this is precisely why we can pick any action, such as Cuthbert buying an iguana. Of course, it could be said that "Cuthbert buying an iguana" is simply a stand-in term for any given free action; but, as Bergson would say, there simply are no free actions "in general." In the same way as there is no "great novel in general" — great novels are great precisely because they subvert what the set of previous novels had in common. Things become much more complicated when we use a more complex action, for example, following Bergson: "An agent S believes at  $t_1$  that Shakespeare will write Hamlet at  $t_3$ " What is the content of S's belief? What is the thing that S is attaching the word "Hamlet" to? Once again, we are running into the same problem as McTaggart's "Death of Queen Anne" (see section 2.3); while saying that "We have a belief that there is a death of Queen Anne in the future" makes explicit the dubiousness of the entity being referred to ("The Death of Queen Anne"), it is precisely the vagueness of the event that turns the belief *that* Queen Anne is going to die into a purely linguistic construct. While the application of the term "Cuthbert" refers to a precise set of qualitative features pertaining to the person Cuthbert (his entire history up to the point of making a decision) — and perhaps "iguana" to all the iguanas S has seen in the past — the entity of "Cuthbert purchasing an iguana" in the future is based purely on impersonal aspects of past instances of purchasing, seeing Cuthbert, and iguanas all combined. There are many tokens of iguanas and purchases whose mutual differences are insignificant when subsumed under their respective types

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*Account*, 37. For another formulation of the argument, see Rogers, 'Anselmian Eternalism: The Presence of a Timeless God', 17.

<sup>642</sup> Hasker, 'Divine Knowledge and Human Freedom', 41. For the discussion of accidental necessity, see Hasker, *God, Time and Knowledge*, 12–13; De Florio and Frigerio, 'In Defense of the Timeless Solution to the Problem of Human Free Will and Divine Foreknowledge', 7.

(“Iguana” and “purchase”) and may, therefore, be combined into a single event of Cuthbert purchasing an iguana subsumable under a general type (“Cuthbert purchasing iguana”). This procedure immediately begins to look suspicious when applied to one-off events (“Shakespeare writing Hamlet”); is that really something that can be believed before it happened? Surely, before Hamlet is written, there is no Hamlet! (see p. 35) The obvious objection that there is a possible set of properties of which it may be true that they will be instantiated is not valid since such an instantiation in its “possible” state would already *be* Hamlet. The argument can work for simple propositions of people purchasing things — but these actions, Bergson says, are inextricably connected with the impersonal nature of the parasitic self, and are therefore closer to the “determined” end of the spectrum running from free will to determinism. One might already feel that something strange is happening in the argument above if the central action (“Cuthbert purchasing an iguana”) is replaced either with obviously unique and free events (“Shakespeare writing Hamlet”) or actions pertaining to us that require intense deliberation (“Getting married”).

(ad 2) Once again, the “necessity of the past” refers to the fact that at  $t_2$ , propositions about  $t_1$  are necessary, because they are in the past and “the past appears fixed and closed, while the future appears open. Intuitively, we feel we cannot change our past, whereas we believe we can influence, at least to a certain extent, our future.”<sup>643</sup>

(ad 4) The “infallibility” here simply refers to the fact that an omniscient God does not believe things that are not true; so if He believes a certain proposition at a given time about a later time, the fact referred to by that proposition must occur.

(ad 7) This premise explicitly asserts Postulate 3, i.e., the principle of alternative possibilities.<sup>644</sup> Furthermore, the seventh premise of the argument also illustrates Postulate 1, namely, that freedom and determinism are absolute. Cuthbert can either do otherwise and is free, or he cannot do otherwise and is not, *tertium non datur*.

Now, once Hasker has delineated the argument above, he provides a survey of all the possible options in analytic philosophy of religion that one might go to when responding to it. Even though I hope it is by now clear that the argument as such is dubious from a Bergsonian

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<sup>643</sup> De Florio and Frigerio, ‘In Defense of the Timeless Solution to the Problem of Human Free Will and Divine Foreknowledge’, 7.

<sup>644</sup> Postulate 3 is also not specific to analytic accounts of free will — already in Aquinas we find the idea that “[w]e are said to be free in a decision when we can adopt one course and reject another: this is to choose. And so the nature of free decision has to be considered in terms of choice.” (Aquinas, *Summa Theologiae*, 1970, 11. Man (Ia.75-83):IaQ83a3.)

perspective, it may still be worthwhile to look at some of the mainstream solutions to the problem and see one or more of the Postulates resurface again in its attempted resolutions.

The Ockhamist solution rests on the observation that whereas some facts about the past are fixed and necessary,<sup>645</sup> others are intrinsically connected to future times and thus — despite being about the past — cannot be considered as fully true until their “future component” has come to be. For example, the fact of a particular person writing a book on the 3<sup>rd</sup> October 1857 now seems to be necessary and something we cannot do anything about. But this is not the case with the related fact of that person writing the book a certain time before I finish writing this chapter<sup>646</sup> — that past fact depends on when *I* choose to be done writing this chapter. Ockham, following Aquinas, argued for the category of “accidental necessity,” i.e., the necessity attached to propositions in virtue of being about the past.<sup>647</sup> Hasker uses as an example of the proposition “Socrates is seated” — once it becomes a proposition about the past (i.e., once Socrates has sat down), it will attain necessity. By contrast, the proposition “The bride-to-be is trying on her dress” is different — it will not become true until the person trying on the dress has become a bride. Similarly, take the sentence “God believed at 6:00 this morning that John would have a cup of tea for lunch”<sup>648</sup> — it seems that the person giving John the tea has control over that proposition, even though it concerns something in the past:

What God knows about the acts of a person is relationally dependent on what the person who is the object of that knowledge does. Thus in this relational sense a person has the power to act so that the past is what it is, that is, that God truly believes something about the present. Consequently, there is no contradiction between my human freedom and divine knowledge.<sup>649</sup>

The truths about God’s past beliefs are therefore not necessary (namely, accidentally necessary) and do not necessitate the truths of future-oriented propositions that they are about.<sup>650</sup> Once again, without going into the technical problems with the Ockhamist solution as such (e.g., the problem of “counterfactual power over the past” proposed by Plantinga<sup>651</sup>), one can see Postulates 1-3 reappear. Postulate 1 (“free will and determinism are absolute”) refuted

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<sup>645</sup> This distinction is usually articulated using the notion of “hard” and “soft” facts. For a discussion, see Fischer, *Our Fate. Essays on God and Free Will*, 12–14.

