

## Time Regained

Sander Tuns

“If you don’t understand the sequence of which a concept is part, you cannot understand the concept”,<sup>1</sup> Gilles Deleuze insisted in a seminar on Baruch Spinoza given at Vincennes in 1980. This approach to understanding thinkers and their concepts is already apparent in his 1966 book *Bergsonism*, which prompted the rediscovery of the work of Henri Bergson in French academia after a period of relatively decreased interest in his work. In this work, Deleuze interprets Bergson’s work as having three major stages—duration (*la durée*), memory and *élan vital*. Deleuze determines a progression between these, moving from an understanding of human psychology to an ontological understanding of reality.<sup>2</sup> The elucidated sequence provides a fuller understanding of the concepts than an analysis of a concept in isolation could achieve.

With the resurgence of interest in Bergson’s work in recent years, this ‘Deleuzian approach’ to philosophers and their concepts seemed appropriate for Arjen Kleinherenbrink to reconstruct the sequence of Bergson’s criticism of Immanuel Kant’s notion of time and how Bergson progressed this criticism with regard to the notion of free will.<sup>3</sup> Kleinherenbrink positions himself in relation to the works of Keith Ansell Pearson and John Mullarkey, who emphasize that Bergson’s ‘engagement with the legacy of Kant’s Copernican Revolution’ is scattered throughout his work;<sup>4</sup> or suggest that Bergson’s philosophy is ‘a reversed Kantianism’<sup>5</sup>

The current essay will be working within the combined spirit of the aforementioned commentators and elucidate a sequence that goes beyond the sketched trajectory of Kleinherenbrink to shine a light on Bergson’s engagement with Kantian philosophy. The inevitable consequence of Kantian philosophy is the reformation of metaphysics and science as such. For Kant philosophy should be aware of reason and its capacities. He writes in the preface to the first edition of the *Critique* that ‘our reason has the peculiar fate that, with reference to one class of its knowledge, it is always troubled by questions which it cannot ignore because they are prescribed by the very nature of reason itself, and which it cannot answer because they transcend the powers of human reason.’<sup>6</sup> This particular class of knowledge is metaphysical knowledge. The metaphysical questions reason cannot answer are prescribed by its own nature. What Bergson argues for in his work is that this prescription of reason upon itself might not have been completely understood by Kant. Bergson thinks Kant made a mistake at the beginning of his theorizing of the nature of reason that lead him to his conclusions on metaphysics and science.

This essay will follow Bergson along his conceptual developments starting from his doctoral thesis *Time and Free Will: An Essay on the Immediate Data of Consciousness* (1889; hereafter TFW), in which he develops his fundamental theory on time. This theory of time is not (yet) a theory of time “out there”, but from the outset a theory of experienced time. In other words, Bergson is interested in the nature of

<sup>1</sup> Deleuze, “Spinoza,” as cited in Kleinherenbrink, “Time, Duration and Freedom.” Translation of: ‘Et si vous ne comprenez pas la séquence dont un concept fait partie, vous ne pouvez pas comprendre le concept.’

<sup>2</sup> Deleuze, *Bergsonism*, 13.

<sup>3</sup> Kleinherenbrink, “Time, Duration and Freedom,” 203-205.

<sup>4</sup> Ansell Pearson and Mullarkey, *Henri Bergson*, 32.

<sup>5</sup> Mullarkey, *Bergson and philosophy*, 169.

<sup>6</sup> Kant, *Critique*, Avii

consciousness, from which he can develop an epistemology and ultimately a conception of science and metaphysics as such. He develops this process further in the later works *An Introduction to Metaphysics* (1903) and *Creative Evolution* (1907). In these texts Bergson relates himself to the problems of Kantian philosophy in more detail and epistemologically matures the initial argument he makes in TFW. This essay follows this progression in Bergson's philosophy in order to fully understand the way Bergson relates himself to Kant and the alternative way of doing metaphysics and science he proposes.

### **Kantian time**

"There can be no doubt that all our knowledge begins with experience."<sup>7</sup> These famous words of Kant demand immediate clarification, since it does not follow from this that all knowledge also arises *from* experience. In other words, there are certain parts of cognition that do not originate in experience. In the introduction of *Critique of Pure Reason*, Kant poses the question of whether knowledge of this kind of cognition, absolutely separate from experience (pure a priori knowledge), is possible. Kant's aim is not to arrive at generalities that arise from experience, such as "every alteration has its cause", but at knowledge with nothing empirical mixed in with it, hence *pure* a priori.

Generalities, such as "every alteration has its cause", are what Kant calls *concepts*. These differ from *intuitions* in that concepts are general and mediate representations of objects, and intuitions are singular, immediate representations of objects.<sup>8</sup> Intuitions happen when an object is given to us by means of a capacity Kant calls *sensibility*. An intuition is a conscious and objective representation of objects, properties or events, meaning that it refers to something specific. Sensibility supplies the intuitions, which then have an effect on us. This effect is called a *sensation*. For Kant a sensation is not an objective representation of an object but involves the subjective state this representation puts the subject in. It is through sensation that intuitions become empirical and thus subjective. Thus the difference between intuitions, sensations and concepts is as follows: intuitions regard immediate representations of e.g. an object, sensations regard the subjective state intuitions put subjects in and concepts regard generalities objects can share.

An *appearance* is the undetermined object of an empirical intuition.<sup>9</sup> That is to say that appearance is a more general term for all the specific intuitions of objects, properties and events. Appearances have a matter and a form. The matter of an appearance is that which responds to sensation.<sup>10</sup> The form of an appearance is that which gives order (in certain relations) to a manifold of appearances.<sup>11</sup> Kant seeks to understand the form of appearances. Such knowledge would be a priori, since what orders sensations cannot itself be a sensation. Instead, it must already be in one's mind, prior to experience. This means that the form is not dependent on the appearances that it orders but exists without an actual object of the senses as a *pure intuition*.

According to Kant, there are two pure forms of sensible intuition, namely space and time. In space, the objects outside of us are represented in their shape, size, and relation. This occurs by means of our

<sup>7</sup> Ibid., B1.

<sup>8</sup> Ibid., A19/B33.

<sup>9</sup> Ibid., A20/B34.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

outer sense, a property of the mind.<sup>12</sup> Our inner sense determines the way in which the mind intuits itself. It does not and cannot do this by means of space but can only do this by means of time. Space and time are merely empty forms in which all phenomena are perceived. But then, if these forms differ from phenomena that are perceived, what exactly are these forms on their own? What is the nature of time? How does Kant define it?

