1996

Mysticism, Logic and the Metaphysics of Time: Henri Bergson's Method and Its Implications for Contemporary Philosophy

Gregory A. Clark
Loyola University Chicago

LOYOLA UNIVERSITY CHICAGO

MYSTICISM, LOGIC AND THE METAPHYSICS OF TIME: HENRI BERGSON'S METHOD AND ITS IMPLICATIONS FOR CONTEMPORARY PHILOSOPHY

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

DEPARTMENT OF PHILOSOPHY

BY

GREGORY A. CLARK

CHICAGO, ILLINOIS

JANUARY, 1996

PREFACE

References to Bergson's work are provided in parentheses within the text according to the abbreviations in the LIST OF ABBREVIATIONS. References will usually contain two abbreviations separated by a semicolon. I list the original French first followed by the English translation. For example, "(MeM 193; MaM 173)" refers to page 193 of *Matière et mémoire* and page 173 of *Matter and Memory*. References with only one abbreviation either were not originally written in French, as in the case of AP which was written in Latin, or have not been translated into English, as with TLM. Where more than two abbreviations occur within one set of parentheses, I have provided references to more than one work. Bergson sometimes writes about the same topic in nearly identical words. In such instances a "/" separates two different works.

Most translations of Bergson's work are quite good. The exception to this rule happens to be the most important text for this dissertation. *Matter and Memory* cannot be trusted as a guide to what Bergson does in *Matière et mémoire*. It is nearly impossible, for example, to decipher Bergson's notion of "representation" in *Matter and Memory*. Paul and Palmer translate "*représentation*" as "perception" (MaM 9; MeM 1), "idea" (MaM 93, 164; MeM 98, 182), "thought" (MaM 173; MeM 193), and "memory" (MaM 116, 117; MeM 129) as well as "representation." Likewise, Bergson's doctrine of memory, is impossible to discern in translation. As a rule,

Palmer and Paul translate "*mémoire*" as "memory" and use "recollection" as a translation of "*souvenir.*" Likewise, "memory-images" are almost the only translation for "*images-souvenirs.*"[1] Unfortunately, "*souvenir*" is often rendered as "memory" and not just as "recollection."[2] I have consistently altered the translation of Paul and Palmer to maintain rigor in the terms. I always translate "*souvenir*" as "recollection" and "*mémoire*" as "memory." Other difficulties with the translation will be noted in the text.

In the course of writing these pages, I have acquired more debts of both gratitude and gold than I can hope to repay. As debts of gratitude bind people together in friendship, I would like to thank those who befriended me and helped to make this dissertation both better and more timely than it could have been without their aid. Dr. Adriaan Th. Peperzak read multiple drafts, commented on them with care, and modeled a refreshing vision of the philosophical life. Dr. Kenneth Thompson shared many of my interests and willingly spent many hours with me discussing them. Dr. Harry Gensler worked with me on my first efforts to think about the relation of logic and time. Dr. Ardis Collins, for whom I worked as a teaching assistant, impressed upon me the importance and rigor of philosophical methodology. Dr. John Llewellyn encouraged my first explorations into the relation between Bergson

---

[1] See MeM 99, 100; MaM 91, 92 where "*anciennes images*" and "*images anciennes*" is rendered as "memory image".

[2] This happens nine times in the conclusion alone. MeM 253; MaM 225/ MeM 256; MaM 227/ MeM 262; MaM 233/ MeM 267; MaM 237-8/ MeM 268; MaM 239/ MeM 269; MaM 239/ MeM 270; MaM 240/ MeM 274; MaM 244/ MeM 275; MaM 244.

and Levinas, of which this dissertation is the most recent development. I also thank the Graduate School for a Loyola University Fellowship for the 1993-4 school year. Because a dissertation consumes so much of one's time and energies, it is much more than an academic exercise. Providence Group, Doug Geyer, and, most of all, Heather Ashcroft-Clark called me to live humanly and mediated God's grace to me. What is good, true, or beautiful in this dissertation bears the stamp of these people. I bear sole responsibility for the errors, fallacies, and awkwardness which remain.

TO HEATHER

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

AP "Aristotle's Concept of Place." Translated by John K. Ryan. *Ancients and Moderns* 5 (1970): 12-71.

CE *Creative Evolution.* Translated by Arthur Mitchell. New York: Henry Holt and Company, 1911.

CM *The Creative Mind.* Translated by Mabelle L. Andison. New York: A Citadel Press Book, 1992.

DaS *Duration and Simultaneity.* Translated by Leon Jacobson. Indianapolis: The Bobbs-Merrill Company, Inc., 1965.

DeS *Durée et simultanéité.* 1922. *Mélanges.* Presses Universitaires de France, 1972.

DI *Essai sur les données immédiates de la conscience.* Paris, 1989. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991.

EC *L'Evolution créatice.* Paris, 1910. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991.

ES *L'Énergie Spirituelle.* 1919. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991.

L *Laughter.* in *Comedy.* Garden City: New York: Doubleday Anchor Books, 1956.

MaM *Matter and Memory.* Translated by Nancy Margaret Paul and W. Scott Palmer. New York: Zone Books, 1988.

MaR *The Two Sources of Morality and Religion.* Translated by R. Ashley Audra and Cloudesley Brereton. Garden City, NY: Doubleday Anchor Books, 1935.

ME *Mind-Energy,* Translated by H. Wildon Carr, Westport CT: Greenwood Press, Publishers, 1975.

MeM *Matière et mémoire, Essai sur la relations du corps avec l'esprit.* Paris, 1896. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991.

MeR *Les Deux sources de la morale et de la religion.* 1932. *ŒUVRES*. Presses Universitaires de France, 1959, 5th ed., 1991.

PM *La Pensée et le mouvant.* 1934. *ŒUVRES*. Presses Universitaires de France, 1959, 5th ed., 1991.

R *Le Rire: Essai sur la signification du comique*, 1900. *ŒUVRES*. Presses Universitaires de France, 1959, 5th ed., 1991.

TFW *Time and Free Will: An Essay on the Immediate Data of Consciousness.* Translated by F. L. Pogson. London: George Allen & Unwin Ltd., 1981.

TLM "Trois Leçons de Métaphysique: Au Lycée Henri-IV, 1893" in *Cours II*, edited by Henri Hude, Paris: PUF, 1993.

LIST OF ILLUSTRATIONS

CHAPTER ONE

INTRODUCTION

The Timing of a Thesis

A curious tradition surrounds scholarship on the work of Henri Bergson: Bergson scholars often apologize for their work. The nature of the apologies has changed over the years, however. Scholars writing while Bergson was still popular tried to justify the need for exposition, as if exposition were not a genuinely philosophical activity.[1] Writing in 1911, A.D. Lindsay said,

> Some apology is needed for publishing a book on the philosophy of Bergson. Books on philosophers are always a poor substitute for the writings of the philosophers themselves, and that is especially true of a writer so brilliant as Monsieur Bergson. My excuse is that in some degree the very brilliance and charm of Monsieur Bergson's writing has hindered a proper appreciation of his work.[2]

Today, scholarship on Bergson requires justification because Bergson's work seems irrelevant. A dissertation on the work of Plato or Kant can proceed without prior or special justification in philosophy departments. As part of the established canon of philosophy, we can assume that good work on Plato or Kant will inform

---

[1] Bergson himself also fell prey to this attitude, writing in his introduction to the French translation of William James' *Pragmatism*: "What is there for me to say about it that has not already been said, and much better?" (CM 209; PM 239).

[2] A.D. Lindsay, *The Philosophy of Bergson* (Port Washington, NY: Kennikat Press, Inc., 1911), v. Bergson won the Nobel prize in literature in 1927.

contemporary discussions which have been framed, at least in part, by their thought. Likewise a dissertation on Derrida's work can be justified because his work is still fresh, or, at least, in vogue. The philosophical community has yet to pass a definitive or competent judgment on Derrida's thought. What, on the other hand, can a dissertation on Bergson contribute to the philosophical literature of the late 20th century, over one hundred years since Bergson began publishing? Judgments have already been passed on Bergson's work. The gathering of philosophers in Paris to commemorate the centenary of Bergson's birth (1959) used the occasion to mumble last rites over his corpus.[3] More recently, Leszek Kolakowski's book, *Bergson* (1985), calls the need to write books on Bergson into question: "To be sure, sometimes, somewhere, someone writes a doctoral thesis on 'Bergsonism', yet it may fairly be said that today's philosophers, both in their research and in their teaching, are almost entirely indifferent to his legacy."[4]

Stated most broadly, my questions, and the questions of Bergson scholars for the last 35 years, are these: Why has philosophy turned aside from Bergson? Why should it pay attention to him now?

Historical Introduction to Some Secondary Literature

We can answer these questions only by an historical survey of some influential secondary literature on Bergson. Rather than concentrate on the work of Bergson

---

[3] *Bergson et nous*, Actes du X[e] Congrès des Sociétés de philosophie de langue française (Paris: Librairie Armand Colin, 1959).

[4] Leszek Kolakowski, *Bergson* (Oxford: Oxford University Press, 1985), 1-2.

specialists, I will focus on the literature which has shaped perceptions of Bergson in mainstream philosophy (that is, analytic philosophy and existentialist phenomenology) and made specialized work on Bergson marginal.

Analytic Philosophy and Bergson

Bertrand Russell, along with G.E. Moore, is commonly regarded as one of the founders of the analytic tradition in 20th century Anglo-American philosophy. One might expect that his essays on Bergson would explain why Bergson is neglected in Anglo-American philosophy today.

Bertrand Russell on Bergson

Bertrand Russell published "The Philosophy of Bergson" in 1912.[5] In 1914, he published an article, "Mysticism and Logic,"[6] and a book, *Our Knowledge of the External World*,[7] each of which attacks Bergson's method and philosophical positions.[8] In these attacks, Russell initially insists that he cannot recognize any

---

[5] *The Monist* 22 (July 1912): 321-347. He reprinted the essay twice in different formats. In 1914, he reissued the text with a reply by H. Wildon Carr and a rejoinder to Carr by himself. Bertrand Russell, *The Philosophy of Bergson, With a Reply by Mr. H. Wildon Carr and a Rejoinder by Mr. Russell* (Cambridge: Bowes & Bowes, 1914). He published it again, in 1945, with a few additions as a chapter on Bergson in his *History of Western Philosophy* (NY: Simon and Schuster, 1945), 791-810. I will refer to the text in the *History of Western Philosophy* when possible.

[6] *Hibbert Journal* 12 (July 1914): 780-803. Reprinted in *Mysticism and Logic* (Totowa NJ: Barnes & Noble Books, 1981).

[7] (NY: W.W. Norton & Company, Inc., 1929).

[8] Russell also wrote "The Professor's Guide to Laughter," *The Cambridge Review* 33 (18 January 1912): 193-4, a highly critical review of Bergson's book *Laughter, an Essay on the Meaning of the Comic* (1900).

philosophical arguments in Bergson's work. While this should indicate that Bergson and Russell deeply disagree about proper philosophical method, Russell instead insists that because Russell fails to recognize the arguments, Bergson offers no arguments. Russell concludes his 1912 essay with the claim that Bergson's philosophy

> does not depend on argument, and cannot be upset by argument. His imaginative picture of the world, regarded as a poetic effort, is in the main not capable of proof or disproof. Shakespeare says life's but a walking shadow, Shelley says it is like a dome of many-coloured glass, Bergson says it is a shell which bursts into parts that are again shells. If you like Bergson's image better, it is just as legitimate.[9]

In Russell's essay, the charge of "irrationalism," "mysticism," or "anti-intellectualism" constitutes the chorus of a song he ingrains in the memory through repetition. In 1946, Russell *opens* his criticism of Bergson with a consideration of the influences and effects of "Bergsonian irrationalism." "Bergsonian irrationalism" is a foregone conclusion. This image of Bergson as an "irrationalist," "anti-intellectual,"

---

[9] Russell, "Bergson," 810. Interestingly, in his reply to H. Wildon Carr, Russell backs off from the claim that Bergson offers no arguments. "M. Bergson's philosophy, like all other ambitious systems, is supported by arguments which I believe to be fallacious, but it does not follow that it is in fact false. . . . What I do maintain is that, in view of the mistakes in Bergson's reasoning, his conclusions remain mere imaginative possibilities to be placed alongside the thousand other possibilities invented by cosmic poets." ("Mr. Wildon Carr's Defence of Bergson," *The Philosophy of Bergson*, 33). Likewise, in "Language and Metaphysics," *An Inquiry Into Meaning and Truth* (London: George Allen and Unwin, Ltd., 1961), Russell does offer a refutation of Bergson. There are, he tells us, "those who maintain that there is knowledge not expressible in words, and use words to tell us what this knowledge is. These include the mystics, Bergson, and Wittgenstein." This group "can be dismissed as self-contradictory" (341-2).

and "anti-scientific" constitutes part of Russell's legacy to Anglo-American philosophy.[10]

Bergson himself never published any response to Russell's criticisms. Consequently, the defense of Bergson fell to his disciples. H. Wildon Carr wrote a reply which Bergson called "excellent."[11] Even better is a series of articles by Karin

---

[10] Russell's interpretation has had an enormous influence on the English speaking world's perception of Bergson, even among those not primarily interested in the philosophy of science or the method of logical analysis. Morton White, for example, says that "Bergson was an outspoken irrationalist, a spokesman for the anti-intellectual tendencies that had been accumulating in the writings of the romantics." Later he adds, "His style moves in a way that resembles his own picture of consciousness--not as a series of sentences that can be understood separately, but rather like a series of 'interpenetrating' experiences that lack definiteness, independence, and clarity. Their effect is like that of poetry rather than philosophical prose and they communicate moods that periodically explode into insights rather than propositions that hang together logically and imply a conclusion." ("Time, Instinct, and Freedom: Henri Bergson," *The Age of Analysis* [New York: A Mentor Book, 1955], 66, 67). Leszek Kolakowski holds a similar position. He claims that Bergson is largely of a merely historical interest, "a dead classic," who influenced existentialism. Certainly, he claims, Bergson offers no philosophical method which might be of interest today. "Was there a 'Bergsonism' apart from Bergson himself? Unlike his contemporary Husserl, Bergson has not left any 'school' which would develop his ideas. . . . Bergson's philosophy was perhaps too impregnated with his unique literary style and rhetorical devices, too personal and expressionistic. . . . Bergson, however, offered no applicable 'method' apart from his own results; he inspired other people, but left them no ready-made instrument for further research." (Kolakowski, *Bergson*, 101).

[11] "On Mr. Russell's Reasons for Supposing that Bergson's Philosophy is not True," in Russell, *The Philosophy of Bergson.* In fact, Carr's reply fails to uncover the true differences between the two great minds. Carr only once suggests that Russell and Bergson simply talk past each other: "I think the criticism simply rests on a failure to appreciate the exact problem that Bergson is dealing with in his doctrine of duration. I do not know that Bergson has anywhere distinctly approached the problem of knowledge from the standpoint of what Meinong calls *Gegenstandstheorie*. I do not know what his view on the problem would be if he did give attention to it, but I cannot see its relevance to the actual doctrine of duration" (31).

Costelloe.[12] Like Carr, she points out many of Russell's errors of interpretation, and she recognizes that Bergson and Russell argue about different things.[13] She goes further, however, and traces the difficulty to philosophical method. Costelloe freely concedes that if Bergson were claiming that his opponents were logically inconsistent, Russell would have much to say. But Bergson does not follow this method, and Russell seems incapable of recognizing this fundamental difference between them.[14]

Bergson's account of Russell's antipathy toward him squares with Costelloe's claim that Russell fails to understand Bergson's method. According to Bergson, Russell's fiery rhetoric between 1912 and 1914 was ignited by an oral exchange

---

[12] "An Answer to Mr. Bertrand Russell's Article on the Philosophy of Bergson," *The Monist* 24 (1914): 145-155. See also her "Complexity and Synthesis: A Comparison of the Data and Philosophical Methods of Mr. Russell and M. Bergson," *Aristotelian Society Proceedings*, N.S. 15 (1914-15): 271-303; and "What Bergson Means by 'Interpenetration.'" *Aristotelian Society Proceedings*, N.S. 13 (1912-13): 131-155. Karin Costelloe, who later also published under the name "Mrs. Adrian Stephen," was the niece of Russell's first wife, Alys Pearsall Smith. In a letter to "Goldie" dated Feb. 13, 1913, Russell notes, "Karin read a paper in praise of Bergson to the Aristotelian [Society] the other day--Moore and I attacked her with all imaginable ferocity, but she displayed undaunted courage." (Russell, *The Autobiography of Bertrand Russell*, 222).

[13] "An Answer to Mr. Bertrand Russell's Article on the Philosophy of Bergson," 147.

[14] "Whenever Bergson attacks the mathematical explanation for change on the grounds of consistency, Mr. Russell can at once crush him.

Bergson's real objection to this explanation of change, however, is not concerned with its logical consistency. His real charge against the so-called explanation of change by means of a mathematical continuum is that this explanation leaves out the essential things [sic] which is the *process of change*. . . . Bergson's theories both of change and duration depend upon the assumption that change is a process and not a series of points. It is because Mr. Russell never seriously tackles this assumption that his criticism of Bergson does not seem to go to the root of the matter." ("An Answer to Mr. Bertrand Russell's Article on the Philosophy of Bergson," 146-7).

between the two at the 1911 meeting of the Aristotelian Society, where Russell presented a paper, "On the Relations of Universals and Particulars."[15] Bergson reflected on this event in a conversation with Jacques Chevalier on May 30, 1933:

> Bertrand Russell has never forgiven me for the refutation that I made one day, orally, of his too material interpretation of platonic Ideas. He revenged himself by saying that evolution culminated on one side in the intellect which found its complete development in mathematicians, and on the other side, in instinct which is at best in ants, bees and Bergson.[16]

That is to say, Bergson criticized Russell for treating platonic Ideas as though they were material objects existing in space, separated from one another and from material things by an empty, homogeneous medium.

This is not just an incidental criticism from Bergson's point of view. Bergson's method, particularly in his earliest works, points out how the position of an opponent presupposes a spatial separation between the terms of a problem. Thinking in terms of spatial difference renders the problem unsolvable. Bergson suggests a way

---

[15] *Aristotelian Society Proceedings* N.S. 12 (1911-12): 1-24. Russell also dined next to Bergson at a Trinity College dinner on October 28, 1911. *Bertrand Russell: Prophecy and Dissent*, 1914-16. Vol. 13. ed. Richard A. Rempel et al. (London: Unwin Hyman, 1983), 581.

[16] Jacques Chevalier, *Entretiens avec Bergson* (Paris: Librairie Plon, 1959), 197. See Milič Čapek, *Bergson and Modern Physics: A Reinterpretation and Re-evaluation* (Dordrecht: D.Reidel Publishing Company, 1971), 345. This explanation accounts for the animosity in Russell's writings on Bergson better than the more traditional explanation that Russell's discussions and arguments with William James and Alfred North Whitehead led Russell to Bergson's works. Milič Čapek (*Bergson and Modern Physics,* 345) propagates this view and notes H.C. McElroy (*Modern Philosophers: Western Thought since Kant* [New York: Russell F. Moore, Co., 1950], 141). Further, the account found in Chevalier locates the dispute between Bergson and Russell squarely in the realm of philosophical method.

to think of the terms as temporally rather than spatially different and thus dissolves the problem.

Bergson's criticism, given orally before Russell's colleagues, must have blind-sided Russell. Judging by Russell's response in his articles, he never fully appreciated Bergson's project or method.

Russell's attack on Bergson is important because it accounts for the perception of Bergson in the English-speaking world. If one pushes on these attacks, however, Russell's particular arguments become secondary to the question of proper philosophical method. One goal of this dissertation is to distinguish Bergson's method from that of logical analysis. Because Russell's criticisms do not explicitly raise the question of method or criticize Bergson in a manner that makes the methodological issues transparent, this dissertation does *not* deal with Russell's essay on Bergson. To the extent that such work can be done on the basis of Russell's text, Costelloe has already done it. Further, because Russell's explosive essays of 1912 and 1914 landed so far from their mark, to take them as our texts today would risk appearing to use Russell as a straw man in order to defeat logical analysis.[17]

---

[17] Milič Čapek aptly describes Russell's view of Bergson as "sarcastic" and as "nothing but a weird caricature." Čapek, *Bergson and Modern Physics*, 180-1.

Richard M. Gale on Bergson's Analysis of the Idea of Nothing

Richard M. Gale's "Bergson's Analysis of the Concept of Nothingness"[18] offers a better path into an analytic reading of Bergson for several reasons. First, Gale's vision of philosophy, as the attempt to clarify common-sense notions through the analysis of language, stands in the tradition established by Russell and Moore. In addition, Gale's widely acclaimed work in the philosophy of time puts him in a favorable position to understand Bergson's philosophy.[19] Third, Gale takes pains to read Bergson carefully and with charity. He does not depreciate Bergson's analytical abilities and even claims that certain parts of the analysis are "brilliant."[20] Finally, Gale's focus on Bergson's analysis of the idea of nothing allows for a specific, detailed reading of Bergson.

Gale turns to Bergson's analysis of the idea of nothing "for its promise of clarifying these perplexing concepts [of *negation* and *non-being*]."[21] The method which Bergson uses, according to Gale, is logical analysis. Bergson sets out to derive a *necessary* contradiction in the idea of absolute nothingness, thus showing that the idea has no sense or meaning. One can produce a necessary contradiction, however, only if the idea of nothingness contradicts a necessary truth.

---

[18] Richard M. Gale, "Bergson's Analysis of the Concept of Nothingness," *The Modern Schoolman* 51 (May 1974): 269-300.

[19] Richard M. Gale, *The Language of Time* (London: Routledge & Kegan Paul, 1968).

[20] Gale, 271. On the other hand, Gale endorses Russell's article on Bergson (282 n 11) and repeats the claim that "Bergson was an irrationalist" (285).

[21] Gale, 269.

With this understanding of Bergson's goal and method and with the implied criteria for judging Bergson's success, Gale sets about his examination of Bergson's analysis. The arguments Bergson provides, Gale concludes, fall short of their mark. For example, Bergson's first argument fails to show that we cannot imagine absolute nothingness, because his argument presupposes the intentionality of consciousness, and the intentionality of consciousness is not an analytic truth. The second proof, that the attempt to conceive of absolute nothingness by conceiving of oneself as annihilated leads to contradictions, fails because Bergson neglects

> to distinguish between the content of one's conception--what is conceived--and pragmatic facts about the conceiver, such as that he is thinking. . . . The sentence, 'I do not exist,' is pragmatically self-falsifying in that every use of it makes a false, but contingently false statement. It could be true that I do not exist, only I could never truly assert that it is so.[22]

Since my existence is not necessary, there is no necessary contradiction in the concept that "I do not exist."

In its careful and patient arguments and its lack of inflammatory rhetoric, Gale's reading greatly improves on Russell's. Nevertheless, Gale remains as oblivious to Bergson's philosophical method as did Russell. Gale's criticisms of Bergson's analysis depend on his conception of Bergson's goal and method. Gale himself noted that Bergson's text requires some imaginative re-editing to make it conform to an analytic approach to the problem. If Gale is mistaken about Bergson's project, his analyses may be instructive, but they cannot defeat Bergson's arguments.

---

[22] Gale, 276.

Both Russell's and Gale's work on Bergson, then, implicitly raise the question of the nature and validity of Bergson's philosophical method. They turn aside from his philosophy because they judge his method to be inadequate. To respond to this judgment, I will explicate, in chapters two through four, the underlying concepts on which Bergson's method relies. Chapter five will show how Bergson uses this method to analyze the idea of nothing, and that Gale's interpretation and subsequent criticism of Bergson's method fails.

Existentialist Phenomenology and Bergson

Russell's hostility to Bergson found an echo in France in the person of Julien Benda.[23] However, because phenomenology rather than logical analysis came to dominate French philosophy, Bergson's credit-rating in France never plummeted as drastically as in the English-speaking world. Indeed, even after Bergson's star had faded, many European philosophers, such as Gabriel Marcel,[24] Roman Ingarden,[25]

---

[23] *Le Bergsonisme, ou une philosophie de mobilité* (1912). *Une Philosophie pathétique* (1913).

[24] G. Marcel, "Bergsonisme et musique," *Revue musicale* 6 (1925): 219-229. ("Bergsonism and Music," trans. C.K. Scott Moncrieff, Chap. in *Reflections on Art: A Source Book of Writings by Artists, Critics, and Philosophers*, ed. Susanne K. Langer [New York: Oxford University Press, 1961], 142-151).

[25] Roman Ingarden wrote his doctoral dissertation, "Intuition and Intellect in Henri Bergson," under Husserl at Freiberg in 1918. See also, "L'intuition bergsonienne et le problème phénoménologique de la constitution," *Bergson et nous*, Actes du X^{e} Congrès des Sociétés de philosophie de langue française (Paris: Librairie Armand Colin, 1959), 163-166; and Jean-Marie Fataud, "Roman Ingarden, Critque de Bergson," *For Roman Ingarden: Nine Essays in Phenomenology* (Martinus Nijhoff, 1959), 7-28.

and Maurice Merleau-Ponty,[26] continued to express a deep and lasting appreciation for Bergson's work. Given the differing philosophical climates in the French and in the Anglo-American worlds, one might expect that French philosophers would focus on a different set of issues in Bergson than do English speaking philosophers. This conjecture, however, would be mistaken.

Jean-Paul Sartre[27]

Jean-Paul Sartre, the most influential of the French phenomenologists, was initially drawn to philosophy by the power of Bergson's thought. Bergson's *Essai sur les données immédiates de la conscience* first "gave him the idea that philosophy was the methodical description of the interior states of man or the psychological life."[28] However, in his first major philosophical work, *L'Imagination: Étude critique* (1936), Sartre severely criticizes Bergson and attempts to show the promise of Husserl's phenomenology for the study of consciousness and its objects.

In *L'Imagination*, Sartre uses Husserl's account of the intentionality of consciousness to distinguish between perception, which has a *thing* as its object, and

---

[26] M. Merleau-Ponty, *The Phenomenology of Perception*, trans. Colin Smith (London: Routledge & Kegan Paul, 1962); "Bergson in the Making," Chap. in *Signs*, trans. Richard C. McCleary (Evanston, IL: Northwestern University Press, 1964).

[27] Jean-Paul Sartre, *L'Être et le néant.* (*Being and Nothingness*, trans. Hazel E. Barnes, [New York: Philosophical Library, 1956]); and *L'Imagination: Étude critique*, 1936. (*Imagination: A Psychological Critique.* trans. Forest Williams [Ann Arbor: University of Michigan Press, 1962]).

[28] Herbert Spiegelberg, *The Phenomenological Movement: A Historical Introduction* (Boston: Kluwer Academic Publishers, 1982), 482.

imagination, which has an *image* as its object. Sartre's challenge is to describe an image so as to distinguish it from other forms of existence, particularly the existence of a thing. Sartre calls the confusion of images with things "the naive metaphysics of the image."

Sartre claims that Bergson falls into this naive metaphysics of the image by overlooking the intentional structure of consciousness. Indeed, Sartre does not hesitate to put this in Husserl's own terminology: Bergson "repeatedly confused noema and noesis."[29] The confusion means (1) that Bergson sometimes treats the act of consciousness as if it were an object of consciousness, as if consciousness itself were a thing.[30] But to conceive of consciousness as if it were a thing entails (2) the denial of the claim that consciousness exists only "for-itself."[31] Bergson's position would claim that consciousness can be conscious and yet unaware of itself.[32]

This lack of insight, according to Sartre, leads Bergson to completely misconstrue the nature of an image and its relation to the imagination. Bergson sometimes treats an image as though it were a thing, as when he claims that the entire

---

[29] Sartre, *Imagination*, 45.

[30] "Consciousness for Bergson seems to be a kind of quality, a character simply given; very nearly, a sort of substantial form of reality." (Sartre, *Imagination*, 39).

[31] "Bergson was not of the opinion that consciousness must have a correlate, or, to speak like Husserl, that a consciousness is always consciousness *of* something." (Sartre, *Imagination*, 39). "Bergson considered negligible this characteristic, essential to the occurrence of consciousness, of appearing to itself as conscious. [Thus he confuses] consciousness and the world, treating consciousness as a quasi-substantial quality" (Sartre, *Imagination*, 40).

[32] Richard M. Gale, by contrast, criticizes Bergson's analysis of the idea of nothing because it treats the intentionality of consciousness as an analytic truth.

universe is a world of images and that matter is the ensemble of images, whether or not they are perceived. At other times, he treats an image as though it were an act of consciousness, when he asserts that "Being and being consciously perceived is not a difference affecting the nature of images, but only a difference of degree."[33] From Sartre's perspective, this criticism devastates the whole of Bergson's thought, for in Bergson's "theory of images we find his entire metaphysics."[34]

Sartre does extend his criticisms to Bergson's entire metaphysics in *L'Être et le néant.* Again, he asserts that consciousness exists only for-itself, and from this claim he launches three criticisms. First, Sartre dismisses Bergson's concept of time because it considers the condition of the pure past apart from or isolated from the present. This leads Bergson to posit a pure recollection or a pure memory apart from a consciousness which remembers. But such a "pure memory" actually undermines the notion of memory by conferring on consciousness "the existence of the in-itself."[35]

Second, Sartre rejects Bergson's criticism of the idea of nothingness. Making negative existential judgments depends on an original experience of non-being. Without such an experience, one not only lacks a notion of nothingness, but of negation. "How could we even conceive of the negative form of judgment if all is plentitude of being and positivity? . . . The necessary condition for our saying *not* is that non-being be a perpetual presence in us and outside of us, that nothingness haunt

---

[33] Sartre, *Imagination*, 39. (MeM 35; MaM 37).

[34] Sartre, *Imagination*, 38.

[35] Sartre, *Being and Nothingness*, 110.

being."[36] It will not suffice to simply make negation a category of the mind which lacks any object, for this would again treat consciousness as a thing rather than as what exists only for-itself. "Consciousness . . . cannot produce a negation except in the form of consciousness of negation. No category can 'inhabit' consciousness and reside there in the manner of a thing."[37]

Sartre's criticisms of Bergson all presuppose a particular conception of the proper method of philosophy. As such, Sartre's analysis assumes the superiority (of Sartre's understanding) of Husserl's perspective. But in this form of argument, Sartre merely criticizes Bergson for not being Husserl. As long as his readers share this presupposition, they may forget Bergson fairly quickly and easily. Bergson's insights into consciousness, time, and the idea of absolute nothingness are covered over, displaced by the doctrine of intentionality. Whether the reader should take the point that Bergson's analyses of time cannot be put within the structure of intentionality as an accomplishment or a failure requires another argument. Such an argument, however, would require a look at the philosophical presuppositions of the notion of intentionality. For this we must turn to another philosopher.

---

[36] Sartre, *Being and Nothingness*, 11.

[37] Sartre, *Being and Nothingness*, 11.

Emmanuel Levinas

Like Sartre, Levinas came to philosophy through Bergson's writings[38] and then turned his attention to Husserl's and Heidegger's phenomenology. However, while Husserl and Heidegger dominate Levinas's research, Bergson continually appears in the shadows and plays a very important, if not widely recognized, role. Reflecting on his own career, Levinas noted that "a love of Bergson has remained with me all my life."[39] Indeed, Levinas considers Bergson's *Essai sur les données immédiates de la conscience* one of the five greatest books in the history of philosophy.[40] Beyond this general influence, however, Bergson's criticism of the idea of nothing provides Levinas with a powerful response to phenomenology and to Heidegger's analysis of Being-towards-Death in particular.

A brief sketch of Heidegger's account of Being-towards-Death will allow us to see how Levinas draws on Bergson's insights in order to break free of Heideggarian ontology. According to Heidegger, in anticipating my own death, I anticipate the possibility of my own impossibility. This allows me to grasp Dasein as a whole, as

---

[38] Levinas went to study at Strasbourg when he was eighteen years old: "there I did modern philosophy, contemporary philosophy, and there it was Bergson. And so a love of Bergson has remained with me all my life, though now of course he has been somewhat forgotten." (Raoul Mortley, *French Philosophers in Conversation* [London: Routledge, 1991], 11), See also Levinas, *Ethics and Infinity: Conversations with Philippe Nemo*, trans. Richard A. Cohen (Pittsburgh: Duquesne University Press, 1985).

[39] Mortley, *French Philosophers in Conversation*, 11.

[40] Along with Heidegger's *Sein und Zeit,* "Plato's *Phædrus*, Kant's *Critique of Pure Reason*, Hegel's *Phenomenology of Mind;* also Bergson's *Time and Free Will.*" (Levinas, *Ethics and Infinity*, 37-8).

including all of my possibilities authentically, since it even includes the possibility of impossibility. However, Heidegger goes further and equates this "possibility of my impossibility" with the "possibility of my nothingness." Through the encounter with nothingness or not-being, the way is open to understand what it means for me "to be."

Levinas attacks Heidegger's claim that in anticipating death we confront nothingness, that death provides a confrontation with not-being and hence makes possible the understanding of being. "The unknown of death," Levinas claims, "is not given straight off as nothingness."[41] Death is not nothingness because nothingness is an illusory idea. "Nothing is a false idea, and death is not identical to nothing. The human is then a way of not being-towards-death."[42]

To make this point against Heidegger, Levinas develops a phenomenological description of the way in which we are always immersed in being and do not experience nothingness. This is a description of the *il y a* or the "*there is*." For this insight into the impossibility of experiencing nothingness, Levinas does not credit Husserl.[43] Rather, Levinas consistently claims that the *there is* retrieves Bergson's

---

[41] Levinas, "Time and the Other," *Time and the Other*, trans. Richard A. Cohen (Pittsburg: Duquesne University Press, 1987), 69-70.

[42] Levinas, *Dieu, la mort et le temps* (Paris: Bernard Grasset, 1993), 67, 81, 83. "if by death one means nothingness . . . it is impossible to die." ("Time and the Other," 51.)

[43] According to Derrida, "Levinas, uncomfortably situated in the difference between Husserl and Heidegger--and, indeed, by virtue of the history of his thought--always criticizes the one in a style and according to a scheme borrowed from the other." "Violence and Metaphysics," *Writing and Difference*, trans. Alan Bass (Chicago: University of Chicago Press, 1978), 97-98.

criticism of the idea of absolute nothingness,[44] though not in a way "that would be pre-Heideggerian."[45] This Bergsonian insight provides a basis for Levinas's criticisms of Heidegger's thought.

First, if nothingness is an impossibility, if death is not a confrontation with nothingness and, hence, with the meaning of my own being, what is it? Death, according to Levinas, is the most extreme form of suffering. It is the extreme form of the impossibility of nothingness and of our ultimate passivity and powerlessness. Death is that which is not my own. It is beyond my powers, unknowable, and ungraspable. It comes from elsewhere.

The suffering and death of the other, not the anticipation of my own death, reveals this to me. The suffering of the other person does not disclose my own authentic possibilities. Rather, it breaks my solitude and freedom; it opens me to the other person.[46]

> This approach of death indicates that we are in relation with something that is absolutely other, something bearing alterity not as a provisional determination we can assimilate through enjoyment, but as something whose very existence is made of alterity. My solitude is thus not confirmed by death but broken by it.[47]

---

[44] "When, in the last chapter of *Creative Evolution*, Bergson shows that the concept of nothingness is equivalent to the idea of being crossed out, he seems to catch sight of a situation analogous to that which led us to the notion of the *there is*." (Levinas, *Existence and Existents*, trans. Alphonso Lingis [London: Kluwer Academic Publishers, 1978], 63-4). See also, "Phenomena and Enigma," *Collected Papers*, trans. A. Lingis (Dordrecht, The Netherlands: M. Nijhoff, 1986), 63; *Ethics and Infinity*, 40.

[45] Levinas, *Existence and Existents*, 19.

[46] Levinas, *Dieu, la mort et le temps*, 17-22.

[47] Levinas, "Time and the Other," 74.

Second, this alterity of the other cannot be described within the structures of phenomenology. The intentionality of consciousness privileges the temporal mode of the present when, after the phenomenological reductions, it treats the noema as *immediately present* to the noesis.[48] The intentionality of consciousness requires collecting or synthesizing temporal differences, through retentions and protentions, into the present. It demands synchronizing what is diachronous. The model of intentionality conceives of time and temporal objects, of the present or a re-presentation in the present, so as to efface temporal differences.[49] If temporal alterity is erased, all alterity can be gathered into the present, into what is immediately grasped by consciousness.[50]

The radical alterity of the other is possible only if the other occupies a different time. "The structure of time is not intentional, is not made from protentions and retentions."[51] Neither is the structure of time ecstatic, for in ecstasis "the subject is

---

[48] Levinas, "Diachrony and Representation," *Time and the Other*, trans. Richard A. Cohen (Pittsburg: Duquesne University Press, 1987), 98.

[49] "But, then, the intelligibility and intelligence situated in thought understood as vision and knowledge, interpreted starting from intentionality, consist in privileging, in the very temporality of thought, the present in relation to the past and future. To comprehend the alteration of presence in the past and future would be a matter of reducing and bringing back the past and future to presence--that is, representing them." (Levinas, "Diachrony and Representation," 99.)

[50] "And, seemingly, it would be a matter of understanding all alterity, which is brought together, welcomed, and synchronized in the presence at the interior of the *I think* and which then is assumed in the identity of the *Ego*--it is a matter of understanding this alterity assumed by the thought of the identical--as *its own* and, then still, of leading its *other* back to the *same*." (Levinas, "Diachrony and Representation," 99.)

[51] Levinas, *Dieu, la mort et le temps*, 19.

absorbed by the object and recovers itself in its unity."[52] Levinas describes this different time as that which is "older than," "anterior to," "precedes," "remains prior to," and "before," the formal unity of the structure of consciousness and knowledge.[53]

It follows from this that death can never be now, cannot enter my time, even in ecstasis. Death is not a possibility of mine. It reveals a future which can never become present. This temporal difference is irreducible to presence, or to time which one conceives in terms of the present.

Levinas's criticisms of presence can sound very close to Heidegger's.[54] Levinas is well aware of Heidegger's insights and pays his debts to Heidegger when it is appropriate. As should be clear, however, Levinas is criticizing, not parroting, Heidegger. Thus, what is interesting in Levinas's settling of accounts is that he does not pay dues to Heidegger alone. In his later writings on time, he mentions Heidegger in the same breath with Rosenzweig and Bergson. In each case, however, he emphasizes the contribution of Bergson.[55] In "Wholly Otherwise" (1976), his short essay on Derrida, Levinas goes further and seems to discredit Heidegger. Precisely

---

[52] Levinas, "Time and the Other," 41.

[53] Levinas, "Diachrony and Representation," 106.

[54] "The thesis that all cognition has 'intuition' as its goal, has the temporal meaning that all cognizing is making present." (Martin Heidegger, *Being and Time*, trans. Macquarrie and Robinson [New York: Harper & Row Publishers, 1962], H 363 n xxvi.)

[55] Levinas, "The Old and the New," *Time and the Other* trans. Richard A. Cohen (Pittsburg: Duquesne University Press, 1987), 128-133; "Diachrony and Representation," 119-120.

where most scholars would expect to find Heidegger's name, Levinas offers Bergson's name *instead*:

> Derrida's critique, which liberates time from its subordination to the present, which no longer takes the past and the future as modes, modifications, or modulations of presence, and which arrests a thinking which reasons upon signs as upon signifieds, thinks through to the end Bergson's critique of Being.[56]

Of course Bergson does not criticize Husserl's notion of intentionality or identify the priority of presence which it assumed. He criticizes the notion of Being as presence by distinguishing the pure past from the mode of the present, and he does so thirty years prior to Heidegger. Bergson's philosophy of time cannot be fit into the structure of intentionality.

Of the three preceding issues, the criticism of the idea of nothingness is clearly the most basic for Levinas. Levinas's criticism of Heidegger begins explicitly with an insight achieved by Bergson in the analysis of the idea of nothing. For Levinas, Bergson is more than just "the enemy of my enemy;" Bergson is a friend. By reading Bergson's work as a continuous whole, from *Essai sur les données immédiates de la conscience* (1889) to *Les Deux sources de la morale et de la religion* (1932), Levinas brings Bergson very close to his own positions on time and sociality:

> The *élan vital* is not the ultimate signification of the time of bergsonian duration. In *The Two Sources of Morality and Religion*, duration, which in *Creative Evolution* is thought as *élan vital*, becomes interhuman life.