<sup>646</sup> See for example Leftow, *Time and Eternity*, 249.

<sup>647</sup> For a full discussion, see Hasker, *God, Time and Knowledge*, 75–95.

<sup>648</sup> Hasker, 78.

<sup>649</sup> Hasker, 79.

<sup>650</sup> Hasker, ‘Divine Knowledge and Human Freedom’, 44–45.

<sup>651</sup> Hasker, *God, Time and Knowledge*, 96–113.

by Bergson's insistence of placing the extent to which an act is free and to which it is determined on a continuum, is present in this solution. Events consisting of free acts can change the truth of God's beliefs; determined events ("The sun rose at 6:32 in the morning") do not. But how about acts where the two are mixed? Recall that the interpenetration of the parasitic and the fundamental selves (see section 1.5) is crucial for appreciating the extent to which an act is free or not. Furthermore, the tendency to provide a "general" response to the problem of free will and determinism captured by Postulate 2 is clearly at play here; any future-oriented act can be subsumed under God's past knowledge, regardless of its content. The same is the case with Postulate 3: God's past beliefs are propositions about future-oriented acts that can be otherwise.

According to the Molinist response — if indeed it is a response, and not just a *model* of divine providence —,<sup>652</sup> what God knows are "counterfactuals of freedom," statements of the form "If a particular person were in such and such circumstances, they would freely do such and such acts." God then merely providentially arranges for us to be in those circumstances and — surprise! — we do precisely as He expected:

He knows by middle knowledge what each possible creature *would* do if placed in any possible situation; then he decides which possible creatures to make actual, and which situations they shall be placed in; and, in virtue of his having decided this, his middle knowledge again informs him concerning what the *actual* free creatures will *in fact* do.<sup>653</sup>

The vast majority of critiques of Molinism focus on the various problems connected to these "counterfactuals of freedom."<sup>654</sup> What accounts for their truth-status?<sup>655</sup> Can they even take on truth-values?<sup>656</sup> Do they really count as counterfactuals of *freedom*?<sup>657</sup> More importantly for our present purposes, the "counterfactual of freedom" embodies the problems deriving from Postulate 4; a counterfactual of freedom presumes that our mental life can be subsumed under causal relations, albeit counterfactual ones. Furthermore, the idea of counterfactuals of freedom is simply a subjunctive reformulation of Postulate 3 (the principle of alternative possibilities)

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<sup>652</sup> See Fischer, 'Putting Molinism in Its Place'.

<sup>653</sup> Hasker, *God, Time and Knowledge*, 16.

<sup>654</sup> For a full discussion, see Hasker, 18–52.

<sup>655</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 74.

<sup>656</sup> Goris, 74–75.

<sup>657</sup> Hasker, 'Divine Knowledge and Human Freedom', 50; Hasker, 'The (Non-)Existence of Molinist Counterfactuals'. For recent discussions, see Perszyk, 'Recent Work on Molinism'.

— the “ability to do otherwise” is transposed from the realm of the actual world to the nearest possible world, but, conceptually, still relies on the preceding availability of two courses of action.

Before moving onto the canonical Boethian solution relying more explicitly on the notion of divine timelessness, it is, of course, also possible to simply evade the problem by denying some of the presuppositions that this essay is based on and that were outlined in the Introduction (Hypotheses 1 and 2); i.e., denying infallible foreknowledge, immutability and timelessness by, for example, opting for open theism.<sup>658</sup>

Traditionally, theists have appealed to the fact that God exists in eternity to solve the problem of free will. This project has from the outset stipulated divine timelessness, so the Boethian solution, which appeals to God’s existing in eternity, seems to be the most appropriate route to take. The literature on this is quite vast,<sup>659</sup> but the gist can be summarised as follows:

God’s beliefs are not in the past; rather, God and his beliefs are outside of time. So, technically, God does not *foreknow* anything, as there is nothing for him to *foreknow*. All the objects of God’s knowledge are eternally existing, tenselessly true propositions, and so are not true *at any time*, but are true simpliciter. ... He can know them by observing all events in time as eternally present to himself.<sup>660</sup>

As Rota puts it: “So, you freely choose to answer the phone at 9 am tomorrow. *Because* you choose this then, God knows that you choose this then.”<sup>661</sup>

This solution seems particularly useful for our purposes since it simply *presumes* that we are free and then tries to make this fact compatible with divine omniscience; once the possibility has been articulated, the importance of making free will (analytic, Bergsonian, or otherwise) compatible with divine omniscience is secondary. The two exist independently; analytic philosophy has generally tended to buy any analytic account of free will available on

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<sup>658</sup> Hasker, ‘Divine Knowledge and Human Freedom’, 51–52; for key discussions, see Pinnock et al., *The Openness of God: A Biblical Challenge to the Traditional Understanding of God*; Rhoda, ‘The Philosophical Case for Open Theism’.

<sup>659</sup> For a recent treatment, see Diekemper, ‘Eternity, Knowledge and Freedom’; Rogers, ‘Anselmian Eternalism: The Presence of a Timeless God’; Rota, ‘The Eternity Solution to the Problem of Human Freedom and Divine Foreknowledge’; De Florio and Frigerio, ‘In Defense of the Timeless Solution to the Problem of Human Free Will and Divine Foreknowledge’; Rogers, ‘The Necessity of the Present and Anselm’s Eternalist Response to the Problem of Theological Fatalism’.

<sup>660</sup> Diekemper, ‘Eternity, Knowledge and Freedom’, 49.