In section two of the Transcendental Aesthetic in the *Critique of Pure Reason*, Kant speaks of time as ‘one and the same’ of which different times are parts of; successively, not simultaneously.<sup>13</sup> There is one infinite time, which ‘determines the relation of representations in our inner sense.’<sup>14</sup> We represent time as a homogenous line spreading out to infinity in which appearances succeed one after the other. Alteration is possible through the order that the pure intuition of time brings to the manifold of appearances. Also, magnitudes of time are only possible through ‘limitations on one single underlying time.’<sup>15</sup> As Kant later on in the *Critique* mentions: ‘it is only the concept of quantities that admits [...] of *a priori* representation in intuition, while qualities cannot be represented in any but empirical intuition.’<sup>16</sup>

According to Bergson, Kant’s great mistake was to take time as homogenous.<sup>17</sup> Allegedly, Kant thought that human consciousness is only capable of perceiving states of consciousness - or as Bergson calls it psychic states - by juxtaposition, side by side. Psychic states in this sense are succeeding each other on the line of time, in the same manner as distinct objects succeed each other on the lines of space. For Bergson, this is a confusion of time with space, because side by side differentiation happens in space and not in what Bergson calls duration, or real time. In TFW, Bergson provides two arguments against Kant’s concept of time. First, by making an argument from intensity and magnitude in which he discusses the intensity of psychic states. Secondly, he provides an argument from multiplicity and duration in which he discusses the multiplicity of conscious states and in which he develops the concept of duration.<sup>18</sup>

### Intensity and magnitude

Bergson’s first argument sets out from a common way of expression. In daily life, we are used to talking about the intensity of psychic states in terms of growth and diminution. We might say a sensation is two times as intense as another sensation of the same kind. “I am twice as angry” or “I feel less ashamed” are common phrases. We talk about psychic states in the same way as we would talk about numbers. For example, when we say that four is greater than three. According to Bergson, this means that four contains three, in the sense that there are two unequal spaces in which the one is inside the other. Accordingly, three is inside four and thus four implies three. Quantity is based on the principle of the container and the contained. Now, the problem for Bergson here lies in attributing this principle of quantity to the intensity of psychic sensations. The idea of sensations as intensive magnitudes is a mistake because it does not express the true nature of sensations. Bergson argues against this common

<sup>12</sup> Ibid., A22/B37.

<sup>13</sup> Ibid., A31/B47.

<sup>14</sup> Ibid., A33/B50.

<sup>15</sup> Ibid., A32/B48.

<sup>16</sup> Ibid., A714/B742.

<sup>17</sup> Bergson, *Time and free will*, 232.

<sup>18</sup> The third part of TFW deals with the organization of conscious states and the issue of free will. This is outside of the trail this essay follows and will therefore not be directly discussed.

sense notion of intensive magnitudes by providing a series of examples.

Bergson distinguishes between two types of intensities: deep-seated psychic states and muscular efforts. In simple cases, deep seated psychic states are cases of pure intensity without any physical symptoms that accompany it. Yet, these pure, simple cases are rare, therefore Bergson provides examples that are as near as possible to help elucidate the nature of these pure and simple psychic states. One of the examples given is pity (or compassion), a moral feeling. At first, pity involves putting oneself mentally in the suffering position of another person. On its own this would lead to the avoidance of the other person since human beings prefer not to be in pain over being in pain, thus the feeling of the other's pain is soon accompanied by a new element; the need to help them get rid of the pain – i.e. sympathy. Lower forms of pity are 'perhaps a dread of some future evil to ourselves, (which) does hold a place in our compassion for other people's evil.'<sup>19</sup> Because we fear a future evil, we want to prevent it from happening to ourselves and others. Yet, this is a mere low form of pity. True pity is to desire suffering. We would hardly want to see this desire realized, yet we form it despite ourselves. Pity involves a form of humility towards an alleged injustice that nature commits against us - it begs for 'self-abasement, an aspiration downwards.'<sup>20</sup> This downwards aspiration is nevertheless uplifting. Because we manage to dissociate our thought from certain sensuous goods, we feel superior to them. Pity ultimately involves humility with a charming side-effect of superiority. The supposed increasing intensity of pity involves a sequence that develops 'from repugnance to fear, from fear to sympathy, and from sympathy itself to humility.'<sup>21</sup>

Using this example, Bergson shows that a moral emotion such as pity does not simply denote a development of increasing intensity, as the common way of speaking suggests. To feel less or more pity for someone does not involve one sensation that decreases or increases in intensity but consists of qualitative transformations. This process does not obey the principle of the container and the contained because repugnance is not inside fear and neither does fear include repugnance. What does happen is a permeating succession of different phases of pity that qualitatively differ from each other. Qualitative transformations are a temporal heterogeneity and cannot be satisfactorily represented by any symbol and therefore also not by one of lesser or more. To understand them as intensive magnitudes is a translation of the intensive into the extensive. This is to understand psychic states as spatial.

But what about manifestations of consciousness in which the intensity spreads to extensity? As is the case, for example, with psychic states that involve muscular efforts. To illustrate such a manifestation, Bergson invites us to participate in an exercise.<sup>22</sup> To partake, so to say, in "embodied armchair philosophy". Let us press our lips together. Press them more and more tightly. Without further examination, this would feel as if we are experiencing one and the same sensation continually increasing in strength. Yet when we engage in closer reflection, it will be noticed that more and more muscles of the face, then of the head, and then of the entire body will get involved. While our attention is focused on a supposed increase of the quantity of a singular sensation, in truth, there is an increase of qualitatively distinct sensations. From these two examples, it is evident that near both extremes in deep-seated psychic feelings and muscular efforts, and consequently in their intermediate states, there is a

<sup>19</sup> Bergson, *Time and free will*, 19. Word between brackets added.

<sup>20</sup> Bergson, *Time and free will*, 19.

<sup>21</sup> Ibid.

<sup>22</sup> Ibid., 25.

qualitative process and an increasing complexity which do not allow to be merely understood as intensive magnitudes.