---

[56] Levinas, "Wholly Otherwise," *Re-Reading Levinas*, eds. Robert Bernasconi and Simon Critchley (Bloomington and Indianapolis: Indiana University Press, 1991), 6.

> Duration becomes the fact that a man can send forth a call to the interiority of the other man.[57]

Our survey of Sartre and Levinas has briefly highlighted the issues of nothingness, sociality, and time with regard to the structure of the intentionality of consciousness. Sartre and Levinas agree that Bergson's thought cannot be incorporated into phenomenology. They disagree on how to respond to Bergson in light of this fact. Sartre's disagreements with Bergson, his method, and his own positions on nothingness, and time are direct developments of his understanding of the intentionality of consciousness. Levinas uses Bergson's analysis of the idea of nothingness to criticize the structure of intentionality as well as its implications for sociality and temporality.

Direction of Research Suggested by the Secondary Sources

I began this survey of the secondary literature with two very general questions: Why did philosophy turn away from Bergson's work? and What does Bergson have to offer to philosophy at the end of the twentieth century? The first question calls for an answer drawn from the study of intellectual history, and the survey of the secondary literature provides some suggestions. These suggestions will have to be clarified.

---

[57] Levinas, *Dieu, la mort et le temps*, 67. Interviews given by Levinas in 1981 leave one to wonder what, if anything, Levinas thinks he has added to Bergson's analyses: "it is Bergson who taught us the spirituality of the new, 'being' disengaged from the phenomenon in an 'otherwise than being.'" (*Ethics and Infinity*, 28). To show that these are not merely casual remarks, he makes even stronger claims in later (1982) scholarly works. "Is it forbidden to also recall that in *The Two Sources of Morality and Religion*, the duration of *Time and Free Will* and *Matter and Memory*, thought as *élan vital* in *Creative Evolution* signifies love of the neighbor and what I have called 'to-God' ['A-Dieu']? ("Diachrony and Representation," 119-120). See also, *Dieu, la mort et le temps*, 115.

First, and most prominently, the philosophers who determined the course of contemporary philosophy do not appreciate Bergson's method. I pointed this out in the cases of Russell and Gale, but it is also true for Sartre and Levinas, neither of whom provides an account of Bergson's method. This is particularly regrettable with Sartre, as methodological differences constitute his chief objection to Bergson.

Bergson's analysis of the idea of nothing has also formed a focal point of this survey. Once again, however, the exact relation of Sartre and Levinas to Bergson remains ambiguous on this point because neither philosopher provides us with a careful reading of Bergson's analysis of the idea of nothingness. This is extremely frustrating with Sartre, as "nothingness" proves such a central element of his own thought. But Levinas also neglects to offer a close reading of Bergson's analysis, contenting himself instead with the description of the *there is*.

What has been said of Hegel, then, might also be said of Bergson: he was not so much refuted as forgotten. Forgetfulness is more effective than refutation, but it lacks philosophical integrity. To properly assess Bergson's thought and his relation to either Sartre or Levinas, then, would we require an account of his method and a reading of his analysis of the idea of nothingness.

If, historically, philosophers failed to understand Bergson's method and his analysis of the idea of nothing, one might speculate on an answer to my second question, "What does Bergson have to offer to philosophy today?" Perhaps, Bergson can enable philosophy at the end of the twentieth century to reconsider its methods.

Further, the concept of nothingness may provide the whetstone against which philosophy may sharpen its methods.

Gilles Deleuze and Bergson

This suggestion for answering my second question is, I think, on the right track. Indeed, Gilles Deleuze has already been showing the possibilities which Bergsonism holds for rethinking philosophy. Before I pursue this suggestion, then, I will survey the work of Deleuze as it relates to my question.

Deleuze is a French philosopher, though not a phenomenologist. He claims to have a great appreciation for Anglo-American philosophy but is virtually unintelligible to anyone trained in analytic philosophy. Nevertheless, his writings have been enormously successful in France and most of his work has been translated into English.

Deleuze brings a unique conception of philosophy to his three highly original pieces on Bergson.[58] According to Deleuze, the discipline of philosophy consists in the creation of concepts. The history of philosophy is the history of the development of new concepts, and the movement of a single philosopher's thought can be traced through the new concepts he or she creates.

---

[58] "Bergson," *Les philosophes célèbres*, ed. Merleau-Ponty, Edition d'Art Lucien Mazenod (Paris, 1956): 292-299; "La conception de la différence chez Bergson," *Les Études bergsoniennes* 4 (1956): 79-112; *Le Bergsonisme* (Paris: PUF, 1966). (*Bergsonism*, trans. Tomlinson and Habberjam [New York: Zone Books, 1991]). *Bergson: Memoire et vie* (Paris: PUF, 1957) is a collection of Bergson's texts which supports Deleuze's reading.

Deleuze's view of philosophy requires that his studies on Bergson be comprehensive. Therefore, Deleuze traces the development of Bergson's thought through the creation of a series of concepts: duration, memory, and *élan vital.* He explicitly attends to Bergson's method of "intuition" and ties together the whole of Bergson's work. I turn to Deleuze, then, to find a contemporary and rigorous interpretation of Bergson's method and of his analysis of the idea of nothingness.

Deleuze's Reading of Bergson

According to Deleuze, we can understand Bergson's criticism of the idea of nothing only if we already understand his method. I will consider three aspects of Deleuze's reading of Bergson: (a) the concept of metaphysical difference as expressed in spatial difference, temporal difference, and the difference between spatial and temporal difference, (b) the philosophical method which these metaphysical differences imply, and (c) the account of Bergson's criticism of the idea of nothing given this philosophical method.

Metaphysical Difference

According to Deleuze, Bergson bases his method on a distinction between two kinds of differences. Things can differ spatially when they occupy different places or temporally when one succeeds the other. Deleuze juxtaposes space and time as two different multiplicities.

> One is represented by space . . . : It is a multiplicity of exteriority, of simultaneity, of juxtaposition, of order, of quantitative differentiation, of *difference in degree*; it is a numerical multiplicity, *discontinuous and actual.* The other type of multiplicity appears in pure duration: It is an

> internal multiplicity of succession, of fusion, of organization, of heterogeneity, of qualitative discrimination, or of *differences in kind*; it is a *virtual and continuous* multiplicity that cannot be reduced to numbers.[59]

Beyond this litany of opposed characteristics, Deleuze does not offer his reader much help, assuming instead that his reader is already familiar from Bergson's own work with these two multiplicities and their differences from one another.

Deleuze's Reading of Bergson's Method

According to Deleuze, Bergson's philosophical method is implied in spatial and temporal differences. What does this mean? How can a concept of difference imply a philosophical method? In very general terms, the claim is that our questions almost always assume a spatial difference between the objects of inquiry. For example, while we know that a "mind" is not an object in space, when we consider the relation of the mind to the body, we most often conceive of them as spatially distinct objects. According to Bergson, this makes any solution to the problem impossible. Bergson wants to enable us to criticize thinking in terms of space, and ask questions in terms of time.

This general statement fails to suffice for Deleuze, however. While Deleuze may take for granted the distinction between space and time, he wants to show in a precise way how Bergson's method rests on that distinction. Deleuze, then, attempts to formalize Bergson's method of intuition, actually listing the rules of the method

---

[59] Deleuze, *Bergsonism*, 38.

which follow from the distinction between spatial and temporal differences. These rules directly address the way in which one states philosophical questions.

The first rule identifies spatial difference with difference of degree. It warns against false questions, questions which assume a difference of degree between their terms: "Condemn false problems and reconcile truth and creation at the level of problems."[60] The second rule spells out requirements for stating a true question: "Struggle against illusion, rediscover the true differences in kind or articulations of the real."[61] The third rule, taking its cue from *Matière et mémoire*, says, "State problems and solve them in terms of time rather than of space."[62] Because differences in kind are differences within duration or real time, and because space cannot recognize differences in kind, the third rule sums up the previous rules.

Deleuze's formalized rules of Bergson's method show that to *think* in terms of space refers primarily to thinking differences of degree, while thinking in terms of time indicates thinking differences in kind. According to Deleuze's account of intuition, difference in degree between spatial objects dominates all other spatial characteristics, including externality and juxtaposition. Difference in kind is more important than motion for thinking in terms of time.

---

[60] "False problems are of two sorts, 'nonexistent problems,' defined as problems whose very terms contain a confusion of the 'more' and the 'less'; and 'badly stated' questions, so defined because their terms represent badly analyzed composites. (Deleuze, *Bergsonism*, 15, 17).

[61] Deleuze, *Bergsonism*, 21.

[62] Deleuze, *Bergsonism*, 31. "Questions relating to subject and object, to their distinction and their union, should be put in terms of time rather than of space" (MeM 74; MaM 71).

The Criticism of the Idea of Nothing

In principle, these rules, which bring metaphysical differences into philosophical questions, should account for all Bergson's analyses, including the criticism of the idea of nothing. Deleuze considers Bergson's account of the idea of nothing by way of explicating the first rule of the method. The general rule states, "Condemn false problems and reconcile truth and creation at the level of problems."[63] Deleuze then formulates an explanation which he calls a "complementary" rule. "False problems are of two sorts, 'nonexistent problems,' defined as problems whose very terms contain a confusion of the 'more' and the 'less'; and 'badly stated' questions, so defined because their terms represent badly analyzed composites."[64] Deleuze classifies the problem of the idea of nothing as a "nonexistent problem" which confuses the more and the less. In fact, the problem of the more and the less is a problem concerning negation, and negation itself leads to false problems.[65]

Let us follow the analysis according to the rules that Deleuze attributes to Bergson's method. The false problem asks "Why is there something rather than nothing?" As a false problem it confuses the more with the less; it assumes that absolute nothing is less than something and that something is more than absolute nothing. Add to this the claim that the less is prior to the more, that nothing precedes

---

[63] Deleuze, *Bergsonism*, 15.

[64] Deleuze, *Bergsonism*, 17.

[65] Deleuze, *Bergsonism*, 18.

something, and one must give an account for why there should be something over and above nothing.

Deleuze acknowledges that Bergson reverses the evaluation by arguing that a negative idea contains more than a positive idea. A negative idea presupposes (1) the positive idea; (2) the mental operation of negating the positive idea; and (3) a psychological motive, such as a disappointed expectation, for (2).[66] However, this can only be a provisional response, according to Deleuze, because Bergson condemns *all* attempts to think in terms of more and less. To continue to state the problem in terms of the more and the less is not yet to state the problem truly.

To state problems truly, one needs Deleuze's second rule: "Struggle against illusion, rediscover the true differences in kind or articulations of the real."[67] Leaning on Bergson's related analysis of the problem of disorder, Deleuze argues that the problem of nothingness will disappear, not when we realize that there is more in the idea of nothing than in the idea of something, but when we recognize that two beings can differ in kind without either containing anything negative.[68]

> The idea of nonbeing appears when, instead of grasping the different realities that are indefinitely substituted for one another, we muddle them together in the homogeneity of a Being in general, which can only be opposed to nothingness, be related to nothingness. . . .

---

[66] Deleuze, *Bergsonism*, 17.

[67] Deleuze, *Bergsonism*, 21.

[68] "The heart of Bergson's project is to think differences in kind independently of all forms of negation: There are differences in being and yet nothing negative." (Deleuze, *Bergsonism*, 46).

> In short, each time that we think in terms of more or less, we have already disregarded the differences in kind between the two orders, between beings, between existents.[69]

The false problem concerning "Why is there something rather than nothing?" emerges from thinking in overly general terms about being, instead of thinking of differences in kind between beings. The true question would be "How does this kind of being differ from that kind of being?"[70] This requires that nonexistent problems, such as that generated by the idea of nothing, which confuse the more and the less, are reducible to badly stated questions, which consist of badly analyzed composites.

According to Deleuze's third rule, however, even this analysis should not yet be adequate. Failing to recognize differences in kind arises from the analysis of beings according to spatial differences. The difference between kinds of beings must be thought as differences within duration. Deleuze pursues this line of thought in various ways throughout *Bergsonism* but never explicitly follows the analysis of the idea of nothing through to the third rule.

Nevertheless, Deleuze's work provides us with the most powerful consideration of Bergson's method and he works out that method with an eye to Bergson's criticism

---

[69] Deleuze, *Bergsonism*, 20.

[70] "What is, in fact, the common root of all negation? We have already seen it. Instead of starting out from a difference in kind between two orders, from a difference in kind between two beings, a general idea of order or being is created, which can no longer be thought except in opposition to a nonbeing in general, a disorder in general, *or else* which can only be posited as the starting point of a deterioration that leads us to disorder in general or to nonbeing in general. In any case, the question of difference in kind -- 'what' order? 'what' being? -- has been neglected." (Deleuze, *Bergsonism*, 46-7).

of the idea of nothing. For this reason, Deleuze's thought will provide the horizon against which we will work out Bergson's concept of duration and its implications for philosophical method in chapters two, three, and four.

Summary

I began this survey of the secondary literature questioning whether and how Bergson might be relevant to contemporary philosophy. To answer this question, I did not turn to Bergson specialists but to those with a higher profile in mainstream philosophy. If Bergson were central to the projects of Richard M. Gale, Emmanuel Levinas, or Gilles Deleuze, then his work would be relevant to contemporary philosophy, if only in a derivative manner.

What have we found? Richard M. Gale does devote one essay to Bergson, examining his analysis of the idea of nothing. While he works very hard to read Bergson well, he ends by dismissing Bergson's work as inconclusive. The case of Gale, then, argues for the insignificance of Bergson's thought for contemporary philosophy. In order to argue that Bergson does speak to contemporary philosophy, I must respond to Gale's criticism.

Emmanuel Levinas does not devote any single essay to Bergson. Nevertheless, he often refers to Bergson when discussing nothingness and time. If Bergson is important to Levinas, this is indicated, but not explicitly shown, in his writings. Thus, the relation of Levinas to Bergson remains tantalizingly ambiguous.

One could argue that Bergson's work is a focal point only for the enterprise of Gilles Deleuze.[71] Deleuze's thesis is that Bergsonism constitutes a philosophy of metaphysical difference.[72] In *Bergsonism*, he approaches this thesis by explicitly opposing "differences in being" to logical differences, which require a negation: "The heart of Bergson's project is to think differences in kind independently of all forms of negation: There are differences in being and yet nothing negative."[73] Deleuze continues to draw on Bergson in more recent writings.[74]

Deleuze's work has attracted a great deal of attention for its originality. When Deleuze writes about the concepts Bergson created, he is also practicing philosophy

---

[71] For a consideration of Bergson's texts from the perspective of an interest in Deleuze, see Paul Douglas, "Deleuze's Bergson: Bergson Redux," *The Crisis in Modernism: Bergson and the Vitalist Controversy*, eds. Frederick Berwick and Paul Douglas (Cambridge University Press, 1992); Paul Douglas "Deleuze and the Endurance of Bergson," *Thought* 67, 264 (March 1992): 47-61; and Michael Hardt, "Bergsonian Ontology: The Positive Movement of Being," Chap. in *Gilles Deleuze: An Apprenticeship in Philosophy* (Minneapolis: University of Minnesota Press, 1993).

For hostile considerations of Deleuze's texts from the perspective of an interest in Bergson, see J. Chenu, "Gilles Deleuze: Le bergsonisme," *Etudes philosophiques et litteraires*, 1, 1 (1967): 47-50; and Madeleine Barthélemy-Madaule, "Lire Bergson," *Les Études bergsoniennes* 8 (1968): 85-120.

[72] "The notion of difference ought to throw a certain light on the philosophy of Bergson, but inversely Bergsonism ought to provide the greatest contribution to a philosophy of difference." ("La conception de la différence chez Bergson," *Les Études bergsoniennes* 4 [1956] 80).

[73] Deleuze, *Bergsonism*, 46.

[74] Deleuze provides extensive commentary on Bergson in *Cinéma 1: L'Image-mouvement* (Les Editions de Minuit, 1983). (*Cinema 1: The Movement-Image*, trans. Tomlinson and Habberjam [Minneapolis: University of Minnesota Press, 1986]) and *Cinéma 2: The L'Image-temps* (Les Editions de Minuit, 1985). (*Cinema 2: The Time-Image*, trans. Tomlinson and Galeta [Minneapolis: University of Minnesota Press, 1986]).

and creating concepts of his own.[75] Specifically, Deleuze attempts to form a concept of difference which is not reducible to the difference between concepts. Based on his development of a concept of difference, Michel Foucault claims that Gilles Deleuze may well be the defining philosopher of this century.[76] This would suggest that Deleuze's work on Bergson has been enormously productive for his own philosophical development. Further, Deleuze's success demonstrates both that Bergson continues to be important[77] and that we need to attend to Deleuze's work on Bergson. If Deleuze's reading is correct, if the concept of difference functions as the ground of Bergson's thought, then Deleuze enables us to understand Bergson's relevance for postmodern philosophy.

However, it is necessary to determine whether Deleuze provides a faithful representation of Bergson, at least in his works devoted to Bergson. That is, Deleuze's success might also suggest that Deleuze simply pulls Bergson along in the

---

[75] "Deleuze's interpretation of Bergson (formulated as early as 1956) stands at the head of a long discourse on difference in French thought that constitutes a theoretical touchstone for post-structuralism. Here we find a particular and rigorous usage of the term ['difference']." (Hardt, 1-2). Indeed, on the basis of Deleuze's anti-Hegelian explorations of difference, Vincent Descombes claims that Derrida and Deleuze occupy "that remarkable point of modern metaphysics which all preceding discourse had indicated like a flickering compass." *(Modern French Philosophy*, trans. L. Scott-Fox and J.M. Harding, [New York: University of Cambridge Press, 1980], 137).

[76] "Perhaps one day, this century will be known as Deleuzian." ("Theatrum Philosophicum," *Language, Counter-memory, Practice: Selected Essays and Interviews*, ed. Donald F. Bouchard [Ithica, NY: Cornell University Press, 1977], 165). In this essay, Foucault describes Deleuze's method in the same terms that Deleuze describes Bergson's method (176). Deleuze repays the compliment in his work, *Foucault* (trans. Seán Hand [Minneapolis: University of Minnesota Press, 1988], 13).

[77] "The case of Deleuze suggests that Bergsonism has indeed endured." (Douglas, "Deleuze's Bergson: Bergson redux," 368).

wake of his own creative work. If Deleuze's work on Bergson distorts Bergson's own work significantly (and I will argue that it does) one must look elsewhere to determine the import of Bergsonism for philosophy today.

Plan of the Study

This dissertation answers two questions: "What is Bergson's method?" and "What relevance does that method have for philosophy today?" These questions are not adequately answered until chapter six. I have adopted two guiding principles in my attempt to discern Bergson's method. First, I determine Bergson's method with reference to his analysis of the idea of nothing. I have chosen this analysis because, as the survey of the secondary literature has shown, it is both historically and philosophically important. Also, whatever explicit clues Bergson might give his readers about his method, some particular analysis must be chosen, for the "method that is being proposed is understood only if it is applied to an example" (PM 76; CM 71). I take up Bergson's analysis of the idea of nothing in chapter five where I distance his method from that of Richard M. Gale's.

My second guiding principle is drawn from the work of Gilles Deleuze. Deleuze claims that the concept of difference provides the key to Bergson's method, that the concept of difference is developed in Bergson's philosophy of space and time, and that this method based in difference accounts for the analysis of the idea of nothing.

Bergson's texts indicate that Deleuze correctly sees an intimate connection between Bergson's philosophy of space and time, Bergson's analysis of the idea of

nothing, and Bergson's method. Bergson insists on the connection between his method and his philosophy of time: My "conclusions on the subject of duration were, as it seemed to me, decisive. Step by step they led me to raise intuition to the level of a philosophical method" (PM 25; CM 30). Likewise, Bergson claims that his belief that reality is temporal led him to consider the idea of nothing, in order to show that "*a reality which is self-sufficient is not necessarily a reality foreign to duration*" (EC 298; CE 298). That is to say, according to Bergson's self-interpretation, the idea of duration or real time generates both his method and the motive for his analysis of the idea of nothing.

My question to Deleuze concerns whether the concept of difference provides the ground which joins this cluster of concepts. If Deleuze is correct, the dissertation will turn out to be an extensive verification of Deleuze's work. My strategy is to assume that Deleuze is accurate and to try to interpret Bergson's texts accordingly. If and when the interpretation breaks down, runs into fatal objections, or ignores large segments of Bergson's text, then I must modify the formulation of the center of Bergson's thought.

Chapters two, three, and four develop Bergson's philosophy of space and time on the basis of the principle of differentiation which each introduces. Chapter two delineates Bergson's notion of space and shows, from the side of space, why time must be different than space. In this chapter, I am particularly concerned to determine whether Deleuze's description of Bergson's concept of space is valid. Deleuze says that space is "a multiplicity of exteriority, of simultaneity, of juxtaposition, of order, of

quantitative differentiation, of *difference in degree*; it is a numerical multiplicity, *discontinuous and actual.*"[78]

Chapter three approaches Bergson's own doctrine of duration in an indirect manner, by considering Bergson's criticism that philosophers use space to think about time, rather than thinking about time itself. Specifically, it shows how this claim applies to Aristotle's definition of time as "that which is numbered in motion with respect to the *before* and *after*." It defends Bergson's interpretation against Heidegger's criticisms of Bergson, and it shows why Bergson rejects each part of Aristotle's definition. This approach to Bergson's doctrine of duration allows the issues which dominate the history of philosophy of time to determine our approach to Bergson's doctrine of duration.[79] If one starts from Aristotle's definition of time, the nature of the *before* and *after*, in their distinction from and relation to one another, determines one's philosophy of time. By taking these issues, and not Aristotle's solutions, as guides, I move to Bergson's own positive position on duration as presented in *Matière et mémoire*.

Matière et mémoire, the most complex and difficult of Bergson's books, moves through a series of diagrams as it locates more precisely the relation between the *before* and *after*. With the last of these diagrams, the diagram of the cone, Bergson represents the nature of time. Taking the diagrams as stepping stones, chapter four

---

[78] Deleuze, *Bergsonism*, 38.

[79] Though Appendix A does set out to show that Bergson's criticisms apply equally to J.E. McTaggart and W.V.O. Quine.

provides an exposition of the progress of Bergson's thought in *Matière et mémoire* and of the meaning of the diagram of the cone in particular. This chapter will show how the diagram of the cone provides the basis for a method. Thinking in terms of time will consist of thinking the terms of a problem as temporally distinct and as interpenetrating one another.

If Deleuze reads Bergson correctly, the expositions of differences in chapters two, three, and four should allow us, in chapter five, to understand Bergson's analysis of the idea of nothing. As noted above, the significance of this analysis for Deleuze is that it shows that temporal differences cannot be reduced to logical differences, that the *before* and *after* are not negations of one another. Deleuze, however, does not provide much exposition on this point. Thus, in chapter five, I take up Richard M. Gale's reading of Bergson's analysis. Gale assumes that Bergson's method consists in logical analysis. Deleuze's point will be both clarified and sustained if Gale's reading fails for neglecting the distinction between logical differences and temporal differences.

Chapters two through five show that Deleuze's interpretation can be sustained, at least in its broadest contours. After voicing some objections to this reading of Bergson, chapter six corrects the inadequacies of Deleuze's interpretation, and it offers a general statement of Bergson's method. Finally, I return to the question that initiated our survey of the secondary literature: What is Bergson's vision of the philosophical enterprise?

CHAPTER TWO

SPACE, TIME, AND EXTENSION

Bergson's method will become intelligible when we have seen how his conception of duration generates his method. Bergson's conception of duration emerges by way of contrast with his idea of space. Before we turn directly to Bergson's method and to the way that method is revealed in his analysis of the idea of nothing, we must first consider Bergson's conceptions of space, time, and the difference between space and time. To grasp Bergson's conception of the difference between space and time, we need to consider both space and time, each according to its own nature. This chapter begins, then, with Bergson's concept of space. Deleuze claims that for Bergson space represents "a multiplicity of exteriority, of simultaneity, of juxtaposition, of order, of quantitative differentiation, of *difference in degree*; it is a numerical multiplicity, *discontinuous and actual.*"[1] To evaluate these claims, this chapter examines Bergson's texts.

Section I develops Bergson's definition the nature of space. Space is, he argues, a homogeneous medium, and every homogeneous medium is space. The nature of space dictates the types of distinctions between spatial objects. Section II shows that objects in space are external to one another, juxtaposed, set side by side.

---

[1] Deleuze, *Bergsonism*, 38.

These characteristics allow us to distinguish space and spatially distinguished objects from forms of differentiation with which space might be confused. Section III distinguishes space from extension. Space is a form of intuition (in Kant's sense of the word) by which we order our perceptions of the external world. Extension is the product of space and sensation. Section IV establishes (1) the distinction between space and real time and (2) the identity of space and homogeneous time. This discussion provides the basis for understanding what Bergson means when he talks about space and what it means to think in terms of space. It gives substance and precision to part of Deleuze's definition by showing that *objects* in space are exterior, juxtaposed, discontinuous, and simultaneous.[2]

Homogeneity as the Definition of Space

In the *Essai sur les données immédiates de la conscience*, Bergson identifies space and homogeneity. He asserts both that "space is to be defined as the homogeneous" and "inversely every homogeneous and unbounded medium will be space" (DI 73; TFW 98). Homogeneity designates not a positive qualitative alikeness, but rather "the absence of every quality" (DI 73; TFW 98).[3] Thus, space is simply a medium which lacks all quality, and any medium which lacks quality is space. In this sense, space is "amorphous" (MeM 208, 243; MaM 187, 216). From this purely

---

[2] Chapter four will argue, against Deleuze, that space *does not* introduce differences of degree.

[3] Bergson never gives a strict definition as to what counts as a quality. As examples, he sometimes considers color, the feeling of direction, the difference between left and right, and aging.

negative definition, it follows that one cannot distinguish two different spaces by their qualitative differences.

The positive attributes of space follow from this negative definition. Because these attributes are commonly assigned to geometrical space, commentators have often simply accepted them without understanding how they follow from Bergson's identification of homogeneity and space. This simple substitution of geometry for Bergson's position, however, lacks philosophical rigor, fails to understand the precise meaning of Bergsonian space, and fails to make explicit how Bergsonian space impinges on areas other than geometry.

Infinite Divisibility

Space is infinitely divisible. Bergson gives two expressions to this thesis. First, he offers the simple geometrical definition: "the interval which separates two points is infinitely divisible" (DI 84; TFW 112 / MeM 210, 211, 214; MaM 188, 189, 192). The philosophical meaning of divisibility says the same thing differently. "Space can be divided and put together again according to any law whatever" (DI 84; TFW 113 / MeM 214; MaM 192).

Emphasizing the first expression, we may say that the infinite divisibility of space means that one will never reach an indivisible interval of space. Hence, one can divide space anywhere and as many times as one likes. After each division, one will still have a divisible interval of space. This leads us to the point of the second expression. Space will never change its nature, become something different, or become indivisible, regardless of the frequency of division or the place divided. The

ultimate constituents of space have no limits or definite articulations which require a specific law or form for divisibility.

The homogeneous nature of space accounts for its infinite divisibility. Space lacks all quality and all qualitative differentiation; it has no "natural joints" or "natural articulations" which would prevent division at a particular place or after a certain number of cuts. One cannot arbitrarily divide something with natural joints or articulations, which is actually constituted by indivisibles, without doing violence to its nature. "As long as we are dealing with space, we may carry the division as far as we please; we change in no way, thereby, the nature of what is divided" (MeM 231; MaM 206). The lack of differentiation within itself allows it to be divided anywhere, arbitrarily, without changing its nature.[4]

Someone may object by asserting that dividing a line does indeed change the line. A line segment of definite length differs from the two line segments created by bisecting that line. The bisection produces two lines, each of which is one half the length of the original line.

One need not modify anything Bergson has said to account for this type of change in the line. Bergson does not claim that a geometrical line does not change at all when divided. His claim is, rather, that the resulting lines do not differ in kind from the original line. The division of a line segment will always produce line segments which are qualitatively alike, never two indivisible points.

---

[4] Deleuze, *Bergsonism,* 41-42; *A Thousand Plateaus,* trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 483.

Continuity

The claim that space is infinitely divisible entails the claim that "the essential character of space is continuity" (MeM 220; MaM 197).[5] In this Bergson follows Aristotle, who claims that continuity *means* infinite divisibility.[6]

Anything which is "one" is continuous. If something is one, then it is infinitely divisible. Continuous things, according to Aristotle, are composed of parts whose extremities are one or identical. That which is continuous or one, consequently, consists, at least potentially, of an infinite number of parts. A geometrical line is the most obvious example of continuity.

Something may be discontinuous in two ways. First, something may be "two" and thus already divided and discontinuous. In a second sense something is discontinuous if it is not composed of parts, even potentially. If something is not even potentially composed of parts, it is absolutely simple and indivisible. A geometrical point is discontinuous in the second sense and a line divided into two is discontinuous

---

[5] See also TLM 398. An Aristotelian, Jesse De Boer, misses this point. He argues that Bergson's reply to Zeno fails because Bergson thinks motion "is continuous, undivided, indivisible" while the line is "multiple, *discontinuous*, divisible, and *actually divided* into an infinity of parts in juxtaposition (emphasis added)." Again, he says that, according to Bergson, "space is really divided, motion and time are not. . . . Space, indeed, can be composed of points" (Jesse De Boer, "A Critique of Continuity, Infinity, and Allied Concepts in the Natural Philosophy of Bergson and Russell," Chap. in *The Return to Reason*, ed. John Wild [Chicago, Henry Regnery Company, 1953], 99-100).

[6] Aristotle, *Physics,* trans. R.P. Hardie and R.K. Gaye, in *The Basic Works of Aristotle,* ed. Richard McKeon (New York: Random House, 1941), 4. 231 a 21.

in the first sense. A series of geometrical points is continuous because the points themselves are discontinuous in the second sense of the word.

Something which is discontinuous in the first sense may be potentially continuous, as when one joins two lines together to form one continuous line. Aristotle also holds that things which are discontinuous in the second sense of the word cannot form a continuity. To form a continuous thing the extremities of the discontinuous parts would have to form a unity. "Extremities" are themselves parts, however. Since discontinuous things lack parts, they have no extremities which could be one with the extremities of other discontinuous things. Continuous things, therefore, must be composed of continuous parts. Consequently, continuous things are infinitely divisible. Thus, because space is continuous, it consists of parts which are themselves continuous. One can decompose space into parts without fundamentally altering that space. Likewise, one can combine parts to form a space. Thus, lines must be composed of line segments, not of points.

The Difference Between Objects in Space

Objects occupy a homogeneous medium which is not empty. Objects are spatially distinct or different insofar as they are separated by homogeneous, continuous intervals (DI 73; TFW 98). As such, space is "a principle of differentiation other than qualitative differentiation" (DI 71; TFW 95). Objects distinguished spatially are external to one another: "externality is the distinguishing mark of things which occupy space" (DI 73; TFW 99). Bergson also refers to spatially distinguished objects as

"juxtaposed" or "side by side."[7] Bergson often uses the term "outside" to refer to the spatial relation between myself (or my body) and "external objects" (MeM 210; MaM 188).

The meaning of this claim may best be grasped by way of example. For the sake of simplicity, consider two geometrical points *A* and *B* as our two objects. If *A* and *B* are distinct, a space between them, described by a line, distinguishes the one from the other. The line is continuous, but the points are discontinuous or external to one another.

This example shows that the objects which space differentiates, and the space which does the differentiating, do not share the same characteristics. The objects are discontinuous, if for no other reason than because they are "two." The space which distinguishes them, however, is continuous and is not itself a multiplicity.[8] Space, though itself continuous, constitutes the basis for discontinuity or externality. Thus, any discontinuous multiplicity will presuppose a unified, continuous space as the basis for that multiplicity. Further, objects in space share the same quality (DI 57, 71; TFW

---

[7] As does Kant: "In order that I may be able to represent them (vorstellen) as side by side, that is, not only as different, but as in different places, the representation (Vorstellung) of space must already be there." *Critique of Pure Reason,* trans. F. Max Müller (Garden City, NY: Anchor Books, 1966), § 2, 1. 23.

[8] Deleuze's description of space as a "multiplicity of exteriority . . . discontinuous and actual" is therefore misleading.

76, 95), whereas space is the absence of quality. We may call objects in space "homogeneous" only in a secondary sense.[9]

Objection that Space is not Homogeneous: The Epistemology of Space and Extension

If one grants Bergson the identification of homogeneity and space, all the other characteristics follow. If Bergson simply asserts his definition *a priori*, however, we would lack any reason for thinking that his philosophy had any relation to experience. His entire system of thought would look like "an insidious dialectic elaborated by circular arguments."[10] Even Bergson's admirer, Milič Čapek, claims Bergson does not need to offer any reason for his identification of space and homogeneity because the position is "hardly controversial."[11] Bergson, however, is more wary than either his friends or his detractors. He considers objections to his view and provides arguments in response.

An Objection, a Reply, and an Evaluation

The first and most obvious objection to Bergson's claim that space is homogeneous is the counter claim that space is not homogeneous. One argument to support this claim could be drawn from 20th century physics. In the general theory of

---

[9] Jean Wahl insists on "l'homogénéité des éléments dans Bergson" (Jean Wahl, *Bergson: Le Cours de Sorbonne,* [Paris: Centre de Documentation Universitaire, 1969], 1). Wahl is mistaken, since the units are not homogeneous in Bergson's thought. Rather, they are qualitatively alike.

[10] M. Boudot, "L'espace selon Bergson," *Revue de Métaphysique et de Morale* 85, 3 (1980): 334-5.

[11] Čapek, *Bergson and Modern Physics*, 224.

relativity, light defines a straight line. However, as experiments show, light bends as it approaches a large mass. The general theory of relativity accounts for the effect of gravity, not through the notion of a force which acts at a distance between two bodies (which would require that the light no longer be straight), but through non-euclidian geometry. If space is curved, however, it neither lacks all quality nor has a uniform quality. Therefore, physics tells us that space is not homogeneous. If space is not homogeneous, then one cannot divide it absolutely anywhere or according to any rule one chooses. Dividing space would not maintain a qualitative likeness in the products of the division. Space would not be infinitely divisible.

The short answer to this objection simply points out that Bergson means something different by space than what the objector means by space. The objector refers to physical, measurable space. Bergson's meaning is closer to that of Kant, taking space as a form by which the mind orders its world. Physical or perceived space Bergson calls "extension."

This curt reply is quite correct and, at least at one level, does suffice as a rebuttal: "There is an equivocation concerning the word 'space.'" On the other hand, the reply does not provide deeper illumination into what Bergson means by either of these terms or develop their relation. We will need a clear understanding of the relation between space and extension when developing a Bergsonian interpretation of Aristotle's distinction between the *before* and *after* in chapter three. Second, the reply does not show the place of this distinction in the whole of Bergson's philosophy. As Appendix B shows, whether one reads Bergson as advocating a sharp dualism or a

series of gradations between the mind and the concrete external world depends on whether one takes space or extension as primary. Most significantly, however, the reply does not provide any *justification* for the distinction between space and extension, between conceived space and perceived space. Because the distinction between space and extension is of major importance to Bergson's philosophy as a whole and to a proper understanding of his doctrine of space and time in particular, we need to push at it a bit harder.

In this task of understanding the difference between space and extension, secondary texts provide little aid. Commentators on Bergson have almost entirely passed over or hopelessly muddled the distinction. Milič Čapek does little more than claim that Bergson's distinction between space and extension corresponds to our distinction between geometrical space and representational space.[12] A.R. Lacey complains that the relation between time and space is "complicated because [Bergson] does not entirely and unambiguously *identify* space and extension."[13]

---

[12] "In most instances, Bergson's language makes this distinction between what we today call *geometrical* and *representational* space; it is the latter which is called by him 'extension,' the former being called simply 'space' (*'l'espace'*)." (Čapek, *Bergson and Modern Physics*, 210).

[13] Emphasis added. Lacey approaches the problem as an attempt to distinguish between "two kinds of space, albeit one more thoroughly 'spatial' than the other." After citing several texts, Lacey decides to throw in several other concepts to complicate the matter further. "The distinction between space and extension cannot be fully grasped in isolation and without reference to what Bergson says about time and motion, on which it in turn throws some light." (A.R. Lacey, *Bergson*, The Arguments of the Philosophers, ed. Ted Honderich [London: Routledge, 1989], 22-23). This allows Lacey to turn to the distinction between space and time instead of providing an adequate exposition of the distinction between space and extension.

Bergson himself must bear much of the responsibility for this confusing state of scholarship. His published works insist on "dovetailing" the problems of epistemology and metaphysics, making it difficult to determine the nature of the distinction between space and extension.[14] Is this an epistemological or a metaphysical distinction? Further, Bergson's views continue to develop throughout the course of his career. His views on the relation between space and extension become increasingly nuanced. Of which Bergson, then, are we speaking?

Because I am concerned with Bergson's notion of space as he develops it in the *Essai*, I will limit my discussion of the relation between space and extension to his earliest views. Second, the distinction between space and extension replies to a problem determined by a Kantian framework. The questions about space and extension concern their nature and their origins as ideas. It is, in other words, an epistemological discussion, an attempt to account for the nature and origin of our experiences of the external world. Let us first lay out that framework.

The Kantian Context

Kant on Extensive and Intensive Magnitudes

In his "Axioms of Intuition" and "Anticipations of Perception," Kant articulates three doctrines with which Bergson engages. First, extensive magnitudes presuppose

---

[14] Fortunately, Bergson's TLM lecture course which he did not authorize for publication, enables us to identify those philosophers and the arguments he calls upon when discussing epistemology and those used in discussing metaphysics. A discussion with a philosopher--Aristotle, Descartes, or Leibniz--indicates a metaphysical discussion. Quoting "psychologists," and "psycho-physists" indicates an epistemological discussion. Kant's name is present in all discussions.

the forms of space and time. Because we can grasp space and time only through their parts, and because extensive magnitudes are given through the forms of space and time, extensive magnitudes require a synthesis of parts.[15] We can represent the whole of an extensive magnitude to ourselves only by first representing the parts.

Second, sensation, of itself, includes neither space nor time. Even if we were to consider sensation as given in time, it takes only a moment. Hence, it is not an extensive magnitude. The whole is given at once, not by a synthesis of parts. Sensation, then, is not an extensive magnitude.

Third, however, because a sensation can be diminished to zero, there must be intermediate steps between the sensation and its total absence. "Every colour, red, for instance, has a degree, which, however small, is never the smallest; and the same applies to heat, the momentum of gravity, etc. . . . This peculiar property of quantities that no part of them is the smallest possible part (no part indivisible) is called continuity."[16] For this reason, Kant says that sensations have an "intensive quantity," or are intensive magnitudes.[17]

---

[15] "I cannot represent to myself any line, however small it may be, without drawing it in thought, that is, without producing all its parts one after the other, starting from a given point, and thus, first of all, drawing its intuition. The same applies to every, even the smallest portion of time. I can only think in it the successive progress from one moment to another, thus producing in the end, by all portions of time and their addition, a definite quantity of time." (Kant, *Pure Reason*, B: 202-3).

[16] Kant, *Pure Reason,* B: 210.

[17] Norman Kemp Smith, *Commentary to Kant's Critique of Pure Reason*, 3d ed. (Atlantic Highlands, NJ: Humanities Press International Inc., 1984), 86. Kant, B 207. Kemp Smith quotes the *Essai* in a long footnote as an explication of Kant's position.

Bergson's Elimination of Intensive Magnitudes

The first chapter of the *Essai* takes issue with Kant's third doctrine, arguing that sensations do not change in a continuous fashion. Rather, sensations change in leaps of a definite quantum. At their lowest level, sensations do diminish to zero without passing through intermediate stages. Thus, sensations do not seem to be a synthesis of parts. The claim that sensations change in a continuous fashion, and hence that they are intensive magnitudes, issues from the confusion of a sensation with the cause of a sensation, for the causes of sensations can be reduced in a continuous and measurable quantities. To see the difference between the sensation and the cause of the sensation, Bergson warns that the reader must make "a clean sweep (*table rase*) of everything which his past experience has taught him about the cause of his sensations and [come] face to face with the sensations themselves" (DI 35; TFW 47). Only in this way will the reader grasp the "immediate data of consciousness."