<sup>661</sup> Rota, ‘The Eternity Solution to the Problem of Human Freedom and Divine Foreknowledge’, 166.

the market (e.g., the fusion of compatibilism and Molinism) and then adjusting omniscience accordingly. This is also further attested by Johnson's recent demonstration that the problem of *theological* determinism reduces to *logical* fatalism. It has generally been assumed that although the argument for logical fatalism is insufficient, it gains its force from the introduction of an omniscient timeless God.<sup>662</sup> However, Johnson demonstrates (i) that theological incompatibilism (i.e., the belief that divine omniscience is incompatible with free will) reduces to logical incompatibilism<sup>663</sup> and (ii) theological determinism reduces to logical fatalism. The culprit in the free will and omniscience problem lies entirely in the temporal domain of free will.<sup>664</sup> Johnson argues that

[I]t is not God's foreknowledge that makes you unfree — it is not God's foreknowledge that causes your future performance of an action X to already exist. What is responsible for your non-freedom is the mere fact that your future action already has — before you perform it — existence. If one could establish this without reference to God's foreknowledge [as Johnson does], one would not even need God's foreknowledge to produce the fatalist conclusion.<sup>665</sup>

The intricacies of Johnson's argument are not particularly important for our present purposes (since a large segment of his argument appeals to absolute existence<sup>666</sup> in time that Chapters 3 and 4 have rejected), but the moral here is that it seems one can simply *affirm* Bergsonian freedom that had been defended against accounts denying free will in analytic philosophy in Chapter 1, and plug it into the existing timelessness solutions; what then remains is to explain omniscience. Or in other words, if Johnson is right, and it is *only* eternalism that threatens free will, and we have done away with eternalism, we can simply take Bergson's picture of free will and stick to the orthodox timelessness solutions.

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<sup>662</sup> "Logical fatalism" claims that our free will is threatened by the fact that we cannot control the truths of propositions (or the existence of future truth-makers for those truths); "theological fatalism" by the fact that we cannot control beliefs that God held at a point in the past; "causal fatalism" by the fact that we cannot control the state of the world at a time before our birth and laws of nature (all defined in Zagzebski, 'Eternity and Fatalism', 66.).

<sup>663</sup> Johnson, 'God, Fatalism, and Temporal Ontology', 443–45.

<sup>664</sup> Johnson, 436.

<sup>665</sup> Johnson, 442.

<sup>666</sup> "[S]ince it is an existing future and not God's foreknowledge that hinders our free will ... the [timelessness] solution will fail. For example, suggesting that God is timeless — that God sits outside and views the entire timeline as a whole — does not solve the problem; the timeline must exist as a whole — past, present, and *future* — if God is viewing its entirety and sitting outside of it. The timelessness solution reinforces the problem (the fact that the future exists); it does not solve it." (Johnson, 442.)

### 5.3. The Problem of Divine Causation

It would be tempting to say that the problem of theological determinism reduces to the non-theological one, as Johnson shows, and that non-theological determinism is neutralised by Bergson's dissolution of the four postulates and the relativization of existence. Sadly, things are not so easy due to the intrinsic connection between divine knowledge and divine causation that was affirmed in Chapter 4.

A good way to illustrate this problem is to appeal to Goris' distinction between two separate issues pertaining to the problem of free will as it is discussed in Aquinas. Goris distinguishes between "temporal fatalism" and "causal determinism:"<sup>667</sup> "[O]ne problem has to do with the diachronic relation of foreknowledge and future contingents, and the other with the synchronic relation of a necessary cause and its effect."<sup>668</sup> Goris also points out<sup>669</sup> that whereas in Aquinas' *Commentary on the Sentences* the two topics are treated conjointly,<sup>670</sup> later, they become two distinct problems.

"Temporal fatalism" concerns the relation between the temporal present and the future truth of propositions:

[T]he immutability of God's eternal foreknowledge, signified in human language by a past tense, seems to lead to fatalism. For it implies the temporally antecedent truth ("fore-truth") of propositions about contingent future events and thus a necessary outcome of these events. Genuine freedom and contingency have to be denied if one holds to divine foreknowledge: ...<sup>671</sup>

Or in other words, temporal fatalism is caused by the link between the past and the future and the role that the future plays in divine knowledge — Goris argues that this would be a problem even if God was not the cause of being<sup>672</sup> since the problem is entailed merely by God's *knowledge* of the future, not His causation of it. It is precisely *this* problem that Bergson's analysis of free will discussed in the previous section applies to. As we have seen, according to the temporal ontology proposed in Chapter 3, there is no absolutely and independently

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<sup>667</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 54.

<sup>668</sup> Goris, 'Divine Foreknowledge, Providence, Predestination, and Human Freedom', 100.

<sup>669</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 53–56.

<sup>670</sup> Aquinas, *In Quatuor Libros Sententiarum*, 1:1d38Q1a5.

<sup>671</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God's Foreknowledge and Irresistible Will*, 61.

<sup>672</sup> Goris, 62.



existing future to which the truth of propositions could attach, and the problem thus does not get off the ground.

By contrast, the problem of “causal determinism” concerns the divine causation of being. God’s will in causing *esse* is always necessary: it never fails. How then can there be contingencies *at all*?<sup>673</sup> Goris says:

Causal determinism, ... , has to do with the irresistibility of the causal influence of God’s creative activity. ... The problem of causal determinism does not lie in the *diachronic* relation of present to future as regards God’s *fore-acting* (that is the problem of temporal fatalism), but in the *synchronic* relation of cause to effect as regards God’s *fore-acting*.<sup>674</sup>

The same problem is also observed in Stump and Kretzmann’s engagement with Shanley’s earlier-discussed “causal knowledge:” “If God causes human acts,” Stump and Kretzmann ask, “then in what sense is it possible for any human being to act otherwise than she does?”<sup>675</sup> Or in other words:

On Shanley’s view, if a human will is in state A, God knows that it is, and his knowing it causes the will to be in state A. And it is very hard to see how God’s causing the will to be in state A doesn’t constitute coercing the will to be in state A.<sup>676</sup>

Once again, this problem is, from God’s perspective, purely *synchronic*, since “the relation of divine knowledge to anything whatsoever is like that of present to present.”<sup>677</sup> This is also theologically problematic when it comes to the divine causation of *sinful* actions.<sup>678</sup> In the end, Shanley is forced to press the divine mystery button and affirm that “Aquinas’s silence about exactly how it all works is not an oversight or a failure of nerve, but rather an acknowledgement of the limitations of human thought in the face of divine transcendence.”<sup>679</sup> Note that this problem is particularly pertinent to the theory of divine relation to time affirmed in the previous chapters and is not resolved immediately by appealing to Bergson’s analysis of free will

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<sup>673</sup> Goris, 55.

<sup>674</sup> Goris, 62, italics original; see also Matthews Grant, *Free Will and God’s Universal Causality. The Dual Sources Account*, 1–10.

<sup>675</sup> Stump and Kretzmann, ‘Eternity and God’s Knowledge: A Reply to Shanley’, 441, footnote 8.

<sup>676</sup> Stump and Kretzmann, 442, footnote 11.

<sup>677</sup> Aquinas, *The Disputed Questions on Truth*, Q2a12.