While Kant held all states of consciousness to be in the same medium, Bergson, contra Kant, gives us an account of consciousness that is only accustomed to being thought of in terms of space. It does so because the sensations we perceive have an external cause, an external object. These causes are extensive and measurable and thus consciousness associates the 'idea of a certain quantity of cause with a certain quality of effect.'<sup>23</sup> The idea is transferred into the sensation; 'the quantity of the cause into the quality of the effect.'<sup>24</sup> The every-day use of language demands this fallacy since it facilitates life with ease. Yet this does not mean that magnitudes are reflective of the true nature of sensation or inner life. When sensations are increasing in intensity they progress in qualitatively different psychic states, not in magnitude. This puts intensities in the middle of two streams: 'one of which brings us the idea of extensive magnitude from without, while the other brings us from within [...] the image of an inner multiplicity.'<sup>25</sup> With this expression, Bergson's concludes his first argument from intensity and magnitude in TFW. The second argument Bergson provides against Kant's conception of time concerns these inner multiplicities: how are they the same and/or different from extensive magnitudes?

### **Multiplicity and Duration**

Bergson's second argument starts with a question: what is a number? It can be defined as a collection of units that are, or are assumed to be, identical to one another. For example, when we count a flock of fifty sheep, we know they are not all exactly the same, but we neglect their individual differences and only focus on that which they have in common. At the very least, there is one thing in which they differ: their position in space. When we do not regard the actual sheep, and only count them, we must place them side by side in an ideal space in order to count them. One might argue that it is possible to count them by merely repeating one image fifty times, which would mean that the series lies in duration instead of space. However, according to Bergson, this cannot be done, because it would not allow the number to increase. In pure duration only a single sheep can exist at once. To be able to count the sheep it is necessary to think them all together at once. This can only be done in space. It takes an ideal space which we can imagine the sheep in, to be able to count them. Thus, the idea of numbers requires necessarily the idea of space.

This becomes clear when we look at how children are taught numbers. At first, they imagine or are presented objects to be counted. For example, the food eaten by Eric Carle's "very hungry caterpillar" in the book of the same name. The caterpillar eats one apple on Monday, two pears on Tuesday, etc. The child sees the fruit on the page, or if they are younger are shown three-dimensional objects, to make them understand. At a later stage of the child's educational path, these fruits become points and finally, they are fully stripped of the image and the children are left with mere symbols of abstract numbers. The symbol is the conventional way of expressing a number, while its spatial origin is forgotten. When we try to clearly visualize the abstract number itself, and not just the symbol, we

<sup>23</sup> Ibid., 42.

<sup>24</sup> Ibid., 42.

<sup>25</sup> Ibid., 73.

recourse to an extended image, as discussed in the previous paragraph. The intuition of space does not always evidently accompany every idea of number, but every idea of a number implies the intuition of space.

This brings us to the formulation of one of two different kinds of multiplicities: the multiplicity of material objects counted in space.<sup>26</sup> To be able to count objects in space no symbolic representation is necessary; it suffices to think them in the medium they are observed in. This is the multiplicity ‘of exteriority, of simultaneity, of juxtaposition, of order, of quantitative differentiation, of *difference in degree*; it is a numerical multiplicity, *discontinuous and actual*.<sup>27</sup> What matters for Bergson here is that we refer to these multiplicities in possibilities of seeing and/or touching them. Something which is impossible for the second kind of multiplicity, the one of conscious states.

The second, *continuous* multiplicity appears in pure duration. This is an ‘internal multiplicity of succession, of fusion, of organization, of heterogeneity, of qualitative discrimination, or of *difference in kind*; it is a *virtual and continuous* multiplicity that cannot be reduced to numbers.’<sup>28</sup> To express psychic states numerically means to separate them and artificially place intervals between them. In order to count the rings of a church bell, one must place the sensations of the sounds distinctly next to each other in an ideal space. This means that one deviates from the continuity of the bells in order to juxtapose them in a homogenous medium by means of symbolic representation. One might protest that the bell itself rings a certain number of times and that we pick up on that. Yet, we can only do this by means of a translation into spatial terms. If we would experience the bells in a pure duration, the mind could not make sense of it, because there is only one ring at a time. The act of putting the sounds in an ideal space allows the mind to think the bells together at once and consequently enables it to count them. But the pure psychic states themselves do not admit to amounts, the true nature of consciousness is lost in counting or even naming sensations.

According to Bergson, the true nature of consciousness exists only in duration. The continuous multiplicity of conscious states, like we have seen in pity, is only after its passing *artificially* understood in terms of time as a fourth axis of space. Which is, as discussed above, also a spatial understanding of time. Pure duration precedes this understanding. Bergson states that ‘pure duration is the form which the succession of our conscious states assumes when our ego lets itself *live*, when it refrains from separating its present state from its former states.’<sup>29</sup> Duration is the realm of subjectivity and is always changing, always becoming. Because words are in a sense like numbers, to talk about duration is always a violation of immediate experience. Words are separate units that can never express the true becoming that is duration, but merely represent it. Language is limited. Bergson provides multiple images to communicate duration, but mentions that ‘if a man is incapable of getting for himself the intuition of the constitutive duration of his own being, nothing will ever give it to him, concepts no more than images.’<sup>30</sup> Images and concepts cannot recreate the flow of one’s consciousness or even the feeling of it. To “experience” duration requires an effort. Philosophy, according to Bergson, should promote this

<sup>26</sup> Bergson, *Time and free will*, 85.

<sup>27</sup> Deleuze, *Bergsonism*, 38. Deleuze derives the two kinds of multiplicity from the works of G. B. R. Riemann. Deleuze suggests that Bergson has been well aware of Riemann works, despite him not being mentioned in TFW. Deleuze refers to this multiplicity as discrete. Discrete because it contains the principle of its own metric, i.e. one of its parts is what is multiple. Fifty sheep is a discrete multiplicity, because one sheep is repeated fifty times (in space).

<sup>28</sup> Deleuze, *Bergsonism*, 38.

<sup>29</sup> Bergson, *Time and free will*, 100.

<sup>30</sup> Bergson, *An Introduction to Metaphysics*, 15-16.

effort, which goes against the habits of the mind but can never be fully articulated.