On the other hand, Bergson accepts Kant's first doctrine. With the elimination of intensive magnitudes, this means that all magnitudes are extensive magnitudes and hence *presuppose* space. Bergson also accepts Kant's second doctrine that sensations of themselves are not structured by space. A sensation, which Bergson defines as an "internal state" (DI 1; TFW 1), is a pure quality which is not at all extensive or quantifiable. Sensations which are representations may represent objects which take up space, and all sensations may be caused by events, and in turn start reactions, which are extensive and measurable. The sensation itself, however, is not a magnitude or quantity. "In themselves the qualities of things lack space" (AP 66 / TLM 407).

Bergson's elimination of intensive magnitudes purifies Kant's position. By distinguishing more sharply between extensive magnitudes and sensations, it prevents empiricists from appealing to sensations conceived as intensive magnitudes to account for the origin of the idea of space. Under Bergson's scheme, Kant's position is almost assured victory by the terms under which he poses the question. On the one hand, all magnitudes are extensive magnitudes and they presuppose space. On the other hand, sensations, in themselves, lack space. We do have an idea of space. What then is the origin of our idea of space?

Bergson's Epistemology of Space

Let us look more closely at Bergson's account of the origin of the idea of space, as this will enable us to better understand the difference between space and extension. Bergson suggests three, and only three, ways to account for the origin of our idea of space. The idea of space could be (1) given *immediately* in sensation, (2) constructed on the basis of sensations, as the empiricists claim, or (3) given *a priori*, a position Bergson calls "nativism." These three ways exhaust all the possible accounts of the origin of our idea of space.

Bergson's argument for his own position, that our idea of space is given *a priori*, remains entirely negative. By showing the inadequacy of the other two alternatives, only one position remains.

Space is not Given Immediately in Perception

The great differences between our idea of space and sensations as they are immediately given show that sensations do not immediately give us the idea of space. (a) Sensations are qualitatively heterogeneous[18] while space is homogeneous. (b) "Sensations are discontinuous precisely because they differ in quality" (TLM 398). Space, by contrast, is continuous. (c) Sensations are simple and indivisible, while space is "indefinitely and even infinitely divisible." (d) One can, in the imagination, suppress every sensation, but one is still left with space as an empty, inert, eternal, medium.[19] Thus, one cannot suppress the idea of space. (e) The laws which govern physics and chemistry are contingent--they could have been otherwise--but the laws which govern mathematics and geometry seem to be necessary.[20] (f) Sensation gives us different ideas of space, according to whether it comes through touch or vision. Still, "the geometry of the blind is the same as ours. Beneath the two extensions, the one perceived by sight, the other by touch, there is something which is common to the one and to the other, and which is perceived neither by sight nor by touch. This

---

[18] Bergson argues this point in the first chapter of the *Essai* and in *Durée et simultanéité*.

[19] Later, when Bergson more explicitly relates space to practical life and fabrication, he claims that one can conceive only of an occupied space (CM 97; PM 106). The conception of empty space, of a void, is like a conception of 'nothing' in which everything is suppressed, but where suppression is really a form of substitution. The void would be a case of substitution in which nothing took the place of what was suppressed. See AP and CE 281; EC 281.

[20] This, of course, raises the problems of non-Euclidian geometry. The fact that Bergson seems unaware of non-Euclidian geometry would argue against Deleuze's claim that Bergson was well acquainted with Riemann's work. Deleuze, *Bergsonism,* 39-40.

something is homogeneous and empty space" (TLM 399-400). Thus, the idea of space is not given immediately in sensation. Sensation itself lacks all spatial characteristics.

Space is not Constructed from Perceptions

Empiricism tries to reduce all ideas to sensations. It claims there is only "a difference of degree, and not of kind [*nature*], between the reality of the object perceived and the ideality of the object conceived" (MeM 269; MaM 239). Thus, empiricism sets out to show how we *construct* the idea of space from our sensations.

Bergson distinguishes between German and British empiricism. British empiricism, as represented in Bain and Spencer, argues that we can construct our idea of space from *successive* sensations. Bergson summarizes the argument of the British empiricists:

> When, with our eyes shut, we run our hands along a surface, the rubbing of our fingers against the surface, and especially the varied play of our joints, provide a series of sensations, which differ only by their qualities and which exhibit [*présentent*] a certain order in time. On the other hand, experience teaches us that this series can be reversed, that we can, by an effort of a different kind (or, as we shall call it later, *in an opposite direction*), obtain the same sensations again in an inverse order: relations of position in space might then be defined as reversible relations of succession in duration. (DI 74; TFW 99-100, translation altered).

This procedure can also be performed with visual sensations (TLM 402).

Bergson notes, however, that succession alone is not adequate to produce the idea of space. "The successive sounds of a melody are simply successive, we do not juxtapose them, we do not put them in space, we will not manage to invert their

order" (TLM 402). What, then, besides succession is required to give us the idea of space? What is it that vision and touch have that hearing does not?

Bergson argues that the reversibility of vision and touch reveals spatiality. "Thus, if my gaze lands successively on points A, B, C, D, E of a line or a surface, I can, as I wish, produce in myself the same visual sensations in an inverse order E, D, C, B, A." Reversibility allows one to claim that the perceived objects occupy space. Bergson, overstating his case somewhat, goes so far as to say that the "idea of a juxtaposition in space is only the idea of a reversibility of the order of succession in duration" (TLM 402). In his more careful statements he says that the idea of a reversible order presupposes the idea of juxtaposition and hence space. The priority resides with juxtaposition: "one does not conceive of reversibility if one does not first have a representation of juxtaposition" (TLM 477 n 9). "It is easy to see that the idea of a reversible succession will never be formed by a mind which did not possess already the idea of space." (TLM 402).

The ideas of succession and time with which the British empiricists operate, then, presuppose the notion of space. They get space out of the succession of sensations because they had already built space into the succession of sensations (DI 74 ff; TFW 100 ff).

German empiricism, which espouses the theory of "local signs," claims that we construct the idea of space from *simultaneous* sensations. The theory of local signs claims that "every sensation of the skin and every visceral sensation seems to derive from its topographic seat a peculiar shade of feeling, which it would not have in

another place."[21] For example, "if with the finger we touch first the cheek and then the palm, exerting each time precisely the same pressure, the sensation shows notwithstanding a distinctly marked difference in the two cases."[22]

Such a theory might provide a basis for an objection to Bergson's claim that our idea of space lacks any qualitative distinction. We derive the idea of space, the objector would claim, from the sensations of the body. The body, however, is thoroughly soaked in qualitative differences. Even two simultaneous, identical stimuli on a "homogenous surface" will cause qualitatively different sensations. Two rays of light striking the retina in slightly different places will bear qualitatively different effects (DI 71; TFW 95). Thus, distinctions between sensations are qualitative, not homogeneous. From these qualitative differences, one could never derive the idea of space which lacks all quality. Hence, our idea of space does not lack qualitative differences.

Bergson thinks this objection unwittingly lends support to his definition of space. Our sensations certainly do bear qualitative distinctions. If they did not, "there would be no reason for placing one of them on the right rather than on the left" (DI 71; TFW 95). However, if one only rejects a dogmatic empiricist claim that our idea of space has its origins in bodily sensations, one will see that we actually do have an idea of homogeneous space. The point is that our dealings with the objects or with

---

[21] William James, *The Principles of Psychology*, Volume II (Dover Publications, Inc., 1950), 155.

[22] Wundt, *Vorlesungen üb. Menschen- u. Thierseele* [sic], (Leipzig, 1863) i. 214. Quoted in William James, *Principles of Psychology*, II, 155.

space itself are not limited to these qualitative distinctions, to the fact that we experience an object on our right rather than on our left. We can ignore this qualitative distinction and yet still maintain the distinction between two objects simultaneously perceived. Thus, Bergson says, "we afterwards interpret this difference of quality in the sense of a difference of position" (DI 71; TFW 95, translation altered).

Second, Bergson takes great delight in pointing out that insofar as the empiricists treat sensations themselves as prior to space and hence not of themselves spatially structured, they, in effect, assume Kant's own position. Once one admits that sensations are not themselves structured by space, however, it will require some activity or intuition of the mind to produce the idea of space. "The more you insist on the difference between the impressions made on our retina by two points of a homogeneous surface, the more do you thereby make room for the activity of the mind which perceives under the form of extensive homogeneity what is given it as qualitative heterogeneity" (DI 71; TFW 95). No combination of sensations will suffice to produce the idea of space (DI 69-70; TFW 92-4).

Finally, and most important, Bergson need simply observe that to juxtapose sensations is *already* to have the idea of space. "Space is what enables us to distinguish a number of identical and simultaneous sensations from one another; it is thus a principle of differentiation other than that of qualitative differentiation" (DI 71; TFW 95). One has not thereby proven that or how the idea of space has it origin in experience. This is to say that "juxtaposition is only possible in a continuous,

homogeneous medium. It is necessary therefore that we have *a priori* the intuition of this medium" (TLM 477 n 10). Insofar as the empiricists succeed in producing the idea of space from sensations, the sensations with which they start, the relations and differences between the sensations already presuppose the idea of space.

Space is Given *A Priori*

Having ruled out the other two positions, only Kant's position, that the idea of space is given *a priori*, remains. Every other attempt to account for the idea of space forces Bergson back to nativism (TLM 404).

This is not the way Kant establishes his position, and Bergson does not bother to repeat Kant's arguments. Indeed, Bergson insists on the difference between Kant's arguments and his own. He says, "let us set aside the Kantian argumentation, the partially contestable proofs that Kant has given for this theory" (TLM 401).

Nonetheless, Bergson remains primarily a Kantian as regards the epistemology of space. Bergson says that "like Kant" he divides "cognition into two elements, namely, matter and form" (AP 66). As with Kant, space is the form, and sensations correspond to the matter or the content. The two elements of cognition have a different nature and a different origin. The matter is given through experience and the form is given *a priori*. The sensations or qualities, considered apart from perception, have no spatial attributes. "In themselves the qualities of things lack space" (AP 66 / TLM 407). Space, by contrast, is an empty form which establishes distinctions and relations between sensations (TLM 477 n 3). The idea of space, then, is an act of the mind which "consists essentially in the intuition, or rather the conception, of an empty

homogeneous medium" (DI 70; TFW 95). Bergson repeatedly credits Kant for establishing this insight.

> We owe the exact formulation of this later conception to Kant: the theory which he works out in the Transcendental Aesthetic consists in endowing space with an existence independent of its content, in laying down as *de jure* separable what each of us separates *de facto*. . . . In this respect the Kantian conception of space differs less than is usually imagined from the popular belief. Far from shaking our faith in the reality of space, Kant has shown what it actually means and has even justified it. (DI 69; TFW 92).[23]

The Epistemological Primacy of Space

Having established that the question of the relation between space and extension arises within a purified Kantian context and that Bergson himself remains Kantian in the answer he gives to the question, it remains to clarify more precisely the difference between two objects in an extensive magnitude and two objects in space.

Bergson claims that extension is a product, not of several sensations, but of the combination of sensations with the idea of space. It is true to say not only that "bodies are in space" but that "space is in bodies," and hence extended (AP 66). Our experience of extension, then, includes the experience of space. For this reason, we can assign the positive attributes of space to extension also. Extension, like space, is continuous and divisible. We determine unequal spaces and unequal extensions by a

---

[23] In 1907, Bergson repeats his conviction that Kant has definitively proven this point. "What the *Transcendental Aesthetic* of Kant appears to have established once for all is that extension is not a material attribute of the same kind as others" (EC 205; CE 203-4).

measurement in which there is container/contained relationship (DI 2-3; TFW 2-3). Objects in an extended magnitude are separated by a spatial distance.

On the other hand, unlike space, extension includes a qualitative heterogeneity due to sensation. We experience this qualitative heterogeneity most definitely in our bodily distinction between left and right (DI 72; TFW 97). From the perspective of the earth, there is a qualitative distinction between north, south, east and west. Thus, Bergson can explain the uncanny sense of direction evidenced by many animals by positing a highly qualitatively distinguished perception of the extensive world (DI 72; TFW 96-7). Objects in an extended magnitude are not simply external to one another. One is *also* to the left, or to the north, of another. Unlike the nature of space and the differences which it establishes between its objects, extension allows for qualitative differences within itself and between its objects.

Against the claim that space is not homogeneous, Bergson makes the claims that (1) we do have an idea of a homogeneous space, and (2) any space which is not homogeneous is actually extension.

Objection that All Homogeneity is Not Space: Space, Time, and Homogeneous Systems

Bergson does not only claim that space is homogeneous. He claims that "space alone is homogeneous" (DI 89; TFW 120). This, too, Bergson must prove. Isn't it possible to conceive of two distinct, homogeneous, equally fundamental mediums?

Bergson's short answer to this question appeals to the law of identity of indiscernables: "it is hard to see how two forms of the homogeneous could be

distinguished from one another" (DI 73; TFW 98).[24] If homogeneity is the absence of quality, then two forms of homogeneity will be qualitatively indistinguishable.

On the other hand, Bergson notes that some people may think that they do conceive of two distinct homogeneous mediums: space and time. If time constitutes a homogeneous medium, and if space and time discernably differ from one another, then there is one homogeneous medium which is not space. Bergson's thesis that only space is homogeneous would be refuted. Bergson, then, must provide reasons for believing that time is not a homogeneous medium. Before turning to Bergson's objections, let us first consider what it means to conceive of time as homogeneous.

Time and Homogeneity

A Homogeneous System

As we have seen above, in a homogeneous medium, objects are completely external to one another, qualitatively alike, and separated only by an infinitely divisible and homogeneous span. By adding the notion of "dimension," we can consider what I will call a homogeneous system. As an image of a homogeneous system, one might imagine a grid of coordinate geometry with geometrical points representing objects scattered throughout the system. The system may have two, three or more dimensions represented by axes on a coordinate grid.

I am not able to sharply define the notion of "dimension," and will have to depend on its obviousness to the reader's own experience. This notion, however, does

---

[24] See Čapek, *Bergson and Modern Physics*, 224.

not introduce a qualitative difference which would violate the homogeneity of the system. Consider a block 1 unit high, 2 units wide, and 3 units deep. One may rotate the block or rotate the homogeneous system (it does not matter which), such that the block will be 2 units high, 3 units wide, and 1 unit deep. This will violate absolutely nothing about the nature of the block or the nature of the homogeneous system. Thus, I do not see that the notion of dimension introduces anything foreign into the notion of homogeneity.[25]

A coordinate grid represents our conception of space so closely that it is in fact difficult to determine which is the original and which is the representation. The consideration of extension and space in the previous section addresses this question. Regardless of how one answers this question, however, it seems obvious that the representation does not significantly alter the thing represented.

Time as an Axis in a Homogeneous System

A homogeneous system allows us to introduce time and consider it explicitly as a homogeneous medium. To think of time as homogeneous would mean that we assign one of the axes of the coordinate grid to stand for time. If we represent time as an axis, the homogeneous system will encompass an indefinite number of instants. Or, if we choose not to represent time, the homogeneous system will be a distribution of

[25] This could provide the basis for an argument that time is not homogeneous. One cannot rotate the axes so as to make the height of an object its duration and its duration its height. In other words, all the spatial axes may be interchangeable, but the temporal axis is somehow unique. This uniqueness, however, is not represented by the axis itself.

objects at an instant *t*. By introducing time into a homogeneous system and by insisting that we maintain the homogeneity of this time, we learn more about the nature of a homogeneous system than if we had only considered it as a form of space.

In what follows, I consider two groups of arguments which show that real time cannot be homogeneous. The first group of arguments depends on both the lack of qualitative difference between objects in a homogeneous system and the assumption that a homogeneous system can represent motion. The second group of arguments shows that a homogeneous time cannot represent motion or change and cannot represent succession.

Arguments Concerning Qualitative Difference

The lack of a qualitative difference between locations in time tells us something new about the nature of a homogeneous system which was perhaps too obvious when we considered space; time is irrelevant for a homogeneous system. This can be seen in several ways. First, because we are considering time as part of a homogeneous system, the instants of time and the objects located at those instants must be qualitatively alike. We can assign to these instants a temporal value of "past" or "present" or "future," but we do not introduce any qualitative difference into the system insofar as it remains a genuinely homogeneous system. This means that, in a homogeneous system, the past is a present which has already been. The past is a past present, another form of the present; the present, likewise is reducible to the past. The future is merely another form of the present and the past, a future present and a future

past. From the standpoint of quality, the future adds nothing new or different to the past.

Second, because it does not make qualitative distinctions, a homogeneous system does not itself incorporate a notion of "direction." This is made evident by the fact that the motion in a homogeneous system is, in principle, reversible.

Assume a homogeneous system with a complex object composed of simple parts. On our geometrical grid, each of the parts is represented by a point and the complex object is represented by the cluster of points. Now assume that the object, or the cluster of points breaks up, such that the distance between each of the points increases. This may represent an object decaying or a star exploding. On a homogeneous system, there is no reason why the process may not be reversed -- either literally, by reversing time, or practically, by the object being reconstituted. If time can be reversed, then the homogeneous system does not truly incorporate a sense of direction. If the complex object is reconstituted, then objects in the homogeneous system do not grow old or have a history which is essential to their identity.[26]

Third, if the lack of qualitative differentiation implies a lack of direction and a lack of history, it also denies the emergence of novelty. If novelty is possible at all, it emerges only through the reconfiguration of the elementary objects in the system. The

---

[26] "Now, we say that a composite object is changed by the displacement of its parts. But when a part has left its position, there is nothing to prevent its return to it. A group of elements which has gone through a state can therefore always find its way back to that state, if not by itself, at least by means of an external cause able to restore everything to its place. This amounts to saying that any state of the group may be repeated as often as desired, and consequently that the group does not grow old. It has no history" (EC 8; CE 8).

conditions for any "new" configuration, however, have always been present from the beginning. Once the system is established and defines its universe, nothing new can enter from the outside, and nothing fundamentally new can emerge internally. A homogeneous system, then, is a closed system[27] in which everything is "given once for all" (PM 115; CM 104).

Fourth, because a homogeneous system is closed, it is ideal for construing mechanistic relations between objects. Indeed, Bergson claims that the mechanistic conception of nature and the law of the conservation of energy presuppose that the universe itself constitutes a homogeneous system.

> Let us note that the law of the conservation of energy can only be intelligibly applied to a system of which the points, after moving, can return to their former positions. This return is at least conceived of as possible, and it is supposed that under these conditions nothing would be changed in the original state of the system as a whole or of its elements. (DI 115; TFW 152).[28]

Bergson's conclusion is clear. If the universe is a homogeneous system "time cannot bite into it." A homogeneous system, then, denies the nature and effectiveness of time.

This interpretation of a homogeneous system agrees with the customary way of conceiving space. Traditionally, when philosophers and scientists distinguish between

---

[27] A "closed system" is defined by "purely mathematical laws, isolable because duration does not act upon them" (PM 109; CM 100). Thus, for a closed system, "the future states . . . are calculable and hence visible in its present state" (PM 113-4; CM 103).

[28] "Past time is neither a gain nor a loss for a system assumed to be conservative" (DI 116; TFW 153).

space and time, they conceive of space as "timeless, void of activity."[29] Space has a "timeless" form when we conceive of it not only as eternal but also as frozen at a dimensionless instant of time.[30] Therefore, the objects in space and the positions they occupy are either outside of time or simultaneous at a given instant.

Objection to the Identification of Space and Homogeneity

These considerations, however, still grant Bergson's objector too much. Bergson has assumed, for the sake of argument, that a homogeneous system can represent motion, and hence, that it can represent succession. Strictly speaking, however, a homogeneous system cannot deal with objects that change, neither can it represent objects which succeed one another.

Let us return to the objector above who claims that both space and time are homogeneous. How might someone try to distinguish space from time, so as to call them two homogeneous mediums? Bergson considers the possibility that someone might try to distinguish space and time by their ordering principles rather than by some qualitative distinction: "the homogeneous is thus supposed to take two forms,

---

[29] Alfred North Whitehead, *The Principles of Natural Knowledge* (Cambridge: Cambridge University Press, 1955), 1. According to Kant, "all parts of infinite space exist simultaneously." Kant, *Pure Reason*, B § 2, 4. 25.

[30] "The ultimate fact embracing all nature is (in this traditional point of view) a distribution of material throughout all space at a durationless instant of time, and another such ultimate fact will be another distribution of the same material through the same space at a another durationless instant of time. . . . No room has been left for velocity, acceleration, momentum, and kinetic energy, which certainly are essential physical quantities." Alfred North Whitehead, *The Principles of Natural Knowledge,* 2. See Bergson's discussion of Zeno's Stadium paradox in MeM 215 n 1; MaM 192 n 2.

according as its contents co-exist or follow one another" (DI 73; TFW 98). Leibniz, for example, notes that "*space* is only the order of existing for possibles that exist simultaneously, just as *time* is the order of existing for possibles that exist successively."[31] Likewise, Kant holds that we represent time by a geometrical line, "and we conclude from the properties of this line as to all the properties of time, with one exception, i. e. that the parts of the former are simultaneous, those of the latter successive."[32] Simultaneity and succession, then, are the ordering principles which supposedly distinguish the two homogeneous mediums of space and time.

From Bergson's perspective, this argument has a superficial view of homogeneity. It does not realize that succession and homogeneity are mutually exclusive terms. Let us first consider what Bergson means by "simultaneity."

The Meaning of Simultaneity

According to Bergson, objects separated by a homogeneous medium are simultaneous. Though he fails to argue, his terminology clearly commits him to this position. He infers the one from the other without any argument when he writes "the idea of a homogeneous medium, i.e. of a simultaneity of terms which, although identical in quality, are yet distinct from one another" (DI 71; TFW 95).

---

[31] "Letter to de Volder, 30 June 1704," in *Philosophical Essays* (Indianapolis: Hackett Publishing Company, 1989), 179.

[32] Kant, *Pure Reason* § 5, 31.

Strictly speaking, homogeneity and simultaneity are not synonymous. Homogeneity describes space while simultaneity refers to the relation between objects or, as Bergson says here, terms.

On the other hand, there may be a deeper symmetry between the meaning of homogeneity and simultaneity. Recall that Bergson defined homogeneity not as "qualitatively alike" but as "the absence of all quality." So also, simultaneity does not necessarily mean "at the same time" but could also mean "outside of all time" or "the absence of temporal distinctions."

Homogeneity Implies Simultaneity

Bergson's opponents, who hold that time can be homogeneous and successive, will most likely grant that, insofar as the system consists of a distribution of objects at an instant *t*, the objects will be simultaneous. Simultaneity here simply means that they are contemporary or together in time or at *t*. There is no temporal distinction between the objects.

On the other hand, it is not as clear that a homogeneous system which includes an indefinite number of instants would imply that its objects were simultaneous. Bergson's opponents would wish to ask him, "Why would simultaneity be implied by a homogeneous system that includes a temporal axis?"

Bergson must turn the question back to his opponents by asking what about the temporal axis makes it a *temporal* axis. Certainly, there is nothing about the axis itself, for it is exactly the same as the other axes which represent spatial dimensions.

For the temporal axis to function as a *temporal* axis requires different rules of interpretation than those used for the spatial axes.

For example, what suffices to distinguish between two objects in a spatial dimension may not suffice in the temporal dimension. Recall that a homogeneous system must treat all differences between objects as established by a homogeneous medium -- as qualitatively alike and external to one another. The separation by a homogeneous medium is sufficient to call the objects "two." We can represent this easily on a coordinate grid with two axes. One object is located at (1,3) and another object at (2,5). If the temporal axis is not represented, then no temporal differences are represented and the objects exist at their locations simultaneously.

Now let us suppose that we suddenly realize that the x-axis is labeled "time" and the y-axis is labeled "distance." If we maintained the same interpretation used for spatial dimensions, then these points still represent two different objects, external to one another and existing simultaneously. Continuing with this interpretation, one could conclude that two instants in time are simultaneous and external to one another in the same way that two places are simultaneous and external to one another.

Suppose that we *already* understand what time is, such that we know that the interpretation in the above paragraph is absurd. This will require that we begin to modify not the axis itself but the rules of interpretation. We can try to guard against taking the two points as two different objects by a continuity hypothesis. Whereas in a spatial dimension, the homogeneous span between two objects indicates their discontinuity, in a temporal dimension we draw a line between the two dots to indicate

(DI 85; TFW 115).[33] A homogeneous system represents the difference between *t* and *t'* as purely external, as if the temporal, changing object were spatial objects. Thus, the objects in a homogeneous system are unchanging.

What, then, is the difference between the spatial and temporal axes? They differ in interpretation given by those who already know how to read the graph. This difference of interpretation is only indicated, and not represented, by the label "time" on the axis. This means that the axes which represent a homogeneous system distort the nature of time in a way that they do not distort the nature of space. One may claim to represent time as a homogeneous medium, but one does so at the cost of representing what is successive as if it were simultaneous.

Homogeneity as Space, Again

We can now return to the objection voiced above that time may be homogeneous and that, therefore, there can be two distinguishable homogeneous mediums. Bergson responds by asking whether "homogeneous time" can really have a different ordering principle than that of space. Time implies succession. Homogeneity, however, implies simultaneity because it is "given all at once" (DI 73; TFW 98). Two conclusions, equally fatal to Bergson's objector, follow: (1) If the contents of time are successive, time is not homogeneous; (2) if time is homogeneous, it cannot be distinguished from space by its ordering principle.

---

[33] "Though we may do our best to imitate the mobility of becoming by an addition that is ever going on, becoming itself slips through our fingers just when we think we are holding it tight" (EC 164; CE 163).

Spatial Thinking

In considering the nature of space, we have focused on its identification with homogeneity and the difference which it establishes between its objects. Space is continuous, infinitely divisible, and lacks all quality. Objects in space are qualitatively alike and external to one another. Unlike space, extension can be itself qualitatively differentiated, and objects in an extended magnitude may also differ qualitatively. Time requires a qualitative distinction between the past, present, and future and allows for succession. A homogeneous medium does not allow either of these qualities to time. Objects in a homogeneous medium are qualitatively alike and simultaneous. While this study is not capable of generating all the characteristics which Deleuze ascribes to spatial multiplicities--particularly the notion of "differences of degree"--neither has it given us any reason to dissent from Deleuze's characterization of space.

This characterization of space and spatial objects suffices to indicate in a provisional way the nature of spatial thinking. This method is best illustrated with regard to particular philosophical problems. In the *Essai* Bergson considers the debate between free will and determinism. Both sides in this debate imagine progress through time as a progress along a road. At certain points, the road seems to fork, or to present more than one possibility. The debate concerns whether it is within our power to choose possibilities other than the one which we actually, eventually choose. From Bergson's perspective, however, both sides have adopted a spatial mode of thought, for they have assumed that the future lies before us in the same way as a set of already determined possibilities. The future is already given. Thus, the proponents

of free will have attempted to argue their case on a terrain that favors determinism. The debate between free will and determinism adopts a spatial mode of thought by considering a phenomenon that is inherently temporal but treating it without recognizing the qualitative distinctions between the past, present, and future.

Cartesian mind-body dualism constitutes another philosophical problem caught in the structures of spatial thinking. In this example, the philosopher treats the mind and the body as though they were spatial objects. The mind is a thinking, unextended thing and the body is an unthinking, extended thing. The philosopher realizes that the mind cannot literally be in space. Still, having defined each term as the negation of the other, the natural tendency is to establish the terms outside of one another, and it becomes impossible to understand how one can have an influence on the other.

These are simple obvious examples which give a first approximation at what Bergson means by spatial thinking. We will examine this mode of thinking more closely in chapter four. In order to understand what it means to think in terms of time, and how temporal thinking can dissolve these sorts of difficulties, however, we must first examine the nature of time.

CHAPTER THREE

ARISTOTLE, HEIDEGGER, AND BERGSON

Focusing on the principle of differentiation between objects in space, chapter two found the nature of a spatial multiplicity rooted in the homogeneity of space itself. The essence of space is homogeneity and that homogeneity provides the principle for distinguishing spatial objects. Further, the essence of space allowed us to distinguish time from space. The goal of chapter three is to distinguish space from time on the basis of the nature of time.

The order of my procedure is curious, for neither Bergson nor Deleuze treat space and time separately, in distinct chapters.[1] In their desire to develop the contrasts, the texts of each move back and forth between the consideration of time and space. While this order of procedure has some advantages, it also opens itself to difficulties. Juxtaposing space and duration may obscure the true nature of each and produce overly schematic oppositions.[2]

---

[1] Bergson did this only in unpublished lectures, such as TLM.

[2] André Robinet notes that placing space and time in opposition may provide an easy access to the text, but at the cost of the truth and originality of the work. What difficulty will arise? "According to this structure of opposition, it is necessary to conceive heterogeneity as discontinuous, the antithesis of homogeneous continuity. But here the difficulties begin, because [according to Bergson] 'intermingling' and 'overlapping' provide two ways of grasping the heterogeneity of duration. . . . The

Deleuze presents space and time as schematically opposed to one another. In his discussion of space, Deleuze focuses on the principle of differentiation. Chapter two agreed with the general thrust of Deleuze's own findings. When Deleuze turns to duration, he again focuses on its principle of differentiation, producing a tidy contrast with spatial differences. Duration "is an internal multiplicity of succession, of fusion, of organization, of heterogeneity, of qualitative discrimination, or of *differences in kind*; it is a *virtual and continuous* multiplicity that cannot be reduced to numbers."[3] The difference between space and time, then, is the *difference* between their differences. The form of difference embodied in space is the *opposite* of the form of difference expressed by time.

The opposition of time to space, however, does not necessarily produce clarity. One may know what one thing is without also knowing its opposite. If Deleuze's characterization of space remains fairly self-evident, his description of the multiplicity of duration does not. What meaning is his description of duration trying to convey to the reader?

In approaching Bergson's doctrines on space and time, one must assert that space and time clearly differ from one another. But one must also insist that this difference need not be an opposition. Spatial difference is not the only form of

---

strict opposition the essential character of duration to the homogeneity of space requires that heterogeneity be discontinuous. Each of the instants which compose the mobility of duration are independent of other instants." (André Robinet, *Bergson et les métamorphoses de la durée* [Paris: Éditions Seghers, 1965], 27-8).

[3] Deleuze, *Bergsonism*, 38.

difference. To avoid opposing the terms, I have separated the discussion of the essence of space from the discussion of the essence of time. Further, I will not approach Bergson's understanding of duration through his position on space. Rather, this chapter will define an approach to Bergson's notion of duration by providing a Bergsonian interpretation and criticism of Aristotle's philosophy of time. One should approach Bergson's notion of duration by asking "What are the differences and the relations between the *before* and *after*?" This approach makes the contrast of space with time intelligible as a contrast of two different ways of thinking about the differences and relations between the *before* and *after*.

Section I considers Aristotle's definition of time with an eye to the difference and relation he establishes between the *before* and *after*. It defends Bergson's claim, that Aristotle understands the *before* and *after* in terms of space, against Heidegger's alternative interpretation. Section II develops Bergson's criticisms of Aristotle's definition of time. Bergson claims that understanding the *before* and *after* in terms of space covers over our immediate experience of time. By appealing to our immediate experience, Bergson reveals aspects of time which contradict Aristotle's philosophy of time.

Aristotle's Definition of Time

When Bergson claims that philosophers treat time as if it were space, he refers to Kant, who treats space and time in parallel fashion in the first *Critique*, the *Prolegomena*, and his *Inaugural Dissertation*. Bergson also, however, must be responding to Aristotle's claim that time is "what is measured in motion with respect

to the 'before' and 'after.'"[4] Beginning with a consideration of the *before* and *after* of the motion which defines time, we will see that Bergson thinks that each element of the definition tacitly spatializes time.

Aristotle's Text: The *Before* and *After* of Motion

Aristotle says, "It is clear, then, time is 'number of movement in respect of the before and after,' and is continuous since it is an attribute of what is continuous."[5] Aristotle treats the *before* and *after* of time in the same way as the continuity of time:

> But what is moved is moved from something to something, and all magnitude is continuous. Therefore the movement goes with the magnitude. Because magnitude is continuous, the movement too must be continuous, and if the movement, then the time; for the time that has passed is always thought to be in proportion to the movement.
>
> The distinction of 'before' and 'after' holds primarily then, in place; and there in virtue of relative position. Since then 'before' and 'after' hold in magnitude, they must also hold in movement, these corresponding to those. But also in time the distinction of 'before' and 'after' must hold, for time and movement always correspond with each other.[6]

---

[4] There is disagreement in the Aristotle literature on the relation between "measure" and "number" in Aristotle's definition of time. Some argue that the two notions are not distinct, others that they are quite distinct. I cannot enter into this discussion which is proper to the study of Aristotle. I do not think that Bergson ever considers whether time may be numbered, though he does consider whether it may be measured. For my purposes, I will suppose that "number" and "measure" are not distinct. I do not see that the arguments offered here would be invalidated if they were distinct. See Richard Sorabji, "Time, Number, and Consciousness," Chap. in *Time, Creation, and the Continuum: Theories in Antiquity and the Early Middle Ages* (Ithaca, NY: Cornell University Press, 1983).

[5] Aristotle, *Physics,* trans. R.P. Hardie and R.K. Gaye, in *The Basic Works of Aristotle*, ed. R. McKeon (New York: Random House, 1941), 220 a 24-5.

[6] Aristotle, *Physics*, 219 a 10-19.

We should notice three things about this passage. First, Aristotle considers only locomotion, movement from one place to another place, or movement in magnitude. In this sense a substance moves "from something to something." Second, movement from one place to another place occurs in magnitude. The continuity of magnitude ensures the continuity of locomotion and time. Third, the *before* and *after* are relative positions within the magnitude. The magnitude itself relates these places to one another. *Before* and *after* apply to motion and time only because they first apply to magnitude, as a relation between two places or positions.

This last position poses difficult exegetical problems. All interpreters of Aristotle must answer the question: "How can *before* and *after* hold primarily in 'place'?" To answer this question, we need to know what Aristotle means by "magnitude."

Bergson argues that Aristotle's "magnitude" is roughly equivalent with his own notion of "extension." As such magnitude inherently refers to space. Aristotle, then, uses space to define time. Before I present Bergson's arguments, however, I will first try an alternative reading of Aristotle's definition of time. Martin Heidegger's commentary on Aristotle in *The Basic Problems of Phenomenology* provides an important interpretation for three reasons: (1) he provides an interpretation of what Aristotle means by magnitude, (2) he argues that magnitude does not necessarily include space, (3) he explicitly intends his interpretation as an alternative to Bergson's interpretation.

Heidegger's Interpretation of Aristotle

In *The Basic Problems of Phenomenology*, Heidegger gives his only extensive analysis of the fourth book of Aristotle's *Physics*. Heidegger rightly points out that if *before* and *after* in Aristotle's definition are already temporal concepts, then his definition reduces to a mere tautology. On the other hand, perhaps the time which does the defining is more originary than the time which is defined. This means that Aristotle defines the time of physics in terms of some more originary time to which the *before* and *after* belong. Aristotle's word for this "more originary time" would be "magnitude."

To get at this more originary time, one needs to consider motion, and the *before* and *after* of motion, more closely. We should not limit motion to locomotion, for, Heidegger says, "the most general character of motion is . . . a transition from something to something."[7] Changes of quality can be changes of a thing 'away' from something 'toward' something else without the thing changing place. This "shows that this 'away from something toward something' need not be taken spatially. We shall call this structure of motion its *dimension*, taking the concept of dimension *in a completely formal sense*, in which spatial character is not essential. . . . we should rid ourselves completely of the spatial idea, something that Aristotle did, too."[8]

---

[7] Martin Heidegger, *The Basic Problems of Phenomenology*, trans. Albert Hofstadter (Bloomington & Indianapolis: Indiana University Press, 1988), 242.

[8] Heidegger, *Basic Problems*, 242.

What Aristotle calls "magnitude," Heidegger calls "dimension." "Dimension" here designates a very general notion of "stretch" or of "continuity."[9] Spatial extension represents only one form of continuity and is certainly not the only form.

How then should we understand Aristotle's claim that motion is continuous because magnitude is continuous and that motion and time have a *before* and an *after* because magnitude has a *before* and *after*? Heidegger says,

> This proposition should be understood not ontically but ontologically. . . . Extension and continuity are already implicit in motion. They are earlier than motion in the sense of being a priori conditions of motion itself. But this does not signify that motion is identical with extension (space) and continuity, which is clear already from the fact that not every motion is a change of place, a spatial motion.[10]

The distinction between dimension and space allows Heidegger to provide an explanation of the *before* and *after* in terms of dimension.

Heidegger points to this distinction between space and dimension (or magnitude) as of the utmost importance. By this distinction, by arguing that the originary phenomenon for which Aristotle grasps is not spatial, Heidegger retrieves Aristotle's work for his own philosophical purposes. Heidegger knows that Bergson also attempts to think time independently of space. However, Bergson tends to emphasize the differences which separate him from other philosophers. Bergson argues that Aristotle, like other philosophers, recognizes only homogeneous time and hence confuses time with space. Heidegger's retrieval of Aristotle, then, is intended to

---

[9] Heidegger, *Basic Problems*, 242.

[10] Heidegger, *Basic Problems*, 243.

mark a path which differs from Bergson's and which even tries to discredit Bergson's contribution to the philosophy of time. In *Being and Time*, Heidegger claims that Bergson misunderstands Aristotle and thus fails to escape from the Aristotelian determination of time.[11] The later *Basic Problems of Phenomenology* stresses the point. "It is important to see [that 'dimension' is not 'space'], because it was with reference to this determination that the Aristotelian concept of time was misunderstood in the modern period, especially by Bergson; from the outset he took this dimensional character of time in the sense of spatial extension in its reference to motion."[12]

A Bergsonian Reply to Heidegger

Bergson does indeed claim that philosophers have spatialized time. Aristotle's definition of time is perhaps the most important in the history of philosophy. If Aristotle does not confuse time with space, Bergson's criticisms of the philosophical tradition will be greatly weakened. We need, then, to show the deficiencies of Heidegger's interpretation of Aristotle and provide a Bergsonian interpretation adequate to Aristotle's own texts.

---

[11] Heidegger, *Being and Time*, H 26.

[12] Heidegger, *Basic Problems*, 242. "Unless the ontological sense of akolouthein has been comprehended, the Aristotelian definition of time remains unintelligible. Or else defective interpretations occur, for example that of Bergson, who said that time as Aristotle understands it is space. He was mislead into adopting this inadequate interpretation because he took continuity in the narrower sense of the extensional magnitude of space. Aristotle does not reduce time to space nor does he define it merely with the aid of space, as though some spatial determination entered into the definition of time." (*Basic Problems,* 244).

Problems with Heidegger's Interpretation of Aristotle

The most obvious difficulty with Heidegger's interpretation of Aristotle is that he does not make sense of the *before* as a 'before' and the *after* as an 'after.' Two points in any continuity do not constitute a *before* and *after* in themselves. They require the addition of some sense of 'direction' or some qualitative difference. Even if Heidegger were correct in all that he says, he fails to specify the nature of dimension sufficiently. Magnitude, in so far as it has a *before* and an *after*, must mean more than "continuity" or "dimension."

Heidegger's interpretation, moreover, cannot be sustained in the face of Aristotle's texts. In particular, he does not explain how it is that the *before* and the *after* belong primarily to 'place.' Heidegger assumes that he is free to consider motion *per se* in this passage. He claims that change of color as a change "away from something toward something" will do better than the example of locomotion for the definition of time.

In the passages under consideration, however, Aristotle concerns himself not with motion *per se* but with motion insofar as time belongs to motion. While every moving thing moves in time, according to Aristotle, not everything which moves properly defines time. The regular, circular motion of the celestial sphere defines time, and this motion is locomotion.[13] All motions exist under this motion and are measured by time, which uses it as a standard.

---

[13] "Now neither alteration nor increase nor coming into being can be regular, but locomotion can be." (Aristotle, *Physics*, 223 b 20-21).

Heidegger glosses over the privilege granted to locomotion as the motion of the heavens which defines time. The motion which defines time is locomotion in magnitude, not just "dimension." Without motion in a magnitude, the *before* and *after* cannot occupy a place or have relative position. Heidegger's distinction between space and dimension *separates* the *before* and *after* from place and position, rather than explaining how the *before* and *after* apply primarily to place and have relative position.

Heidegger's interpretation rests on an unsupported assumption. Heidegger assumes that locomotion means motion in *space*. This assumption differs from Aristotle's own statement. Locomotion is rather motion in a *magnitude*. Heidegger himself has confused magnitude and space in the case of locomotion. Again, what is magnitude according to Aristotle? We can now make our question more specific: how is it that two places with relative position one to another can differ such that these places can be called *before* and *after*?