<sup>678</sup> Stump and Kretzmann, ‘God’s Knowledge and Its Causal Efficacy’, 95.

<sup>679</sup> Shanley, ‘Divine Causation and Human Freedom in Aquinas’, 116.

because such an analysis applies only to the diachronic problem of temporal fatalism. Bergson's lack of a ready-made temporal ontology makes things even worse; since we supplanted this lack with a combination of ontological idealism on the diachronic side and divine causation of being on the synchronic side, the latter inevitably ushers in the problem of Goris' "causal determinism."

#### 5.4. Divine Causality and Bergsonian Free Will

This section will aim to resolve the problems from above by bringing together everything that has been said in the previous chapters. F. C. T. Moore says that whereas the main aim of Bergson's TFW was to destroy an old structure of thought, the aim of MM was to rebuild it.<sup>680</sup> Recall that TFW corresponds to Stage 1 and MM to Stage 2, where we decided to leave Bergson's thought and limit *la durée* to the human mind. We, therefore, cannot use MM to rebuild what was destroyed by TFW. Since the ontology based on OIT (see Chapter 3) and divine causation of being (see Chapter 4) was imposed onto the conclusions reached by Bergson in TFW, it is precisely OIT and divine causation of *esse* that must be used to resolve the problem of causal determinism. This section will relate all of the claims from above to the two axes that characterise the relation between ontology, divine omniscience, and human free will.

*The Diachronic Axis: Free Will and Temporal Ontology.* In his 1904-1905 lectures at the Collège de France, Bergson talks of organisms as "contingency machines,"<sup>681</sup> analogously to speaking of living beings in MM as being "zones of indetermination."<sup>682</sup> In what follows this observation will be limited to *human* beings, unlike Bergson who extends such an observation to the entirety of the organic universe.<sup>683</sup> If Bergson is right about this, it turns out that there *is* indeed something special about the human frame of reference after all. This does not imply, of course, in the way that Bergson imagined,<sup>684</sup> that *our* human frame of reference should be used as a basis for extending a single time throughout the universe. The uniqueness consists of

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<sup>680</sup> Moore, *Bergson: Thinking Backwards*, 5.

<sup>681</sup> "L'organisme c'est ... une machine à contingence." (EPL 115.)

<sup>682</sup> MM 39/36.

<sup>683</sup> We are not actually diverging from Bergson that much after all; he does affirm that there is something special about human free will: "Freedom as it exists in man is a completely different thing from pure contingency that can exist in things in general, it is a double contingency of reason, of reflection." ("[L]a liberté telle qu'elle existe chez l'homme est tout autre chose que la pure contingence telle qu'elle peut exister dans les êtres en général, c'est une contingence double de raison, de réflexion." (EPL 118, my translation.))

<sup>684</sup> DS 19/25-26.

something else; *ours* is the only one that contains memory, which, as has been shown above, plays a key role in conscious agency on the future. Memory and *durée* are not required simply for us to function correctly in the world — akin to the B-theoretical affirmation that tense is not part of reality but required for successful human agency<sup>685</sup> — but also to make a difference *to* the world.

The usual picture painted by analytic philosophers of time consists of a single space-time block to which our immediate perception is related as the perception of colour is to a particular object. On the picture advocated here, by contrast, free will brings in our own causation which directly impacts what exists in the space-time block itself. A better analogy than one of us travelling through worldlines in the way that Aquinas' and Boethius' travellers journey on the path seen by God from the top of the mountain (see section 4.1), is one of us building a house to get to its top floor; it is us who determine how tall the building is going to be, which stairs lead to the top, and how we use the bricks on the floors below to access it.

On the ontological view sketched out in Chapters 3 and 4, the universe is deeply anthropocentric; it stipulates the human world as the unique instantiation of creatures with memory (putting questions about extra-terrestrial conscious beings in brackets), which is required for free conscious acts.<sup>686</sup> There may not be a unique {future} and a unique {present} in terms of objective time (and space) stipulated by Relativity, but there is only one unique {future affectable by conscious acts}, namely, that part of the space-time block related to the present in which human beings exist.

On this picture, it does not particularly matter whether the laws of nature describing the future are deterministic (as Bergson thought) or probabilistic<sup>687</sup> — what matters is that *we* can make difference to the future; either in the sense of “making an absolute difference to what would otherwise obtain without us” or in the sense of “making a difference to the probabilities of future events” through our conscious memory-dependent activity. As Geach observes:

The existence of statistical patterns of contingency does not exclude voluntary control of the course of events by God or man. The phonemes I utter, the letters I write down, conform to all sorts of statistical regularities; my freedom of speech

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<sup>685</sup> Bardon, ‘Time-Awareness and Projection in Mellor and Kant’, 61.

<sup>686</sup> MM 151-2/168-9.

<sup>687</sup> For a brief discussion, see Kane, ‘Introduction: The Contours of Contemporary Free-Will Debates’, 5–8.

simply rides upon these regularities, for they nowise suffice to determine what I say — truth or falsehood, sense or nonsense.<sup>688</sup>

It is generally presumed that the contingency of the future is required for there to be human freedom — on the Bergsonian picture, it is human free will that is the basis for the contingency of the future; future will be what it will be because *we* will shape it so. If the existence of objects in the future is relative to the human mind (see section 4.4) *qua la durée* and if *la durée* is intrinsically connected with free will, its development can be used to ground the direction of time (instead of attempting to locate the arrow of time in purely material causality). In simple terms:

P1: Future is that realm of the space-time block which can be affected by conscious beings.

P2: In the space-time block humans are the only conscious beings, who are also agents.

**C: There is only one future, i.e., that part of the space-time block consciously affectable by human beings.**<sup>689</sup>

This is deeply consonant with Richard Swinburne's claim that

[T]he past is that realm of the logically contingent which it is not logically possible that any agent can now affect, and the future is that realm of the logically contingent which it is logically possible that an agent can now affect.<sup>690</sup>

If agency in time is limited to beings with memory, as Bergson suggests, then there is only one frame of reference in which agents exist — and, consequently, only one future.

This deeply anthropocentric picture of reality also explains why, once more, “there is something special about time.” (see section 4.5) For Bergson, free will is the domain where *la durée* and objective time intersect.<sup>691</sup> Whereas *la durée* (at Stage 1) is purely mental, it is the shape it takes that results in an action in the external world. Without the mind, the world, on

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<sup>688</sup> Geach, *Providence and Evil*, 118.