In *An Introduction to Metaphysics*, Bergson compares duration to three images: two spools with tape between them, the colour spectrum and an infinite elastic band.<sup>31</sup> One spool is unwinding the tape and the other winds it up. We can compare this to duration: when our lives endure, our past grows and our future decreases in the continual manner of the tape. Every moment is different because there is some of the tape added to the past. Another resemblance between this image and duration is that the tape is continual without juxtaposition. However, the downside of this image is that it evokes the idea of a linear duration with parts that are homogenous and superimposable on each other. The tape does not change in nature. Therefore, Bergson needs another image. The image of the colour spectrum presents duration as a qualitative multiplicity. To move over the shades and colours of the spectrum is to experience gradual qualitative change. The drawback of this image is that it does not present a continuity since the colours are spatially juxtaposed. Duration excludes juxtaposition and extension. The third image of an infinite elastic band is supposedly fixed in a mathematical point, the present. Bergson first asks us to imagine this band being drawn out progressively, to make it longer. Bergson then tells us to fix our attention on the movement itself, rather than the line it constitutes. Focusing on the movement of the elastic band allows us to see the movement of duration. This movement is continuous, heterogeneous and indivisible. Note that even though we can divide a spatial line that represents the movement, for the movement itself this is not possible. The moving object is a mere abstraction from the movement. This third image expresses the pure mobility of duration but remains incomplete because every image is incomplete. Every image can only resemble in certain aspects the unity of an advancing movement and in others the multiplicity of expanding states. Every image must sacrifice certain aspects over others.

Duration is all that these images tell us at once: 'variety of qualities, continuity of progress, and unity of direction.'<sup>32</sup> It is the synthesis of multiplicity and unity. The two arguments that Bergson develops in TFW counter Kant's conception of time as an empty, homogenous form serving as a fourth axis of space. Bergson argues that Kant's time is *artificial*. To think of time spatially is to abnegate true time and it is only done out of habit and for the benefit of the practical. According to Bergson, Kant wrongly thought that intuitions are singular, immediate representations of objects. The singularity of intuitions stems from the contamination of time with space. Therefore, Kant wrongly thought of consciousness as a unity across time. Since he thinks time as a homogeneous background for the manifold of all experience, Kant conceives of time as the ever-changing manifold *itself*. He concludes that consciousness is a unity because the underlying empty forms keep it all together.<sup>33</sup> Bergson breaks with this unity. He shows there is a realm of consciousness that Kant neglected. Bergsonian intuition is the simple, indivisible experience of consciousness by which it grasps duration, not an immediate representation of the object as is intuition for Kant. The discovery of duration serves as the starting point for the construction of a Bergsonian epistemology. Bergson's correction of Kantian time allows him to develop his method of intuition, by means of which his relation to Kantianism progresses to its most vital point. But before we get to this vital point it is important to briefly sketch why a new epistemology is necessary. What are the problems Bergson is trying to solve? And how does Bergson

<sup>31</sup> Ibid, 11-15.

<sup>32</sup> Ibid., 15.

<sup>33</sup> Kant, *Critique*, A352.

solve these?

### Time out of joint

In the preface to the first edition of the *Critique of Pure Reason* Kant writes that ‘the battlefield of [...] endless controversies is called metaphysics.’<sup>34</sup> On this battlefield reason is confronted with its dark side. Despotist dogmatists and sceptic rebels fight it out in an ongoing battle for knowledge of the most general order. The so-called queen of all sciences is forever incomplete because she puts forward principles that exceed the limits of experience and therefore cannot adhere to empirical testing. The analytic claims of rationalists and the synthetic claims of empiricists are both insufficient to answer the metaphysical questions they are engaged in. Both sides of the battlefield are diffuse according to Kant. His critical philosophy attempts to bring an end to this war and install perpetual peace in philosophy. Acknowledging the principles of metaphysics as the presuppositions of experience in general is needed in order to do so. Time and space are empty forms that make experience possible, and categories such as causality facilitate our understanding. Kant’s solution solves the disputes of empiricists and rationalists by placing their discussion in the realm of science. Science - limited by the forms of sensation and categories of the understanding - produces relative knowledge and consequently metaphysics is reduced to mere speculation.

Bergson wants to save science from its relativity and metaphysics from its supposed meaningless speculation by recovering intuition. He agrees with Kant that the field of metaphysics is somewhat like a battlefield but does not invoke the Kantian war rhetoric. Bergson speaks about ‘antagonistic schools’ whose members have chosen a side and an opponent to play a never-ending game with.<sup>35</sup> Philosophers through the ages might have had their differences, but Bergson urges that after comparing their definitions and concepts one must conclude that there is one notion they share.<sup>36</sup> They all distinguish between two ways of knowing a thing. The first one is from the outside, relative to our point of view and to the symbols we use. The second one is from the inside, not relative in any way but absolute. Kant thought the second way of knowing was impossible. Things-in-themselves are unknowable due to the transcendental apparatus. In *An Introduction to Metaphysics*, Bergson gives the example of a character in a novel in order to explain the division between two types of knowing. The author may describe them in many ways, from a multitude of perspectives, but this can never be equal to the immediate experience of being the character. The literary adage of “show, don’t tell” aims to fill this gap, but will only achieve this if it evokes a qualitative experience of identification with the character. A description of a city never fully makes sense if the reader has never been in that city. Even photographs taken from every possible point of view of the city would not be equal to the real experience of walking in its streets.

The point Bergson makes here is that from the outside perspective one must translate experience into an explanation and pile up these explanations in order to reach what one wants to express, but still one will never reach it. *Analysis* reduces the object to already known elements that the object has in common with other objects. The object is grasped by that which it is not or, in other words, by symbols and representation. According to Bergson, the positive sciences work this way. Even the ones concerned

<sup>34</sup> Ibid., Aviii.

<sup>35</sup> Bergson, *An Introduction to Metaphysics*, 21, 67.

<sup>36</sup> Ibid., 1.



with life - biology and medicine – are confined to the visual symbols of life: organs, anatomical elements, etc. By means of symbolic representations the positive sciences try to recreate the real. But they can never fully do that, because that what you write down, i.e. partial notations, never can be the same as the real parts. Bergson gives an example where notations are completely symbolic. Suppose you are given the letters of an unknown poem in a random order and you are asked to reconstruct the poem. This would be impossible. If the letters were all parts of the poem you could try different orders until it fits, as children do with a Chinese puzzle. But the letters are mere notations. So, you can only reconstruct the poem if you already know the poem. Because if you do not already know the poem, you could only get the gist of it by giving yourself an intuition and from this re-descend to the symbols. This intuition gives you a sense of an experience of the whole poem, perhaps from another poem you've experienced. From this you would attempt to constitute a meaningful whole. If the letters, these symbols, would be real parts of the poem, this artificial intuition would be unnecessary. So, we are not dealing with fragments of the thing, but with fragments of its symbol.