Aristotle on "Magnitude"

Magnitude is a continuous body which is capable of measurement. Two characteristics are of interest here. First, magnitude seems capable of including all that we mean by space as defined by geometry. Magnitude "which is continuous in one dimension [is called] length, in two breadth, in three depth. . . . limited length is a

line, breadth a surface, depth a solid."[14] Second, the parts of a magnitude are capable of having relative position to one another. In the *Categories,* he writes,

> The parts of a line bear a relative position to each other, for each lies somewhere, and it would be possible to distinguish each, and to state the position of each on the plane and to explain to what sort of part among the rest each was contiguous. . . . [This could not] be done in the case of time, for none of the parts of time has an abiding existence, and that which does not abide can hardly have position.[15]

Aristotle's reminder that the parts of time do not have positions relative to other parts of time underscores his claim that time does not have a *before* and *after* from itself but from motion which has it from magnitude.[16]

All of Aristotle's examples of things which do have relative position, of things which are properly continuous magnitudes, are taken from geometry -- lines, planes, and solids. Thus, only things in space have relative position. Space, however, is not sufficient to determine two relative positions as *before* and *after.*

The *before* and *after* are determined in magnitude, not just space. Magnitude seems capable of including space, but we still have not distinguished Aristotle's sense of magnitude from geometrical space. What is true of magnitude but not of space

---

[14] Aristotle, *Metaphysics*, trans. W.D. Ross, in *The Basic Works of Aristotle*, ed. R. McKeon (New York: Random House, 1941), 1020 a 10-14.

[15] Aristotle, *Categories*, trans. E.M. Edghill, in *The Basic Works of Aristotle*, ed. R. McKeon (New York: Random House, 1941), 5 a 15-28.

[16] "Of things that are quanta incidentally . . . some are quanta in the way that movement and time are so; for these also are called quanta of a sort and continuous because the things of which these are attributes are divisible. I mean not that which is moved, but the space through which it is moved; for because that is a quantum, movement also is a quantum, and because this is a quantum, time is one." (*Metaphysics,* 5. 1020 a 25-33).

which could allow magnitude to have a *before* and *after*? How is it that magnitude indicates qualitative differences or a sense of direction? The failures of Heidegger's reading of Bergson may help point us to the right path.

Heidegger criticizes Bergson for failing to distinguish between dimension and space. The preceding two sections have argued that Heidegger's distinction between dimension and space differs in important ways from Aristotle's distinction between magnitude and space. Further, they noted that Heidegger himself fails to distinguish between magnitude and space in his description of locomotion. Now we must ask whether Bergson makes the sort of distinction Heidegger should have made to help us understand Aristotle's distinction between magnitude and space.

A Bergsonian Reading of Aristotle

Bergson's distinction between space and extension

Let us recall the position described in chapter two. Bergson distinguishes between "space" and "extension" in *Quid Aristoteles De Loco Senserit*, *Essai*, *Matière et mémoire*, and *L'Évolution créatice*. The mark of space is homogeneity or the absence of all quality. Space, according to Bergson, is an "empty homogeneous medium" which imposes on objects their quantifiable characteristics (DI 71; TFW 95). Spatial objects *qua* spatial are mere units, distinct from and external to one another, but qualitatively alike. Figures in space can be described by spatially differentiated points in one, two, three, or more dimensions (DI 81; TFW 109).

Extension differs from space in that it includes qualitative differences. Qualitative differences cannot be defined in purely spatial terms though qualities may

be extensive. This is most obvious in living bodies. My body is extended. While it can be analyzed spatially, it also has qualities which go beyond the homogeneity of space. Different parts of my body differ qualitatively from other parts, as when I feel a difference between my right and my left. Bergson says, "we ourselves distinguish our right from our left by a natural feeling, and . . . these two parts of our own extension . . . appear to us as if they bore a different *quality*" (DI 72; TFW 96-7, translation altered). The distinction between extension and space will suffice to provide a Bergsonian explanation of how *before* and *after* could apply primarily to place.

A Bergsonian interpretation of Aristotle.

One of the main theses of Bergson's minor Latin dissertation,[17] is that Aristotle describes the magnitude of the heavens as "place" rather than as "space."[18] Part of this proof was the claim that Aristotle's universe, as a living thing, has a qualitative orientation -- just as we have an extended qualitative orientation that distinguishes our right and our left (AP 51 ff). Because of this orientation, air naturally rises and for water 'seeks its own level.' The motion of the celestial sphere also has an orientation -- the stars could not just as easily move in the opposite

---

[17] Henri Bergson, "Aristotle's Concept of Place," trans. John K. Ryan, *Ancients and Moderns*, ed. John K. Ryan, Studies in Philosophy and the History of Philosophy Vol 5. (Washington D.C.: The Catholic University of America Press, 1970).

[18] The heavens "must be deemed supremely worthy of the name place, not only because it contains all things but also because it is itself contained nowhere . . . beyond the heavens there is nothing -- no body, no void, not even space" (AP 54).

direction. Aristotle's universe, which is itself ensouled, in which the first movements are explained through the desire to be like an unmoved mover, has qualitative distinctions.

When Bergson turns to critically evaluate Aristotle, however, he appeals to Kant and claims that place is more properly described as extension (AP 66 ff). Thus, through Kant, Bergson transforms Aristotle's "magnitude" into his own "extension."

This allows us to make sense of the claim that the *before* and *after* have relative position in magnitude. First, qualitative distinctions are possible in extension. The *before* and *after* refer to the qualitative distinctions in the extended magnitude of the heavens. With regard to the motion of the sun, the east is always *before* and the west is always *after*. Second, extension includes the notion of space. Not all continuous quantities have qualitative distinctions or, more specifically, a *before* and *after*. Any geometrical figure, for example, will not have these qualities. The notions of 'place' and 'position,' however, apply more properly to the realm of space. In this sense, characteristics of space are included in Aristotle's definition of time. Thus, Bergson's distinction between extension and space enables us to interpret the *before* and *after* as applying primarily to place in a way that Heidegger's distinction between dimension and space do not.

It is possible to argue that Aristotle himself recognizes that he uses space to define time. In the *Categories*, Aristotle claims that the parts of time, unlike geometrical continuous quantities, do not have a relative position to one another, "for none of the parts of time has an abiding existence, and that which does not abide can

hardly have position."[19] Thus, when Aristotle, in the *Physics*, turns to measure time, he considers it as something which belongs to motion and to magnitude. Time is measured in motion with respect to the *before* and *after*. *Before* and *after* apply not primarily in time but to places in a magnitude which hold relative positions to one another.

How are we to account for the discrepancies between the *Categories* and the *Physics*? Has Aristotle momentarily forgotten the *Categories*? Does he intend to give us the very nature of time in the *Physics* (as Heidegger seems to think) or only what is required to measure time? If the *Physics* does give us the nature of time, then time itself requires attributes--place and position which have an abiding existence--which only properly apply to spatially continuous quantities.

Objections to Aristotle's Definition of Time

Chapter two has shown that space is homogeneous, and the first section of this chapter demonstrates that space does enter into Aristotle's definition of time. By considering each part of Aristotle's definition of time, the remainder of this chapter will show that Bergson opposes each part of Aristotle's definition. Bergson's denial of Aristotle's position does not provide a positive definition of the essence of time, but it does point us back to an immediate experience on the basis of which we can begin to reformulate our understanding of time. This new conception of time will point us toward Bergson's method and enable us to understand his analysis of the idea of

---

[19] Aristotle, *Categories*, 5 a 15-28.

nothing. A clarification of Bergson's method, in turn, should equip us to determine what Bergson's vision of the philosophical enterprise offers to philosophy today. Let us begin with a consideration of the *difference* between the *before* and *after*.

The "*Before* and *After*" and Time

Before presenting Bergson's arguments, let us indicate in advance the differences between Aristotle's and Bergson's perspectives. In general, Aristotle understands the horizon by which we understand the difference and the relation between the *before* and *after* as magnitude; Bergson understand the horizon in terms of which we understand the *before* and *after* as duration.

Let us make the difference more specific. Aristotle defines time as "what is measured in motion with respect to the *before* and *after*." Time, then, requires two distinct instants. Thus, against Zeno's paradox of the arrow, Aristotle insists that only one instant would not suffice to constitute time. There must be two moments. Without this distinction between the *before* and *after*, there is either temporal identity (simultaneity) or an eternity outside of all time. The difference between the *before* and *after* should not overshadow or be articulated in such a way as to destroy their connection. We have seen Aristotle's solution to this dual requirement. The *before* and *after* characterize time because they first characterize motion. Aristotle says that motion has the structure of "from something to something," with "something" understood as a place or position in a magnitude. The *before* and *after* designate these distinct places which are connected by the continuous span of the sky. We have *both*

the *before* and *after* insofar as they have relative position to one another.[20] The original horizon within which Aristotle understands the difference and union of the *before* and *after* is not time but magnitude.

Because the *before* and *after* are first in magnitude and in time only in a derivative sense, the *before* and *after*, in their primary sense, exist simultaneously, not successively. That is, they are part of the magnitude prior to being attributes of time. They belong to time only because time belongs to motion and the local motion of the rotating spheres is motion in a magnitude. One cannot measure time without a *before* and an *after*, but one may very well have a *before* and an *after* as qualitatively distinguished places in magnitude without conceiving of time.

Bergson accepts Aristotle's assertion that time requires a *before* and an *after*. "Everyone will surely agree that time is not conceived without a *before* and an *after*--time is succession. . . . both [the *before* and *after*] are needed to constitute time" (DeS 88; DaS 65). Likewise, he insists that the *before* and *after* are connected. Without the connection, "there will be only one or the other, consequently a single instant, no before and after, not succession, no time" (DeS 61; DaS 48). One must have *both* a *before* and an *after*, in some way, together (See DI 75, 78; TFW 100, 104-5).

Bergson objects to Aristotle taking magnitude as the horizon of the *before* and *after*. He says, "that time implies succession I do not deny. But that succession is first presented to our consciousness, like the distinction of 'before' and 'after' set side

---

[20] Heidegger follows Aristotle in this definition provided that "something," and hence the *before* and *after*, not require a spatial interpretation. In both cases, motion has a "from *x* to *y*" structure.

by side, is what I cannot admit" (PM 166; CM 149). This means that the most original meaning of *before* and *after* cannot be that of "place" or "position" because the *before* and *after* are not external to each other.[21] The *before* is not a "something" or a position left behind. The *after* is not a "something" or a place to which one can go. Rather, time or motion brings the *before* into the *after* in a continuous, uninterrupted fashion; it carries one reality into another. By showing how the *before* and *after* actually are distinguished and related, Bergson is able to *reveal* the horizon of time.

Bergson's procedure, then, is not to put forward a definition of time and then to defend it. Rather, he asks, "How do we experience the *before* and *after*?" and "What experiences reveal the distinctions and relations of the *before* and *after*?" Let us, then, examine the particular experiences which Bergson says show the *before* and *after* as they are.

The Immediate Experience of Time

Bergson approaches the difference and relation between the *before* and *after* by pointing us to particular, usually auditory, experiences through which time most clearly shows itself.

> A melody to which we listen with our eyes closed, heeding it alone, comes close to coinciding with this time which is the very fluidity of

---

[21] This point will be demonstrated below. In implication of this point is that the motion which unites the *before* and *after* and which thus defines time is not primarily locomotion. This second point is illustrated below in Bergson's example of listening to music as an experience of time. This point will be demonstrated in chapter four. See MeM 217 ff; MaM 194 ff.

> our inner life; but it still has too many qualities, too much definition, and we must first efface the difference among the sounds, then do away with the distinctive features of sound itself, retaining of it only the continuation of what precedes into what follows and the uninterrupted transition, multiplicity without divisibility and succession without separation, in order to finally rediscover basic time. Such is immediately perceived duration, without which we would have no idea of time. (DeS 55; DaS 44-45 / See also DI 74-75; TFW 100).

This passage gives Bergson's most adequate suggestion of the experience through which time shows itself. In our discussion of the *concept* of time we will need to return continuously to this experience. We should note several things about this passage. First, our immediate experience of time is given in our experience of ourselves, in the "very fluidity of our inner life" rather than, say, in the observation of the movement of the sun across the sky or of the second hand on the face of a watch. Compared with locomotion, the movement of one's own mind is more immediately known and less likely to be contaminated with spatial or homogeneous notions. This fluidity of our inner life, taken in itself, however, is not even as differentiated as the succession of notes in a melody. Thus, we must "efface the difference among the sounds." Rather than a melody, for example, one should think of the single tone which the Emergency Broadcasting Service runs on the radio now and again. Even this monotonous sound, however, remains too distinct because the fluidity of our inner life is not identical with an auditory experience. One must "do away with the distinctive features of sound itself." This approximates the immediate experience of time and of one's own changing inner life, before sensations from the external world cover it over.

Lessons Drawn from the Immediate Experience of Time

At the end of the passage above, Bergson also provides a few characterizations of time. These characterizations no longer simply point to or suggest the immediate experience of time. They reflect on that experience and engage polemically with reflections on time contained in the history of philosophy. Specifically, these characterizations oppose thinking of the *before* and *after* as spatially different. More than articulating another form of difference, a temporal difference, however, they return us to motion, to the preservation of the past in the present, in which the distinction between the past and the present manifests itself. Let us flesh out the concept of time under these two headings. Bergson says that time is (a) the continuation of what precedes into what follows and (b) an uninterrupted transition.

The continuation of what precedes into what follows.

In this phrase "what precedes" refers to the *before* or the past and "what follows" refers to the *after* or the present. One may also say that the *before* continues into the *after* or that the past continues into the present.

If the past and the present, or the *before* and the *after*, were spatially distinct, they would be external, juxtaposed, and side by side. A spatial interval would cut off the *before* from the *after* and the *after* from the *before*.

Rather than immediately developing the appropriate distinction, however, Bergson instead insists on the connection between the two with the word "continuation." "Continuation" does not indicate a difference, but a quality or direction of motion.

Let us look at the example above, assuming that we already know the difference between the *before* and *after*. Does the *before* continue into the *after* when we listen to the tone of the Emergency Broadcasting System? Does it make a difference whether we have been listening to the tone for two seconds as opposed to forty-five seconds? Or, on the contrary, is the *after* unaffected by the *before*? Though the material cause of the sensation does not differ in the least, I take it as undebatable that the experience itself does change over time. "A sensation, by the mere fact of being prolonged, is altered to the point of becoming unbearable. The same does not here remain the same but is swollen by the whole of its past" (DI 115; TFW 153). Most people will change the station after only a few seconds. Thus, the experience "I now have of it differs from that which I have just had, even if only because the one is an instant older than the other. My memory is there, which conveys something of the past in the present" (EC 2; CE 2). The experience of listening to the Emergency Broadcasting System tone supports Bergson's description of duration as "ever the same and ever changing" because the past continues into the present.

There is a difference between the *before* and *after*. No one denies this. In pointing to "continuation," however, Bergson points not to the difference itself, but to the active nature of the connection between the two. We distinguish the *before* and *after* only because we have experienced the continuation, the motion from one to the other.

Uninterrupted transition.

Bergson's second description of real time focuses more directly on the "continuation" and the continuity between the *before* and *after*. He emphasizes the aspect of motion with the word "transition." Let us, however, look more closely at the "uninterrupted" nature of this motion.

Recall that Aristotle claims that time is continuous. Aristotle argues, just as he did with the *before* and *after*, that the continuity of time derives from the continuity of motion and that the continuity of motion derives from the continuity of magnitude. To say that magnitude, motion, and time are continuous is to say that they are infinitely divisible. One can divide infinitely divisible things anywhere, as many times as one likes, without thereby changing the nature of the thing divided. A part of time is still time and is still infinitely divisible.[22] While the *before* and *after* are points, and so not parts of time, the continuous span between them, which defines a span of time, is infinitely divisible.

Bergson too says that time is continuous, but means by this that our experience of time and of change is *indivisible*. "This indivisible continuity of change is precisely what constitutes true duration. . . . *real duration* is what we have always called *time*, but time perceived as indivisible" (PM 166; CM 149). Here Bergson uses "continuous" to mean "one" and "indivisible" into (spatial) parts.

---

[22] Kant, though rejecting the derivation of continuity from magnitude, explicitly argues for Aristotle's claim that time is continuous and therefore infinitely divisible.

The indivisibility of time or change results from the fact that the past is in the present. Cutting the past off from the present makes our experience of time something very different. If time is essentially a continuation of the past into the present, and if division is spatial division, cutting off the one from the other, then concrete time, time as we experience it, would be indivisible.[23] According to Bergson, we experience time or change as one, whole, continuous and indivisible in the sense that to divide time is to change it at a fundamental level.[24] Continuous processes--melodies, consciousness, movement, etc.--will become different things if they are divided. Hence, the thing itself is indivisible.

Bergson's notion of continuity, therefore, is governed by what is proper to the nature of a thing. A thing's nature is not just a set of qualities abstracted from time but has a certain rhythm and duration. The *before* and *after* of a particular change manifest the unitary nature of a thing.[25]

---

[23] "This indivisible continuity of change is precisely what constitutes true duration. . . . it is the clearest thing in the world: *real duration* is what we have always called *time*, but time perceived as indivisible. That time implies succession I do not deny. But that succession is first presented to our consciousness, like the distinction 'before' and 'after' set side by side, is what I cannot admit" (PM 166; CM 149).

[24] The reader should distinguish both the "spatial continuity" described in chapter two and the "temporal continuity" described here from a third theory of continuity, associated with Georg Cantor and Bertrand Russell. This mathematical theory of continuity refers to the order of a series. A series is continuous (or compact or dense) if between any two terms there are other terms. Thus, no two terms in a continuous series are "next to" each other. A discontinuous series has terms which are next to each other.

[25] It is somewhat of an overstatement to claim that a thing is indivisible. In fact, the nature of a thing may be divided truly or falsely, according to the natural articulations of the object or according to a rule which ignores those natural articulations, those different natures which co-exist in one object. Both Bergson and

Again, let us return to our experience of a melody as a paradigm for our experience of time. Bergson claims that we experience a melody as a movement which lasts, in which "the past is incorporated with (*fait corps avec*) the present, and constitutes with it an indivisible whole."[26]

> It is the very continuity of the melody and the impossibility of breaking it up which make that impression upon us. If we cut it up into distinct notes, into so many 'befores' and 'afters,' we are bringing spatial images into it . . .: in space, and only in space, is there a clear-cut distinction of parts external to one another (PM 166; CM 149).

The continuity of the melody is destroyed if one separates each of the notes from one another. "If the sounds are separated, they must leave empty intervals between them" (DI 65; TFW 87). Past notes would not connect with present notes to constitute a melody. No single note could, by itself, constitute the melody. Rather than creating a different melody, one would have abolished all melody.

Zeno divide Achilles' motion. Bergson merely argues that Zeno divides falsely by ignoring the natural articulations of Achilles' movement. Bergson can divide Achilles' motion at each one of Achilles' steps. Early scholarship on Bergson tended to emphasize the way in which division falsified its objects. "When Bergson says that what has *durée* is indivisible he does not mean that we cannot isolate particular parts out of the whole process; what he means is that by isolating them we falsify their nature." (Karin Costelloe, "What Bergson Means by 'Interpenetration.'" *Aristotelean Society Proceedings* 13 [1912-13]: 131). Deleuze has recovered the ways in which duration may also be divided truly: "In reality, duration divides up and does so constantly: That is why it is a *multiplicity*. But it does not divide up without changing in kind, it changes in kind in the process of dividing up. This is what is a nonnumerical multiplicity, where we can speak of 'indivisibles' at each stage of the division. There is *other* without there being *several*" (Deleuze, *Bergsonism,* 42).

[26] Arthur Lovejoy, *The Reason, the Understanding, and Time* (Baltimore: The Johns Hopkins Press, 1961), 185-6. See PM 164; CM 147.

Our experience of a melody, then, is an uninterrupted transition, a transition which cannot be divided without changing in nature.[27] The nature of a thing, the rhythm of its motion, determines what constitutes a proper *before* and *after* and what is an artificially imposed *before* and *after*.

Time and Measurement

Because the *before* and *after* are given only through movement, time cannot be measured, according to Bergson. Indeed, Bergson's rejection of spatialized or homogeneous time originally developed out of a reflection on the measurement of time.

The possibility of measurement rests on four conditions. (1) In measuring, we compare one thing to another, sometimes directly, sometimes by the use of a third thing which serves as a standard. (2) Such comparison requires that either we superimpose the things themselves on one another or that we move some common standard from one object to the other. (3) Through superposition, one can make quantitative judgments of "more than," "less than," or "equal to." In the superposition of spatial figures, quantity is determined by the relation of the container and the contained. "We call that space the greater which contains the other" (DI 1; TFW 2).

---

[27] In fact, it is not just dividing a melody which changes its nature -- any change will change its nature. "The proof is that, if we interrupt the rhythm by dwelling longer than is right on one note of the tune, it is not its exaggerated length, as length, which will warn us of our mistake, but the qualitative change thereby caused in the whole of the musical phrase." (DI 75; TFW 100-101).

(4) Finally, moving the thing or the standard from one object to another object cannot alter the thing or the standard.[28]

Given these conditions, Bergson argues that real time cannot be measured. No part of time can itself be superimposed on any other part of time. "Its essence being to flow (*passer*), not one of its parts is still there when another part comes along. Superposition of one part on another with measurement in view is therefore impossible, unimaginable, inconceivable" (PM 2; CM 12).[29]

---

[28] "The procedure of measurement presupposes congruence. For example, a yard measure is applied successively to measure two distances between two pairs of points on the floor of a room. It is of the essence of the procedure of measuring that the yard measure remains unaltered as it is transferred from one position to another. . . . Thus, immediate judgments of congruence are presupposed in measurement, and the process of measurement is merely a procedure to extend the recognition of congruence to cases where these immediate judgments are not available. Thus, we cannot define congruence by measurement." (Alfred North Whitehead, *The Concept of Nature* [Cambridge: Cambridge University Press, 1971], 120-1). Bertrand Russell, in his early mathematical writings, refers to the "congruence" requirement as the Axiom of Free Mobility. This axiom states that "*Spatial magnitudes can be moved from place to place without distortion;* or as it may be put, *shapes do not depend in any way upon absolute position in space.* ("The *A Priori* in Geometry," *The Collected Papers of Bertrand Russell, Volume I,* Cambridge Essays: 1888-99 [London: George Allen & Unwin, 1983], 294; "The Logic of Geometry," *The Collected Papers of Bertrand Russell, Volume I,* Cambridge Essays: 1888-99 [London: George Allen & Unwin, 1983], 268.) The axiom of Free Mobility, according to Russell, is the "equivalent" of the homogeneity of space ("The *A Priori* in Geometry," 297), and both are equivalent to the relativity of position. "Hence, positions in space, if our axiom be true, must be wholly constituted by external relations, i.e. *Position is not intrinsic, but a purely relative, property of things in space."* ("The *A Priori* in Geometry," 296). "What [the axiom of Free Mobility] does assert, at bottom, is the impossibility of absolute position, and the homogeneity of space." ("The Logic of Geometry," 272).

[29] "However, the time that endures is not measurable, whether we think of it as within us or imagine it outside of us. Measurement that is not merely conventional implies, in effect, division and superimposition [*superposition*]. But we cannot superimpose successive durations to test whether they are equal or unequal; by hypothesis, the one no longer exists when the other appears; the idea of verifiable

Perhaps, then, we might use some third thing to serve as a standard to compare the two parts. Bergson argues that this does not solve the problem, because the standard itself would have to be radically different from time. Such a standard "will have as its essence non-duration" (PM 2-3; CM 12).

What does such a standard actually measure when we think that we measure time? What has "non-duration" as its essence? According to Bergson, we measure space or a geometrical line which is radically different from the nature of real time.

> The line one measures is immobility, time is mobility. The line is made, it is complete; time is what is happening, and more than that, it is what causes everything to happen. The measuring of time never deals with duration as duration; what is counted is only a certain number of extremities of intervals, or *moments*, in short, virtual halts in time (PM 3; CM 12).

Finally, to move something in time is necessarily to subject it to change. There can be no guarantee that this change does not distort its measuring capacity. For this reason, in addition to the reasons given in chapter two, time cannot be considered homogenous.

Thus, "usually when we speak of time we think of the measurement of duration, and not of duration itself" (PM 4; CM 13).[30] When we think of the

---

equality loses all meaning here." (DeS 62; DaS 49).

Bertrand Russell came upon this same difficulty some time later and by different means. "No event can be made to recur, without alteration, at another place in the time-series, in order to test the equality of its duration with that of some other event. No day can be superposed upon another day. Hence, it would seem, if the above discussion be correct, time-measurement must be impossible." (Russell, "The *A Priori* in Geometry," 295).

[30] Bertrand Russell agreed even with this conclusion. Measurement requires the ability to move something without that something, thereby, changing. Thus, Russell

measurement of duration, we think of a homogeneous time with fixed and unchanging parts, juxtaposed in a definite order, and which we can consider as simultaneous with one another. Real time involves change, and its parts are not and cannot be simultaneous.

Time and Change

Bergson argues as if time were identical to motion. That is, when he points us to our experience of the *before* and *after*, he points us not simply to time, but to motion. In listening to music, we experience the movement of the music, and the movement of our own minds as we follow the music. But this movement is not the same thing as time. Bergson does not distinguish between time and things which exist within time.

Perhaps the most serious challenge to Bergson's criticism of Aristotle's definition comes from Aristotle himself, for Aristotle, in the course of defending his definition of time, claims to disprove the thesis which Bergson seems to assume. According to Aristotle, time is not identical with motion, and he claims to prove that it is not. Accordingly, if Bergson's criticisms of Aristotle are to succeed, we must examine Aristotle's arguments for the claim that time is different from motion.

---

had required the Axiom of Free Mobility in the measurement of space. While he argues that real time is homogeneous, he claims that one cannot move in time because time has only one dimension. From this, he concludes that time-measurement is impossible. "As regards *direct* time-measurement, this is indeed the case. Time is measured *indirectly*, by means of space. We are reduced, in fact, to the more or less arbitrary assumption that some motion, or set of motions, given in experience, is uniform. Equal times, on this assumption, are measured by equal spaces traversed." ("The *A Priori* in Geometry," 295).

Aristotle acknowledges that time is closely connected with motion. He contends that time belongs to motion in the sense that it is what is measured in motion with respect to the *before* and *after*. With two arguments he emphatically rejects the claim that time is identical with motion.

> Now (a) the change or movement of each thing is only *in* the thing which changes or *where* the thing itself which moves or changes may chance to be. But time is present equally everywhere and with all things. Again, (b) change is always faster or slower, whereas time is not; for 'fast' and 'slow' are defined by time -- 'fast' is what moves much in a short time, 'slow' is what moves little in a long time; but time is not defined by time, by being either a certain amount or a certain kind of it. Clearly then it is not movement.[31]

Do Aristotle's arguments give us reason to reject Bergson's position and the criticisms advanced against Aristotle's definition?

In both arguments, Aristotle attempts to show that time and change have different characteristics and cannot, therefore, be exactly the same thing. Let us review the relevant points of Aristotle's position. Aristotle distinguishes between the motion of the celestial sphere which defines time, and all other changes. Time is what we count in the motion of the celestial sphere, but which we use in turn to measure other motions as fast or slow. The motion of the celestial sphere provides the standard for Aristotle. The distinction between time and motion in the preceding two arguments is really a distinction between the standard motion which defines time and all other motions which are measured by time.

---

[31] *Physics*, 218 b 8-20.

This review exposes both arguments as a sleight of hand. Aristotle's conclusion, that time and change have different characteristics, indicates rather a distinction between two kinds of motion, a distinction between a standard motion and all other motions. Aristotle's arguments do not show that time is not movement, but that it is not a non-standard movement. Further, we today would hold that the choice of a standard movement is somewhat arbitrary and relative to the purposes for which we need a standard motion. We might use a vibrating crystal or an atomic clock rather than the sun to calculate time. Thus the distinction between standard and non-standard motions tells us nothing about the motions themselves. Rather, the differences to which Aristotle points result from our own action of setting up one motion as a standard.

Let us consider each of the arguments. The first argument claims that change is limited to the thing which changes and the place which that thing occupies, whereas time "is present equally everywhere." We might understand this argument in terms of Aristotle's cosmology. If the movement which defines time is the motion of the celestial sphere, then every other change really does happen within it, under it, as part of its domain. In this cosmology, the sun was given great power for producing change on earth. The motion which serves to define time, then, would in a real sense be "present equally everywhere." On the other hand, it is not clear that we need this cosmology to justify using one motion to measure another motion. All that would be required is that our chosen standard be applicable to all motions.

The second argument claims that change can be faster or slower, but time itself cannot be fast or slow, "for 'fast' and 'slow' are defined by time . . . but time is not defined by time." Now certainly, having already chosen a standard for time measurement, we can designate all other motions as fast or slow. We would *not* say that the motion of the standard itself, however, moves either fast or slow, for we determine fast or slow by the standard motion. Aristotle is correct to say that "time is not defined by time," since this means that we cannot have another standard motion which measures the motion which functions as the standard.

Aristotle introduces a contradiction into his thought when he claims that "change is always faster or slower." Since the standard is itself a motion, it follows that there is at least one form of motion which is neither fast nor slow. This, in turn, means that time and at least one form of change do not have different characteristics.

If time is not distinct from change, then time does not belong to change by being counted in change. Moreover, time is not a medium which can be distinguished from the events or processes which supposedly "occupy" time or happen "in time" and which time itself can then measure. Time simply is change.

Summary

Let us briefly summarize the interpretation and the criticisms advanced against Aristotle's philosophy of time. Aristotle claims that the *before* and *after* are places in a magnitude, whereas Bergson argues that they cannot be places because they are not external to or separate from one another. Aristotle asserts that motion is "from something to something." Bergson insists that motion brings the *before* into the *after*,

and hence is not primarily locomotion. Aristotle argues that time is not motion, but is measured in the motion from the *before* to the *after*. Bergson argues that time is not measured in motion because it cannot be measured and because it is not distinct from motion.

Conclusion

Approaching Bergson's understanding of duration by way of Aristotle's philosophy of time has two advantages. First, it provides a position, perhaps the most influential position in the history of philosophy, against which Bergson argues. Without this background, Bergson's position remains unintelligible. Second, Aristotle's philosophy of time is a more appropriate avenue to an understanding of Bergson's philosophy of time than is Bergson's own philosophy of space. Approaching Bergson's philosophy of time through his philosophy of space, and taking these as opposites of one another, would lead one to conclude (incorrectly) that time is discontinuous. By approaching Bergson's philosophy of time through Aristotle, we can see that the relation between space and time must be more subtle than a simple opposition. *Space and time are not simply mediums in which objects exist, but ways of understanding the difference and relations between the "before" and "after."* If Bergson's method turns out to depend on the difference between (1) the way time distinguishes the *before* and *after* and (2) the way space distinguishes the *before* and *after*, this chapter will have pointed us in the right direction.

What can we positively conclude at this stage about the nature of time? We must acknowledge that Bergson's appeal to the immediate experience of time and our

subsequent reflection on that experience has not produced a definition which would capture the essence of time. On the other hand, we have discovered some characteristics of time: Time an unmeasurable, continuous, uninterrupted movement of the *before* into the *after*. While these characteristics remain less than a definition, they do belong to time and can serve to keep the experience of time always before us and to orient us in future explorations.

CHAPTER FOUR

DIAGRAMS OF TIME

A philosophical method determines the way in which one joins and distinguishes terms. Chapter two took up the nature of space and briefly indicated what it would mean to think in terms of space. Space provides one principle of differentiation: homogeneity. Time, I have been arguing, provides a different principle of differentiation. Deleuze articulates the difference introduced by duration as "an internal multiplicity of succession, of fusion, of organization, of heterogeneity, of qualitative discrimination, or of *differences in kind*; it is a *virtual and continuous* multiplicity that cannot be reduced to numbers."[1] Deleuze, thus, emphases the connection between temporal difference and differences in kind. The present chapter engages directly with Bergson's notion of time with the aim of indicating how the notion of duration implies a principle of differentiation and of determining whether Deleuze has given an adequate account.

The reflections in chapter three were necessary to frame the question of time appropriately. Following Aristotle, the distinction between the *before* and *after* provides the key to understanding the nature of time. Aristotle's solution has been

[1] Deleuze, *Bergsonism*, 38.

rejected for remaining in a spatial mode of thought, but his problem continues to guide our reflections: "How are we to distinguish between the parts of time?"

In order to grasp Bergson's answer to this question, we must first understand his (re)formulation of the question. Bergson does not ask abstractly "what is time?" Rather, the question which determines his research is "how do we concretely experience time?" I could not avoid anticipating this approach in chapter three in order to generate Bergson's criticisms of Aristotle's definition of time. For Bergson, our most fundamental experience of time is found, not in the motion of the sun across the sky, but in one's experience of one's own self.[2] Thus, prior to the experience of the motion of the heavens, we experience the motion of our own souls. Bergson claims that "for us time is at first identical with the continuity of our inner self" (DeS 55; DaS 44).

The question, then, is "how do we concretely experience time?" and this question breaks down into two questions: "how do we experience the difference between the *before* and *after*?" and "how do we experience the connection between the *before* and *after*?" Bergson answers both questions without hesitation: the *before* and *after* are experienced as the past and present, and the past and present are given in experience as "recollection" and "perception," while the connection between the past and the present is experienced as "memory."

---

[2] One might also argue that the *Physics* allows for Bergson's approach when Aristotle acknowledges that time implies a soul which counts.

In *Matière et mémoire* Bergson illustrates the progress of his thought concerning perception, recollection, and memory through a series of three diagrams. While I will engage Deleuze in some debate, the goal of this chapter remains primarily expository.[3] One will grasp Bergson's method only by first understanding these diagrams. In Sections I and II, I will interpret the diagrams and the transition from one diagram to the next diagram by closely following the arguments presented in *Matière et mémoire*. The series of these diagrams, culminating in the diagram of the cone, show that the heterogeneity between the *before* and *after* is the difference between activity and passivity. Section III shows how the diagram of the cone explicitly provides the basis for a method to resolve the debate between realism and idealism.

The Difference between the Past and the Present

Bergson argues that recollection and perception, and the past and present, do not differ spatially, nor by degree, nor chronologically. Rather, they differ qualitatively from each other. He argues that this qualitative difference, is the difference between that which is active and that which is passive. Perception, or the experience of the present, is identified with that which is in process or active. Recollection, or the past, refers to that which is passive. Thus, while spatial objects are distinguished by a homogeneous space, the past and the present are differentiated

[3] Objections other than those explicitly raised in Bergson's own text will be taken up in chapter six.

by the tense of their activity. Bergson arrives at this conclusion through his criticisms of associationist psychology's distinction between recollection and perception.

Associationist Psychology and the Spatialized Mind

The relation between recollection and perception is a topic for the discipline of psychology. Associationism was one of the most important schools of psychology at the time Bergson began writing.[4] The *Essai sur les données immédiates de la conscience* argues that associationism describes the movement of the mind according to spatial categories, and this description prevents it from giving an adequate account of mental phenomena. Thus, the claim made in the preface to the *Essai* that "we usually think in terms of space" (DI vii; TFW xxiii) refers to associationists, among others.

Associationism subscribes to what William James calls "The Mind-Stuff Theory." This theory makes two assumptions about states of mind. First, in order to simplify its object of study, associationism understands a multiplicity of simple conscious states or ideas as distinct states which are atomic, independent, and simple, that is, as objects in space (MeM 149; MaM 134). Second, associationism assumes that the states and the self remain self-identical, that is, fixed and unchanging, throughout a process of change. Trading on an "analogy with a misunderstood physical atomism" (MeM 185; MaM 166), associationism seeks to explain changes within the self in terms of these unchanging elements.

---

[4] Famous advocates of associationism include Hobbes, Locke, Hume, Hartley, and James Mill. See William James, *Principles of Psychology,* vol I. 594 ff.

Against associationism, Bergson criticizes both assumptions. First, he asserts that ideas do not exist as distinct, independent, atomic entities. Ideas join together only if each idea somehow can complete or satisfy the other in some way. If, however, mental states are fixed, completed entities, independent of and distinct from other mental states, then there can be no reason internal to the states themselves why one idea would join with another idea. Thus, this model of the mind actually undercuts the possibility of explaining the association of ideas. Associationism

> has made ideas and images into independent entities floating, like the atoms of Epicurus, in an interior space, drawing near to each other and catching hold of each other when chance brings them within the sphere of mutual attraction. . . . If recollections move about, indifferent, in a consciousness that is both inert and amorphous, there is no reason why the present perception should prefer and attract any one of them: we can only, in that case, note the conjunction when once it has taken place and speak of resemblance or of contiguity, -- which is merely, at bottom, to vaguely recognize that our mental states have affinities for one another (MeM 182-3; MaM 164, translation altered).

Second, Bergson claims that the fixed and unchanging identity of mental states and of the self prevents associationism from giving an adequate account of the *activity* of the self. How and why does the mind initially set out to recognize something? How and why does the mind complete its activity?[5] The concepts central to associationism prevent it from answering such questions.

---

[5] Bergson produces this argument in reference to associationism's account of decision making. "But if it is always the same self which deliberates, and if the two opposite feelings by which it is moved do not change, how, in virtue of this very principle of causality which determinism appeals to, will the self ever come to a decision? The truth is that the self, by the mere fact of experiencing the first feeling, has already changed to a slight extent when the second supervenes: all the time that the deliberation is going on, the self is changing and is consequently modifying the two feelings which agitate it" (DI 128-9; TFW 171).

Because associationism has "a defective conception of the self and of the multiplicity of conscious states" (DI 119; TFW 158), it also gets the nature of time wrong. On this model of thought, the present is an atomic, independent state or entity without any essential reference to the past or to the future. The *before* and the *after* are external to one another. For Bergson's criticism to hold, he must articulate how the past may be in the present.

These initial criticisms depend only on the categories of space outlined in chapter two. Bergson advances a further objection, which depends on the notion of difference of degree. From Gilles Deleuze's perspective, this criticism is more important than those above, so we must determine its relation to the categories of space.

Associationism and Differences of Degree

Bergson's Criticism of Differences of Degree

Bergson observes that associationism groups different mental phenomena under a common heading and treats the differences between these phenomena as differences of measurable quantity. That is, associationists consider mental states as qualitatively alike but of varying degrees of strength or intensity. According to associationism, the difference between a perception and a recollection is only a difference of "force and vivacity." Just as a homogeneous time finds no qualitative difference between the past and the present, associationism fails to recognize any qualitative difference between recollection and perception. Recollections are past perceptions -- the state of mind

called recollection is simply a weaker, less distinct form of the state of mind called perception (MeM 149, 266; MaM 135, 236).