<sup>689</sup> In principle, time could branch. Why does your future have to be my future? This objection can simply be warded off by clarifying that the future is relativized to presently experiencing humans: the differences between their reference frames are negligible and do not enter into an experience at all. To paraphrase Stump and Kretzmann's comment, indexing the individual experience of every single human to a single reference frame “would be as inappropriate as taking an Einsteinian view of time in a discussion of historical chronology.” (Stump and Kretzmann, ‘Eternity’, 440.)

<sup>690</sup> Swinburne, ‘God and Time’, 211.

<sup>691</sup> I am indebted to Frédéric Worms for this observation.

its own, is governed by laws that may show indeterminacy or indeterminism, but not consciousness. The mind, however, has an effect on the particular shape the world takes.

This anthropocentrism about the universe also poses a question about the epistemic status of the future. Consider the question: “Why do we not know the future?” The first way of answering consists of the “Laplacian” response. For Laplace, who regarded the universe as deterministic (i.e., the relation between cause and effect was not probabilistic, but necessary), the only reason why we do not know what happens in the future is merely our lack of information. In a passage frequently referred to by Bergson, he says:<sup>692</sup>

We ought then to regard the present state of the universe as the effect of its anterior state and as the cause of the one which is to follow. Given for one instant an intelligence which could comprehend all the forces by which nature is animated and the respective situation of the beings who compose it ... it would embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain and the future, as the past, would be present to its eyes. The human mind offers, in the perfection which it has been able to give to astronomy, a feeble idea of this intelligence. ... All these efforts in the search for truth tend to lead it back continually to the vast intelligence which we have just mentioned, but from which it will always remain infinitely removed.<sup>693</sup>

By contrast, analytic temporal ontologies that operate with absolute existence give two possible options in answering this question: on the presentist / growing block view, we do not know the future, because there is nothing there to know *yet*.<sup>694</sup> On the eternalist picture, we do not know the future because we are causally separated from it, but it is “there.” However, on the Bergsonian view, we do not know the future, because we do not yet know how *we* (humans) are causally going to affect it, simply because we cannot yet know what sort of character we are going to be by the time we get “there:”

The reason why it is absurd to say that an action, a free action, could have been foreseen if we know perfectly the conditions and the character [of a person], is

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<sup>692</sup> The quote is explicitly discussed by Bergson in EPL 302-3.

<sup>693</sup> Laplace, *A Philosophical Essay on Probabilities*, 4; for a discussion, see Dorato, *Time and Reality: Spacetime Physics and the Objectivity of Temporal Becoming*, 78.

<sup>694</sup> Geach: “The idea of a determinate future is a dangerous piece of mythology, and it conflicts with the things that we really know perfectly well. It is true in a sense that the future’s not ours to see — ... . The truth is that the future is not for *anybody* to see; ... .” (Geach, ‘The Future’, 209.)

that we can never know perfectly the character, for the simple reason that it does not yet exist as it will [exist] at the moment when the decision will be taken, ... .<sup>695</sup>

The self we will be when we take that action will have been in the process of being created until the very (retrospectively identified) moment when we take a particular action: “your state tomorrow will include all the life you will have lived up until that moment.”<sup>696</sup>

The fact that the shape the future will take depends partially on us<sup>697</sup> also explains why we feel so uncomfortable about the conclusion of the sea-battle paradox from Aristotle.<sup>698</sup> Once again, contrary to Postulate 2 (see section 1.4), Bergson insists that the particular nature of every event and every action makes a difference; should Aristotle have picked an event in the external world over which we have no causal control (e.g., the sun rising at a particular time tomorrow), we would perhaps have no qualms regarding the conclusion of the argument. That the sun will or will not rise at a particular time tomorrow is determined and it is obvious we cannot do anything about it. Conversely, had he picked something which pertains to our *durée* (e.g., that tomorrow we will feel a sense of existential anguish), we would immediately say the argument is false; simply because the content of the proposition “I feel existential anguish (like Raskolnikov does in *Crime and Punishment*, for example)” cannot be said to be “true” or “false.” In the first case, the possibility of the sun rising tomorrow excludes all possibility of conscious causal contribution; in the second it is constituted purely by the internal development of *la durée*.<sup>699</sup> The force of the counter-intuitiveness of the conclusion regarding the sea-battle consists in the intuitive feeling that “*there is something we could do to stop or launch the battle*” — perhaps we can travel to the location of the battle and successfully convince all the

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<sup>695</sup> “[L]a raison pour laquelle il est absurde de dire qu’une action pourrait être prévue, une action libre, si l’on connaissait parfaitement les conditions et le caractère, c’est qu’on ne peut pas connaître parfaitement le caractère, par la raison très simple qu’il n’existe pas encore tel qu’il sera au moment où la décision sera prise, ... .” (EPL 119-20, my translation.)

<sup>696</sup> CM 8/11.

<sup>697</sup> Although I do not use “the future being (partially) up to us” to infer that “*the laws of nature* are (partially) up to us,” my view is fully compatible with that defended by Beebe and Mele, ‘Humean Compatibilism’. The view defended here is, however, different in its order of explanation: my claim is that “laws of nature” do not extend to *la durée* and it is for that reason that the future is up to us. The view advocated by Beebe and Mele, by contrast, is that the future can be up to us and it is for that reason that the laws of nature are too.

<sup>698</sup> Aristotle, *The Categories. On Interpretation*, IX, 135.

<sup>699</sup> This arrangement of the future into “layers,” which we have partial power over, also provides a novel way of responding to one worry about Humean compatibilism. As Beebe and Mele point out, the Humean compatibilist faces the troublesome inference from the claim that laws of nature are up to us *simpliciter* to the claim that we can, for example, break the speed of light (Beebe and Mele, ‘Humean Compatibilism’, 210.). Whereas Beebe and Mele overcome the problem by specifying the sense of “ability” over the future (Beebe and Mele, 213–16.), the view proposed here resolves it by restricting which layers of the future we have such ability over.

soldiers to grab a beer and go home. The sea-battle that is future *for us* stands precisely at the intersection of our own mental life (e.g., the moral conviction that we are obligated to stop sea-battles) and of the external world (it is a large-scale event happening not far from us). The anthropocentricity of my proposed temporal ontology implies that “not all aspects of the future are equal.” Just like the fundamental self, the future is arranged in spheres or layers around *la durée* — at the profound self of *la durée*, there is complete freedom, at the furthest level (movements of planets and galaxies), complete determinism.<sup>700</sup> This is, of course, intimately connected to the relation between the mind and time. Whereas analytic philosophy starts with a mind-independent spread of events in the space-time block, on the view argued for here, the immediate present is the ontological foundation of temporality and is involved in shaping the future — this theory is therefore in exact opposition to classifying temporal becoming as purely mind-dependent. Grünbaum says that “the transient now is mind-dependent and irrelevant to physical events as such,”<sup>701</sup> but this is clearly false if the “transient now” is what grounds human action which dictates what shape the future will take. There is real change in the world because *we change the world*.