For Bergson the mistake between the symbolic and the real also occurs in metaphysics; both the antagonistic schools of empiricism and of rationalism mistake partial notations for real parts.<sup>37</sup> Let us consider either school's approaches to the self. Empiricists work like psychologists who look for the "ego" in psychical states. From the real parts of psychic life, they try to construct a coherent whole, by referring to them using the term ego and by denoting psychical states as "states of the ego". All they do is make notations of psychical states and place readymade concepts on them. Empiricists seek the original in the translation and the real in concepts. They make the error of believing that they can find the objects, in this case the self, while remaining on the level of analysis. They take the outer perspective on inner life. Rationalism makes the same mistake by persisting on the unity of the self as a form without content in which mental states happen. Bergson does not find empiricism nor rationalism effective in understanding the real because

the former, seeking the unity of the ego in the gaps, [...] is led to fill the gaps with other states, and so on indefinitely, so that the ego [...] tends towards zero, as analysis is pushed farther and farther; whilst rationalism, making the ego the place where mental states are lodged, is confronted with an empty space [...] which goes beyond each of the successive boundaries that we try to assign to it [...] and which tends to lose itself no longer in zero, but in the infinite.<sup>38</sup>

Bergson and Kant both criticize the metaphysics of early modernity, but for different reasons. They would agree that the field is unnecessarily divided and that this division problematizes its very aim of gathering knowledge of the most general kind, but they disagree about the cause of and solution for these problems. Kant considers metaphysics to be impossible. He considers metaphysical thought only to be possible through a superior, original intuition, an *intellectual intuition*. Such an intuition can only belong to a 'primordial being', not to humans.<sup>39</sup> The human intuition is dependent on the existence of an object. Only if an object triggers our capacity for representation intuitions happen. Human intuition

<sup>37</sup> Ibid., 30.

<sup>38</sup> Ibid., 35-36.

<sup>39</sup> Kant, *Critique*, B72.

(or perhaps intuition of all finite beings) is always derivative (*intuitus derivativus*) in this sense, not original (*intuitus originarius*). An original intuition can be attained if ‘only by thinking an object the object exists and the object contained nothing not contained in the concept of it.’<sup>40</sup> This is a divine capacity. Metaphysics<sup>41</sup> for Kant would be only possible through a vision, not through logic.

Logic leads to the four antinomies of pure reason. Kant showed that there are four antinomies through which a thesis and the negation of this thesis, the antithesis, can be defended with equal valid proof. Reason results in contradictory and equally true (or wrong) statements. Consider for example the first antinomy, which fits the theme of this essay. The thesis ‘the world has, as to time and space, a beginning’ and the antithesis ‘the world is, as to time and space, infinite’ both are statements about reality in itself, but contradict each other.<sup>42</sup> This antinomy here is of the mathematical type because – as Kant himself puts it – ‘they concern adding together or dividing up the homogenous’.<sup>43</sup> The theses concern the magnitude of reality but we cannot make sense of them due to our limited experience. It is impossible for humans to experience both finite and infinite time and space. Finitude of space and time is impossible to experience because we would understand them to be bounded by an empty space or an empty time. These are mere ideas, constituted by negation. The magnitude of the world must lie in itself. But this is in contradiction with the concept of a sensible world, whose existence only takes place in representation, in experience. The theses are in contradiction with each other because they deal with something outside of experience in experiential terms.

The transcendental subject is stuck in the finitude of sensibility. When it attempts to extrapolate from sensibility, it falls into the trap of the antinomies. This is the main reason why Kant urged a critical philosophy. Human knowledge is limited, and we ought to be aware of that. The answer to the question “What can we know?” is empirical and constrained by the transcendental forms of intuition and categories of our understanding. Science should operate within and only within these limits. Every attempt at knowledge outside of this is consequently speculative. Kant drags metaphysical concepts (such as causality, possibility, negation and plurality) into the transcendental, as conditions for experience. The only way out of this, an intellectual intuition, he regarded to be impossible, because he pictured it as a vision of reality in itself, radically different from experience. This vision would have to break with sensation. The subject would have to break with itself to achieve such a vision. Bergson thought Kant was wrong in this sense. As is shown in the first chapter of this essay, there is a realm of experience not dependent on analytic concepts: duration. Bergson thinks knowledge can come from this realm and the intuition that can grasp it.

### Intuition as method

The method of intuition is not a method in the conventional sense. There is no finite number of steps that need to be repeated to study a subject. The method of intuition concerns intuition as a movement into the concrete flow of duration. We must *try* to follow duration. Bergson does not pose a grand epistemology that at once can understand reality, but a rather modest attempt that starts from

<sup>40</sup> Dryer, *Kant's Solution for Verification*, 202.

<sup>41</sup> Here not meaning the futile, endless disputing of empiricists and rationalists, but the kind of knowledge of reality in itself.

<sup>42</sup> Kant, *Prolegomena*, 91.

<sup>43</sup> *Ibid.*, 93.

duration.<sup>44</sup> Bergson draws an analogy between our consciousness and an imagined orange consciousness. This strange, orange consciousness would not experience itself from the outside as orange, instead it would experience itself being in a continuum between yellow and red. It might even suspect a whole other spectrum of colours beyond yellow and red. In this same manner we must, as a single consciousness, suspect a whole spectrum of durations and trace our relations to those. Just as orange is a real part of the colour spectrum, so is consciousness a real part of duration. The boundaries of real parts are not as clear cut as notational parts of concepts are. Intuition as a method must therefore sympathize with its own duration and attempt to *follow* its continuity and mobility. Through itself it must bring itself into contact with the whole and follow its own movement into other areas.

Intuition can follow its duration in two directions: downwards and upwards. The downward movement proceeds towards matter and its pure repetition. Matter repeats because it divides our simple sensations and dilutes its quality into quantity. At the limit of matter is pure homogeneity. The upward movement advances towards ‘a duration which *strains*, contracts, and intensifies itself more and more.’<sup>45</sup> At the limit of this movement would be eternity. Note that Bergson does not imply that intuition searches for eternity, as Schopenhauer and Schelling have done.<sup>46</sup> For them, intuition was an immediate search for the eternal. Eternity would be grasped at once, as one being from which all of existence could be deduced. This would be a conceptual eternity of death. Bergson’s intuition attempts to find the true duration, an eternity of life. Bergson aims at the absolute – a living, moving eternity that includes all duration and the materiality it is dispersed in. The downward movement towards the world of physics and the upwards movement towards the eternity of all durations are the extreme limits between which intuition moves. This movement is the essence of metaphysics. That Bergson’s thought is “frankly dualistic” becomes apparent here. On the one hand, there is the material side of reality: an external, homogeneous, quantitative, numerical multiplicity of similarity, juxtaposition and differences in degree. On the other hand, there is the duration of reality: an internal, heterogeneous, qualitative, continuous multiplicity of succession and differences in kind. It is a movement of the mind that can orient us towards either.