Consider two states of mind which differ by degree from one another as much as possible. At one extreme there is a very strong perception represented by a point D. At the other extreme, there is an extremely weak recollection represented by a point A. Because A and D are the same kind of things, and because they differ by degree, one could represent the difference between a recollection and a perception as a continuous line (AD). At some point on the line, a weak perception will be a strong recollection. By representing the difference between recollection and perception by a line AD, it becomes possible to divide the line absolutely anywhere (by MP) and so place recollection on one side of the line (AO) and perception on the other side (OD). The difference between the two, then, becomes somewhat arbitrary. Bergson produces Diagram 1, which I will call "Perception and Recollection in One Dimension," to explain this point.[6]

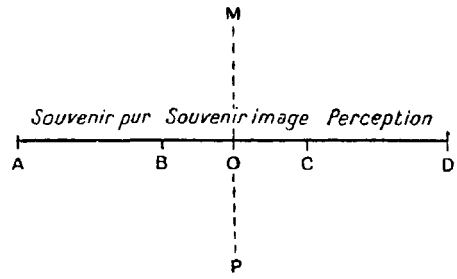

Diagram 1: Perception and Recollection in One Dimension

Against this view, Bergson offers a *reductio ad absurdum.* If perception and recollection differ only by intensity, then, a "recollection of an acute pain, for instance is but a slight pain, inversely, an intense pain which I feel, will end, as it grows less,

[6] I ask the reader to ignore for the moment the labels "*Souvenir pur*," "*Souvenir image*," and "*Perception,*" as these refer to Bergson's alternative theory of recognition.

by being an acute pain remembered (*remémorée*)." At some point, on this theory, it will be impossible to distinguish between a perception and a recollection. When is a weak perception a strong recollection or a strong recollection a weak perception? The claim that, under normal circumstances, perceptions might be confused with recollections leads to absurdities, however. If someone at my dissertation defense softly mumbles a question, I may appropriately respond, "Pardon me, I could not hear your question." My examiner would be completely baffled, however, if I had not realized that s/he had asked me a question at all and thought that I was merely remembering a time when we had had a heated discussion with raised voices. Bergson admits that with a very slight sensation, it may be difficult to determine whether I *imagine* I feel or actually feel it. However, I will never confuse a *recollection* of a strong perception with a weak perception. Thus, recollection must have a different nature than perception (MeM 150-1; MaM 135-7).[7]

---

[7] More precisely, Bergson is claiming that if we start with the perception, we will not confuse it with a recollection. In every place where he presents this argument, Bergson always starts from the strong perception and gradually weakens it. At what point does it become a recollection? It does not. "If the recollection of a perception were but this perception weakened, it might happen to us, for instance, to take the perception of a slight sound for the recollection of a loud noise. Now such a confusion never occurs" (MeM 269; MaM 239, translation altered). Again, "Take an intense sensation and make it gradually decrease to zero. If there is only a difference of degree between the recollection of the sensation and the sensation itself, the sensation will become recollection before it disappears. Now, a moment may come when you are unable to say whether you are dealing with a weak sensation experienced or a weak sensation imagined, but the weak state never becomes the recollection, thrown back into the past, of the strong state. The recollection, then, is a totally different thing" (ES 132-3; ME 161, translation altered). If the direction is reversed, if we start with a recollection and move toward perception, Bergson will admit that a recollection might be confused with a perception. This does not violate Bergson's claim that perceptions and recollections differ in kind. Rather, it requires

Bergson does not hesitate to transpose this discussion back into the terminology of the past and the present: "If we make recollection merely a weakened perception we misunderstand the essential difference between the past and the present" (MeM 70; MaM 67). Here the past and the present are not merely juxtaposed. Rather, the associationist makes them into different strengths of the same thing. The past is merely a different form of the present, a past present. Likewise, every *before* is also an *after* and every *after* is also a *before*.

If Bergson's criticism holds, a positive description of time will require a qualitative difference between the *before* and the *after* or between the past and the present. The present "never will be" past. The past "never was" present. The past will have its own way of being and will not exist only as a mode of the present. "There is much more between past and present than a mere difference of degree" (MeM 152; MaM 137).

Differences of Degree and Space

Before we move on to consider how to describe this qualitative difference between the past and the present, let us pause to address another question which we are now in a position to answer: what is the relation between the first two criticisms of associationism, which depend on spatial categories, and this third criticism which

---

an understanding of the differing functions of perceptions and of recollections. Bergson claims that a recollection-image can "set going in the brain the same machinery that perception ordinarily sets to work in order to produce actions" (MeM 267; MaM 238). It is because a recollection-image can do this that we try to remember, especially when our perceptions are vague.

invokes differences of degree? The question is prompted by Deleuze's claim that thinking in terms of space *is* thinking differences of degree. The text and Diagram 1 which we considered under the third criticism constitute the primary basis for this claim. Do this text and this figure support Deleuze's contention?

Let us begin by asking "What exactly does the line AD in Diagram 1 represent?" The line certainly represents differences of degree. The line symbolizes a whole series of mental states, ordered according to their strength. Or perhaps the line represents the movement of a single mental state from its initial strong perception through its life until it is lost in the oblivion of forgetfulness. The line represents gradations of strength which separate A from D.

A geometrical line literally represents space. Space is a medium which *lacks all quality*. Insofar as objects are spatial objects, insofar as they are grouped in the same space, objects share a *common quality*. A straight line is described as the shortest distance between two points. A line which represents space indicates a spatial difference between two points which are qualitatively alike. The line, however, represents only the medium which lacks all quality which separates the two objects.

The line AD in Diagram 1, therefore, does not literally represent a homogeneous space, a medium lacking all quality. Rather, it represents objects which share a common quality. Spatial objects are homogeneous in a secondary sense. The fact that a space requires that spatially distinguished objects be qualitatively alike and that any line contains an infinite number of points certainly *allows* for the

representation without great distortion. A spatial figure, such as a line, *can* represent differences of degree because the difference never extends to a qualitative difference.

In Diagram 1 the objects are also *ordered* by their strength, by their differences of degree. The line AD is also used to represent this ordering. It does not represent the juxtaposition or externality of mental states to one another. Again, because there are an infinite number of points on any line, no matter what length, and because a point can represent a mental state, and because the points on a line do have a serial order, a line *can* represent an ordered series. According to traditional conceptions of geometry, however, a line is not literally composed of points. A line is composed of other lines. Accordingly, the line AD is not a perfect representation of gradations of strength of mental states.

These considerations show that there is a definite difference between the line which represents the space between two spatial objects and the line which represents an ordered series of qualitatively similar objects. Further, there is nothing about space or spatial objects which would require that spatial objects differ by degree. This means that to think in terms of space is not identical with thinking differences of degree.

This point is essential. It shows that thinking in terms of space -- at least as defined in chapter two -- is a different mode of thought than thinking differences of degree. If Bergson later identifies the two, he must find a principle of differentiation other than homogeneity. If he does not identify the two, then one ought not condemn a position simply because it is formulated in terms of differences of degree. Having

clarified the nature of Bergson's criticisms of associationism, let us return to the consideration of the qualitative difference between recollection and perception or the past and the present.

The Heterogeneity of the Past and the Present

Bergson is trying to conceptualize the difference and relation between recollection and perception in a way that is faithful to our actual experience. He argues that thinking of them as differences of degree violates our experience. This violation shows that we experience a qualitative difference, though not a spatial separation, between perception and recollection and, hence, between the present and the past. Bergson finds some support for this position not only in the *reductio* presented in the third criticism above but in experimental studies of the human brain.

Areas of the Brain and Temporal Difference

Physiological studies, even in Bergson's day, had shown that the processes of memory and perception are supported by different areas of the brain. The area of the brain devoted to perception differs from the area used for recollection (ES 31-34, 129-30; ME 39-43, 157).

An interesting conclusion follows from this simple observation. Put in purely physiological terms, both regions of the brain, the one devoted to recollecting and the other devoted to perceiving, must be fed information *at the same time.* "*The formation of recollection is never posterior to the formation of perception; it is contemporaneous with it.* Step by step, as perception is created, the recollection of it is projected beside

it, as the shadow falls beside the body" (ES 130; ME 157, translation altered). Bergson believes that one consciously feels the perception and recollection of the same object at the same time when one experiences *deja vu*.[8]

This claim will certainly unsettle an attentive reader. Bergson asserts that real time is not like space, and space is not like time. He holds that, while time does have a *before* and *after*, the *before* and *after* are *temporally* differentiated rather than spatially separate. Now, one experiences the *before* and *after* as recollection and perception. However, recollection and perception are "contemporaneous." How can recollection and perception be both temporally differentiated and contemporaneous?

This confusion surfaces only if one has already assumed a definite meaning of "temporal difference." "Temporal difference" conflicts with "contemporaneous" if by "temporal difference" one means "chronological difference." The time designated by "chronology" can be stated in two propositions: (1) What is present will become past. (2) What is past once was present. These propositions make sense only if one already understands the difference introduced by "will become" and "once was." The claim that recollection and perception are "contemporaneous" explicitly denies that these differences apply. Bergson's use of the word "contemporaneous" attacks an understanding which takes temporal difference as chronological difference.

Thus, from the perspective of physiology, *chronology* does not distinguish recollection of a past event from perception of a present event. The difference

---

[8] See "Le souvenir du présent et fausse reconnaissance," ("Memory of the Present and False Recognition,") in ES ; ME.

between recollection and perception is not due to their being constituted at chronologically different times, for they are constituted at the same time. A recollection never *was* a perception, and a perception never *will become* a recollection.

Having formulated our position in this way, we can see why temporal difference cannot be identified with chronology. In chronology the past and the present remain different forms of the same thing. Chronological difference continues to think of the parts of time as homogeneous. Bergson, however, has shown that time is heterogeneous and that recollection and perception are fundamentally different from one another. A recollection is not a perception which is past. There is a fissure within every event, as between a body and its shadow. Thus, studies of the physiology of the brain support the claim, already reached in Bergson's third criticism, that the past and the present differ qualitatively from one another.

Diagram 2: Perception and Recollection in Two Dimensions

We have yet to determine the precise nature of this qualitative difference between the past and the present. In order to clarify Bergson's understanding of the heterogeneity of the past and the present, let us return to Diagram 1 and consider how to modify the representation of the difference between recollection and perception. How might we represent the difference not as a spatial difference, a difference of degree, or as a chronological difference, but as a qualitative difference? Obviously Bergson does not want to represent the difference between a recollection and a perception in the manner of Diagram 1, that is, as a difference of degree. As a first

step to envisaging a more adequate image, he produces Diagram 2, which I will call "Perception and Recollection in Two Dimensions."[9]

Point I represents the brain of the subject. The horizontal line, AB, represents the present of the subject and "all simultaneous objects in space." The arrows going out from point I along line AB indicate that point I forms the center from which the subject acts on its world.[10] The vertical line CI represents the past of the subject with its "successive recollections set out in time" (MeM 158; MaM 142-3). The arrow along CI indicates the direction of time and the process of bringing recollections to bear on perceptions. Thus, Diagram 2 represents the difference between perception and recollection as two lines at right angles to one another. An object perceived by the brain holds a place at the intersection of the two lines. As such, it will be both perceived and recollected at the same time.

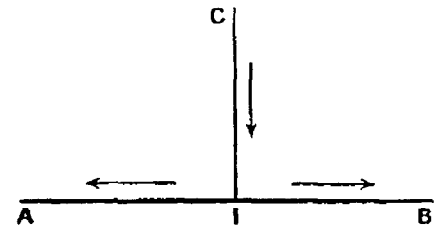

Diagram 2: Perception and Recollection in Two Dimensions

[9] Taken by itself, this diagram is subject to all of Bergson's criticisms of spatial images used to represent temporal realities. However, we must bear in mind the context in which the diagram occurs and Bergson's more general use of literary images. Given the gap between reflection and lived experience, Bergson holds that no image will be adequate to experience. However, a philosopher can offer a series of images, each of which supplies something lacking in previous images. The "direction" of the images, then, can point the reader to the experience, though it cannot provide or substitute for the experience.

[10] The space in which the objects represented by line AB exist is perceived space, or extension, not the purely conceptual space treated in chapter two.

Diagram 1 and Diagram 2 differ in some important respects. First, exactly *what* is represented in each figure may differ. Line AD of Diagram 1 represents atomic mental states. The realities represented are purely subjective. Lines AB and CI of Diagram 2 seem to represent the *objects* grasped in perception and recollection. The brain is represented only at point I. Accordingly, the lines do not represent objects within the brain or purely subjective realities.

Second, and more importantly, Bergson moves from one horizontal line in Diagram 1 (line AD) to the two lines perpendicular to one another in Diagram 2 (lines AB and CI) to maintain the "radical distinction between the two series, temporal and spatial" (MeM 159; MaM 143). Diagram 1 used only one line to represent both recollection and perception; Diagram 2 uses two lines, perpendicular to one another, to represent the qualitative difference between perception and recollection. Line AB represents perception, while line CI represents recollection. Thus, the shift from Diagram 1 to Diagram 2 is a movement from homogeneity to heterogeneity, from a closed system limited to a qualitative alikeness, to an opening in that system which allows for qualitative difference. Diagram 2 represents the qualitative difference between perception and recollection. Let us examine each of the lines separately to determine the meaning of this diagram.

Line AB: Pure Perception

Perception is a process in which a subject "perceives" an object. Line AB represents the possible objects of perception. The subject is represented as point I and the objects perceived (potentially including the entire universe) are represented as

other points along line AB. Further, line AB represents the universe as simultaneous or at an instant. Because we are considering the perception of one object by another object at an instant, *t*, we must exaggerate the process of perception and say that it is instantaneous. Such a perception, limited entirely to a single instant, would not be mixed with recollections or with past instants of time (MeM 31, 42; MaM 34, 44). Perception at an instant is a pure perception. Line AB, then, represents the process of pure perception. The nature of pure perception can be articulated in more detail under two headings. Pure perception, as represented by line AB, signifies (1) a homogeneous system and (2) an instantaneous present.

A homogeneous system.

The line AB represents the entire universe at an instant, with every object which occupies a point on the line acting on and reacting to every other object. Bergson's account of perception relies on this structure of action and reaction. "Perception" here simply refers to the way $object_1$ acts on $object_2$ and to the way $object_2$ reacts. Further, because $object_2$ perceives or is acted on by $object_1$, $object_2$ is called a "subject" and $object_1$ an "object." The action-reaction structure of perception is the basis for its subject-object structure.[11]

---

[11] As we will see in chapter five, perception provides the only necessary conditions for a purely intellectual act or an affirmative judgment. Bergson describes a purely intellectual act as the act of a subject "placed before objects and concerned with them alone" (EC 288; CE 288). Further, the action-reaction structure of perception allows a quality to "come and record itself" and for affirmation to take a pre-linguistic form.

The universe, as represented by line AB, is a *system* because all the actions and reactions between objects can be completely accounted for by a perfect knowledge of laws of nature. The objects and the laws relating the objects to one another provide the sufficient conditions for all future events. A perfect knowledge of the objects and of the laws of nature would enable us to predict every detail of the future. The ability to completely foresee the future of an object means that "the future of the [objects] must be contained in their present and will add to them nothing new" (MeM 11; MaM 17). Such a mechanistic, self-contained system may be called "homogeneous" in that, while not lacking all quality, it does not allow for any different quality to emerge within the system.

In this homogeneous system, spread out in space at an instant of time, no object is *qualitatively* distinct from any other object. The human body, including the human brain, is just one more material entity. The body and the brain are subject to the same laws as other objects and are wholly describable in terms of action and reaction. "Each of us is a body, subject to the same laws as all other portions of matter. When pushed, we advance; when pulled, we recoil; when lifted and let go, we fall" (ES 30; ME 38). Considered in this way, the human body and the human brain have exactly the same status as other objects in the universe, whether rocks, or fish.

The instantaneous present.

The claim that pure perception happens in an instantaneous present simply means that pure perception is (i) instantaneous and (ii) a perception of the present. An instantaneous or pure perception introduces an interesting qualification into the

structure of perception. First, while perception has the structure of action-reaction, perception at an instant would require that there be no temporal distinction between the action and the reaction. As an example that tries to approximate an instantaneous reaction, one might first think of a very low-level form of life, such as an amoeba. Here, "the more immediate the reaction is compelled to be, the more must perception resemble a mere contact; and the complete process of perception and of reaction can then hardly be distinguished from a mechanical impulsion followed by a necessary movement" (MeM 28-29; MaM 32). Because such pure perception is most truly a "contact" followed by a necessary movement, the "perception" of one material body by another material body provides an even more obvious example than a living body reacting to its environment. One might think of the force of gravity on one's body. The action of gravity and the way one reacts to it are not, most of the time, distinct.

Perception also assumes the structure of a subject perceiving an object. In perception at an instant, there is no distinction between the object and the subject (MeM 248; MaM 221). "For, in pure perception, the perceived object is a present object, a body which modifies our own" (MeM 265; MaM 236). Pure perception places the perceiving subject in the very heart of things and places things in the very heart of the subject (MeM 68, 200; MaM 66, 180). Pure perception, then, is a direct encounter with an object. It is the model of a completely objective experience.

This allows us to clarify the meaning of a claim made above, that line AB of Diagram 2 represents the objects of perception. Pure perception does not allow for distinctions between subject and object. Thus, one cannot distinguish between the act

of perception, which belongs to the subject, and the object of perception. Line AB does not represent the objects of perception as distinct from the act of perception. It represents absolutely objective experiences as ordered from a particular perspective at point I. This does *not* mean that the objects of perception are subjective or created by the subject in any way. It does not mean that only point I of line AB actually exists. It means that the subject has exactly the same status as the objects and that it perceives those objects as they are.

Line AB not only represents the universe at an instant. It represents the universe in the present. The instant of pure perception is, according to Bergson, a *present* because this is the instant at which the universe is active. In this sense, the present is "*that which is acting*"[12] (MeM 71; MaM 68-69) or "*what is happening*"[13] (MeM 166; MaM 149-50, translation altered).

It may not be immediately clear why Bergson introduces the notion of "action" to define the present. Has not he smuggled in the notion of action in an illegitimate manner? There are two possible replies to this objection. First, this objection may rest on a convenient forgetfulness. Bergson introduces the notion of action prior to a discussion of the present, doing so on the first page of *Matière et mémoire* where he describes the universe as a homogeneous system of actions and reactions. If one accepts his description, it becomes entirely proper to use the notion of action to clarify the present.

---

[12] "l'*agissant*"

[13] "le présent est simplement *ce qui se fait*"

Second, the objection may intend to deny that the description of action at the beginning of *Matière et mémoire* is adequate for a description of the universe. With this objection, Bergson heartily concurs. Action requires more than one instant. Further, we have already seen that Bergson does not believe that a homogeneous system can allow for change or processes such as action. Thus, if he speaks about action at an instant or in a homogeneous system, it must be a concession for the sake of argument to his opponents who hold that the universe is a homogeneous system. For Bergson, "*pure* perception . . . exists in theory rather than in fact" (MeM 31; MaM 34). Pure perception is an abstraction, having been separated from recollection and from the past. It is a hypothesis which clarifies the nature of perception. The perception which we experience, however, is not pure. To account for experienced perception, Bergson must complicate the account of pure perception.

We have, so far, only considered one line of Diagram 2. However, we have already come upon the qualitative distinction between the two lines, and hence between the past and the present. With the words "that which is acting" Bergson marks the difference between the past and the present. The past, in contrast to the present, "is essentially *that which acts no longer*"[14] (MeM 71; MaM 68-69). The past is completed. The qualitative difference between the past and the present, between the objects available to perception and those available to recollection, is the

---

[14] translation altered. The translators of *Matter and Memory* have hopelessly confused Bergson's point by translating "le passé est par essence *ce qui n'agit plus*" as "the past is essentially *that which is no longer*"!

difference between the present tense of an active verb and the past tense of that same verb. Let us, then, consider what line CI represents.

Line CI: Pure Recollection

The past, given to the mind in recollection, is represented by line CI in Diagram 2. To clarify this representation, let us consider a possible objection to representing recollection and its objects in this way.

There seems to be, someone may object, a serious discrepancy between what lines AB and CI claim to represent. While all the objects on line AB are perceived at point I, they exist elsewhere on the line and independently of point I. Now the objects, the mental states, along line CI are past. Usually, when I remember an event, a thing, or a person, it is absent from me. By virtue of this absence, it seems plausible to think that my body, more specifically my brain, which is present, has stored and reproduced the image of it obtained when the object was present. These recollection-images exist only in the brain. Hence, they would seem to exist only at point I. It is deceptive, therefore, to draw a line CI to represent "our successive recollections set out in time" (MeM 158; MaM 142-3). More generally, the objector might claim, the present exists independently, while the past exists only in the present. Line CI, therefore, should be erased.

In general, this objection reasserts the conception of time found in associationism. It either claims that (1) the present can and does exist separately and independently of the past because the past does not exist, or (2) the past does exist but only as present, as a mode of or form of what is present. In either case, the

distinction between the past as past, and the present as present, is a distinction between non-existence and existence.

Bergson takes this objection very seriously and uses both psychology and philosophy to formulate a reply. First, he formulates the position assumed by the objector as a hypothesis. A materialistic conception of the mind claims that brain cells store recollections, somewhat like sound is stored on an LP or data is stored on a computer disk. The meaning of this hypothesis is not at all clear and is open to many objections (MeM 130; MaM 118 / ES 51-52; ME 63-4). However, assuming we can make clear sense of it, if the hypothesis is true, then, recollections would cease to exist when those cells were destroyed or failed to function. Conversely, the failure to recollect may indicate some problem with or a destruction of the corresponding brain cells.

In examining this hypothesis, Bergson does not question that brain damage causes an inability to remember. Rather, he asks whether a subject with brain damage loses recollections themselves or the ability to access or act on the basis of those recollections.

Studies of aphasia.

Bergson finds certain psychological studies of aphasia[15] telling against the theory that brain cells store recollections. First, if the brain cells were damaged, words would simply be gone and would have to be relearned. However, studies

[15] Aphasia refers to the loss of ability to understand or express speech due to brain damage.

indicate that for an aphasiac "to recover a word it is often enough to put him on the track of it, by giving him its first syllable, or even by merely encouraging him. An emotion may produce the same effect" (MeM 131-2; MaM 119 / ES 52; ME 65). Rather than the recollections no longer existing, it is more as though "the whole faculty of remembering is more or less diminished *in vitality*" (MeM 267; MaM 237) and the function of the brain is to "*recall* the recollection and not to store it" (ES 52; ME 65).

Second, when aphasia sets in gradually, the progress of the disorder also indicates that memory loss does not result from the destruction of specific brain cells. People gradually lose their memory of words in a manner described by "Ribot's law: proper names go first, then common nouns, and lastly verbs" (MeM 132; MaM 119).[16] Bergson comments wryly: "it would be wonderful indeed that disease should always attack these cells in the same order" (MeM 133; MaM 121), "as if the disease knew grammar" (ES 53; ME 66). Once again, this does not indicate that the recollections no longer exist, but that the strength to remember or the general function has decreased.

This said, the interpretation of studies of aphasia is not the primary issue in the objection to line CI and Bergson's reply to that objection. Bergson is preparing to debate the metaphysical question, "Does the past exist?" or more specifically, "Do recollections, past mental states, exist apart from their relation to the brain?" No set of psychological studies can settle such metaphysical questions. Materialists cannot

---

[16] Ribot, *Les Maladies de la mémoire* (Paris 1881), 131 ff.

prove their philosophical theses through empirical science alone (ES 34-41; ME 43-51), and neither does Bergson claim that the citing of these two examples proves that recollections exist independently of the brain. These studies, however, meet the materialists on their own ground and establish that empirical studies allow, perhaps even suggest, interpretations other than those put forward by those who maintain a mind-brain identity (ES 50; ME 62). In order to fully reply to the objection to line CI, we must leave physiology for metaphysics.

Metaphysics and the existence of the past.

Having shown that some empirical research is compatible with a dualist position, Bergson turns to consider the philosophical basis of materialism. Materialists and dualists disagree over the nature of existence.

Bergson first points out the presuppositions of the materialist's position. Materialists assume that the past, if it exists at all, must exist somewhere, some place, as present, in brain cells. This way of thinking assumes a relation of container and contained appropriate only to physical or spatial reality. Even then, however, "because it has been shown that one thing is *in* another, the phenomenon of its preservation is not thereby made any clearer" (MeM 165; MaM 149).

To avoid assuming a relation between container and contained, the materialist could restate the question, "Where is the past stored?" as "On what does the past depend for its existence?" Here, the notions of "container" and "contained" are replaced with "independent" and "dependent" existence. The dependence of recollections on the brain is plausible only if one already understands the notion of an

independent existence and agrees that the brain has such an existence. *The materialist presupposes that independent existence is present existence.* It is in this sense that the brain and the objects represented by line AB exist properly.

Let us then assume that only line AB exists properly, i.e. that a purely homogeneous system at an instantaneous present defines all that exists. What follows from this? If only the present exists "then, you must suppose that this universe dies and is born again miraculously at each moment of duration" (MeM 165; MaM 149). The brain too would be limited to the pure present and would itself die and be recreated at every instant. But, we can infer, if the brain's existence flickers, so do the memories which are supposed to be stored in the brain. Not only is the brain recreated at each moment, but all our recollections must be recreated with the brain.

What force does this argument have? Bergson's argument does not reveal a conceptual absurdity in the claim that only the present exists. It is not *logically* absurd that the universe is recreated at each moment. Rather, Bergson's argument brings that claim into conflict with another intuitive claim, that things that are properly real have a *continuous* existence, that "to exist" includes in its meaning "to continue." According to this understanding of existence, a form of existence which expires as soon as it is created and is recreated as soon as it dies is not a self-sufficient or independent form of existence. When we identify existence with an instantaneous present, we destroy the possibility of accounting for both independent temporal existence and continuous existence.

"To exist," then, means "to continue" and "to continue" requires not only an instantaneous present, but also a past. Thus, the past, that which does not act, must exist. But the present also exists, and the past and the present are heterogeneous to one another. Thus, existence itself is heterogeneous.

Bergson emphasizes this with reference to Diagram 2 above. Line AB and line CI both represent realities which exist independently of point I. Neither the objects of perception nor objects of recollection are stored in the brain. Perception and recollection may differ in kind, but they share one thing in common: the independent existence of their objects. To head off the objection voiced above, Bergson insists on this interpretation of line CI. He complains that some truths about what line CI represents have been lost because "we have fallen into the habit of emphasizing the differences and, on the contrary, slurring over the resemblances, between the series of *objects* simultaneously set out in space and that of *states* successively developed in time" (MeM 161; MaM 145). Bergson's insistence is striking precisely because he himself is in the habit of emphasizing the differences between space and time.

More specifically, if the past exists, but does so differently than does the present, one no longer has strong reasons for believing that the past exists only in or as the present, or that recollections exist only in the cells of the brain. Recollections, that is, past mental states, exist apart from (a) present brain cells or (b) being presently conscious. To preserve the difference in kind between the past and the present, between recollection and perception, Bergson insists on speaking of "pure recollection." A pure recollection exists independently of a conscious subject

presently recollecting it. If the past or pure recollections (*souvenirs purs*) must, metaphorically, be stored "somewhere," then, Bergson says, "they are in the mind (*l'esprit*)" (ES 55; ME 68) or in "pure memory (*mémoire pure*)" (MeM 268; MaM 238). The past does exist independently of the brain, not materially or as matter, but as mind or spirit. "Pure recollection *(souvenir)* is a spiritual manifestation. With memory (*mémoire*) we are in very truth in the domain of mind (*l'esprit*)" (MeM 270-1, translation altered; MaM 240).

The Relation between the Past and the Present

While the heterogeneity of the past and the present is essential to Bergson's doctrine of time, it is not the whole of that doctrine. Time is not simply the difference between the past and the present; it also implies the relation between the two. We experience the present as perception and the past as recollection, but we experience the relation between perception and recollection as memory.

Memory

Memory, as Bergson uses the term, refers to the bond between the past and the present.[17] Our experience of memory is our experience of the mixed modes of past and present. This means that memory is essential to time. As chapter three indicated, time requires a *before* and an *after*, a past and a present.

> Without an elementary memory that connects the two moments, there will be only one or the other, consequently a single instant, no before and after, no succession, no time. We can bestow upon this memory

[17] "*memory*, that is to say a synthesis of past and present" (MeM 248; MaM 220).

> just what is needed to make the connection; it will be, if we like, this very connection, a mere continuing of the before into the immediate after with a perpetually renewed forgetfulness of what is not the immediately prior moment. We shall nonetheless have introduced memory. To tell the truth, it is impossible to distinguish between the duration, however short it may be, that separates two instants and a memory that connects them. . . . This is real time, perceived and lived. (DeS 61-62; DaS 48-49).

The connection between the *before* and *after* is not accomplished by relative position in space and a qualitative distinction in magnitude, but within the mind by memory. If space or magnitude seems to fulfill this function for Aristotle, it is because he endows both space and the soul that counts with memory, with a continuous existence which connects the past to the present. What, then, is the nature of this connection designated as "memory?"

The Experienced Present

One can exhibit the connection between the past and the present through a meditation on our experience of the present. Bergson considers pure perception as perception at an instantaneous present, a present cut off from any connection to the past, perception apart from any recollection. A consideration of the experienced present requires a correction of this picture. The present is not *experienced* as an instant, but as temporally thick.

> There is no present, if the present be a mathematical instant. An instant is the purely theoretical limit which separates the past from the future. It may, in the strict sense, be conceived, it is never perceived. When we think we have seized hold of it, it is already far away. What we

> actually perceive is a certain span of duration composed of two parts -- our immediate past and our immediate future. (ES 5-6; ME 8-9).[18]

The experienced present, then, is the experience of memory. The experience of the present also involves perception, though no longer pure perception. We find the present mixed with the past, perception mixed with recollection.

Forms of Memory in the Experienced Present

Perception and recollection combine in a variety of ways. Bergson distinguishes between three forms of memory: (1) sensation or contraction memory; (2) habit or body memory; and (3) recollection-images or covering memory.[19] Body memory and covering-memory are both forms of recognition.

Sensation: contraction memory.

Once we acknowledge that the experienced present is not dimensionless but includes temporal moments on both sides of the instantaneous present, there are immediate implications for sensation. Sensation or perception will take time. "However brief we suppose any perception to be, it always occupies a certain duration, and involves consequently an effort of memory" (MeM 30-31; MaM 34). Immediate perception requires a form of memory because it is *not* instantaneous.

As an example of immediate perception or contraction memory, Bergson offers the sensation of light. Consider light as a physicist considers it. A light which

---

[18] See MeM 152-3; MaM 137-8.

[19] I draw these designations from Deleuze.

appears "red" to us has a wave-length of 400 trillion vibrations per second (MeM 230; MaM 205). Red light has the longest wave-length so that, of visible light, its vibrations are the least frequent. The physicist may represent these vibrations as a series of sine waves spread out in space. From the physicist's standpoint, there is a clear distinction between the 200th and the 201st wave, and thus a distinct *before* and *after*. The physicist divides these waves and yet does not change the nature of what is divided (MeM 231; MaM 206).

The way in which our body perceives red light differs significantly from the way the physicist treats it. The frequency of light waves prevents perception from taking each vibration separately. Perception does not count the 400 trillion waves. If one had to count the waves, perceiving each distinctly, one could never perceive a red light.[20] Thus, the 200th and the 201st waves, though distinct for the physicist, are not distinct in perception. To divide the waves from one another, or to halve their frequency, would make the light imperceptible. There will be a qualitative change in the very nature of the perception. Thus, for perception, the waves of light are "indivisible."

Perception can grasp what is distinct for the physicist as indivisible because perception is a form of memory. In immediate perception, memory takes the form of

---

[20] The psychology of Bergson's day claimed that the shortest span of time that the human mind can recognize is 1/500th of a second. To distinguish one pulse of light from another, therefore, each pulse, which for the sake of simplicity can be considered as instantaneous, would need to be separated from the next pulse by 1/500th of a second. To count the 400 trillion vibrations in this fashion would require 25,000 years.

"contraction memory" because it contracts "a number of external moments into a single internal moment" (MeM 31; MaM 34). In the case of the perception of light, contraction memory "condenses in each [perception] an enormous multiplicity of vibrations which appear to us all at once, although they are successive" (MeM 73; MaM 70). One's body perceives the 400 trillion waves per second, not *as* 400 trillion waves, but *as* a "red" light. Thus, "sensible qualities [are] *contractions* effected by our memory" (MeM 39; MaM 41).[21] Contraction memory is "inseparable in practice from perception" (MeM 76; MaM 73).

Bergson insists that contraction memory is not for the sake of speculative knowledge nor "just for the fun of it." Perceptions, such as the sensation of red light, are determined by the particular nature of the eye and the nervous system which have as their function to register action. This registration, however, is highly selective and reflects the interests and possible responses of the perceiver. That which does not interest us simply passes by us, unnoticed.

Contraction memory is the most basic form of memory, "a mere continuing of the before into the immediate after" (DeS 61; DaS 48). The other two forms of memory, types of recognition, are considerably more sophisticated.

Habit or body memory[22]

---

[21] On contraction memory, see also MeM 74, 233, 246; MaM 70-1, 208, 219.

[22] This may also be called "learned" memory (MeM 88; MaM 83).

Perception has an action-reaction, or stimulus-response structure. That is to say, perception includes not only being acted upon but responding. In some objects that response may simply be resistance. The clearest model of pure perception is the causal interaction, considered as instantaneous, of two material bodies. Such perception requires neither consciousness nor representation.

A temporally thick present introduces a distinction between action and reaction. The distinction between action and reaction, then, corresponds to the difference between the immediate past and the immediate future. What is immediately perceived is not simply a present object, but the action of an object of one's immediate past. In reacting, one influences the immediate future.

The structure of a temporally thick present holds both of these moments together. The present includes both action and reaction, past and future.

> The immediate past, in so far as it is perceived, is, as we shall see, sensation . . . . and the immediate future, in so far as it is being determined, is action or movement. My present, then, is both sensation and movement; and, since my present forms an undivided whole, then the movement must be linked with the sensation, must prolong it in action. Whence I conclude that my present consists in a joint system of sensations and movements. My present is, in its essence, sensori-motor. (MeM 153; MaM 138).

We can distinguish three forms of reaction. The most basic type of reaction is a reflex action. Reflexes are determined by the structure of the spinal cord and the brain stem. There is no question of choosing between alternate reflex actions once, for example, a doctor taps your knee with a hammer. A more sophisticated form of reaction can be found in the instincts of animals. While instincts may be much more complex than reflexes, they too seem genetically determined and leave little or no

room for choice on the part of the agent. Both of these examples indicate that the body is capable of remembering motor mechanisms which a definite stimulus can set in motion (MeM 88; MaM 83).

A third type of reaction is habit. Habits, like instincts, can be very complex and seem to be stored within the body itself. Unlike reflexes or instincts, however, habits can be acquired. To get our bodies to remember, we repeat actions over and over. For complex habits, we decompose an action into its simplest motions and then, by putting all the motions together, complete a complex act. Finally, once we have acquired a habit, it is fairly automatic, not requiring the same conscious effort, as soon as we do it again (MeM 84; MaM 80). This holds for speaking a new language, playing piano, and pitching a baseball.

Responding to a stimulus in an appropriate way constitutes a form of recognition.

> To recognize a common object is mainly to know how to use it. This is so true that early observers gave the name *apraxia* to that failure of recognition which we call psychic blindness.[23] But to know how to use a thing is to sketch out the movements which adapt themselves to it; it is to take a certain attitude, or at least to have a tendency to do so through what the Germans call motor impulses (*Bewegungsantriebe*). The habit of using the object has, then, resulted in organizing together movements and perceptions; and the consciousness of these nascent movements, which follow perception after the manner of a reflex, must be here also at the bottom of recognition. (MeM 101; MaM 93-4).

---

[23] Kussmaul, *Die Störungen der Sprache,* p. 181. Allen Starr, *Aprasia and Aphasia (Medical Record,* Oct 27, 1888). -- Cf. Laquer, *Zur Localisation der Sensorischen Aphasie (Neurolog. Centralblatt,* June 15, 1888), and Dodds, *On Some central affections of Vision (Brain,* 1885).

Such recognition is acted, lived, or played. It does not pause to contemplate the object, but moves quickly and automatically from the object. For this reason, Bergson says habit is inattentive to, or a distraction from, the object (MeM 107; MaM 98).

Recollection-images or covering memory[24]

A third form of memory, and a second from of recognition is "covering memory" which requires a "recollection-image" (*image-souvenir*). Perception provides only "a mere hint" of the object. The body's nervous system picks up only on the general characteristics of objects which interest it.

Covering memory comes into play when a perception is too indefinite to lead to a reflexive or instinctive reaction and there is no acquired habit to provide a motor interpretation of the initial sensation. In such cases, the body does not immediately react and take the subject away from the object. Rather, there is a hesitation. One returns to or attends to the object to look again, to better determine the nature of the thing at hand. Thus, Bergson sometimes calls this "attentive recognition."

The mind, spurred by an ambiguous perception, appeals to the memory for aid. Recall that recollections differ in kind from perceptions, that they exist in themselves (or are stored in pure memory), and that there is a recollection for everything ever perceived. When the mind appeals to memory, it initially contacts "the past in general" or pure memory. Within that realm, it locates a region which Bergson calls a

---

[24] Also called "spontaneous memory" (MeM 170; MaM 153).

minority community might interpret Rawls. You now have the person's face before you in the form of a recollection-image. Is this the same person that now stands before you at the party? This can be determined only by comparing the recollection-image with the perception-image. Bergson suggests that this happens by the recollection-image functioning as an "after-image" which either aligns or fails to align with the perceived image. If the two images coincide in an adequate manner, you have a way of responding to this person now by conversing with him/her about Rawls. If not, you must repeat this process again.

Note several points concerning covering memory. First, covering memory has as its primary goal an appropriate reaction. An uncertainty in perception makes an immediate reaction unavailable. When it becomes possible to react appropriately, one no longer need exert the mental effort required to retrieve a recollection-image. Covering memory forms a kind of extended circuit between action and reaction. Attentive recognition

> is a *circuit*, in which all the elements, including the perceived object itself, hold each other in a state of mutual tension as in an electric circuit, so that no disturbance starting from the object can stop on its way and remain in the depths of the mind: it must always find its way back to the object whence it proceeds. (MeM 114; MaM 104).

Second, recall that perception implies both an object and subject. If perception is instantaneous, it is impossible to differentiate the subject and the object. A temporally thick present, however, maintains the contrast between the subject and the object and, thus, between what each contributes to perception. Covering memory designates that aspect of perception that the subject contributes. It is the recollection-

image, and not the perception-image, which constitutes the subjectivity of our experiences.

Most important, however, is the process by virtue of which this form of memory is called "covering memory." Bergson says that recollection-images cover over what is given in contraction memory or immediate perception. In Bergson's fullest account of this form of memory, he says

> these [recollection-]images must constantly mingle with our perception of the present, and may even take its place (*pourront même s'y substituer*). . . . at every moment they complete our present experience, enriching it with experience already acquired; and, as the latter is ever increasing, it must end by covering up and submerging the former. It is indisputable that the basis of real, and so to speak instantaneous, intuition, on which our perception of the external world is developed, is a small matter compared with all that our memory adds to it. Just because the recollection of earlier analogous intuitions is more useful than the intuition itself, being bound up in our memory with the whole series of subsequent events, and capable thereby of throwing a better light on our decision, it supplants the real intuition of which the office is then merely . . . to call up the recollection, to give it a body, to render it active and thereby actual. . . . perception ends by being merely an occasion for remembering (MeM 68; MaM 66).

What Bergson describes here is a process of substitution. Recollection-images "may even substitute for" perception.

Diagram 3: The Cone

All forms of memory connect the different parts of time. Covering memory, however, takes priority for our purposes. Both contraction memory and habit differ from covering memory in that they are concerned primarily with perception and thus with the immediate past and the immediate future. Covering memory, in contrast, is concerned with both recollection and perception and thus with the more distant past

and the present. Further, covering memory is memory in the truest sense of the word[25] and involves the highest functioning of the mind. It therefore holds the most interest for Bergson.

In order to understand how recollection comes into perception in covering memory, Bergson modifies Diagram 2. We can illustrate the problem with Diagram 2 as follows. In Diagram 2, line CI represents past events in the life of the subject set out in chronological order.

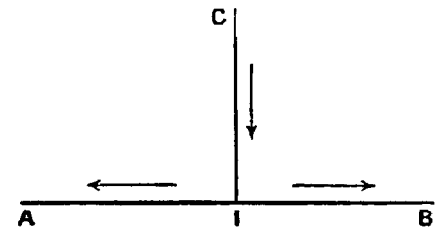

Diagram 2: Perception and Recollection in Two Dimensions

Let us imagine two additional points on line CI which will divide the line into three equal lengths. Point D is closest to point C, and point E is closer to point I. Let the subject at point I recollect the event at point D. One might represent this recollecting as a retrieving, or as a continuous motion, by which the subject travels up line ID to fetch the event at D, and then travels back with event D to point I.

Clearly, this does not adequately represent our experience of recollecting. On this model, one would have to pass through all events between D and I in order to arrive at D, and then pass back again through all the separate events. This is actually how we move through space -- to get from one point to another, I must pass through all the intermediary points. In memory, however, I can move immediately into the past in general, and from there to a given event which I wish to remember. Thus, we

---

[25] It has priority over habit memory, for example, because we remember acquiring habits not through habit memory, but through covering memory.

need a different model to represent how a recollection is ever brought to bear on a perception.

The need to modify Diagram 2 also indicates that our determination of the difference between the past and the present is inadequate as an account of *time*. Time is not only the difference between the past and the present or the *before* and *after* but is the bringing of the past into the present. Diagram 2 may represent the heterogeneity of the past and the present, but it does not allow us to think their relation. To think the relation between recollection and perception in terms of time is to think of them not only as past and present, but as related by a motion of the mind.