*The Synchronic Axis: Divine Omniscience and Human Actions.* Since the temporal ontologies proposed by Bergson in Stages 2-3 are now unavailable, his philosophy has to be supplanted with something else. This is the divine causation of *esse* discussed in Chapters 3 and 4: “every created agent can only cause substantial or accidental being in virtue of the divine cause, which is the cause of being itself.”<sup>702</sup> This does not, however, mean that God provides “undifferentiated” being which is then determined by individual humans.<sup>703</sup> Rather:

God and creature are not two causes collaborating on the same level to produce a joint effect. God causes on the transcendental level and He thereby constitutes the creatures’ causation on the categorical level.<sup>704</sup>

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<sup>700</sup> The fact that there is a continuum between the two spheres is well illustrated by the climate crisis and questions regarding the anthropocene; what was previously regarded primarily as processes governed solely by natural laws (wind, rain, changing of seasons) now becomes strangely consequent upon human free decisions. One could easily imagine a situation with shooting rockets at distant planets to remove them from their orbits and thus letting *la durée*-based causality “leak” further and further into the purely natural.

<sup>701</sup> Grünbaum, ‘The Status of Temporal Becoming’, 393.

<sup>702</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God’s Foreknowledge and Irresistible Will*, 300; See for example Aquinas, *Summa Theologiae*, 1975, 14. Divine Government (Ia2ae.103-9):IaQ105a5.

<sup>703</sup> Goris, *Free Creatures of an Eternal God. Thomas Aquinas on God’s Foreknowledge and Irresistible Will*, 301.

<sup>704</sup> Goris, 301.

Similarly, Shanley states: “When conceived primarily in terms of the creative causation of *esse*, the divine motion is not an exterior manipulation of created agents determining them to act one way or another.”<sup>705</sup> “God does not act on the human will through intermediaries, but rather directly out of God’s ongoing creative causality of the *esse* of all things.”<sup>706</sup> This may also be expressed as follows: Since God is the cause of *esse*, once our *durée* has reached a point of decision to take a particular act, God gives being to that very act. The earlier used example of us gradually contributing to the construction of the space-time block as we construct a house (see p. 165) is particularly instructive — “Unless the Lord builds the house, those who build it labour in vain.” (Ps 127:1)<sup>707</sup>

The causation of *esse* combined with the free causation of *la durée*, which partially constitutes every temporal object, squares perfectly with a recent suggestion by Hugh McCann to extend divine causation of *esse* to human actions.<sup>708</sup> McCann invites us to consider a particular action or decision that is free and *then* to imagine, that in addition to its characterisation, *it exists*, i.e., that it has real existence, not just mental existence.<sup>709</sup> McCann points out that this real existence must have a source<sup>710</sup> and goes through a list of candidates for this source. The first that McCann considers is mental content. Unfortunately, this does not work. “Causes are supposed to be concrete things. The contents of our mental states are, by contrast, *abstracta*, and *abstracta* are generally considered to be causally inert.”<sup>711</sup> — The mental content of our action may provide an *explanation*, but *explanation* is not causation. Note that the same problem applies to *la durée* — *la durée* (and in this one case, it does not particularly matter whether limited to Stage 1 or not) cannot sustain itself in existence and cannot confer complete existence onto its contents; as has been argued in Chapters 3-4, the existence of any temporally extended object (which, of course, includes any temporal object in the future) owes its existence to *la durée* only partially; God’s causation of timeless *esse* is indispensable. Neither can the existence of one moment to the next be accounted for by physical laws relating *events*, McCann claims. Natural laws do not speak about existence:<sup>712</sup>

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<sup>705</sup> Shanley, ‘Divine Causation and Human Freedom in Aquinas’, 105.

<sup>706</sup> Shanley, ‘Beyond Libertarianism and Compatibilism: Thomas Aquinas on Created Freedom’, 85.

<sup>707</sup> Quoted from the New Revised Standard Version.

<sup>708</sup> McCann, ‘Free Will and the Mythology of Causation’.

<sup>709</sup> McCann, 235–36.

<sup>710</sup> McCann, 236.

<sup>711</sup> McCann, 236.

<sup>712</sup> McCann, 245.



If we are going to take scientific laws as descriptive of causal processes, we have to cease taking natural causation to be a process of the past conferring existence on the future.<sup>713</sup>

Finally, McCann considers the possibility of appealing to *agent* causation to account for the existence of the action.<sup>714</sup> But, unfortunately, this does not work either, because it leads to a vicious regress: if agent-causality is used to account for the existence of an action that results from it, then surely the same must apply to the instance of agent-causation itself. And that is clearly not accounted for.<sup>715</sup>

McCann, however, observes that there exists another, more viable, option:

Neither agents nor events turn out to be much good at existence conferral. ... But the issue need not be left at this. There is a third sort of causation, namely the primary causation ascribed in traditional theology to God as creator.<sup>716</sup>

On the present hypothesis, *la durée* is subsumed under temporal diachronic causation,<sup>717</sup> whereas divine causation of *esse* provides the existence of actions (i.e., temporally extended objects) that result from it. This ensures that we retain free will in the temporal realm and the dependence of all being on God<sup>718</sup> and mirrors what McCann says about divine causation of human actions:

[W]e need to realize that on this picture God never makes us do anything, in the sense in which worldly causes are said to make things occur. ... Our decisions and actions lose none of their spontaneity or intentionality, because God's role as primary cause is to provide simply for their existence. ... That my decision to dine at the Asian restaurant owes its being to God's creative act does not prevent its being prompted by my desire for Asian food, or its teleological explanation as a means of fulfilling that desire. The Kantian slant on existence [not being a real

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<sup>713</sup> McCann, 245.

<sup>714</sup> McCann, 243.