The movements of the mind are habitual and not necessary by nature. As we have seen in the examples of pity and pressing our lips together, it is possible to become attentive to the qualitative continuity of experience by making an effort. The dominant habit of the mind is to seek solid support, to keep us grounded. It does so by representing life as things and states. Our intellect provides us with sensations and ideas, or ‘solid perceptions’ and ‘stable conceptions.’<sup>47</sup> It replaces the mobility of the real with immobility. As a net that catches fish out of a flowing river, the intellect catches ready-made concepts out of the flowing of duration, and then calls the conceptual fish knowledge of the river. It is, of course, knowledge of the river in a way, but it is interested knowledge. The (schematic) net catches that which can be utilized. Concepts and sensations ask reality a practical question and reality replies ‘as must be done in business by a Yes or a No.’<sup>48</sup> Doing so lets the movement of the water escape through the net. What metaphysicians need to do is grasp this movement and obtain disinterested knowledge of the real - i.e. knowledge that is not guided by needs.

<sup>44</sup> Bergson, *An Introduction to Metaphysics*, 62.

<sup>45</sup> *Ibid.*, 63.

<sup>46</sup> Bergson, *The Creative Mind*, 32-3.

<sup>47</sup> Bergson, *An Introduction to Metaphysics*, 66.

<sup>48</sup> *Ibid.*

Philosophizing is the reversal of the habitual direction of the mind. The mind can place itself in mobile reality by means of intuition, an *intellectual sympathy*. Intuition is a simple act, but difficult to exercise. To be able to exercise it, the subject has to do violence upon itself. It has to perpetually adjust itself and revise its categories and concepts. By no means does this imply sloppiness. As Deleuze points out, Bergson's intuition is not just a feeling, inspiration or sympathy, but a fully developed method, aimed at philosophical precision.<sup>49</sup> Strict rules and accompanying tasks follow. The first task is to apply the test to the truthfulness or falsity of problems.<sup>50</sup> It is wrong to think that only solutions can be true or false. Problems can be false too and we must do away with them. Problems can be false in two ways; as non-existing problems or as badly stated problems. Non-existing problems contain a confusion of the "more" and the "less". The mistake being made is apparent in the example of being and non-being. There is actually "more" in non-being than in being, because in non-being there is the idea of being *and* the logical operation of negation *and* the psychological motivation to exercise this negation.<sup>51</sup> When we ask about the origin of the universe, we fall into this error. We act as if non-being could have existed before being.<sup>52</sup> As if being preceded itself as a part of nothing. Negation is at the source of non-existing problems and inhibits our awareness of other kinds of being – not homogenous, but fundamentally heterogeneous. Badly stated problems are false problems because their terms represent badly analysed composites. This is the result of arbitrarily grouping together things that differ in kind. Take, for example, the question of whether happiness is reducible to pleasure.<sup>53</sup> Both happiness and pleasure consist of irreducible multiplicities of conscious states, which are impossible to reduce to each other. In badly analysed composites the natural articulation does not correspond with the articulation of the problem. We can see that the former false problem rests on the latter because a confusion of the more and the less is the result of a general idea of quantity instead of quality. Thereby we see only differences in degree instead of differences in kind.

The second step in the method of intuition is therefore to rediscover differences in kind. Bergson does so by division. Composites must be divided according to their natural articulation into differences in kind. Such divisions are found all over Bergson's work: duration and space, heterogeneity and homogeneity, quality and quantity, internal and external, matter and memory, etc. However, in reality, these dualisms are always mixed up. The examples of pity and the pressing of the lips are supposed to resemble as much as possible the extremes of these dualisms, but they are nevertheless not *pure*. The pressing of the lips involves an effort of consciousness and pity involves bodily feelings. The task of the philosopher is to elucidate the tendencies of composites towards the two extremes of the dualism by means of qualitative differentiation. Bergson cites Plato's example of the cook who 'carves the animal without breaking its bones, by following the articulations marked out by nature.'<sup>54</sup> But this dissection, this division, only lasts for a moment. Duration needs to be re-formed into a monism again, otherwise one is left with mere analytical concepts. The extremes must be integrated again. The lines of

<sup>49</sup> Deleuze, *Bergsonism*, 13.

<sup>50</sup> The tasks or acts that must be executed are based on the rules that Deleuze distinguishes in the first chapter of *Bergsonism*.

<sup>51</sup> Deleuze, *Bergsonism*, 17. On the psychological motivation: 'such as when a being does not correspond to our expectation and we grasp it purely as the lack, the absence of what interests us.'

<sup>52</sup> Deleuze on Bergson's relation to Hegel with regard to negation: 'The singular will never be attained by correcting a generality with another generality. In all this, Bergson clearly has in mind Hamelin whose *Essai sur les elements principaux de la representation* dates from 1907. Bergsonism's incompatibility with Hegelianism, indeed with any dialectical method, is also evident in these passages. Bergson criticizes the dialectic for being a false movement, that is, a movement of the abstract concept, which goes from one opposite to the other only by means of imprecision' [Deleuze, "Spinoza," 44].

<sup>53</sup> Deleuze, *Bergsonism*, 18.

<sup>54</sup> Bergson, *Creative Evolution*, 172.

duration and space intersect in the real and therefore must intersect in our knowledge of it.

The third step that one must take to practice metaphysics is to: 'state problems and solve them in terms of time rather than of space.'<sup>55</sup> Take the primary Bergsonian dualism of duration and space, which all other dualisms 'involve [...], derive from [...] or result in.'<sup>56</sup> It is always in duration that differences in kind are located. When we study a sugar cube, we cannot do this to satisfaction if we only look at it from the outside at its spatial dimensions. This way, we will only grasp the differences in degree it has from other objects that are located elsewhere. The cube's duration is where its differences in kind are. It has a way of being in duration, which we can sympathize with from our own duration. We cannot study its qualitative succession from the outside. No, we 'must, willy-nilly, wait until the sugar melts.'<sup>57</sup> The wait is here of great significance because this is how the sugar's duration coincides with my impatience, with my own duration. It changes me. 'It is no longer something *thought*, it is something *lived*.'<sup>58</sup>