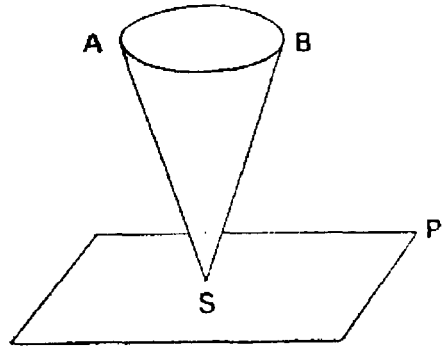

Diagram 3: The Cone

Bergson's third model for understanding the relation between recollection and perception is presented in Diagram 3, the diagram of the cone. Diagram 3 adds a third dimension to the two dimensions in Diagram 2. Line AB has now become a plane P. Point I is now point S. Line CI has been transformed into the base AB of Cone SAB. Based on our discussions of Diagram 2, we can immediately describe what these parallel planes represent. New perceptions are continually received at point S as S and plane P change. With each perception, a new recollection is also recorded on the circular plane AB so that the entirety of the past exists on the base AB. Representing the past as a plane parallel to the plane of the present emphasizes the independent, heterogeneous reality of the past.

In accordance with the description of covering memory, base AB represents pure memory or the past in general. Unlike the claim for line CI, Bergson makes no indication that the events are ordered chronologically. Rather, he says some recollections form "shining points round which the others form a vague nebulosity" (MeM 190; MaM 171). These shining points, with their connected memories, constitute what Bergson calls dynamic schemes.

The fundamentally new aspect of Diagram 3 is the cone SAB which connects the two planes. The cone represents a path of motion between base AB and point S. The connection is represented by a cone because the cone allows Bergson to represent two aspects of the movement. Imagine a line from the center of base AB to point S. This line represents the vertical component of the motion along the cone between recollection and perception. We have already described this motion above.

Notice also that as one descends that vertical line, the circumferences of the cross-sections of the cone decrease. We may then distinguish within cone SAB different planes between plane AB and point S. Diagram 3 can be modified to introduce planes within the cone. This progressive shrinking of the circumference indicates differing degrees of tension of the mind at different vertical levels of the cone. The base of the cone, where the circumference of the cone is greatest, represents the mind at its most relaxed state, detached as much as possible from the present, in a state of dreaming or perhaps

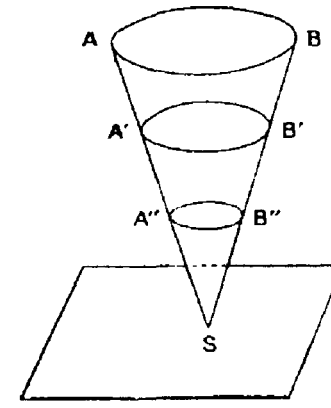

Diagram 3': Planes of the Cone

madness. The mind is most contracted at point S, in reactions closest to reflex actions and which hardly require mental activity. Depending on the tension of one's mind, perception may generate no other image than that of the object itself, or it may be the occasion for the emergence of an entire army of recollection-images. Intellectual effort, such as that required to remember my colleague at the APA, is required to move between the planes, to relax one's mind and then bring it back again to the present perception.

Conclusion

Having examined each of Bergson's diagrams and completed the transition between each of them, we are now in a position to interpret our results. Diagram 1 and Diagram 2 are essential to interpret Diagram 3 correctly, but Diagram 3 is clearly the most important of the three. The cone is the final image in Bergson's attempt to point us to our own experience of time. A diagram is not a definition. It serves as a symbol, which continually effaces itself but which can remind us of our reasonings. The parallel planes remind us that the *before* and *after*, or the past and the present, base AB and point S, both exist. The cone SAB suggests that the past is funneled into the present, such that the past and present are not external to one another, nor are they places with relative position to one another in a magnitude. Space is not the medium of the motion between these two planes; the cone points us to motion, not to space. Indeed, we perceive space only at one pole of the motion, in the present. The poles or planes exist in and for the mind, and the mind itself moves between them.

Interpreted most narrowly, the cone is an image of the workings of the mind. That is to say, it sets out to represent the difference between recollection and perception, and their union in memory. A more complete interpretation must add that this is also an image of real time or duration. The image of the cone represents the difference between the past and the present, or the *before* and *after*, as well as the connection between them. We must go further, however, and say that because Bergson insists that the past exists, the cone is an image of existence. Existence itself embraces the heterogeneity of the past and the present. Finally, we will have grasped the full significance of the cone only when we see how it provides the foundation for a philosophical method, for a way of distinguishing and joining terms and solving philosophical problems.

One cannot adequately discuss any one of these issues without also taking up all the others. However, for the sake of intelligibility I will separate these issues. The final section of chapter two briefly indicated in a preliminary way spatial forms of thought. Having explicated the diagram of the cone, I can now demonstrate, again in a preliminary way, what it means to think in terms of time. The next section will illustrate Bergson's method with regard to the debate between realism and idealism.

Thinking in Terms of Time: The Explanatory Power of the Cone

As I have shown above, Bergson's distinction between recollection and perception also establishes a distinction between the past and the present. These terms, in turn, mark a distinction between the mind (*l'esprit*) and matter -- including the grey matter of the brain. In the preface to the 7th edition of *Matière et mémoire*,

Bergson acknowledges that his position is "frankly dualistic," that it affirms both "the reality of spirit (*l'esprit*) and the reality of matter" (MeM 1; MaM 9). In discussing the distinction between the parts of time, therefore, Bergson is also indirectly discussing idealism, materialism, and dualism.

While Bergson claims to hold to dualism, he also insists that his form of dualism does not suffer from the same defects as traditional forms of dualism. Philosophers hold traditional dualism "in small honor" (MeM 1; MaM 9) because it is incoherent. The problem is not simply that dualism distinguishes terms, but that it is impossible to see "how the one is grafted upon the other" (MeM 250; MaM 222). On Bergson's analysis, this arbitrary bifurcation inherent in traditional dualism stems from two sources. First, dualism oscillates between realistic and idealistic theories of matter (MeM 1, 255; MaM 9, 227). Idealism and realism hold contradictory positions on matter, but the dualist wants to hold on to both. The theory of matter in dualism, thus, is incoherent. Second, dualism thinks of the terms it wishes to relate as spatially separate. Once it places the mind "outside" of matter and matter "outside" of the mind, it cannot determine how one can act on the other (MeM 248; MaM 220-1).

Bergson establishes his own form of dualism precisely in order to push through the irreconcilable terms of traditional dualism. He formulates a coherent theory of matter through his doctrine of pure perception. Likewise, he avoids placing a spatial separation between the mind and matter by identifying each with the past and present respectively, thereby establishing a temporal distinction between the two. That is to

say, the diagram of the cone will enable Bergson to assert a dualism without dualistically bifurcating reality.

Dualism and Theories of Matter

In modern philosophy, metaphysical positions on the nature of matter are directly tied to accounts of the nature of perception. Thus, we cannot consider the nature of matter without also examining the nature of perception. Before we consider Bergson's theory of matter and its relation to perception, let us first determine the nature of the incoherence in traditional dualism.

Definitions of Idealism and Realism

In *Matière et mémoire*, Bergson defines idealism by way of contrast with realism.[26] The model idealists are both Kant and Berkeley. Generally speaking, idealists hold that matter is reducible to perceptions (MeM 1; MaM 9), or that "perceptions are the whole of reality" (MeM 70; MaM 68). Perceptions, being mental, are unextended. Thus, idealists hold that "the material universe [is] nothing but a

---

[26] In his lecture courses, Bergson presents idealism as a modification of skepticism. Rather than deny that any knowledge is possible, idealism severely restricts what is to count as knowledge or what can be known. According to Bergson, the idealist says that "To know is, in reality, to deform, to alter, to transform; it is to bend the real objects to the requirements of the intelligence; it is, to employ an expression of Kant, 'to impose the forms of intelligence on the matter of knowledge,' so that the mind remains shut up so to speak in itself. . . . [The mind fashions objects] in its own image, and it thus knows only itself." (Bergson, "Métaphysique" 4e Leçon, in *Cours I: Leçons de psychologie et de métaphysique Clermont-Ferrand 1887-1888*, ed. Henri Hude [PUF, 1990], 309.) In these lecture courses, where idealism is identified with rationalism, Kant is "l'idéaliste par excellence." ("Métaphysique" 4e Leçon, 309).

synthesis of subjective and unextended states" (MeM 54; MaM 54). Finally, knowledge, thus, is *constructed* out of perceptions.[27]

By realism, Bergson means scientific or materialistic realism (MeM 21; MaM 26). Realism holds that "behind this synthesis [of perceptions], there is an independent reality corresponding to it" (MeM 54; MaM 54) and that this independent reality is the cause of the perceptions (MeM 70; MaM 68). The materialistic realist holds that perceptions are reducible to the cause of those perceptions. In any case, perception is a duplication or reproduction of the external world within the mind. Knowledge, thus, is a *re*construction of what exists independently and separately from the conscious representation.

The Incoherence of Dualism

Considered abstractly, isolated from one another, both realism and idealism can be seen as self-consistent systems. Bergson will not claim that either system contains a self-contradiction. "It goes without saying that it is not a question of refuting the system."[28] Thus, "one can only formulate certain doubts" to show the inadequacy of a given system.[29]

Considered in relation to one another, however, idealism and realism are exactly contradictory positions. Idealism claims that the existence of the material

---

[27] Bergson does sometimes discuss Berkeley or English Idealism and Kant or German Idealism separately. For Berkeley, our constructions are subjective, whereas for Kant they are relative (MeM 259; MaM 230).

[28] "Métaphysique" 4e Leçon, 312.

[29] "Métaphysique" 4e Leçon, 312.

world depends on perceptions of it, and that perceptions and/or perceivers exist in their own right. Realism holds that perceptions are caused by the material world and that the material world exists independently of being perceived. Idealism and realism disagree as to whether matter or the perceiving mind is the more basic reality. Traditional dualism tries to live with *both* systems and thus maintains within itself the contradiction between realism and idealism.

Both realism and idealism try to avoid the contradiction by reducing the opponent's system to their own. Realists explain perception as a function of matter; idealists explain matter as a function of perception. "Thus in idealism, as in realism, we posit one of the two systems and seek to deduce the other from it" (MeM 22; MaM 27). Bergson claims that such a reduction succeeds only if one can deduce one system from the other. However, the attempt of the idealist and the realist to deduce one system from the other is bound to fail: "neither realism nor idealism can succeed, because neither of the two systems of images is implied in the other, and each of them is sufficient to itself" (MeM 22; MaM 27).[30] Thus, according to Bergson, no position, dualist, idealist, or realist, gives an adequate account for the relation between perceptions and matter.

Rather than discuss this question in the abstract, Bergson insists on discussing exactly how idealism and realism are systems which constitute interpretations of

---

[30] "When we look at it closely, we shall see that this is the reef upon which all idealism is wrecked: there is no possible transition from the order which is perceived by our senses to the order which we are to conceive for the sake of our science, -- or, if we are dealing more particularly with the Kantian idealism, no possible transition from sense to understanding" (MeM 255; MaM 227).

experience. Idealism, according to Bergson, describes the universe as it is "*given* to present experience" (MeM 22; MaM 27). Realism, by contrast, describes the universe as we *believe* it to be (MeM 22; MaM 27). For example, consider an object of perception such as a tree. The perception of the tree will vary with the body of the perceiver, exactly as the idealist claims. On the other hand, the perceiver will most likely not believe that the tree itself actually varies with the variations of the body of the perceiver. The tree can be described by both systems. Thus, experientially, we operate with *both* systems.

Conceiving of idealism and realism in this manner makes it possible to give an account of how either system could develop and no longer presents them as simply contradictory. It allows Bergson to ask a very interesting and provocative question:

> how can these two systems co-exist, and why are the same images [i.e. the tree] relatively invariable in the universe, and infinitely variable in perception? The problem at issue between realism and idealism, perhaps even between materialism and spiritualism, should be stated, then, it seems to us, in the following terms: *How is it that the same images can belong at the same time to two different systems, the one in which each image varies for itself and in the well-defined measure that it is patient of the real action of surrounding images, the other in which all change for a single image, and in the varying measure that they reflect the eventual action of this privileged image?* (MeM 20-1; MaM 25).

Recoupage

Bergson calls the method for dealing with such problems "recoupage." When one problem has two contradictory solutions, Bergson "cross-checks" the solutions against one another, he looks for what the solutions have in common. He thus presents the solutions, and the question itself, as belonging to a single system of

thought. The fact that the system of thought allows for, or even requires, two contradictory solutions shows that the system is either false or incoherent, and that the question cannot be resolved in terms of that system. Bergson then articulates a different approach to the phenomenon which both changes the question and the possible solutions.[31]

Bergson practices this method here. Realism, idealism, and dualism all fail in their quest to relate perception and matter because all share some common assumptions. They assume that "matter" refers to that which exists in itself and objectively. It is extended, existing in space, and hence as divisible. By contrast, "perception" refers to that which is unextended, relative, subjective (MeM 54; MaM 54), and a construction or a duplication of the material world (MeM 72, 256; MaM 69, 227). Finally, realists, idealists, and dualists all "regard the elementary operations of the mind . . . as operations of pure knowledge" That is to say, perceptions are produced in a disinterested manner, just for the fun of it, with no definite, purpose or goal but speculative knowledge (MeM 256; MaM 227).

These common assumptions actually create the unbridgeable gulf between matter and of perception, and hence, between realism and idealism. "The obscurity of

---

[31] Kolakowski, *Bergson*, 6. This method was adopted by Alfred North Whitehead: "When you are criticizing the philosophy of an epoch, do not chiefly direct your attention to those intellectual positions which its exponents feel it necessary to explicitly defend. There will be some fundamental assumptions which adherents of all the variant systems within the epoch unconsciously presuppose. Such assumptions appear so obvious that people do not know what they are assuming because no other way of putting things has ever occurred to them." Alfred North Whitehead, *Science and the Modern World* (New York: The Free Press, 1967), 48.

this problem, in all doctrines, is due to the double antithesis which our understanding establishes between the extended and the unextended (MeM 201; MaM 180-1). All positions are left with an abrupt, but unexplainable and undeducible leap between the extended to the unextended (MeM 240; MaM 213).

Restatement of the Problem and the Solution

Because the disagreement between the realist and the idealist is usually presented as a disagreement over the relation of matter to perception, it would be presented, according to Bergson's scheme, as a disagreement over the interpretation of plane P and point S of Figure 3'. According to idealism, point S has a privileged status on this plane, as it conditions all other objects (MeM 22; MaM 26). According to realism, point S is simply one point among others, to be described and accounted for in the exact same way as others. Changes in the objects are not merely changes for the observer, but changes in things themselves.

In order to make headway on this problem, Bergson takes it upon himself to sort through and limit the shared assumptions of the warring parties. First, Bergson clarifies the nature of perception. We have already seen how Bergson's doctrine of perception is simply a description of the action and reaction between material bodies. Pure perception is not subjective but objective (MeM 68, 200; MaM 66, 180). Further, perceptions are themselves extended.[32] On this, realists, idealists, and dualists have been mistaken.

---

[32] This is a change from his position in DI; TFW. See Appendix B for an explanation of this claim.

If Bergson's position is correct, perception is simply a form of matter, or to put it differently, matter is exactly as pure perception presents it. To matter, pure perception adds only perspective which places some objects farther away than other objects. But such a perspective is necessary for every object in the universe. Perception presents the universe from the perspective of its action on me and my reaction to it. Further, because pure perception has the structure of action and reaction, it is not purely disinterested. Rather, perception registers the action of other objects on my body and establishes reactions. Finally, perception is not a *duplication* of the material world. "The reality of things is no more constructed or reconstructed, but touched, penetrated, lived" (MeM 72; MaM 69). With these essential qualifications, the first chapter of *Matière et mémoire* makes clear that realism provides the most adequate interpretation of plane P, for it insists on the reality of matter.

On the other hand, Bergson says that the realist considers all objects as "on the same plane." Realism is mistaken if it thinks that only plane P exists. Indeed, both idealism and realism have been mislead by not making a qualitative distinction between recollection and perception. What is true in idealism refers not to perception but to recollection. Recollection, however, as unextended, subjective, and inactive, is qualitatively different from perception.

Once the distinction between perception and recollection has been made, the question "How can one thing belong to both the idealist and the realist systems" becomes a form of the question, "How can one thing be on both plane P and plane

AB?" or "How can one thing be both recollected and perceived?" The question now before us requires that we explain not how perception and recollection differ, but how they impact one another. Because the "pure" in both "pure perception" and "pure recollection" means that it is not at all related to its counterpart, the present question requires that we bring them into relation to one another. This is the precise function of the diagram of the cone.

Between the extended and the unextended planes of the cone, there are the various intermediate planes. Each plane exhibits within itself a mixture of the heterogeneous characters of the extreme planes. Each intermediate plane, then, differs from the other planes by degree. The cone itself, Bergson says, has "extension." Extension (*extension*), however, is not the extended (*l'étendu*). Unlike the extended, extension admits of degrees and belongs to "supple realities" (MeM 278-9; MaM 247). By "extension," Bergson claims to overcome the conceptual, spatialized opposition between the extended and the unextended.

Recollection and perception come together in the form of attentive recognition. By the mind moving from the past to the present, through the various planes of the cone, recollections can gradually take on extension, eventually becoming extended, in the body of the person. Only by this gradual motion of the mind, moving from one degree to the next and bringing the past into the present, does Bergson claim to mediate between the unextended and the extended. In so doing, he draws on the diagram of the cone to find a way between idealism and realism, one which does not fall into the difficulties of traditional dualism.

Conclusion

The cone is the final image in Bergson's attempt to point us to our own experience of time. A diagram is not a definition. It serves as a symbol, which continually effaces itself but which can remind us of our reasonings and experiences. The parallel planes remind us that the *before* and *after*, or the past and the present, base AB and point S, both exist. The cone SAB suggests that the past is funneled into the present, such that the past and present are not external to one another, nor are they places with relative position to one another in a magnitude. Space is not the medium of the motion between these two planes; the cone points us to motion, not to space. Indeed, we perceive space only at one pole of the motion, in the present. The poles or planes exist in and for the mind, and the mind itself moves between them.

The cone provides the basis for Bergson's method because it provides a model for understanding relations and differences between terms. Valid arguments can never suffice for a philosophical method, especially when other valid arguments arrive at opposed conclusions, as they do in the conflict between realism and idealism. I have illustrated Bergson's use of the cone for his philosophical method by looking at his defence of dualism against realism and idealism. While Bergson's argument is complex, he is explicit about the role that the cone plays both in the proper statement of the problem and in the solution. For all its complexity, Bergson's position is straightforward.

In order to claim that the cone provides the basis for Bergson's method, however, it is necessary to show its role in more than one solution to one difficulty.

Thus, I will show that Bergson's analysis of the idea of nothing, an argument which is considerably more difficult than his treatment of realism and idealism, implicitly relies on the diagram of the cone.

CHAPTER FIVE

THE ANALYSIS OF THE IDEA OF NOTHING

Chapters two, three, and four have clarified Bergson's conceptions of temporal and spatial differences and briefly indicated how these differences might imply a philosophical method. This chapter will examine Bergson's analysis of the idea of nothing to determine whether and how that analysis depends upon these notions of difference. Of particular interest is Deleuze's claim that Bergson's analysis of the idea of nothing articulates a concept of difference between beings which cannot be reduced to logical difference or differences of negations.

Bergson does not arbitrarily choose the idea of nothing as a philosophical problem to exercise his method. He comes to the idea of nothing through his claim that time and motion are the most basic realities. His position appears as the exact opposite of Parmenides'. Parmenides' position is not without its virtues, however. Parmenides provides a way of responding to that awkward and metaphysically anguished question: "Was there a time when there was nothing, or when being was not?" That which is is and that which is not is not. Becoming would be the coming into being from non-being. There was no time which being was not being. Therefore, there is no becoming. Bergson's position, it might seem, must give an account of how that which is not comes to be, since everything is becoming. Bergson's work

challenges the view of becoming as the hybrid of being and not-being. Usually he presents his view of change by attacking the idea of eternal, unchanging being. The analysis of the idea of nothing examines the opposite pole, the idea of not-being or nothing. The question implicit in the analysis of the idea of nothing concerns whether a temporalistic metaphysic can respond adequately to the founding question of Greek metaphysics.

Bergson published his analysis of the Idea of Nothingness in two forms. The first version appeared as an article, "L'Idée de néant," in *Revue philosophique* 62 (1906): 449-466. The second version appeared as the beginning of the fourth chapter of *L'Évolution créatice* in 1907. The 1907 version places the analysis in a larger context and relates it to the rest of the book. Beyond this, the differences are insignificant. I will refer to the analysis in *L'Évolution créatice.*

The analysis divides into a preface and two major parts. The preface is found only in *L'Évolution créatice* and concerns theoretical illusions to which the mind is subject. Here Bergson provides significant guides for understanding his general philosophical method. Because Bergson published the analysis in 1906 without the preface, it must be legitimate to interpret the analysis separately from the 1907 preface. I will return to consider the preface in chapter six.

The first major part begins approximately four pages into the fourth chapter of *L'Évolution créatice*, with the third sentence of the first full paragraph: "From the first awakening of reflection, it is this [the idea of nothing] that pushes to the fore . . . the torturing problems, the questions that we cannot gaze at without feeling giddy and

bewildered" (EC 275; CE 275). This sentence marks the beginning of the word for word agreement with the 1906 article. The first part ends: "the suppression of absolutely everything implies a downright contradiction in terms, since the operation consists in destroying the very condition that makes the operation possible" (EC 283; CE 283). As the last line indicates, the first part intends to demonstrate that the idea of absolute nothingness is self-contradictory. As noted in the introduction, it is this demonstration which interests Richard M. Gale.[1] Section I of this chapter will flesh out the lines of analysis of the first part and show why Gale's consideration fails.

The second part of the analysis begins with the line: "But the illusion is tenacious" (EC 283; CE 284). Here Bergson's argument shifts from a consideration of an absolutely negative idea, to the nature of negation itself. Richard M. Gale thinks that this second part of Bergson's analysis is irrelevant to the first part. I argue that the consideration of negation is relevant to the idea of absolute nothingness and that Bergson's treatment of negation reveals a dimension which traditional analytic philosophy cannot assimilate. As such it can point the way to a different form of the practice of philosophy.

---

[1] Richard M. Gale, "Bergson's Analysis of the Concept of Nothingness," *The Modern Schoolman* 51 (May 1974), 269-300.

First Part:The Idea of Absolute Nothingness

Bergson claims that one cannot have an idea of absolute nothingness because it contains a self-contradiction. He says that the "idea of the annihilation of everything presents the same character as that of a square circle: it is not an idea, it is only a word" (EC 280; CE 281).[2] The "square circle," of course, is the standard example of a contradictory concept. Whether Bergson succeeds in demonstrating his claim depends on how one interprets the nature of this contradiction.

Gale's Interpretation

Gale describes Bergson's project in a variety of ways. Sometimes he uses Bergson's own words and says that the object is to show that the idea of nothing is a "pseudo-idea" or one that lacks "meaning." This remains a bit opaque to Gale, however.

> Bergson assumes that if the idea of Nothing is meaningful there must be some way of representing it. His strategy is to consider every possible way in which an idea could be represented and show that we cannot represent Nothing in that way, thereby establishing that we do not have a genuine idea of Nothing. It is not completely clear whether our inability to represent Nothing is contingent or necessary; but with a little imagination or re-editing Bergson can be interpreted as holding there is a conceptual impossibility in our representing Nothing.[3]

Gale's text admits to imaginatively re-editing Bergson's analysis in order to clarify Bergson's project, that is, by putting it in terms more familiar to those trained in analytic philosophy. Bergson says there is a contradiction in trying to imagine or

---

[2] See also PM 68; CM 64 and MeR 266, 278; MaR 251, 261.

[3] Gale, 272.

conceive of the idea of nothing. Gale begins to clarify the project by introducing the question of whether the "inability to represent Nothing is contingent or necessary." Gale insists that this contradiction amount to a "conceptual impossibility," that it be necessary. A necessary contradiction can only be produced by a contradiction between the idea of nothingness and a truth which is itself necessary. Thus, Gale emphasizes the logical force of the contradiction required: "The point of Bergson's analysis of negative existential judgments is to show that there is a *logical* contradiction in thinking of every object as non-existent."[4]

This interpretation of Bergson's project provides Gale with a clear and rigorous standard by which to measure Bergson's success. Bergson must show that all attempts to formulate an idea of absolute nothingness lead to contradictions and this must be done by showing that the idea of absolute nothingness contradicts some necessary truth. Gale finds that the arguments which Bergson actually provides fail to make the grade.

Without here reviewing Gale's arguments, I will simply concede that they are thoroughly convincing. Within the parameters Gale sets for himself, there is little possibility of refuting him.

On the other hand, there is no need to refute Gale in order to save Bergson's arguments. The soundness of Gale's analysis is limited to his conception of Bergson's project as an attempt to produce a contradiction between the idea of nothingness and a

---

[4] Gale, 288, his emphasis.

necessary truth. If Gale is mistaken about Bergson's project, he is also deceived about the standards by which to judge Bergson's arguments.

Is Gale correct to interpret the contradiction which Bergson claims to produce in the idea of nothingness as having the force of logical necessity? What modal force should we attribute to this contradiction? Though Bergson does not explicitly raise this question, a reading of the text itself may point us in the right direction.

Bergson's Argument

The initial structure of Bergson's argument against the idea of nothingness is simple. All ideas must be either imagined or conceived. Therefore, the idea of absolute nothingness must be either imagined or conceived, or it is not properly an idea at all. One cannot imagine absolute nothingness. Neither can one conceive of absolute nothingness. Therefore, one can have no idea of absolute nothingness.

The supporting arguments for the claims that we cannot imagine or conceive of absolute nothingness rightly take up the bulk of Bergson's text. Both follow a similar plan. *They consider the mental process of imagining and of conceiving an absolutely negative idea.* Imagination would require a process of suppression, while conception would proceed through a process of annihilation. However, both suppression and annihilation turn out to be essentially partial acts, half of an act of substitution. Thus, the attempt to suppress or annihilate everything violates the nature of the act itself. The full act of substitution always reintroduces some reality precisely at the point that the other reality disappears. Thus, "*the representation of the void is always a*

representation which is full" (EC 283; CE 283). Let us examine each argument in turn.

One Cannot Imagine Absolute Nothingness

By an "image" of nothing, Bergson seems to think of a sensation of nothing, an absolutely negative sensation. Bergson's suggested procedure for imagining nothing is the "method of suppression." First he tries to suppress all sensations which come from the external world. He is left only with himself and sensations of himself. He then tries to suppress the sensations of his own body, and even the memory of his own past. He remains, however, in some abstract sense, conscious. "How can I eliminate myself?" (EC 278; CE 278). How can one imagine the disappearance of one's own imagining? Surely only an act of imagining can imagine the disappearance of another act of imagining. In imagining the disappearance of my own consciousness, I must substitute another consciousness for the one which disappears.

> At the very moment that my consciousness is extinguished, another consciousness lights up -- or rather, it was already alight: it had arisen the instant before, in order to witness the extinction of the first; for the first could disappear only for another and in the presence of another. I see myself annihilated only if I have already resuscitated myself by an act which is positive, however involuntary and unconscious (EC 278; CE 278).

Bergson conceives of the process as a movement of the mind between the sensations of the external world and sensations provided by one's own body, substituting each for the other in turn. When I suppress the sensations from the external world, I substitute for them the sensations of my own body. When I suppress the sensations from my own body and my own consciousness, I take up a position

external to myself. The attempt to suppress everything is simply the process by which I "swing to and fro (*osciller*) between the vision of an outer and that of an inner reality." By this process, by constantly changing the perspective from which we view things, we forget that "we are imagining it, consequently that we are acting, and therefore that something still subsists" (EC 279; CE 279). This oscillation is, then, a substitution of one consciousness for another, or one set of sensations for another set.

There are two conclusions one might draw from this argument. One could claim that while there is an image of absolute nothingness formed by a process of substitution, there can be no one for whom it is an image. It is an unimaginable image. This conclusion may not be without merit, at least for some images. In *Matière et mémoire*, Bergson claims that material objects are self-existing images which need not (but may) be perceived. Richard Gale's criticism of Bergson's analysis is certainly committed to the intelligibility of unimagined images. Gale says,

> Bergson's argument . . . is no more convincing than Berkeley's parallel argument that it is contradictory to conceive of a tree existing unperceived and unthought of since you must conceive of it all the while. Both these arguments fail to distinguish between the content of one's conception -- what is conceived -- and pragmatic facts about the conceiver, such as that he is thinking.[5]

On the basis of such a distinction, Gale argues, one can defend that there is an image of my not existing. "The sentence, 'I do not exist,' is pragmatically self-falsifying in

---

[5] Gale, 276.

that every use of it makes a false, but contingently false statement. It could be true that I do not exist, only I could never truly assert that it is so."[6]

One must recall, however, that Bergson is attempting to eliminate the image of himself so as to form an absolutely negative idea. He is trying to argue that an absolutely negative idea (an idea of nothing) is impossible to produce. Even if the difference between "I do not exist" and "Greg Clark does not exist" is negligible, it is such that *someone else* could imagine it, though perhaps I, who am Greg Clark, could not. The idea of absolute nothingness is different. Gale's own argument allows us to conclude that there is an idea of absolute nothingness, but neither "I" or anyone else has an idea of absolute nothingness. Thus, for me, it is not an idea, but only a word. Bergson's conclusion would still hold.

A second, more straight forward conclusion is Bergson's. Suppression will not suffice to form an absolutely negative image because, when pushed hard enough, suppression is really a form of substitution. Substitution always introduces another positive reality to replace the suppressed reality and thus prevents one from forming an absolutely negative idea. At best, suppression will produce only *a* nothing, an absence, relative to another something which is present.

<u>One Cannot Conceive Absolute Nothingness</u>

A concept differs from an image. While we cannot form an image of a one thousand sided polygon, it is a meaningful concept because "we can clearly represent

---

[6] Gale, 276.

the possibility of constructing it" (EC 280; CE 280). A conception, then, seems to consist at least of a rule or a method for generating a clear idea.

This allows proponents of the idea of nothing to set forth a procedure for forming a conception of nothing.

> So with the idea of the annihilation of everything. Nothing is simpler, it will be said, than the procedure by which we construct the idea of it. There is, in fact, not a single object of our experience that we cannot suppose annihilated. Extend this annihilation of a first object to a second, then to a third, and so on as long as you please: the nought is the limit toward which the operation tends (EC 280; CE 280).

We do not need to have a definite image of nothingness if our procedure defines it merely as a limit.

Bergson presents a criteria for judging whether a constructive procedure is successful. Each part of the procedure must be "capable of coexisting." As an example, Bergson uses the notion of a square circle. To generate a square requires that one use straight lines. However, "the law of the generation of the circle excludes the possibility of defining this figure with straight lines" (EC 280; CE 280).

Let us consider, then, the annihilation of an external object.[7] Bergson brings out two points concerning the annihilation of an external object. First, to think one external object annihilated is to think a void or an empty place with definite edges where the thing once was.[8] A void, therefore, is really only "the absence of some definite object, which was here at first, is now elsewhere and, insofar as it is no longer in its former place, leaves behind it, so to speak, the void of itself" (EC 281; CE 281).

Second, Bergson decomposes the notion of a void or empty place into recollection, perception, and the act of substitution. To think of a vacated place as vacated requires a recollection of the object which once occupied it. Our conceptual annihilation of the object removes the object from existence, but the object remains in the memory of the subject as something annihilated. Perception, which would reveal the object if it had not been annihilated, still has a positive content of other objects and their relations to one another. Between the content of the recollection and the

---

[7] In Bergson's text, he considers two different classes of objects which might be annihilated: external objects and internal conscious states. His procedure would *seem* to examine mental process required for (1) the annihilation of a single external object, (2) the annihilation of a single conscious state, and (3) show that in neither case does this mechanism allow for an absolutely negative idea. In actual fact, however, Bergson does not consider the annihilation of a single conscious state. Instead, he jumps immediately to the annihilation of all my conscious states -- in dreamless sleep or in my own ceasing to exist. Because this procedure seems out of order, and because the analysis of the annihilation of all conscious states does not seem to add anything new to the analyses developed under the "image of nothingness" and the annihilation of an external object, I omit the analysis of the annihilation of all conscious states from consideration.

[8] In "Aristotle's Concept of Place" Bergson notes that, according to Aristotle, place is "a surrounding body in which the thing is held enclosed like a jewel in its setting." (AP 28).

content of the perception, there is a contrast. A subject forms the idea of a perceived void or empty place when it focuses on the contrast between the recollection and perception with a concern only for the remembered object. In this way, the mind substitutes the absence of the former object for the presence of the real, still subsisting object. The void, thus, seems like an object, but is in fact much more complex than the objects given in perception.

Conclusions

Summary

In both imagination and conception, the analysis hinges on whether the act of suppression or annihilation can stand alone and be carried to an extreme limit so as to form an absolutely negative idea, or whether it is in fact only part of an act of substitution. Bergson claims that by pushing the act of suppression to its limit, by trying to suppress or annihilate everything, we see that it is actually an act of substitution. "Suppressing a thing consists in replacing it by another . . . annihilation signifies before anything else substitution" (EC 283; CE 283).

This means that we cannot form an absolutely negative idea, that is, an idea of nothing. If the motion of the mind by which we form the idea of nothing would be a process of substitution, then "the suppression of absolutely everything implies a downright contradiction in terms, since the operation consists in destroying the very condition that makes the operation possible" (EC 283; CE 283).

Reply to Gale

We are less than half way through Bergson's text, but we have come far enough to realize that Richard Gale has fundamentally misconceived Bergson's project. Bergson does not intend to produce a contradiction between the idea of nothing and some necessary truth, but between the process by which one forms negative ideas and an absolutely negative idea.

He makes this clear in his account of the contradictory nature of a square circle. According to Bergson, the notion of a "square circle" is not contradictory simply because "square" and "circle" are within the same genus, and hence, *contraries* (not contradictory).[9] Neither is it contradictory because a square circle contradicts a necessary truth. Rather, "the *law of the generation* of the circle excludes the possibility of defining this figure with straight lines" (EC 280; CE 280, emphasis added). Bergson then draws a clear parallel to the formation of an absolutely negative idea: "If the annihilation of anything by the mind is an *operation whose mechanism* implies that it works on a part of the whole and not the whole itself, then the extension of such an operation to the totality of things becomes self-contradictory and absurd" (EC 280; CE 280, emphasis added). There is no idea of nothing because the mechanism cannot create it, not because the idea bears within itself or to some

[9] The example involves using a word which stands for both a quality and a thing. If "square" and "circle" are qualities, they are logical contraries because they belong to the same genus. If "circle" refers to a drawing or a thing, however, they are not mutually exclusive in the same way. If one dyes a citrus fruit blue, one might have a "blue orange."

necessary truth an abstract contradiction. Thus, Bergson requires not an analysis of "nothing" but of the mechanism implied in the "idea of nothing."

Gale wishes for Bergson to answer whether the contradiction involved in the idea of nothing is necessary or contingent. To raise the question is really to ask whether our process of cognition is logically necessary or contingent. While this is an interesting question in its own right (one on which Bergson would come down on the side of *contingency*!) it is not Bergson's question here, neither does it bear on his arguments.

While Gale's arguments remain beside the point, they remain very instructive for how not to conceive of Bergson's analysis of the idea of nothing. Gale proves that Bergson's analysis is not presuppositionless. It depends on the notion of time, the functioning of the mind, and the notion of substitution that he develops in previous works. Bergson's analysis trades on those positions and remains unintelligible apart from them.

Second Part: Negative Ideas

Let us turn, then, to the second part of the analysis of the idea of nothing. In this part, Bergson considers the process of forming all negative ideas, not only absolutely negative ideas. Section A shows the relation between the first part and the second part of Bergson's text by determining the exact nature of Bergson's project. I will argue that the second part constitutes a deepening and a clarification of the early portions, not some logically independent or irrelevant explorations. Here Bergson considers in more detail the conditions necessary for forming negative ideas. These

conditions are at least as interesting as the implications of the fact that one cannot form an absolutely negative idea. Section B gives a brief description of the traditional view of the asymmetry between negative and positive judgments. Section C, finally, shows that Bergson rests the asymmetrical difference between affirmation and negation on different levels of existence. Bergson founds the logical distinction between the positive and negative quality of propositions on the different metaphysical conditions required to account for each. Even the law of non-contradiction would have a metaphysical foundation.

The Relation of the First Part to the Second Part

Gale's Interpretation

According to Richard Gale, the analysis of the second part is logically independent of the analyses of the first part. Thus, Gale devotes 24 pages to the first part of the analysis, to the first 9 pages of Bergson's text. Having argued that Bergson's analysis fails, Richard Gale loses interest in the pages which Bergson has tacked on. "If our only interest was with whether or not Bergson succeeds in establishing the bogus nature of the idea of Nothing, we could stop now."[10]

However, Gale does continue. In the remaining pages of his article, Gale refers to what I will call Bergson's "asymmetry thesis." The asymmetry thesis puzzles Gale because it seems so irrelevant to the proof that absolute nothingness contains a necessary contradiction.

---

[10] Gale, 294.

> Bergson attacks this attempt to represent Nothing by arguing that negation and affirmation are not symmetrical. It is not made clear why this way of representing Nothing is committed to the view that negation and affirmation are symmetrical. What Bergson must do is not just produce some way in which they fail to be symmetrical but show that this failure renders conceptually absurd the attempt to negate every existential proposition. . . . How does this asymmetry between negation and affirmation establish Bergson's conclusion that there is a conceptual absurdity in negating every existential proposition? As far as I can see, this alleged asymmetry is totally irrelevant.[11]

After summarizing the text in this manner, Gale virtually passes it over. The remaining 16 pages of original text, Gale polishes off in little more than 5 pages. Because he takes the "asymmetry thesis" as irrelevant to the analysis of the idea of nothing, Gale does not understand the twenty-six pages of Bergson's analysis as a unified work.

Bergson's Opponents As an Interpretive Clue

Gale is surely correct to point out that, from an abstract point of view, the idea of absolute nothingness is logically independent of the relation between affirmative and negative judgments. On the other hand, Bergson considers the asymmetrical relation between affirmative judgments and negative judgments in his analysis of the idea of absolute nothingness. Bergson, thus, thinks there is some connection. Rather than simply divide Bergson's text, let us ask what relation Bergson does see. We can only grasp the significance and relevance of his comments about logical difference if we understand Bergson's overall project in the criticism of the idea of nothingness. What, then, is Bergson's project?

---

[11] Gale, 294.

We can determine the relevance of Bergson's asymmetry thesis to his project in criticizing the idea of nothing most simply by locating his opponents. Who does Bergson argue against when he says that the idea of absolute nothing is only a word?

Gale's view would require opponents who maintain that the concept of nothing is logically self-consistent. I cannot find a single text of Bergson's which supports this view.

The asymmetry thesis would require opponents who claim that positive and negative concepts are symmetrical. This second view has the overwhelming support of the text. Voicing the view of his adversary, Bergson writes, "One represents negation as exactly symmetrical with affirmation. One imagines that negation, like affirmation, is self-sufficient. So that negation, like affirmation, would have the power of creating ideas, with the sole difference that they would be negative ideas" (EC 286; CE 287, translation altered). Bergson's opponents, thus, put negative ideas and positive ideas "on the same level" or endow them "with an equal objectivity" (EC 291; CE 291). The asymmetry thesis, therefore, argues against a defined position.

The position of Bergson's opponents, however, relates directly to the idea of nothing and to the founding moment of metaphysics. If negative ideas are as self-founded as positive ideas, then the reference of "nothing" has just as much reality as the reference of "being," and there is an eternal dialectical war between the two. The idea of nothing, thus, commits the philosopher to a particular view of being. Temporal beings, on this view, are caught between being and nothing, both temporally and metaphysically. Metaphysically, they are not fully real or fully unreal.

Temporally, they come into existence and pass out of existence at some point in time. What is most truly real is that which exists outside of time, which need not come into or pass out of being. True being, then, is had by platonic Ideas and mathematical formulas, not by physical or mental realities (EC 276; CE 276).[12]

Given this understanding of Bergson's project, both in his criticism of the idea of nothing and his understanding of existence laid out in the previous chapter, Bergson's asymmetry thesis is hardly irrelevant. It motivates the criticism of the idea of nothing and it indirectly supports his understanding of existence. By showing that negative and positive ideas have a different nature, Bergson will be able to demonstrate that "nothing" is not something which being or existence must conquer. If there is no dialectic between being and nothing, there is no reason for claiming that logical rather than temporal realities most properly exist.