<sup>715</sup> McCann, 243.

<sup>716</sup> McCann, 247.

<sup>717</sup> Shanley: "Pace Stump and Kretzmann, Aquinas does not exempt human action from the range of divine causal knowledge." (Shanley, 'Eternal Knowledge of the Temporal in Aquinas', 215.)

<sup>718</sup> I leave it open whether this should or could be discussed using primary and secondary causes and concurrence. *Prima facie*, there does not seem to be any reason why the non-temporal primary causation of *esse* and the secondary *durée*-based causation would not map perfectly onto the Thomistic model both of concurrence and of providence. For more on this, see Matthews Grant, *Free Will and God's Universal Causality. The Dual Sources Account*, 26–33.

predicate] applies here also. Indeed, the entire order of the universe is just as it would be if, *mirabile dictu*, it existed only in your and my imagination and not in reality.<sup>719</sup>

— all of this, of course, with the qualification that the decision to dine at an Asian restaurant should be analysed using Bergson’s account of free will outlined earlier. Bergson provides a detailed analysis of temporal human free will without God, but he cannot provide the required ontological substratum; this is provided by timeless divine causality. In contrast to McCann, however, Bergson rejects Postulate 3 that McCann’s view still relies on.<sup>720</sup>

Finally, since this divine causality is simultaneously causal *knowledge* (see section 4.2), one can also appeal to the Boethian picture of divine knowledge of the world:

From my point of view, there are of course possibilities to be settled, and I alone decide my destiny by employing my will as I do. But I am not pre-empted in this by God. That he should approve, and thereby lend existence to my decisions, in no way undercuts my autonomy in making them, nor does it diminish my responsibility for every intention I form, and every action I undertake. ... [S]ince the act of creation is eternal and comprises in its scope my entire being ... there is from the eternal perspective no point in speaking of possibilities for decision and action in the wake of my creation either. Only within the temporal realm does talk of possibilities have application, and there they apply only to my own decisions and actions, not God’s.<sup>721</sup>

In analysing various temporal ontologies, Ingthorsson criticises the growing-block theory for holding that the continuous addition of being to the already existing past requires *creatio ex nihilo*, which, according to him, is “as occult as magic and miracles.”<sup>722</sup> But this is precisely what my theory affirms. The fact that a theory of divine foreknowledge, time, and human free

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<sup>719</sup> McCann, ‘Free Will and the Mythology of Causation’, 248. Specifically, Aquinas’ text that McCann appeals to in the quotation from above says: “A man’s way is said not to be his when it comes to putting his choice into effect, for in this he can be obstructed whether he likes it or not. But the choices are ours to make, granted dependence on God.” (Aquinas, *Summa Theologiae*, 1970, 11. Man (Ia.75-83):IaQ83a1 ad 4.) The quotation from above also wards off the worry about occasionalism — on the picture proposed here, the *durée*-based causality loses nothing of its own distinctiveness.

<sup>720</sup> McCann: “It will simplify things if we confine our attention to the act of *deciding between alternative courses of action*, since the structure of agency is somewhat clearer with strictly mental acts.” (McCann, ‘Free Will and the Mythology of Causation’, 234, my italics.)

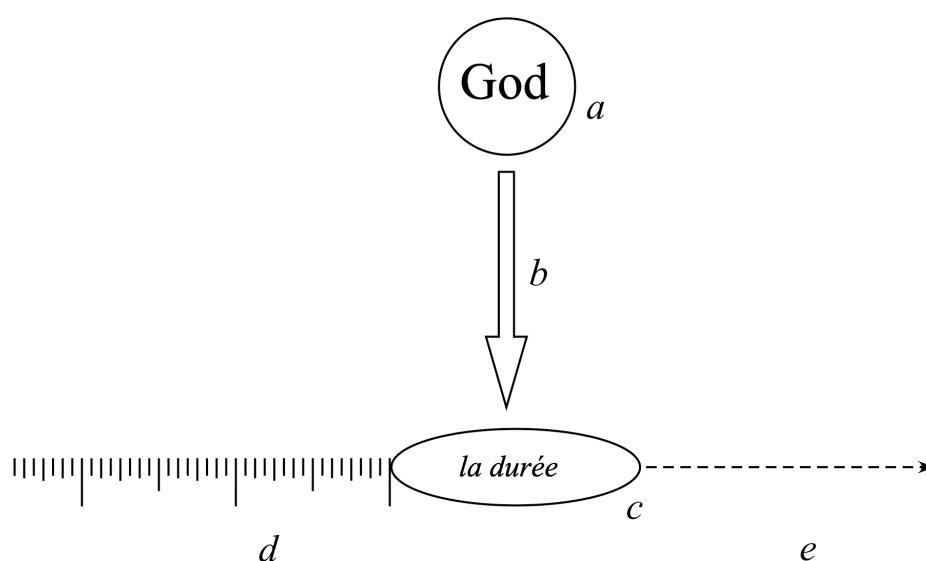
<sup>721</sup> McCann, 250.

<sup>722</sup> Ingthorsson, *McTaggart’s Paradox*, 127.

will, ends up having at its heart divine creation out of nothing is, in my view, an argument *for* that theory rather than *against* it.<sup>723</sup>

### 5.5. Diagram

It might seem inconsistent with what has been said above about Bergson’s critique of spatial representations (see section 1.5) to use a diagram for explaining my picture of divine causation. However, when used with caution, the illustration below may be used as a pedagogical tool to explain the picture of the relation between divine causation and *la durée* that this essay has been arguing for:



God (*a*) is posited as the timeless source of being; His causation of *esse* (*b*) is coextensive with His timeless knowledge of the world. A given agent whose mind is *la durée* (*c*) located at a particular point in spacetime synthesises the timelessly-provided *esse* (see section 3.4) into continuous temporally extended objects, which are, nevertheless, indivisible in the present perception; their division may only be performed on the trace of *la durée* in the past (*d*), which is coextensive with the B-series (see sections 1.2 and 2.3). The future (*e*) is constantly being created as the divinely-provided timeless *esse* is synthesised by *la durée*. The same applies to free acts, where the divine *durée*-based causality (*c*) constantly shapes the divinely provided *esse* (*b*). This diagram applies to every human agent with their present *durée* located at any set of points in spacetime. The qualitative difference between the past (*d*), present (*c*) and future

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<sup>723</sup> In this respect, I am moving away from Bergson, who speaks about free will as “creation,” but stresses that it is not creation out of *nothing* (EPL 118.).