The method of intuition involves a simple act by which one places oneself into duration. From this concrete reality one indefinitely carves, like Plato's cook, the lines of that reality, in order to think them into their mobility. The second and third step make intuition into a method, into more than a feeling, inspiration or sympathy. This method aims at nothing other than precision in philosophy. Even though it starts as a simple act of intuition, the method cannot be contained into this single act. By seeing the colour grey in a simple act, one can sympathize with it and understand how it can be differentiated from white and black. But the method does not stop there. All the other composites in which black and white exist - e.g. in different tones, shades, and tints - can be approached with these tendencies of white and black. When we recognize tendencies in other composites we must accumulate and fuse these insights together into new traces of knowledge. The method of intuition is therefore supposed to invent new concepts that can approximate reality. It can only approximate because the mobile can never be fully expressed by immobile concepts. This does not undo the importance of Bergson's method, because what is won by him is that the starting point - which is as soon as possible forgotten by analysis for the sake of the symbol - is the mobile. Bergson tries to be loyal to this starting point. The precision of the method is in its diversity of acts that 'corresponds to all the degrees of beings.'<sup>59</sup> Due to the differentiation and integration of infinitesimal calculus done qualitatively, Bergson can intuit mobility and approach it step-by-step. Bergson understands that reality is ever-changing and that in order to learn about it, one must ever change with it. This means that science must always adjust itself at the core of its pursuit, i.e. to perpetually restate the formulations of its problems.

### Restating the problems

According to Bergson, the *Critique of Pure Reason* starts with a badly analysed composite. Because of his notion of time, Kant presents the intellect 'bathed in an atmosphere of spatiality'.<sup>60</sup> It is only through this atmosphere that sensations come to us. Sensations are only judged in their spatial form by the

<sup>55</sup> Deleuze, *Bergsonism*, 31.

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

<sup>57</sup> Bergson, *Creative Evolution*, 12.

<sup>58</sup> *Ibid.*

<sup>59</sup> Bergson, *An Introduction to Metaphysics*, 57.

<sup>60</sup> Bergson, *Creative Evolution*, 223.

Understanding (*Verstand*) and therefore reason can only infer about space and time as spatial entities. The whole of the intellect is defined by its spatial origin. The antinomies of pure reason, Kant's most vital problems, are consequently also defined by this original mistake. Kant's philosophy lives and dies by the antinomies, Bergson says.<sup>61</sup> The intellect cannot think beyond the contradictions that it produces and therefore a critical philosophy is necessary. But the foundation of Kant's transcendental architecture is unstable. The antinomies only restrain the mind because we think in spatial terms. When we think in terms of duration the antinomies dissolve. The antinomies are false problems caused by badly analysed composites of time and space. The conditions upon which the antinomies rest are not necessary conditions for experience and can, therefore, be avoided by stepping into duration instead of analysis.<sup>62</sup> The antinomies are simply not an issue anymore from the point of view of duration.

Philosophy is not a matter of choosing sides between possible answers to a false problem. Via intuition Bergson places himself above the disputes of metaphysical schools. He says that 'either metaphysics is only this play of ideas, or else, if it is a serious occupation of the mind, if it is a science and not simply an exercise, it must transcend concepts in order to reach intuition.'<sup>63</sup> Bergson's goal is to have metaphysics dispense with symbols and free it from the speculative accusation Kant made towards it. This does not mean that he wants to do away with concepts and science as such. Scientific research gives us insight into the material operations of reality, but it needs to become more metaphysical, just as metaphysics needs to become more scientific in its aim.<sup>64</sup> This would restore the continuity between the sciences and the intuitions from which it has obtained its revolutions. Science must stay in connection with metaphysics to stay closer to its origin. But metaphysics must also stay in connection with the sciences in order to be progressive and indefinitely perfectible. Because of its invention of concepts, metaphysics will grow in range and extension, blurring the lines between the sciences and intuition. For science, this means that it can advance towards all sources, directions and tendencies that life is full of.

Bergson calls his method of intuition the 'true empiricism' that searches for the originals of life.<sup>65</sup> It does not seek originals in the translations of the intellect as mundane empiricism does but in immediate consciousness. The continuous multiplicity in which immediate consciousness exists will always be limited when grasped through the intellect. In opposition to this limitation, Bergson's philosophy can be seen as a reversed Ockham's razor.<sup>66</sup> It is an attempt to do away with simplicity. Reality is not simple. There is always more than is necessary in nature. To reconstruct reality as simply being there for the satisfaction of the intellect is cheating oneself, like audiences of the theatre who think in real life people always speak neatly, one after the other. It is an artificial construction taken to be real. Bergson argues against this by stating that

<sup>61</sup> Ansell-Pearson, *Philosophy and the adventure*, 114. Bergson, *An Introduction to Metaphysics*, 86.

<sup>62</sup> There is a more specific way in which Bergson dissolves the antinomies, especially the mathematical antinomies. On this subject he says the following: 'at bottom, it is for not having distinguished degrees in spatiality that he has had to take space readymade as given - whence the question how the "sensuous manifold" is adapted to it. It is for the same reason that he has supposed matter wholly developed into parts absolutely external to one another; - whence antinomies, of which we may plainly see that the thesis and antithesis suppose the perfect coincidence of matter with geometrical space, but which vanish the moment we cease to extend to matter what is true only of pure space' [Bergson, *Creative Evolution*, 224-5]. To fully understand and explain this quote further research into Bergson's conception of space and matter is necessary and is therefore out of the scope of the current essay.

<sup>63</sup> Bergson, *An Introduction to Metaphysics*, 21.

<sup>64</sup> *Ibid.*, 74-5.

<sup>65</sup> *Ibid.*, 36.

<sup>66</sup> Mullarkey, *Bergson and philosophy*, 234.

if science is wholly and entirely a work of analysis or of conceptual representation, if experience is only to serve therein as a verification of “clear ideas,” if, instead of starting from multiple and diverse intuition – which insert themselves in the particular movement of each reality, but do not always dovetail into each other,- it professes to be a vast mathematic, a single and closed-in system of relations, imprisoning the whole of reality in a network prepared in advance,- it becomes a knowledge purely relative to human understanding.<sup>67</sup>

This is exactly what the *Critique of Pure Reason* does. Kant’s project laid the foundation for a universal mathematics, establishing what the intellect and its object must be so that an ‘uninterrupted mathematic may bind them together.’<sup>68</sup> Even stronger, the intellect cannot do anything else than establish this universal mathematics. The *Critique* is a revived Platonism that captures all things in its universal relations and *only* in its relations. How the things in themselves are is problematized by Kant. Things-in-themselves are unknowable. But how can he even affirm their problematic status? By stating the problem, Kant already admits to their existence, namely as something that cannot be known. The path to knowing them, an intellectual intuition, Kant ‘intimated but blocked.’<sup>69</sup> The roadblock on this path to knowledge dissolves from the viewpoint of duration and consequently de-problematizes the thing-in-itself.