This point is crucial for an understanding of Bergson's methodology. Gale misunderstands Bergson because he thinks that Bergson's concern is with logical consistency. In fact, Bergson is concerned to argue against the ways logical considerations have determined metaphysics. He intends not to ground his metaphysic

---

[12] Who, then, specifically are Bergson's opponents? Bergson does not provide names. Sigwart, on whom Bergson depends, names Spinoza and Hegel. (Christoph Sigwart, "The Negation," Chap. in *Logic, Volume I: The Judgment, Concept, and Inference* [London: Swan Sonnenschein & Co., 1895; reprint, New York: Garland Publishing, Inc., 1980], 126-7). Spinoza, of course, is well known for his maxim: "*Omnis determinatio est negatio*" -- "All determination is negation." (*Ethics* I, Prop. 8., Schol 1.) Hegel quotes Spinoza's maxim and claims that only the "unreflecting observer supposes that determinate things are merely positive." (*Hegel's Logic*, ed. Wallace [Oxford: The Clarendon Press, 1975], § 91, 135. See also § 119). What Bergson does say has much greater scope than a catalogue of names. His comments above would include aspects of not only Hegel and Plato, but Russell and Quine.

in logic and necessary truths, but to provide a metaphysical ground for the logical distinction between negative and affirmative judgments. The asymmetry thesis provides such a grounding. Let us, then, turn to consider the relation between negative and affirmative judgments both in the tradition and in Bergson.

The Traditional View of Negation

The philosophical tradition recognizes that negation has both a linguistic and a metaphysical aspect. From the stand point of language, negation is either a logical form of judgment or a term with a negative meaning. The metaphysical aspect of negation concerns whether negative things or facts exist.

The doctrine of truth brings these two aspects together. If truth is a correspondence between our language and the world, then how can negative judgments be true, or even meaningful, unless there are negative facts which correspond to them? If privative terms are names, how can they have meaning unless there is some negative fact, or some "objective teleological negations,"[13] with which they correspond?

According to Richard Taylor, "the 'traditional' view of negative judgment,"[14] has claimed that negative judgments and negative terms can have meaning, but denied

---

[13] Richard M. Gale, "On What There Isn't," *Review of Metaphysics* 25 #3 (March 1972): 460.

[14] Richard Taylor, "Negative Things," *The Journal of Philosophy* 49 (June 1952): 442 n 33.

the existence or the being of negative facts.[15] The Eleatic stranger in Plato's *Sophist* says,

> When we speak of 'that which is not,' it seems that we do not mean something contrary to what exists but only something that is different. . . . In the same way that when, for example, we speak of something as 'not tall,' we may just as well mean by that phrase 'what is equal' as 'what is short,' mayn't we? . . . So when it is asserted that a negative signifies a contrary, we shall not agree, but admit no more than this -- that the prefix 'not' indicates something different from the words that follow, or rather from the things designated by the words pronounced after the negative.[16]

In a similar vein, Thomas Aquinas, writes:

> We must realize (with the Philosopher) that the term 'a being' in itself has two meanings. Taken one way it is divided by the ten categories; taken in the other way, it signifies the truth of propositions. The difference between the two is that in the second sense anything can be called a being if an affirmative proposition can be formed about it, even though it is nothing positive in reality. In this way privations and negations are called beings, for we say that affirmation *is* opposed to negation, and that blindness *is* in the eye. But in the first way nothing can be called a being unless it is something positive in reality. In the first sense, then, blindness and the like are not beings.[17]

The traditional position is possible only if one maintains the distinction between reality and the symbols we use to talk about reality. Within both of these, we must allow for

---

[15] "There is implanted in the human breast an almost unquenchable desire to find some way of avoiding the admission that negative facts are as ultimate as those that are positive. . . . Usually it is said that, when we deny something, we are really asserting something else which is incompatible with what we deny." (Bertrand Russell, "On Propositions: What They Are And How They Mean," *Aristotelian Society: Supplement* 2 [1919]: 4).

[16] *Sophist* 257 b-c, translated by F.M. Cornford.

[17] St. Thomas Aquinas, *On Being and Essence*, trans. Armand Maurer, C.S.B. (Toronto: Pontifical Institute of Mediaeval Studies, 1983), 29-30.

differences. Linguistic differences will include the differences between positive and negative judgments and positive and negative terms. Differences within reality may include only positive realities which differ in positive ways and involve nothing negative. Those who hold a traditional view of negation, thus, are not merely making a point about language or logic, but about reality itself. Their metaphysics may have implications for logic, but the doctrine of negation finds its justification in the realm of metaphysics.

Bergson's Account of the Difference Between Positive and Negative Ideas

Given this description, Bergson is a traditionalist. Bergson points out that his account of negation and the logical difference between negation and affirmation is not unique to or original with himself. Indeed, he refers to Kant and to Christoph Sigwart's *Logic* as the position he claims to follow (EC 287n; CE 287n).[18] We need, then, to examine Bergson's account of (1) linguistic differences and begin to determine their relation to (2) metaphysical differences.

---

[18] Bergson provides very little in the way of actual argumentation for his views of affirmation or negation. Bergson does give a reference to Sigwart and quotes a line from Kant which Sigwart also quotes: "From the point of view of our knowledge in general . . . the peculiar function of negative propositions is simply to prevent error." (Kant, *Critique of Pure Reason* B 737; Sigwart, 120). This suggests that either Bergson is appealing to their authority or that he does not consider this a controversial thesis. Through footnotes, I will provide evidence that Bergson's views were not at all uncommon.

The Expression of a Negative Idea

The word "idea," in the phrase "negative idea" remains vague. An idea is expressed by a symbol, be that a word or a sentence. We must now be clear about the nature of the expression of a negative idea in order to be as precise as possible about Bergson's own position. Specifically, we need to know whether a negative idea is expressed by a word or a sentence, or something else.

A negative idea as expressed by a word.

If a word or a term expresses an idea, if it is a question of semantics, then Bergson's opponents would maintain that the meanings expressed by negative terms possess exactly the same reality as the meanings of positive terms.

What are negative and positive terms? Perhaps a negative term is what Aristotle calls a "privative term," and a positive term is what Aristotle calls a "positive term." In the *Metaphysics*, Aristotle shows that all contraries can be reduced to the difference between privatives and positives.[19] To take a traditional example of the most extreme contraries within the same genus (of color), "black" and "white," are opposed as a privative to a positive.[20]

---

[19] "The primary contrariety is that between a positive state and its privation--not every privation, however . . . but that which is complete." *Metaphysics* 1055 a 33. In the *Categories*, Aristotle insists that "'positives' and 'privatives' are not opposed each to each as contraries." *Categories* 12 b 26.

[20] "We have shown that complete difference is the greatest possible, since beyond such difference and between things generically different no difference is definite and there is no difference between anything and things of another genus; hence, a complete difference between things in the same genus is the greatest possible." (*Metaphysics*, 1055 a 24-28).

Does the privative color, black, have the same sort of reality as the positive, white? If a negative idea is expressed by a word, and if this negative word is a privative term, Bergson's opponents would say that they do. However, Bergson himself says that black and white are experienced as having the same reality. In the *Essai*, Bergson argues that, "in point of fact, black has just as much reality for our consciousness as white" (DI 40; TFW 54). Since Bergson claims that the reference of "black" has as much reality as the reference of "white," and if we take "black" as a privative term, then Bergson would be committed to the same position as his opponents. A negative idea, therefore, is not expressed by a privative term.

Perhaps a better example of a negative term would be indefinite terms which are negative in form and not just in meaning such as "not-man" or "not-white."[21] Bergson's opponent would here insist that indefinite terms always have negative meanings, and that these meanings have the same sort of reality as do definite terms.

Aristotle himself, however, following the passage from Plato's *Sophist* quoted above, indicates that, while they may have a negative form, indefinite terms do not necessarily have a negative meaning. "Some intermediate qualities have names, such as grey and sallow and all other colours that come between white and black; in other cases, however, it is not easy to name the intermediate, but we must define it as that which is *not* either extreme, as in the case of that which is neither good nor bad,

---

[21] "The expression 'not-man' is not a noun. There is indeed no recognized term by which we may denote such an expression, for it is not a sentence or a denial. Let it then be called an indefinite noun." (*On Interpretation,* 16 a 30-2).

neither just nor unjust."[22] Aristotle is clear that saying "*x* is *not-y*" does not give us any information about the thing itself. This is because "nothing is by nature a noun or a name -- it is only so when it becomes a symbol."[23] If it is understood that the negative term does not imply anything negative in reality, however, then indefinite terms do not express what Bergson fears in a negative idea. Thus, neither privative terms or indefinite terms capture Bergson's understanding of a negative idea.

A negative idea as expressed by a judgment.

In moving from words to judgments, from semantics to logic, the range of the negative expands. Expressed in terms of logic, negation is not just attached to the predicate term but to the judgment as a whole.[24] Let us assume that a judgment, rather than a word, expresses a negative idea.

Here Bergson's opponents would maintain that the meanings expressed by negative judgments possess exactly the same reality as the meanings of affirmative judgments. This is, in fact, the position of most logicians. For logicians, affirmation and negation are strictly symmetrical. In *On Interpretation*, Aristotle classifies

---

[22] *Categories,* 12 a 20-25.

[23] *On Interpretation,* 16 a 27.

[24] Historically, there is some disagreement about the distinction between negative judgments and negative terms. Some commentators (the Stoics and Boethius) treat propositions with indefinite terms and privative terms in the same manner, as forms of affirmative propositions. Albinus, Plotinus, and Pseudo-Dionysius treat affirmative propositions with indefinite terms as negative propositions. See H.A. Wolfson, "Negative Attributes in the Church Fathers and the Gnostic Basilides," *Harvard Theological Review* 50 (1957): 145-56.

judgments according to two possible qualities. "An affirmation is a positive assertion of something about something, a denial a negative assertion."[25] Thus, "A is B" is an affirmation; "A is not B" is a denial. Further, affirmations and denials are symmetrical. "It is plain that every affirmation has an opposite denial, and similarly every denial has an opposite affirmation."[26]

For Russell, negation is an undefined or primitive concept which changes the truth value of the proposition. "$\sim p$" can be read as "not p" or "It is false that p." Just as truth and falsity appear strictly correlative, so p and $\sim p$ are perfectly symmetrical operations (see below).[27]

Raphael Demos provides the underlying reason as to why modern logicians treat affirmation and negation as strictly symmetrical: Any other position would introduce some foreign element, psychological or metaphysical, into logic. "A negative proposition is not dependent upon the cognitive subject in its definition; consequently, it is perfectly objective, not merely as a proposition, but in its character as negative as well."[28]

---

[25] *On Interpretation,* 17 a 25.

[26] *On Interpretation,* 17 a 32.

[27] A.J. Ayer claims "Thus, to say that a proposition is true is just to assert it, and to say that it is false is just to assert its contradictory. And this indicates that the terms 'true' and 'false' connote nothing, but function in the sentence as marks of assertion and denial." (A.J. Ayer, *Language, Truth and Logic* [New York: Dover Publications, Inc., 1952], 88-89).

[28] Raphael Demos, "A Discussion of a Certain Type of Negative Proposition," *Mind,* N.S. 102 (April 1917): 188. Russell explicitly says that this is the "difference between the standpoint of logic and that of psychology. In logic, we are only interested in what makes a sentence true or false; in psychology, we are also interested

The testimony of Aristotle, Russell, and Demos leads us to conclude that Bergson's opponents are logicians who consider logical difference, the difference between affirmative and negative propositions, from the standpoint of logic alone. Let us assume, then, that for Bergson, negative ideas are expressed in propositions rather than individual words.

Bergson's Two Theses on Negation

If logicians could limit themselves to the realm of logic, Bergson would have no objection to this theory. Bergson admits that the symmetry does hold at the level of language.

> *Both* negation and affirmation are expressed in propositions. . . . In both cases the concepts are represented by the same conventional words. From this point of view, which is that of formal logic, to affirm and to deny are indeed two mutually symmetrical acts, of which the first establishes a relation of agreement and the second a relation of disagreement between a subject and an attribute" (EC 291; CE 291-2).[29]

Some logicians go beyond the level of language, however, to draw conclusions for metaphysics, conclusions concerning the nature of existence. The natural conclusion is

---

in the state of mind of the person uttering the sentence with belief" (*Human Knowledge: Its Scope and Limits* [NY: Simon and Schuster, 1948], 127).

[29] "In the first place subject and predicate, taken each by itself, are thought in the negative propositions in exactly the same way as in the positive; the words stand for the same ideas. When I say, 'snow is not black,' snow means the same as in the judgment 'snow is white,' and black the same as in the judgment 'coal is black'; no effect is at present produced upon them by the negation, they have their usual contents." (Sigwart, 120). Sigwart also takes negation to apply primarily to judgments rather than to terms (Sigwart, 120-122).

that the meanings or references of negative judgments have exactly the same status as those of affirmative judgments.

Against the natural metaphysics of logic, Bergson formulates his asymmetry thesis. Bergson's asymmetry thesis is actually given form in two theses which provide a metaphysical account of logical negation. Thesis One describes how negative judgments presuppose the temporal heterogeneity of existence. Bergson claims that, compared to affirmative judgments, negative judgments (1) require memory, (2) directly judge a judgment, rather than objects, and, thus, belong to a different level and (3) require another subject or language user. Thesis Two gives an account of the specifically negative character of a negative judgment. Bergson argues that the descriptive content of a negative judgment does not differ from its corresponding affirmative judgment. Rather, the negative character lies in what Austin would call its illocutionary force.

Thesis one.

Bergson's first thesis states that "while affirmation is a purely intellectual act (*acte de l'intelligence pure*), there enters into negation an element which is not intellectual (*élément extra-intellectuel*), and that it is precisely to the intrusion of this foreign element that negation owes its specific character" (EC 287; CE 287). What is the extra-intellectual element of negation?

A purely intellectual act. In an act of pure intelligence the mind is "placed before objects and concerned with them alone" (EC 288; CE 288). A lone subject

perceiving objects provides Bergson with his model for describing a purely intellectual act, and thus, affirmation. This is the model of pure perception which we encountered in chapter four. In *L'Évolution créatice*, affirmation is simply this relation between the subject and the object.

The affirmation, however, can take different forms of expression. Most obviously, affirmation can take a linguistic form and simply record the knowledge that emerges in the relation between the subject and the object. An affirmation could take the form of a single word. If I see a black table, I could simply utter the word "black." Or, I could frame an entire sentence: "When I say, 'This table is black,' I am speaking of the table; I have seen it is black, and my judgment expresses what I have seen" (EC 287; CE 287-8).

However, affirmation also takes a pre-linguistic form. If we strip the intellect of language and the ability to reflect, the quality designated by "black" would still be "capable of inscribing itself automatically in sensation and of sending a vague idea (*représentation*) to the deadened intellect." Bergson conceives of the ability of a quality "to come and record itself" as a matter of perception or sensation. Thus, an affirmative sentence presupposes "that we have experienced the specific sensations, tactile or visual for example, that are at the base of this idea (*représentation*)." Once the subject perceives an object, even if it does not use language, "the intellect will still affirm, in implicit terms." To say that the intellect affirms in implicit terms, then, means that, though it does not speak, it reacts to the perceived object (EC 291-2; CE

292-3). Thus, in an affirmation, whether given linguistic form or not, the speaker refers directly to the black table.[30]

Memory as a prerequisite for negation. Bergson considers two forms of negative judgments. In a negative judgment or a denial, I say "The table is not white." In a negative existential judgment, I say "The table does not exist."

Unlike the case of an affirmative judgment, a simple perception cannot account for negative judgment. Bergson is determined to help his reader see this point. "That which exists may come to be recorded, but the non-existence of the non-existing cannot" (EC 292; CE 292). "If I say 'This table is not white,' I surely do not express something I have perceived, for I have seen black, and not an absence of white" (EC 287; CE 287-8).[31] If I have not experienced non-existence or the absence of white, I cannot pass an affirmative judgment using these as terms. Thus, while a purely intellectual act, an act of perception requiring only a subject and an object, satisfies the conditions for affirmation, it cannot account for negation or denial. An account of the meaning of negative judgments will require a different metaphysical description.

---

[30] Bertrand Russell expresses the concept of direct reference in 1948. "If, feeling a drop on my nose, I say, 'It is raining,' that is what may be called 'primary' assertion, in which I pay no attention to the sentence, but use it to refer directly to something else, namely the rain." (*Human Knowledge*, 120).

[31] Likewise, Bernard Bosanquet says, "we nowhere in our perception come upon a mere 'not-something.' No doubt negation is in this way more subjective than affirmation" (Bosanquet, "Negation, and Opposition of Judgment." Chap. in *The Essentials of Logic.* [London: Macmillan and Co., Limited, 1897; reprint, New York: Kraus Reprint Co., 1968] 134).

What sort of experience, then, makes a negative judgment possible? First, the experience of a negative fact requires memory. Recollection, Bergson insists, is qualitatively different than perception.[32] This is most clearly evidenced by the difference between the objects of perception and the objects of recollection. While the object of perception is present to a subject, the object of recollection is materially absent, though still accessible to the mind. If the purely intellectual act is the act by which a subject perceives objects which are present to it, then memory introduces a foreign element into the purely intellectual act. If the act of perception is the model of objective knowledge, recollection is the model of a purely subjective experience.

Memory makes possible a contrast between a recollection-image and present perception. I have seen white before. I have seen white tables before. Perhaps, I remember that this table was once white. Or perhaps, someone has told me that this table is white. On the basis of memory, I develop expectations for the future.

Upon perceiving the table, there is a simultaneous recognition and failure to recognize. On the one hand, I recognize the table as the same table I had seen before. On the other hand, the table I had seen before was white. When I perceive that the table is black, there is a contrast between my recollection or expectation and the perception. The contrast is a necessary, though not sufficient condition for forming a negative judgment: "The table is not white."

---

[32] Against G. Buchdahl's interpretation of Bergson, Bergson is emphatically *not* presupposing "memory and the faculty of dissociating and distinguishing" in his discussion of affirmation. ("The Problem of Negation," *Philosophy and Phenomenological Research* 22 [1961-2]: 168).

Negation as a higher level judgment. The experiences which make negative judgments possible differ from those behind affirmative judgments. The experiences place limits on the way we interpret negative judgments. We cannot interpret "This table is not white" or "The table does not exist" as affirmative judgments which join "table" and the indefinite term "not-white" or "table and the indefinite term "not-exist" because we do not experience negative facts in the same way that we perceive positive facts. If I have not perceived non-existence or the absence of white, I cannot pass an affirmative judgment using these as terms. "This table is not white," thus, is not an affirmative judgment with an indefinite term.

However, I do experience the contrast between recollection and perception. An affirmative judgment expresses only the perception. The negative judgment must express the contrast between the affirmative judgment implicit in the present perception and the affirmative judgment implicit in the recollection. A negative judgment, then, does not refer directly to the terms of an affirmative judgment, but to a judgment as a whole and to its contrast with another judgment. A negative judgment judges an affirmation, not an object. I see the black table and I realize that someone may judge or has judged that the table is white. I then say "The table is not white" not because I have seen the absence of white but to deny the truth of the

judgment, "This table is white."[33] "To deny always consists in setting aside a possible affirmation" (EC 287; CE 287).[34]

In passing judgment on an affirmation, the reference of negation is essentially linguistic. Thus, the introduction of affirmative judgments as objects of negative judgments means that negative judgments belong to a different and higher level than *their corresponding primary affirmative judgments.*[35] *"Negation, therefore, differs from affirmation properly so called in that it is an affirmation of the second degree: it affirms something of an affirmation which itself affirms something of an object*" (EC

---

[33] "Three elements, then, can be primarily distinguished in the simple positive judgment. These are the subject, the predicate, and the thought of their unity. . . . The same three elements are present and have the same force, in the negative judgment; but the negation is added as a forth in language as well as in thought. This prevents the completion of the attempted synthesis as valid, and it opposes it 'No' to the whole proposition *A* is *B*. . . . The judgment '*A* is not *B*' means, 'it is false, it must not be believed that *A* is *B*': hence, immediately and directly, the negation is a judgment concerning a positive judgment that has been essayed or passed; only indirectly is it a judgment concerning the subject of this judgment." (Sigwart, 122).

[34] "The NEGATION . . . presupposes some prompting, either from within or without, to connect the subject and predicate. The object of a negation must be either a completed or an attempted judgment, and for this reason we cannot regard the negative judgment as a species equally primitive with the positive judgment and co-ordinate with it." (Sigwart, 119); "For, in order to deny, you must have the suggestion of an affirmative relation. . . . Thus in the scale of reflection negation stands higher than mere affirmation. It is in one sense more ideal, and it comes into existence at a later stage of the development of the soul." (F.H. Bradley, "The Negative Judgment," *The Principles of Logic*, 2d ed. [Oxford University Press, 1922], 114-115).

[35] Someone could respond to a denial by saying "This table *is* white." This affirmation, however, would not have the character of the primary affirmations we described above. Rather, it would constitute a third level judgment.

288; CE 288).[36] In the sense that negative and affirmative judgments occupy different levels, they are not symmetrical.

This distinction between affirmative and negative judgments is based in the fact that affirmative judgments have a wholly objective character, while negative judgments have a subjective character as well due to the necessity of memory. This is not a logical or a type distinction. Because the aim of this chapter is to argue that Bergson's distinction between affirmative and negative judgments is not made in the realm of logic but of metaphysics, it will be useful to show how it differs from Russell's type distinctions.

First, Russell's type distinction does not distinguish between affirmative and negative judgments. In general, this is because Russell remains concerned primarily with logic rather than metaphysics, and logic, as we have seen, always treats affirmations and negations as symmetrical. This appears in Russell's writings in two ways. Russell only considers "secondary" assertions as emerging after a question has been asked: "But if you say to me, 'Is it raining,?' and I then look out the window, I may answer 'yes' or 'no,' and the two answers are, so to speak, on the same level."[37]

Likewise, following Frege, Russell introduces a distinct assertion sign: ⊢. The assertion introduces a different level of proposition and it pays no attention to whether

---

[36] "[Aristotle's] definition is false if it implies that affirmation and negation as forms of judgment are equally primitive and independent of each other. . . . the primitive judgment should not be called affirmative at all; it would be better denoted as positive" (Sigwart, 119).

[37] Russell, *Human Knowledge*, 120.

the quality of the proposition is positive or negative. The assertion sign claims that the proposition which follows, whether affirmative or negative, is true. Russell simply says that "true propositions have a quality not belonging to false ones, a quality which, in a non-psychological sense, may be called being *asserted*."[38]

Second, while Bergson's distinction emerged from the metaphysical position which denies the perception of negative facts, Russell's type distinction was designed as a rule of safety to avoid logical paradoxes. The liar paradox shows how an assertion can require something like type distinctions between propositions. "Epimenides the Cretan said that all Cretans were liars, and all other statements made by Cretans were certainly lies. Was this a lie? The simplest form of this contradiction is afforded by the man who says 'I am lying'; if he is lying, he is speaking the truth, and vice versa."[39]

Russell's solution to the paradox distinguishes between propositions of different types. A proposition of one type can only make statements about propositions of a

---

[38] *Principles of Mathematics* (NY: W.W. Norton & Company, 1938), § 38. Russell needs the assertion sign because he is dealing with complex propositions which have other propositions, which may be true or false, as their components. The assertion sign "is required for distinguishing a complete proposition, which we assert, from any subordinate propositions contained in it but not asserted. . . . a proposition stated in symbols without this sign ' ' prefixed is not asserted, and is merely put forward for consideration, or as a subordinate part of an asserted proposition." ("Introduction [Chapter One]," *Principia Mathematica* [Cambridge: Cambridge University Press, 1990], 8). Thus $(p \supset p)$ says that "$(p \supset p)$ is true." Indeed, this proposition would be true even if the proposition p were false.

[39] "Introduction [Chapter Two]," *Principia Mathematica*, 60. See also "The Philosophy of Logical Atomism (1918)," *The Philosophy of Logical Atomism*, ed. David Pears (La Salle, IL: Open Court, 1985), 133.

lower type, and thus, not about itself. While the paradox emerges only with self-referential claims, the distinction between types holds even for propositions which do not appear to make judgments about themselves.

To repeat, Bergson's claim differs from Russell's. According to Bergson, negative propositions belong to a different and higher level *than their corresponding affirmative propositions.* Bergson says, "An affirmative proposition expresses a judgment on an object; a negative proposition expresses a judgment on a judgment" (EC 287-8; CE 288). Bergson's distinction is put forward for metaphysical reasons. Russell claims that assertions are of a higher type than the propositions which they assert, whether they are positive or negative. Russell advances his thesis in an attempt to maintain logical consistency.

The extra-intellectual element in negation. The "extra-intellectual" element in negation refers to something for which a purely objectivist metaphysic or a purely intellectual act cannot give an account. We saw that the introduction of memory, in fact, introduced a new element by introducing subjectivity. We can now advance this even further. The essentially linguistic component of negation requires a metaphysical description which includes not only a subject and an object, but a subject speaking to and listening to another subject. "Negation aims at some one, and not only, like a purely intellectual operation, at some thing" (EC 288; CE 288). The extra-intellectual element in negation, the element which forces us to break with a simple subject-object metaphysic, is another subject with whom we speak. Thus, we require a model which

allows not only for perception of objects, but for intersubjectivity as constituted by language. We will fill out this condition as we consider Bergson's second thesis.

Thesis two.

Bergson's second thesis states that "while affirmation is a complete act of the mind, which can succeed in building up an idea, negation is but the half of an intellectual act, of which the other half is understood, or put off to an indefinite future" (EC 287; CE 287). I take it that we understand from the discussion of affirmation above how affirmation is sufficient to constitute an idea. Bergson is now arguing that a negative judgment does not produce an idea with a negative character.

There are two parts to the act of negation. One half, Bergson says, "is understood" or is "put off to an indefinite future" or is "indeterminate." By this, Bergson simply means that when I say "The table is not white" I do not go on to tell you what color it actually is. The table is actually some color, and if the negative judgment is true, the table is some color *other than* white. The positive difference between two colors, the contrast between the expectation and the perception, constitutes the basis for the negative judgment[40] Besides the contrast, a negative

---

[40] Bernard Bosanquet, who disagrees with Sigwart at points (Bosanquet, 132) calls this "contrary negation." "Contrary Negation in its essence is affirmation with a negative intention, and we may take as a type of it in this wider sense the affirmation of a positive character with the intention of denying another positive character. . . . the *meaning* of denial is always the nature of *contrary* denial. As we always speak and think within a general subject or universe of discourse, it follows that every denial substitutes some affirmation for the judgment which it denies. . . . You may safely analyse a significant negative judgment, "A is not B" as = "A is not B but C," or as ="A is X which excludes B." For X may be undetermined, "a colour not red." (Bosanquet, 128-130).

judgment requires human interest and attention. In a negative judgment, the speaking and listening subjects are more concerned with the disappointed expectation than with the actual color of the table.

Given a situation which includes not only a subject and an object, but recollection of a past, expectation of a future, another subject and shared interest, what is the function of a negative judgment? According to Bergson, the half of the act which negation constitutes with definiteness is that I admonish you; I warn you to substitute another judgment for your asserted judgment; I try to keep you from error. "The table is not white" is an alert issued to a subject who thinks or may think that the table is white.

Richard Gale criticizes Bergson for emphasizing this half of the act of negation: "At times Bergson makes it appear as if this act is nothing but a command or warning not to believe the negated proposition. This won't do, since commands and warnings have no truth value."[41] This complaint again shows how Gale misconceives Bergson's project. Because Gale interprets Bergson as trying to show that the idea of nothing is self-contradictory, and since logical relations between propositions depend on their truth-value, it is essential that Gale's Bergson be concerned with the truth of propositions. Bergson's treatment of negative propositions is not sufficient for this task.

Contrary to Gale, however, Bergson is not merely concerned with the *truth value* of a proposition and he need not be for his project to succeed. The

---

[41] Gale, 298.

contradiction in the idea of nothing is not between the content of the idea of nothing and the content of a necessary truth, but within the process by which one would form an absolutely negative idea.

J.L. Austin's distinction between locutionary and illocutionary acts might help us get at the distinction between truth and meaning in a helpful way.[42] Austin argues that saying something is a way of doing something. If I utter the sentence "Doug and Mary are here" several things happen in one act of speaking. First, we can distinguish the locutionary act. The locutionary act conveys information, gives a description, or asserts a proposition which is either true or false. The sentence "Doug and Mary are here" is true if Doug and Mary are within a relatively close proximity. But, in saying "Doug and Mary are here," I may also be giving a warning to someone with me to answer the door, declaring them the winners of a road rally, or playing a joke on someone. Austin calls this second aspect of the speech-act its illocutionary force. It includes the context or the situation in which we speak because different contexts can give the exact same words said in the exact same ways, a different force. The illocutionary force of my statement is neither true nor false. Other examples of illocutionary acts are making of promises and naming ships or babies.

These more familiar distinctions may help us make sense of Bergson. We can interpret Bergson as saying that *at their most basic level*, affirmations are entirely descriptive or have a purely locutionary force. So too, a negative judgment "has no

---

[42] J.L. Austin, *How to Do Things With Words* (Cambridge, MA: Harvard University Press, 1975).

other content than that of the affirmative judgment which it judges" (EC 289; CE 290). A negative judgment does not have a negative content. Thus, if we look only at the descriptive content of a negative judgment, we misunderstand its true function or meaning. Part of the meaning of a negative proposition lies in its illocutionary force, and this constitutes an extra-intellectual and non-descriptive element.

Conclusion: The Metaphysical Basis For Negation

Bergson's distinctions between negation and affirmation, his asymmetry thesis, should now be clear. Affirmation requires the perception of an object by a subject. Negative judgments need memory, operate at a higher level than their corresponding affirmations, and presuppose other subjects and shared interests. Negative judgments do not reflect negative ideas but rather, while remaining indeterminate, have an illocutionary force. This indicates, that "however strange our assertion may seem, *there is* more, *and not* less, *in the idea of an object conceived as 'not existing' than in the idea of this same object conceived as 'existing'* (EC 286; CE 286).

None of the conditions which he distinguishes are proper to the domain of logic. Rather, they describe different metaphysical conditions pertaining to affirmative and negative judgments. Bergson's asymmetry thesis claims that positive and negative concepts actually occupy different metaphysical levels and relate to one another in particular ways. The human mind moves between these metaphysical levels as it produces and considers propositions. This is the proper meaning of Deleuze's claim that Bergson treats differences in kind that contain nothing negative. The differences between the planes of the cone, between perception and recollection, are prior to and

the conditions for negative judgments. Bergson has thus generated the logical distinction between affirmation and denial from a temporalistic metaphysic.

Once Bergson establishes this difference, he can then turn to consider the idea of an absolutely negative concept, or the idea of nothing. Is there a process which could produce such an idea? Bergson's analysis sets out to show that idea of absolute nothingness, would have to occupy an impossible level, or would require the levels to relate in impossible ways. This impossibility is not a logical impossibility but a "metaphysical" impossibility. Thus, Bergson says that the mechanism of the mind sets the limits of intelligibility.

Without a clear understanding of this point, philosophers are likely to attribute their own method to Bergson. To read Bergson's analysis of the idea of nothing as a logical analysis does Bergson no favors, for under such an interpretation, Bergson fails and the text of *L'Évolution créatice* also falls apart. Bergson's concern with the mechanism of the mind comes to sound like an archaic and unfortunately psychologistic form of expression. Such philosophers will find Bergson both frustrating and wanting. Copleston sounds a clear warning against such imperialistic readings of Bergson. Bergson "was not trying to accomplish the sort of task to which logical analysts devote themselves, but failing singly to do so. He had his own idea of the nature and function of philosophy; and his way of philosophizing, and even his style, were connected with this idea."[43] When we have realized that Bergson's

---

[43] *A History of Philosophy IX, Maine de Biran to Sartre,* Chap. 9, (Garden City, NY: Image Books, 1974), 180.

analyses cannot be simply assimilated to our more familiar ways of practicing philosophy, then we can see what potential Bergson's thought has for opening an alternative path.

Bergson's path begins and ends in the recognition that reality is time. Philosophy emerges between this beginning and the ending as the means to move from a vague recognition to a philosophical intuition. The essence of philosophy is not logic, for temporal distinctions precede and account for the distinctions of logic. Philosophy is rather that series of techniques, that method, which enables us to better see the reality of time, the nature of time and temporal differences, and our own participation in time. Such a method will change not only our practice of philosophy, but will alter our self-perceptions and thus also change ourselves. Chapter six will begin to chart part of this alternative path.

CHAPTER SIX

BERGSON'S METHOD AND CONTEMPORARY PHILOSOPHY

While philosophy in the twentieth century rejects Bergson's philosophy as the expression of an inadequate method, the literature offers no clear account of that method. Only Deleuze seems to attend closely to it. The previous chapters have tested Deleuze's statement of Bergson's method and stated that method for ourselves. In order to focus and clarify my argument with Deleuze, let us review and highlight the line of thought of chapters two through five.

Taking my cue from Deleuze, I set out to generate Bergson's method from his concept of difference. According to Deleuze, space is "a multiplicity of exteriority, of simultaneity, of juxtaposition, of order, of quantitative differentiation, of *difference in degree*; it is a numerical multiplicity, *discontinuous and actual.*" Chapter two argued that homogeneity is the principle of differentiation for space. It found that *objects* in space are indeed exterior to one another, juxtaposed, discontinuous, and simultaneous. However, it proved unable to determine whether objects in space differ by degree -- the relation that Deleuze emphasizes.

Chapter three approached Bergson's concept of time by developing a critical response to Aristotle. For Aristotle, and thus for our approach to Bergson, the distinction and relation between the *before* and *after* provides the key to understanding

time. This distinction, as it turns out, rests on the privilege that philosophy grants to certain types of motion and moving objects. While I did not pursue it in chapter three, this conclusion suggests that the concept of motion may be more basic than the concept of difference.

Chapter four began with Deleuze's claim that duration or real time "is an internal multiplicity of succession, of fusion, of organization, of heterogeneity, of qualitative discrimination, or of *differences in kind*; it is a *virtual and continuous* multiplicity that cannot be reduced to numbers."[1] In accord with this description, I showed, first, that the difference between the past and the present is neither a spatial nor a difference of degree. However, where Deleuze identifies spatial difference with differences of degree, I established a distinction between Bergson's arguments that attack spatial differences and those that attack differences by degree. Further, I demonstrated that Bergson relies on the notion of difference of degree for his method of temporal thinking. Differences of degree prevent Bergson's dualism from falling into the incoherence of traditional dualism. These conclusions mean that Deleuze has misdescribed the nature of spatial difference and temporal difference.

The argument of these chapters does not demonstrate that Deleuze's interpretation, that the concept of difference forms the center of Bergson's work, is completely mistaken. It simply shows that (1) one cannot easily correlate spatial difference with difference of degree on the one hand, and temporal difference with difference of kind on the other, and that (2) an account of Bergson's method cannot be

---

[1] Deleuze, *Bergsonism*, 38.

founded on such correlations. One might still maintain that spatial difference and temporal difference alone (rather than their correlations with other differences) can account for the method. One might claim that chapter five depended only on the concept of temporal difference, as represented by the cone, in order to account for Bergson's method in the analysis of the idea of nothing and in order to distinguish that method from one based on logical difference.

It would, however, be a mistake to try to maintain Deleuze's interpretation in this way. Section I of this chapter will look at two objections to Bergson's philosophy of time, and one objection to his analysis of the idea of nothing. These objections are fatal if one takes the concept of difference as the foundation of Bergson's thought. I then turn to Bergson's preface to the analysis of the idea of nothing in *L'Évolution créatice*, a text that I (following Deleuze) suppressed in chapter five. A consideration of this preface will point us more directly to the center of Bergson's thought and will set us on the right course. Finally, section I concludes by showing how this interpretation avoids the objections to Deleuze's interpretation of Bergson voiced at the beginning of the section. Section II gives a general account of Bergson's method, and section III assesses its relevance for contemporary philosophy.

Objections and Replies

Fatal Objections to Deleuze's Interpretation

Tense and Existence

The first objection, initially put forward by Bertrand Russell, quarrels with Bergson's notion of temporal difference. For the next several pages, I will argue that

Russell's objection is as irrelevant as it is obvious. However, in showing this, a real and interesting difficulty will emerge, one that an appeal to a concept of difference will not easily allow us to answer.

Russell charges Bergson with providing circular definitions of the past and the present, claiming that the defining phrases depend on verb tense and thus *presuppose* the notions of past and present.

> What is meant by saying 'the past is essentially *that which acts no longer*' (his italics), except that the past is that of which the action is past? The words 'no longer' are words expressive of the past; to a person who did not have the ordinary notion of the past as something outside the present, these words would have no meaning. Thus his definition is circular. What he says is, in effect, 'the past is that of which the action is in the past.' As a definition, this cannot be regarded as a happy effort. And the same applies to the present. The present, we are told, is '*that which is acting*' (his italics). But the word 'is' introduces just that idea of the present which was to be defined. The present is that which *is* acting as opposed to that which *was* acting or *will be* acting. That is to say, the present is that whose action is in the present, not in the past or the future. Again, the definition is circular.[2]

Karin Costelloe's defense of Bergson against Russell's criticisms concedes this point: "It must be confessed that the definitions offered are, as they stand, circular and thus worthless."[3]

If the reader attends closely to Bergson's text, however, several noteworthy points will jump out. First, Bergson does not claim to have *defined* the past or the present. It is Russell who claims that Bergson's project is to produce adequate

---

[2] Russell, "Bergson," 807.

[3] "An Answer to Mr. Bertrand Russell's Article on the Philosophy of Bergson," 152.

definitions. Having introduced the notion, the circularity objection becomes indisputable. A good definition will explain the term to be defined in words or terms that do not presuppose a knowledge of that term. In this case, a good definition will define the parts of time in terms that do not themselves presuppose the meaning of those parts of time. It was precisely for this reason that Aristotle insisted that the *before* and *after* belong primarily to magnitude. Otherwise, his own definition of time as "what is measured in motion with respect to the before and after" would have been circular. For this same reason, Bergson refuses to provide a traditional definition of time.[4] Bergson, most emphatically, is not trying to define the parts of time in other than temporal terms, as would be required to satisfy Russell's criteria for a good definition.

---

[4] Bergson objects to giving definitions on several grounds. First, a definition of something everyone knows concretely will be more abstract than the concrete knowledge. "There is no need to define so familiar (*aussi concrète*) a thing, something which is continually present in every one's experience. I will not give a definition, for that would be less clear than the thing itself" (ES 5; ME 7). Thus, against all protests that Bergsonian duration remains somehow mysterious, he says our immediate experience of duration is "the clearest thing in the world" (PM 166; CM 149). Second, a definition freezes or fixes the thing defined. "A perfect definition applies only to a completed (*faite*) reality" (EC 13; CE 13). Only something past can be defined, not something in process, not the present. Thus, Bergson insists, "any positive definition of freedom will ensure the victory of determinism" because the past has already been determined (DI 165; TFW 220). Again, "we shall not aim at imprisoning the comic spirit within a definition. We regard it, above all, as a living thing. However trivial it may be, we shall treat it with the respect due to life. We shall confine ourselves to watching it grow and expand. . . . Maybe we shall gain from this prolonged contact . . . something more flexible than an abstract definition, -- a practical intimate acquaintance, such as springs from a long companionship" (R 1-2; L 61).

Second, Russell's charge of circularity would undercut all definitions of time that do not contain paradoxes. Every philosophy of time must be expressed in a language that follows grammatical rules. It will always be possible to argue that *any* reflection about the nature of time relies on a point about verb tense and that the past and the present are always already given in the verb. Thus, Russell's requirement for an adequate definition undercuts all definitions of time that follow the verb tense of the language.

Let us admit, however, that there is a real philosophical issue at stake in Bergson's text. Bergson and his opponents disagree over *which verb* or category is more appropriate to designate the difference between past and present. Bergson says his opponents "define the present in an arbitrary manner as *that which is*"[5] (MeM 166; MaM 149). Is the past that which existed and no longer exists, or that which acted and no longer acts? Because Russell's approach looks only at verb tense and not at the verb, it introduces irrelevant criteria into the debate.