(e) relative to *la durée* ensures that the Bergsonian account of free will escapes Postulates 1-4 (see section 1.4) that in the end lead to Goris' temporal fatalism (see section 5.3) on the diachronic axis *d-e*. The synchronic axis *a-c*, on the other hand, ensures that we can locate a source for every human action, which, however, does not impede there being free will on the diachronic axis, as McCann argues (see section 5.4).

The diagram above has one limitation, one important consequence, and illustrates one crucial difference from the type of causality proposed by Shanley and McCann:

The limitation is that the diagram above illustrates only the relation between God's creative causality and the synthesising mind of a particular (one) agent occupying a set of points in spacetime. Furthermore, the diagram only refers to the past trace of *la durée* and, for a given instance, must always be thought of as reconstructed retrospectively. One might say that this does include a certain level of "temporal Kantianism" — when creation is happening (i.e., in the present) it is inaccessible to the usual mathematical patterns of thought (divisibility, analogousness to a line, etc.), which can only be applied to it *ex post facto*.

The consequence of my view (illustrated by the diagram above) is that, ontologically, the present of *la durée* is crucial; it is where creation happens. The present is "pushed forward" by us (*qua* agents whose minds synthesise the timeless being) in intimate two-level cooperation with God (as the source of being) in a continuous development; our future, and the particular shape it takes, is constantly changed by our free actions. The future is constantly being created.

Finally, my view is different from that offered by McCann in that McCann's account is missing the mind-dependent synthesis of being into temporal objects; his account also does not utilise the machinery of Bergsonian free will, which makes his account vulnerable to the consequence argument (see section 5.1) and the fatalist argument (see section 5.2). God, on McCann's account, provides being, but this makes no difference to the perils involved in the possibility that all our actions are "fixed" by laws of nature and facts of the past. On the other hand, my view is different from Shanley in that Shanley's account also does not engage with the relationship between the mind and time, and with the special theory of relativity.

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This chapter has appealed to the nature of *la durée* to articulate a response to van Inwagen's consequence argument, thus providing a critique of the final of the four Postulates introduced in Chapter 1. It has shown that Bergson can remove one of the main stumbling blocks of free

will debates, but that — due to the lack of ontology in his philosophy — an appeal to divine causation is required to complete the model of God’s relation to time and our free acts.

The crucial consequence of the Neo-Bergsonian model proposed above is the following: the present is central to how we explain divine causation; the indivisible perception based on *la durée*’s relation to divinely-provided being is the “melting pot” in which our mind’s contact with divine creativity happens. Everything else (the breaking down of the past of *la durée* into segments, the extrapolation of our temporal sequence into the future, the establishing of objective time and its systematisation by science etc.) happens *ex post facto*.

## Conclusion

This study has provided a new model of God’s relation to time based on Bergson’s philosophy and showed that such a Neo-Bergsonian perspective is consonant with the core of the traditional Thomistic solution to the problem of divine foreknowledge and human free will. The *human* “present” was shown to be the key intersection of the relationship between the human mind, time, and divine creation — such a perspective was also shown to be ontologically compatible with the rejection of an *objective* present by physics. This Neo-Bergsonian approach can not only sidestep various problems in analytic problems of free will, but also further strengthen the orthodox doctrines of human freedom, eternity, and God’s knowledge as the cause of things.

The three main directions of further research into engagement with Bergson that one might want to take from this point are the following:

First, an enormous amount of work could be undertaken on modality in analytic philosophy, Bergson’s thought on possibility, and the way these relate to possible-world semantics in philosophy of religion. If Bergson’s thought on actuality being prior to possibility is correct, how does this reposition the frequently-iterated claim that God creates the best possible world or at least from among the best? While there have been several extremely brief attempts at relating Bergson’s thinking to possible-world semantics,<sup>724</sup> exploring a full Bergsonian account of possibility, contingency, necessity, and their relation to God would provide new and exciting ways of thinking about fundamental modal questions in analytic philosophy of religion.

Second, one might also go for a smaller-scale approach, use the arguments proposed in section 1.5 and see how alternative accounts of divine knowledge react to Bergson’s account of choice. Specifically, can a Molinist account of divine knowing tolerate or incorporate Bergson’s insistence that our objects of choice do not precede our choosing?

Third, one might wonder how the framework defended here could be related to specifically *Christian* theological problems. Is there a way of thinking about the Incarnation, petitionary prayer, the question of whether God is the cause of sin, or the problem of “time before creation” in Bergsonian terms? Can we provide an account of other attributes affirmed by classical theism (e.g., impassibility, simplicity etc.) using the “Neo-Bergsonian” perspective? And can Bergson’s insights from later stages of his philosophy be related to divine

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<sup>724</sup> Moore, *The Evolution of Modern Metaphysics*, 414–19; Felt, ‘Why Possible Worlds Aren’t’, 66–68.

omnipresence? — Indeed, one might ask what would happen if we did not limit Bergson’s thought to his early works (Stage 1) as was done in this project, but move to Stage 2 and run the whole experiment again.

This essay opened with Frédéric Worms’ tongue-in-cheek remark about Bergson “inventing” analytic philosophy. In the very same talk,<sup>725</sup> Worms observed an inherent tension in the original French title of Bergson’s seminal *La Pensée et le mouvant* from 1934. The title is enormously difficult to translate (hence probably the rather strange “Creative Mind” in English). There is an intentional ambiguity in the French term “pensée” between “thought” (i.e., the noun *la pensée*) and “that which has been thought” (i.e., the *past* participle of “penser”). The second of these meanings contrasts radically with “le mouvant” (the *present* participle of “mouvoir”). The most accurate translation of the French original would thus be something like “That Which Has Been Thought and That Which Is Moving.”

Bergson repeatedly insists that reality is always, in a sense, confined to the present, and thought and language to the past. Therefore, he concludes, concepts and words cannot adequately capture reality. Where I identified the 1910s and 1920s as crucial moments in analytic philosophy of time for its engagement with Bergson, one could look further into the 1960s and 1970s as key moments in analytic philosophy of *language* and try and bring these into a dialogue with Bergsonian philosophy. One might then explore whether a fully worked-out Bergsonian philosophy of language, or indeed, of religious language, is possible or even necessary.

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<sup>725</sup> Worms, ‘Thinking in Bergson’s Philosophy’.

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