Generally speaking, a theory of knowledge can be based on three object-subject relations: either the subject is determined by objects, the objects are determined by the subject or there is some mysterious Leibnizian *harmonie préétablie* between subject and object. Bergson adds a fourth possibility to this list: a relation consisting of a mutual progressive adaptation between object and subject.<sup>70</sup> If the intellect is a special function of the mind turned towards matter and not the all-defining universal view of reality, then the intellect and matter have adapted their form towards each other in the course of evolution. This is a natural development, ‘because it is the same inversion of the same movement which creates at once the intellectuality of the mind and the materiality of things.’<sup>71</sup> It is a case of co-creation of object and subject, engendering their forms through evolution.

Kant never thought this double relationship was possible because he did not think that the mind overflowed the intellect and because he put time on the same plane as space and therefore did not attribute to duration an absolute existence.<sup>72</sup> Bergson, who does both things, can consequently approach epistemological issues differently. Not relatively, but approximately. A critique of knowledge must be accompanied by a philosophy of life in order to transcend the human condition. Instead of maintaining a split between phenomenon and noumenon, Bergson can approach epistemological problems ‘in terms of the relation between our partial perspective of the real, which has evolved in accordance with the vital needs of adaptation, and a mobile whole.’<sup>73</sup> Metaphysics and the sciences can and must re-establish contact with continuity and mobility through intuition. This begs for a reformulation of its problems. Bergson’s metaphysics concerns the invention of problems, of which the shape does not yet exist clearly. It is about creating the terms in which the problem can be stated, and therefore stating and

<sup>67</sup> Bergson, *An Introduction to Metaphysics*, 83.

<sup>68</sup> *Ibid.*, 84.

<sup>69</sup> Ansell-Pearson, *Philosophy and the adventure*, 124.

<sup>70</sup> Bergson, *Creative Evolution*, 225.

<sup>71</sup> *Ibid.*, 225-6.

<sup>72</sup> *Ibid.*, 226.

<sup>73</sup> Ansell-Pearson, *Thinking Beyond the Human Condition*, 14.

solving problems are almost equal.<sup>74</sup>

## Conclusion

The discovery of duration, as a realm of consciousness overlooked by Kant, allowed Bergson to escape the inescapability of the problems of Kantianism, namely the antinomies of pure reason, the demanding spatiality of the understanding and the problematic status of things-in-themselves. In *An Introduction to Metaphysics*, Bergson translates this seemingly untranslatable realm into a serious alternative for Kantian epistemology. This essay has shown that the relation Bergson has with Kantianism is one of intricate engagement that is ultimately aimed at breaking away from Kant's problematic conclusions. Yet, at the same time, Bergson is loyal towards Kant's legacy. Bergson does not seem to overthrow Kantian analysis as such but rather wants to reframe it in a grander play. He breaks the subject open and does not seek to destroy it. The consequences of Kantian philosophy are not as ultimate as Kant thought they were since there are different ways of relating ourselves to the world. Knowledge is not limited to what it already knows but can be creative in conceptions. With the discovery of duration and the cultivation of the intuition that grasps it, human consciousness can find its way out of the scrupulous demands of analysis and towards the mobility, continuity, creation and evolution of life. What Bergson has gained is a creative playfulness of knowledge. Science does not have to wait for a *paradigm shift* to look for new ways of conceptualizing its subjects if it incorporates this creative movement in its methodology. The three steps that consist of identifying wrong problems, rediscovering differences in kind, and stating problems in terms of time rather than space are useful tools in forcing this creative moment in scientific and metaphysical inquiry into existence. What Bergson offers is an epistemology aimed at grasping the changing nature of consciousness, life and ultimately reality as such.

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*Sander Tuns (1992) obtained a BA in philosophy at the Erasmus School of Philosophy in Rotterdam. He is currently attending a Masters in Philosophy of KU Leuven in Belgium.*

<sup>74</sup> Bergson, *The Creative Mind*, 58.



## References

- Ansell-Pearson, Keith. *Philosophy and the adventure of the virtual – Bergson and the time of life*. London: Routledge, 2002.
- Ansell-Pearson, Keith. *Thinking Beyond the Human Condition*. London: Bloomsbury Publishing, 2018
- Ansell-Pearson, Keith, and Mullarkey, John. *Henri Bergson – key writings*. London: Continuum, 2002.
- Bergson, Henri. *An Introduction to Metaphysics*. Translated by Thomas Ernest Hulme. New York: G. P. Putnam's Sons, 1912.
- Bergson, Henri. *The Creative Mind*. Translated by Mabelle L. Andison. New York: Philosophical Library, 1946.
- Bergson, Henri. *Creative Evolution*. Translated by Arthur Mitchell. Westport: Greenwood Press, 1977.
- Bergson, Henri. *Time and free will: an essay on the immediate data of consciousness*. Translated by Frank Lubecki Pogson. Mineola: Dover Publications Inc., 2001.
- Bergson, Henri. *Matter and Memory*. Translated by Nancy Margaret Paul and W. Scott Palmer. Mineola: Dover Publications Inc., 2004.
- Deleuze, Gilles, “Spinoza.” Seminar given on 25.11.1980 at University of Paris VIII, Vincennes, <https://www.webdeleuze.com/textes/17>
- Deleuze, Gilles. *Bergsonism*. Translated by Hugh Tomlinson. New York: Zone Books, 1988.
- Dryer, D.P. *Kant's Solution for Verification in Metaphysics*. New York: Routledge, 1966.
- Jankélévitch, Vladimir. *Henri Bergson*. Translated by Nils F. Schott. Durham: Duke University Press, 2015.
- Kleinherenbrink, Arjen, “Time, Duration and Freedom – Bergson's Critical Move Against Kant,” *Diametros* 39, no. 1 (2014): 203-230.
- Kant, Immanuel. *Prolegomena to Any Future Metaphysics – Revised edition*. Translated by Gary Hatfield. Cambridge: Cambridge University Press, 2004.
- Kant, Immanuel. *Critique of Pure Reason*. Translated by Marcus Weigelt. London: Penguin Classics, 2007.
- Mullarkey, John. *Bergson and philosophy*. Edinburgh: Edinburgh University Press, 1999.