Finally, in spite of Russell's charge, it is clear that Bergson does not *rely* on verb tense to carry his definition of the past. Russell would have noticed this had he considered Bergson's treatment of the existence of the past. Bergson insists that the past has an existence that is appropriate to it and that the past has as much of a claim to existence as does the present. The distinction between the past and the present is a distinction between different ways of existing. While paradoxical from the standpoint of verb tense, surely this is not a circular definition. Given Bergson's concerted effort

---

[5] "Vous définissez arbitrairement le présent *ce qui est.*"

to assert that the past exists, that the disagreement is about verbs rather than verb tense, and his misgivings about definitions, Russell's objection is beside the point.

Nonetheless, this meditation on Russell's objection raises a difficulty that brings us to the center of Bergson's ontology. The past and the present are distinguished as that which no longer acts and that which acts. However, that which is passive, the past, does *exist.* And here Bergson uses the present tense. The present tense would seem to indicate that, at least with regard to the act of existence, the past does act.

This creates a problem for those who claim that the concept of difference constitutes the ground of Bergson's thought. If the past exist*s*, then the principle of differentiation of time does not apply at the level of existence. Existence itself is not heterogeneous; temporal difference is incorporated into a more basic unity. Thus, Bergson's notion of temporal difference is not as radical as it might at first seem.

Psychology and Metaphysics

The second objection, voiced by some commentators on Bergson's work, indicts Bergson for failing to distinguish between psychology and metaphysics. These writers compliment Bergson in a backhanded manner, saying he writes good psychology but poor philosophy. Or they claim that his theory of time or duration, because it refers to lived or experienced time, describes "psychological time" which one ought not confuse with a metaphysics or ontology of time.[6] Discussing the

---

[6] Kevin Sullivan, "The Relation Between Duration and the Critique of the Idea of Nothing in Bergson's Thought," *De Philosophia* 4 (1983): 78-9; J.W. Scott,

psychological relation between memory and perception is not the same, they say, as discussing the metaphysical relation between the past and the present, much less between the *before* and the *after*. Thus, the diagram of the cone may represent one's experience of time, but it does not represent time itself.

One might attempt a Deleuzian response to this objection by correlating psychology with spatial thinking and metaphysics with thinking in terms of time. Such a reply would have much to recommend itself and would certainly say much that is correct about how Bergson might distinguish the two. However, such a response will founder on the textual evidence. After the *Essai*, where he is most concerned with psycho-physics, Bergson does not write of the relation between psychology and philosophy in this way. Further, such an analysis must still explain how it is possible for Bergson to draw many positive insights from the discipline of psychology while still claiming to practice metaphysics.

Psychologism

The third objection relates to the second, but is directed against the analysis of the idea of nothing. Like the previous objection, it claims that Bergson fails to make some important distinctions. Here, an objector might contend that Bergson's analysis depends on a form of psychologism. Psychologism confuses the act of conception with the object of conception, or it reduces one form a being (the being of numbers, for example) to another form of being (the being of nature, or that graspable by the

---

"Bergsonism in England," *The Monist* 27 (1917): 204.

natural sciences). Most often directed against attempts to provide foundations for mathematics, psychologism makes the error of trying to account for the necessary by appealing to the contingent.

Bergson's analysis of the idea of nothing claims that it is impossible to conceive of or imagine the idea of nothing because suppression is really substitution. The act of substitution, however, if it is a law of the mind, is nonetheless contingent. It could be otherwise. Some other being, or some computer, might be able to conceive of the idea of nothing. Thus, the impossibility of conceiving of nothing rests on a merely contingent fact about the human mind.

Bergson's concepts of spatial difference, temporal difference, and the differences between these differences will not enable him to elude this criticism. The charge of psychologism is, in fact, an attack on the way in which these differences are formulated. The distinctions Bergson draws have the status of psychological distinctions, and one cannot refute a charge of psychologism by an appeal to psychological laws. The status of those laws is precisely what is in question.

A Neglected Text: The Preface to the Analysis of the Idea of Nothing

If the concept of difference does function as the center of Bergson's thought, then the objections above more than justify the judgment of the philosophical community on Bergson's work. However, there is good reason to think Bergson's work is not a continual meditation on the concept of difference. To demonstrate this, let us return to Bergson's own text, and to his analysis of the idea of nothing that we have already analyzed.

The reader will recall that the analysis of *L'Évolution créatice* includes a preface, and that chapter five postponed looking at the preface until chapter six. This preface provides the resources to respond to the objections above and thus to properly adjust our reading of Bergson.

Bergson's preface to the analysis of the idea of nothing does not start with a contrast between spatial difference and temporal difference. Rather, it begins with the notion of "interest." The human mind, Bergson writes, is "preoccupied before everything with the necessities of action" (EC 273; CE 272). In accord with its interest in action, the mind develops many tricks, paths, and procedures for adapting to its world. These tricks and procedures of the mind produce illusions when our interests are directed toward speculative matters rather than action, and we continue to use the same paths of thought developed for practical purposes (EC 273; CE 273). Thus, the difference between spatial difference and temporal difference has been supplanted by the difference between practical interests and theoretical interests. Bergson lists two forms that theoretical illusions can take.

Substituting the Static for the Mobile

The first illusion "consists in supposing that we can think the unstable by means of the stable, the moving by means of the mobile." This is a version of Bergson's claim that we think time by thinking space, but formulated in terms of motion and not difference. Further, the notion of interest provides the context for understanding spatial thinking. The immobile or the spatialized serves the interests of bodily action because space is the medium for bodily action. Space can present bodies

as fixed, with definite boundaries, separate or separable from each other and as qualitively alike. The concept of space allows us to analyze bodies, decompose them into their parts, consider them from different angles, and manipulate them for our own purposes. To grasp time or motion, one must withdraw from the interests of action and consider reality not simply as it can serve my needs and as I may act on it, but as it really is. When the attempt to know reality itself uses the habits of thought that have action as their aim, illusory difficulties will emerge.

How is it *possible* to misunderstand in this manner? The *Essai* merely says that we *confuse* succession with simultaneity and duration with the extended (*l'étendue*), that we *translate* duration into space, and that space is a *symbol* for real time. However, Bergson does not give an account of this confusion or translation until *Matière et mémoire* under the name "substitution." The process of substitution is exemplified by the way recollection-images can replace perceptions, as sketched out in chapter four. Thus, illusions are possible *because* the mind operates as Bergson's cone suggests.

Bergson specifies how we come to substitute space for time or the immobile for the mobile by considering the motion of one's own hand from one point to another. I have both a visual and tactile experience this motion. In the sensations of the muscles and skin of my arm and hand, I feel the motion as an "an indivisible or at least an undivided act" (MeM 209; MaM 188). Vision reveals not only the undivided motion, but also a line. Only because the line and the movement are given together is

it possible for one to be the symbol of or *substitute* for the other (DeS 62-5; DaS 50-1).

The imagination, however, makes this possibility an actuality. First, the imagination substitutes for the extended line that I perceive, a merely conceived geometrical line.[7] The imagination then transposes the undivided motion onto the infinitely divisible line. Because the line and the motion seem to coincide, I can imagine that the motion stops for an infinitely small moment at each point on the line. Indeed, for the imagination, but only for the imagination, the points on the line are "only so many imaginary halts" (MeM 211; MaM 190). Through the work of the imagination, then, we replace the perception of both motion and the extensity of the line with a conceived space. Substitution is, in this case, replacing an "artifice of the mind" or imagination for "the data of the senses," divisibility for indivisibility (MeM 211; MaM 189). Indeed, because we are in the habit of thinking in this way, and because it is usually in our interests to think this way, it is "extremely difficult not to attribute to the moving body itself the immobility of the point with which, for a moment, I make it coincide" (MeM 210; MaM 189).

The first theoretical illusion, then, is not explained in terms of spatial and temporal difference. The preface does not point to "difference" as the operative

---

[7] Bergson is not explicit on this point. He immediately assumes that the perceived line "like all space, may be indefinitely divided" (MeM 209; MaM 188). However, Bergson well knows that in perceiving the line, I do not perceive space, for as he later insists, space is only conceived not perceived. In perceiving the line, I do not perceive space but extension. Thus, to get an indefinitely divisible line, there must be an intervening step by which conceived space is substituted for the perceived line.

concept but to the mind that *moves* between its heterogeneous planes in a manner generally determined by its *interests*. Illusions develop when the mind moves in a fashion inappropriate to its interests.

Moving from the Empty to the Full

The second illusion is that "we make use of the void in order to think the full" (EC 274; CE 274). This illusion is rooted in practice because it is natural to think of lack prior to fulfillment. In saying "I have nothing," I am expressing what I have as a function of what I want (EC 273-4; CE 273). For the purpose of action, then, I move from the less to the more, from absence to presence, from empty to full. Bergson notes that this second illusion is the source of the idea of nothing. It leads us to a "radically false conception . . . of negation, of the void and of the nought," because we think that the idea of nothing involves less than the idea of something (EC 275; CE 275).

From the perspective of Gilles Deleuze, the illusory nature of the 'more' and the 'less' consists in the fact that the difference between the more and the less is that of degree rather than kind, whereas existence itself differs in kind. For this reason, Deleuze dismisses as only provisional any solution to a problem that includes the notions of more and less. According to Deleuze, Bergson condemns *all* attempts to think in terms of more and less.[8]

[8] Deleuze, *Bergsonism*, 19.

Against Deleuze's interpretation, chapter four has already demonstrated that (1) spatial thinking is not the same as thinking differences of degree, and that (2) temporality, as illustrated by the diagram of the cone, enables Bergson to reintroduce notions of difference of degree. Thus, the fact that the 'more' and the 'less' may introduce difference of degree does not indicate that anything is amiss.

Further, it is important to note that Bergson does not shy away from stating his most carefully worked out solutions in terms of 'more' and 'less.' In *L'Évolution créatice,* he applies these terms to the results of his analyses: "There is *more* in a movement than in the successive positions attributed to the moving object, *more* in a becoming than in the forms passed through in turn, *more* in the evolution of form than the forms assumed one after another (EC 315; CE 316, his emphasis). Likewise, against the identity of the mind and the brain, Bergson argues that "there is infinitely more in a human consciousness than in the corresponding brain" (ES 42; ME 52).[9]

This illusion, therefore, does not consist simply in the notions of 'more' and 'less.' In what then does the illusion consist? First, it consists of a confusion about or a substitution between what is in reality 'more' or 'less.' As we saw in chapter five, Bergson argues that there is more in the idea of nothing than in the idea of something, whereas most people assume that the idea of nothing includes less than the idea of something. The intellect has reversed the terms (EC 315; CE 316). Second, the illusion fails to see the direction of the motion of the mind between the two terms.

---

[9] "Mind [is] precisely a force which can draw from itself more than it contains, yield more than it receives, give more than it has" (ES 31; ME 39).

For the purposes of action, we feel as if we begin with the 'less' or the void and work our way to the 'more' or the full. In reality, however, by confusing the two terms, we are moving in the opposite direction.

Chapter five has already shown how the idea of nothingness, like the illusion of reducing the mobile to the static, depends on substitution and human interest. The preface to the analysis of the idea of nothing shows how these notions, rather than the concept of difference, account for Bergson's method in the analysis of the idea of nothing.

Replies to Objections

Section I began with a series of objections to Deleuze's interpretation of Bergson. Each objection raised difficulties with taking spatial and temporal differences as the basis for Bergson's method. Having seen Deleuze's interpretation break down, and having provided an alternate interpretation, we can now show how this new interpretation skirts the objections to Deleuze. Responses to the objections above can be formulated on the basis of the notion of interest and motion.

Reply to Russell

This objection voiced a concern about the nature of existence and its relation to time. This problem belongs to the history of philosophical reflection on time. That is, distinguishing between the parts of time will require that we raise issues proper to metaphysics. This point finds a clear expression even in Aristotle. In one of his initial *aporiai* of his essay on time, Aristotle muses:

> First, does it [time] belong to the class of things that exist or to that of things that do not exist? . . . To start, then: the following consideration would make one suspect that it either does not exist at all or barely, and in an obscure way. One part of it has been and is not, while the other is going to be and is not yet. Yet time . . . is made up of these. One would naturally suppose that what is made up of things which do not exist could have no share in reality.[10]

This *aporia* rests on an unexpressed assumption: that which *is* is present. Time exists only insofar as time is present. The future and the past do not (fully) exist because they are not present. Thus, the nature of existence is identified with one mode of time and this notion of existence can then be turned back on time itself. Aristotle himself does not escape from the assumption implicit in this (lack of) passage.

This means that any attempt to articulate the difference and relation between the parts of time will implicitly also raise the central question of metaphysics: what is the meaning of "being" or "existence"? The two questions cannot be separated. Thus, in the course of Bergson's investigations, he points out that "here we come to the capital problem of existence" (MeM 163; MaM 146-7). Bergson's notion of duration, then, implies not only a philosophical method, but also a metaphysical doctrine.

Chapter four presented Bergson's argument that the past exist*s*. This implies, however, that the principle of differentiation of time does not apply at the level of existence. Existence is a unity that incorporates both the past and the present. To use the present tense of the verb "to exist" seems to group the past, along with the present, among those things that act. How then, are we to understand Bergson's use of "to exist" and its relation to the heterogeneity of the past and the present?

---

[10] *Physics*, 217 b 31 ff.

The reply to this objection need not defend difference as the ground of Bergson's thought. Rather, it needs to clarify the relation between existence and the heterogeneity of the past and the present on the basis of motion and interest.

Recall, that time is not distinct from motion and that it *includes* both the past and the present. Time and motion, then, are in the exact same position as existence with regard to the heterogeneity of the past and the present. Bergson actually identifies the time and existence when he claims that there are no unchanging substances, but only motions, and that thinking in terms of time will dissolve classic philosophical questions concerning the nature of substance. Second, Bergson repeatedly says that time is that in the universe which is acting, is happening, or is efficacious. That is, he attributes action to time and motion, just as we argued that existence itself seems to be a way of acting.

If time or motion, rather than difference, generates the method of Bergson's thought, why does he distinguish between the past and the present as that which is passive and that which is active? To resolve this difficulty, we must look at the context of Bergson's initial distinction between the past and the present.

It will perhaps come as a surprise that Bergson claims that this distinction between the past and the present will enable us to understand how the past, in the form of pure recollection, exists (MeM 156; MaM 141). Bergson's general argument is clearer than his explicit statements. Bergson's strategy is to establish the existence of the past by distinguishing between "the present" and "existence." In this contrast, the present is *not* merely that which is acting. It is that part of what is acting which

interests me. The present is given as my consciousness of my own body, that action of which I am aware and to which I can respond. "My present is, in its essence, sensori-motor" (Mem 153; MaM 138). It is defined by the fact that I am an embodied creature who must act in this world. Now certainly, that which interests me exists, but my interests cannot be taken as the mark of existence. That which exists need not present itself as a threat or a promise to my body. The past exists, and hence does act, precisely in that it preserves itself.[11]

What does this mean for our problem? Strictly speaking, it is interest, and not existence or the tense of action, that distinguishes the past from the present. The dichotomy that emerges for Bergson's thought is not between the past and the present, nor between that which no longer acts and that which is acting. Instead, there is a contrast between (1) true existence or duration, an action that incorporates *both* the past and the present, and (2) the interests of bodily reactions that divide the past and the present. Bergson's method and the analysis of the idea of nothing grow out of the domain circumscribed by this dichotomy.

Reply to Psychology Objection

The second objection, above, claimed that Bergson fails to distinguish psychology from metaphysics. The objection itself is not completely transparent. Certainly, it assumes a definite distinction between psychology and philosophy or

---

[11] Bergson uses the reflexive construction, but this should clearly be translated actively rather than passively. "Mais comment le passé, qui, par hypothèse, a cessé d'être, pourrait-il par lui-même se conserver?" (MeM 166; MaM 149).

metaphysics and it argues that Bergson has missed that distinction. But how shall we determine the distinction between psychology and metaphysics?

Perhaps, the objector intends "genetic" understanding of the distinction between psychology and philosophy. That is, perhaps the objector takes Bergson as responding to problems arising in the domain of psychology and concludes that his solutions also must belong to the order of psychology. However, Bergson himself resists this interpretation of his work. When Gaston Rageot claims that Bergson develops the notion of "real duration" in the *Essai* under the influence of William James' notion of "stream of consciousness," Bergson protests. James' stream of consciousness, "has a clearly psychological origin and signification. [Real duration] consists essentially in a critique of the idea of *homogeneous time*, such as one finds in the philosophers and mathematicians."[12] As I have tried to show, Bergson considers the movement of the mind as a result of a critical dialogue with Aristotle. Bergson's struggle to understand time leads him to the position that time cannot be distinguished from motion. In principle, this includes the motion of the mind. Indeed, if we are considering human agents, it would seem that the motion of the mind would be the most likely candidate, at least initially, for a standard motion. Bergson's concern with the motion of the mind, then, is not motivated by psychological considerations.

There are certainly other ways to distinguish psychology and philosophy. However, only a very uncharitable and hasty reader will insist on simply imposing

---

[12] "Lettre au directeur de la *Revue philosophique*," July 10, 1905, in *Écrits et paroles*, ed. R.-M. Mossé-Bastide (Paris: PUF, 1959), 239. Also in *Mélanges* (Paris: PUF, 1972), 656-8.

such distinctions on Bergson's work. The proper questions are "How does *Bergson* articulate the distinction between psychology and metaphysics?" and "Does this distinction mean that the reflections that lead Bergson to the diagram of the cone belong to the order of psychology rather than metaphysics?"

The answer to the first question is clear. Like the positivists, Bergson distinguishes between psychology and metaphysics by their methods. Bergson, however, is not a positivist. Whereas positivists see metaphysics as an imprecise mode of thought, now replaced by the sciences, Bergson understands himself as a metaphysician. Science and metaphysics do have different methods, and metaphysics should not be devalued or replaced by science.

The methods of metaphysics and of science are determined by their goals and interests. "[P]sychology has for its object the study of the human mind working for practical utility, and . . . metaphysics is but this same mind striving to transcend the conditions of useful action and to come back to itself as to a pure creative energy" (MaM 15; MeM 8). This means that the diagram of the cone belongs to metaphysics only if it results from reflections that attempt to overcome modes of thought motivated by practical interests. Since the diagram of the cone overcomes the division between the past and the present, it is not guided by practical interests, and it belongs to the realm of metaphysics. One may wish to argue about the way Bergson draws the distinction between psychology and metaphysics, but one cannot claim that he fails to make the distinction.

This said, why does Bergson spend so much energy reading the scholarly psychological literature? Why does he draw on psychology when asking metaphysical questions? Bergson's empirical bent provides part of the explanation for this. Bergson prefers to restate overly general metaphysical questions in terms that can be tested by experience, and the sciences can provide a particularly rigorous reflection on experience. Furthermore, while metaphysics and psychology may have different interests, Bergson realizes that they share a common object: the mind. Because metaphysics and psychology share a common object of study, the methods and conclusions of the one should have consequences for the other. The methods of psychology, consequently, are not philosophically neutral. The conclusions of metaphysics should direct the methods of psychology, and the conclusions of psychology should also illumine some of the central problems of metaphysics. Whether we are psychologists or philosophers, if we truly understood the problems of the other discipline, we would have deeper insights into our own questions. "Many problems which appear foreign to each other as long as we are bound by the letter of the terms in which these two sciences state them, are seen to be very near akin and to be able to solve each other when we thus penetrate into their inner meaning" (MaM 15; MeM 8). The fact that this "dovetailing of problems" makes Bergson's work in *Matière et mémoire* incredibly complex does not constitute an objection to his efforts. Reality is itself complex (MaM 16; MeM 9).

Reply to Psychologism Objection

Like the psychology objection above, the charge of psychologism can be as slippery as it is common. Further, the force of this third objection will be greatly lessened if one accepts Bergson's distinction between psychology and metaphysics given above. Some additional comments may be helpful.

I take the charge of psychologism, here, to mean that Bergson bases the logically necessary or the impossible (the ability to imagine or conceive of nothingness) on the psychologically contingent (the law of substitution). It is probably a concern to avoid the charge of psychologism that leads Gale to distort Bergson's text. But clearly, as chapter five has shown, the charge of psychologism and Gale's reading of Bergson misinterpret Bergson's argument. Bergson does not claim that it is *logically* impossible to conceive of nothingness. Further, given the distinction above between psychology and metaphysics, the law of substitution is not a contingent, psychological law. Bergson's reflections belong to the realm of metaphysics, rather than to logic or psychology. He is pointing out that the motion of the mind differs from the steps of logic, and from practical interest. The law of substitution is a metaphysical motion. Given the metaphysical structure of the mind as that which substitutes one thing for another, there is a contradiction in imagining or conceiving of nothingness. Bergson's method does not consist in finding logically necessary premises as his starting points, but in intuiting the metaphysical structures of one's own mind.

An Articulation of Bergson's Method

Having considered some of Bergson's work in close detail in the previous chapters, and clarified the principles that drive it in this chapter, a concise overview of Bergson's method will prove useful. The reader may best grasp Bergson's method if I present it first in an abstract or formal manner and then flesh out that account experientially.

A Formal Account

For purposes of exposition I divide Bergson's method into three aspects: the goal, obstacles to the goal, and techniques to overcome those obstacles. The goal of philosophy, according to Bergson, is to know reality or existence in all its particularity. In this quite general sense, philosophy is metaphysics (PM 181-182; CM 162). What is the nature of existence? In chapter four we saw that the past exists and that the diagram of the cone represents existence or duration. Thus, Bergson's method aims to bring the reader to the place where s/he can recognize that the mind moves between and embraces both the heterogeneous poles of the past and the present. "Through philosophy we can accustom ourselves never to isolate the present from the past which it pulls along with it." (PM 175; CM 157).

One does not grasp *all* of reality in a single act, however. There are many different kinds of beings, each of which must be understood according to the structure of its own duration. Thus, there are stages to Bergson's philosophical project. The importance of the first stage sometimes leads Bergson to identify the method with only the first stage. In the first stage, as Bergson repeatedly says throughout *La Pensée et*

le mouvant, one achieves an intuition of one's own mind as an undivided motion. The intuition of one's own mind forms the first stage because of our unique access to ourselves. "There is at least one reality which we all seize from within, by intuition and not by simple analysis. It is our own person in its flowing through time, the self which endures" (PM 182; CM 162).

At another stage, one can attain an intuition of the rhythm of other persons (PM 28; CM 32). Moving out from the level of the human, one can intuit the vital impetus of life (as Bergson sets out to do in *L'Évolution créatice*) and, proceeding further, the duration of matter (as Bergson does in *Matière et mémoire*). It is impossible to say beforehand how far intuition can carry one. However, it may enable us to ascend even to heaven, in which case "metaphysical experience," or the intuition of the highest reality, "will be bound up with that of the great mystics" (PM 50; CM 50).

Obstacles inhibit the intuition of reality, however. Bergson says that an artificial scheme, that is the structure of space, comes "between reality and us" (PM 157; CM 142). Because spatial thought is rooted in the practical interest of bodily creatures to act in the world, "spatial thought," has a narrow meaning and a wider meaning. In the strict sense, thinking spatially means that the intellect places the terms of a problem in a homogeneous medium that does not allow for qualitative distinctions between the terms, but which establishes a spatial separation between them. Indeed, Bergson claims that the function of the intellect is precisely to "establish clear-cut distinctions" or oppositions on the model of solid bodies (MeM

164; MaM 147). Thus, on account of those sharp distinctions, the intellect establishes the unbridgeable gulf between external objects and internal states (MeM 164; MaM 147-8). In the wider sense of the word, spatial thought simply means thinking in accordance with an interest in action. Indeed, this wider sense overshadows the narrower meaning in Bergson's later works. The interest and function of spatial thought becomes more important than the differences that space establishes between its objects. The primary obstacle to intuition, then, is not simply spatial differences but our practical interests.

Practical interests prevent us from intuiting duration as it is by leading us to divide the past and the present. Bergson provides a helpful example to explain his point.

> 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 is something that can be made longer or shorter, like the interval between two points of a compass. For the moment, the points are just far enough apart to reach from the beginning to the end of my sentence; but if the fancy took me to spread them further my present would embrace, in addition to my last sentence, the one that preceded it: all I should have had to do is to adopt another punctuation. Let us go further: an attention which could be extended indefinitely would embrace, along with the preceding sentence, all the anterior phrases of the lecture and the events which preceded the lecture, and as large a portion of what we call our past as desired. (PM 168-9; CM 151-2).

That is to say, one's interests determine the span of one's attention, and the span of one's attention determines where one divides the past and the present. Thus, the division between the past and the present is a function of interest. Bergson writes, "The distinction we make between our present and past is . . . relative to the extent of the field which our attention to life can embrace. The 'present' occupies exactly as

much space as this effort. . . . In a word, our present falls back into the past when we cease to attribute to it an immediate interest" (PM 169; CM 152).

Bergson's philosophy has as its goal to help keep us from dividing the past and the present. The practical interests that direct our attention function as the obstacle to that goal. Therefore, the techniques of Bergson's method must free our attention from practical interests. This is possible, however, only if attention can be practically disinterested. But can it?

Recall the discussion of habit memory and covering memory in chapter four. Habit memory, I said, "is acted, lived, or played. It does not pause to contemplate the object, but moves quickly and automatically to a reaction. For this reason, Bergson says habit is inattentive to, or a distraction from, the object." "Attention" takes the form of habit memory when practical interests and the desire to act in the world guide it. By contrast, covering memory, I said, "does not immediately react and take the subject away from the object. Rather, there is a hesitation. One returns to or attends to the object to look again, to better determine the nature of the thing at hand. Thus, Bergson sometimes calls this 'attentive recognition.'" Attentive memory brings recollection-images to bear on the perception, strengthening, enriching, deepening it, and calling forth even more recollection-images. In order to do this, however, it must put a check on its interest in acting. Thus, true attention is already practically disinterested. Bergson often indicates the difference between these to forms of attention as different directions of the mind. If the drive to act indicates the natural motion of the mind, then "attention . . . implies a backward movement of the mind

which thus gives up the pursuit of the useful effect of a present perception" (MeM 110; MaM 101).

Bergson's techniques attempt to move or convert one from the "inattentive attention" dominated by practical concerns, to true attention. "It would be a question of *turning* this attention *aside* from the part of the universe which interests us from a practical viewpoint and *turning it back* toward what serves no practical purpose. This conversion of the attention would be philosophy itself." (PM 154; CM 138). While one might initially represent this conversion as a redirection of the attention to *different objects*, this is not Bergson's goal. His aim is to move us from one form of attention to another form, to reverse the motion of the mind. This is a philosophical conversion that teaches us to see the *same things* differently, by no longer dividing the past and the present. How does Bergson propose to do this?

First, Bergson challenges habits that allow us to move on without considering the what is actually before us. In philosophy, such habits of thought can be and are stored up in language. Language is a set of signifiers and philosophy has often been concerned to determine and use rules for transforming one set of signifiers into another set of signifiers. With the help of signifiers, we can arithmetize thinking. For most purposes, Bergson claims, this is greatly to our advantage. By manipulating signifiers we do not need to think about what they signify. Mathematics provides the clearest example of the importance of symbolism.[13] "For we can confidently assert

---

[13] Bergson also argues that chit-chat or idle talk in conversation has much the same character. "Current conversation is composed in great part of ready-made responses to conventional questions, the response succeeding the question without

that 12 is half of 24 without thinking either the number 12 or the number 24: indeed, as far as quick operations are concerned, we have everything to gain by not doing so" (DI 58; TFW 77-78, translation altered).[14] Alfred North Whitehead eloquently states this point in his chapter on "The Symbolism of Mathematics," in *An Introduction to Mathematics:*

> By the aid of symbolism, we can make transitions in reasoning almost mechanically by the eye, which otherwise would call into play the higher faculties of the brain.
>
> It is a profoundly erroneous truism, repeated by all copy-books and by eminent people when they are making speeches, that we should cultivate the habit of thinking of what we are doing. The precise opposite is the case. Civilization advances by extending the number of important operations which we can perform without thinking about them. Operations of thought are like calvary charges in a battle -- they

---

intelligence being interested in the meaning of either. Thus, patients with *dementia* can keep up an almost coherent conversation on a simple subject, although they hardly know what they are saying. . . . The mind remains on one and the same "plane of consciousness" (ES 168-9; ME 204).

[14] "Ernest Mach once wrote that in performing mathematical operations he sometimes had an uncomfortable feeling that his pencil was thinking instead of his mind. He thus merely referred to the well-known fact that even the highest and most complex mathematical operations may be performed almost mechanically and effortlessly once their basic rules are known and automatized by repetition and habit. From a purely mathematical point of view Lorentz's equations are hardly anything more than elementary algebra; all mathematical consequences can be derived from them without effort by a simple mechanical application of the familiar algebraic rules. The real difficulty begins when we try to grasp the *physical* meaning of these mathematical consequences and to express it in our unreformed Newtonian and Euclidian language. Then we shall find that our own pencil will *not* perform this task for us as the required radical revision of the traditional forms of thought cannot be realized without sustained and vigorous effort." Milič Čapek, *New Aspects of Time: Its Continuity and Novelties* (Dordrecht: Kluwer Academic Publishers, 1991), 284-5.

> are strictly limited in number, they require fresh horses, and must only be made at decisive moments.[15]

Signifiers or symbols make it possible to think without thinking, to substitute a symbol and a rule or an automated response for a very complex mental operation. It allows us to simulate thinking about things themselves. Even René Berthelot, Bergson's critic, notes that "the modern arithmetization of mathematical analysis marked by Krönecher, Dedekind, Tannéry, and Cantor, seemingly confirmed Bergson's diagnosis."[16]

According to Bergson, philosophy consists in its calvary charges and the use of fresh horses. Philosophy, like any other discipline, requires such maneuvers when it faces a stalemate. Particularly, when philosophical problems resist any adequate solution (such as the Cartesian statement of the mind-body problem) or imply more than one solution (as the idealist and realist positions on matter), there is adequate reason to subject the problem itself to scrutiny. We must go beneath the problem as stated by the tradition, and discover the experience of reality out of which the problem supposedly grows.

Bergson claims that pushing on problematic problems will generally have one of two possible results. Some problems will turn out to have been "badly stated problems" and these, when restated, will "present themselves in another way." Some questions will lend themselves to the method of *recoupage*. For others, Bergson tries "to get the problem stated in less general terms and even, if possible, to give it a

---

[15] Alfred North Whitehead, *An Introduction to Mathematics* (New York: Oxford University Press, 1958), 41-42.

[16] Čapek, *Bergson and Modern Physics*, 75.

concrete form, to shape it to certain facts upon which direct observation could be based" (PM 79; CM 73). Bergson uses this strategy in *Matière et mémoire* where the question, "does the mind exist independently of the body?" is reduced to the question "are recollections stored in the brain?" This second question can be addressed, if not completely settled, by experimental psychology.

This move to experience explains why all of Bergson's works grant such an important place to the sciences. *Matière et mémoire* is steeped in psychology, *L'Évolution créatice* engages with the work of evolutionary biologists, and *Les Deux sources de la morale et de la religion* occupies itself with the work of Durkheim and Levy-Bruhl. Given the evidence of Bergson's actual practice, it remains incomprehensible how his contemporaries could have imputed a hostility to science to him. The method of intuition cannot be an attempt to ignore or bypass empirical science and simply turn inward. Bergson is attempting to get us to reflect on our experience. Certainly, science can distort our experience, as when it substitutes purely causal analyses for the phenomena itself or when it unconsciously relies on an inadequate metaphysic. However, it also has the potential to reveal our experience to us, to retrieve our experience from what traditional language and knowledge might lead us to expect. If one does not simply take the results of the sciences as a new form of habitual knowledge, the sciences can help us to reflect attentively on our experiences.

The same argument could be advanced for Bergson's use of logic. In *Matière et mémoire* Bergson uses a *reductio ad absurdum* to argue that perceptions never

become recollections. Thus, Bergson does not claim that logic has no place in philosophy. Logic can be useful to philosophy if it helps us attend to our experiences. Logic, however, should not master philosophy. The eternal truths of logic should not blind one to the reality of time. One should not confuse the motion of one's mind with the steps one might take in a logical argument. These are sometimes very different motions. Both logic and science, then, form part of our habitual thoughts from which Bergson tries to free us, and both provide techniques that Bergson is willing and happy to use to get us to attend to experience.

Not all problems are badly stated questions, however. Bergson claims that when we attend to them, "problems we considered insoluble will resolve themselves [*se résoudre*], or rather, be dissolved [*se dissoudre*]" (PM 32; CM 36). These "non-existent problems" will simply disappear, for "if one were convinced of the reality of change and if one made an effort to grasp it, everything would become simplified, philosophical difficulties, considered insurmountable would fall away" (PM 144; CM 131). The analysis of the idea of nothing has shown that the question, "Why is there something rather than nothing?" is a non-existent problem. It dissolves as a legitimate problem once we see that we have no concept or image of "nothing." The illusion that we do have a concept of nothing stems from a failure to recognize substitution rather than suppression as the true motion of the mind, and from our practically interested habit of moving from the empty to the full.

Bergson does not fear differences of degree, as Deleuze does, so he has no need to reduce "non-existent problems" to "badly stated questions." Nevertheless, he

insists that these errors find a common origin in the practical interests that guide the thoughts of bodily creatures. By using whatever (science, logic) will aid him in the task of getting his readers to look again and to attend to the things themselves, he helps to free them from the mere curiosity and the business of the practically oriented person. He aims to reveal not only the world, but the reader's own self to his or her self.

An Experiential Account

For all Bergson's talk about the concrete and experience, the account above fails to make contact with experience. Let us provide a simplified an overly schematic contrast of the experiences Bergson is addressing. First, I will consider myself as unschooled in philosophy, and especially in Bergson's form of philosophy. I am a person who lives day to day, engaged in projects at my work, school, and home. My attention is usually constrained by the requirements of getting to work, preparing meals, typing papers, preparing class sessions, etc. That is, my attention is focused on the task before me; it is limited to the immediate past and the immediate future. More concretely, when I defend my dissertation, I must respond to the question just put to me. The event consists in a series of questions and replies. The birth of my child is experienced as a series of tasks--giving back rubs, preparing hot compresses--to provide for a safe delivery. In such cases, I am so directed toward the tasks at hand, that I am hardly aware of myself or, perhaps, I may feel entirely at the mercy of the world. At best, I may hope for my tasks to go smoothly and to find some pleasure as the product of my labor. I see the world as something to be manipulated to satisfy my

needs or desires. Even if I live in an industrialized society where technology and instrumental reason have rationalized the structures of one's world, it remains lifeless. These habitual ways of thinking and seeing darken my world and warp my vision. The world is, Bergson says,

> no more than a shadow of itself: and it is as cold as death. Everything in it is arranged for our maximum convenience, but in it, everything is in a present which seems constantly to be starting afresh; and we ourselves, fashioned artificially in the image of a no less artificial universe, see ourselves in the instantaneous, speak of the past as of something done away with, and see in memory a fact strange or in any case foreign to us, an aid given to mind by matter. . . . With its applications which aim only at the convenience of existence, science gives us the promise of well-being, or at most, pleasure. (PM 141-2; CM 128-9).

Now imagine that, by Bergson's techniques, one's attention has been directed away from such practical interests and their attendant forms of thought. Without the concern for what I will do in my immediate future, the span of my attention can expand. Bergson says,

> An attention to life, sufficiently powerful and sufficiently separated from all practical interest, would thus include in an undivided present the entire past history of the conscious person--not as instantaneity, not like a cluster of simultaneous parts, but as something continually moving: such, I repeat, is the melody which one perceives as indivisible, and which constitutes, from one end to the other . . . a perpetual present." (PM 169-70; CM 152).

To see one's self directly, apart from practical interests, is to grasp oneself *sub specie durationis* (PM 176; CM 158).

According to Bergson, seeing oneself as in time will give an entirely different hue to one's life. I do not simply move from the immediate past to the immediate future, but I see my present situation in light of my whole life. The present does not

enslave or limit me, but allows me to create what I will become. The dissertation defence has a depth of meaning and significance informed by achievements and disappointments of my past and my hopes for a future. The birth of a child has a meaning in the narrative of one's own life, but also in the story of a family, a community, and beyond. Even mundane events can take on momentous significance. They too form the melody of one's own life.[17] What, from the perspective of practical interests, had been dead "comes to life again" (PM 142; CM 129). Technology may entice us with pleasure, but this form of "philosophy could already give us joy" (PM 142; CM 129).[18]

Philosophy, then, according to Bergson, is the methodical cultivation of this attention to duration, the enhancement and enrichment of a certain form of experience, so as to maintain that experience even when practically engaged (PM 85; CM 79).

---

[17] Bergson's example goes immediately to the extreme case. "It happens in exceptional cases that the attention suddenly loses the interest it had in life: immediately, as though by magic, the past once more becomes present. In people who see the threat of sudden death unexpectedly before them, in the mountain climber falling down a precipice, in drowning men, in men being hanged, it seems that a sharp conversion of the attention can take place--something like a change of orientation of the consciousness which, up until then turned toward the future and absorbed by the necessities of action, suddenly loses all interest in them. That is enough to call to mind a thousand different 'forgotten' details and to unroll the whole history of the person before him in a moving panorama" (PM 170; CM 152-3).

[18] Joy itself results from recognizing the reality of duration. "At its lowest level joy is very like a turning of our states of consciousness toward the future. Then, as if their weight were diminished by this attraction, our ideas and sensations succeed one another with greater rapidity; our movements no longer cost us the same effort. Finally, in cases of extreme joy, our perceptions and recollections become tinged with an indefinable quality, as with a kind of heat or light, so novel that now and then, as we stare at our own self, we wonder how it can really exist" (DI 8; TFW 10, translation altered).

Contemporary Philosophy and Bergson's Method

A General Assessment

What relevance does this vision of philosophy have today? First, in spite of Deleuze's interpretation and the initial impetus for this dissertation, Bergson's closest kin are not the philosophers of difference. Bergson's work rotates on a different axis. Second, I do not believe Anglo-American philosophy provides us with something analogous to Bergson's vision of philosophy. Anglo-American philosophy does not understand its task as the cultivation and production of experiences through philosophical reflection. Those who share Bergson's project of producing new or deeper experiences through reflection on subjectivity and temporality are, in spite of their disagreements, the existentialists and, I think, Michel Foucault.

Certainly, the French existentialists are not "Bergsonians." The feeling of joy that so infused Bergson's experience of temporal self felt like anxiety to young academics whose country had been devastated by two wars. Likewise, in spite of his emphasis on novelty and his constant criticisms of the inadequacy of the philosophical tradition, Bergson would never have written a book like Sartre's *Saint Genet.* Novelty, transgression, difference, and exceeding limits for its own sake has little place in his thought. That is, the experience that Bergson wishes to cultivate has depth as well as novelty, and it best seen in the saints and mystics of the Middle Ages.

Still, French existentialists cut their philosophical teeth on Bergson's work. Modify it as they must, they nevertheless caught his vision of philosophy. Perhaps, then, Bergson's relevance for contemporary philosophy is carried by existentialism.

On the other hand, French existentialism itself, at least in the form given to it by Sartre, seems passé. Having been eclipsed by Marxism, structuralism, and post-structuralism, existentialism appears as a rather weak aid to pursue a Bergsonian vision of philosophy in a postmodern context.

The existentialists, however, are not the only heirs to Bergson's legacy. Bergson and his vision of philosophy have inspired excellent work in the history of philosophy.[19] For example, the Plotinus scholar Pierre Hadot, whose *Exercices spirituels et philosophie antique* argues that ancient philosophy and much of modern philosophy can be understood as spiritual exercise, claims to have initially caught his vision of philosophy from Bergson.[20] The similarity of Bergson's vision of

---

[19] Bergson's student, Etienne Gilson, claims that Bergson's criticism of the intellect forced Thomists to re-examine their Kantian reading of Thomas, and thereby sparked the Thomist revival at the beginning of this century.

[20] "One of my first articles, published in the *Actes du Congrès de Bruxelles* in 1953, already tried to describe the philosophical act as a conversion. I always recall the enthusiasm with which, in the threatening situation of 1939, at the time of my baccalaureate in philosophy, I commented on the dissertation's subject, drawn from Henri Bergson: 'Philosophy is not a construction of a system, but the resolution, once taken, to look naïvely in oneself and around oneself.' Under the influence of Bergson, then of existentialism, I have therefore always conceived of philosophy as a total metamorphosis of the manner of seeing the world and of being in it." (Pierre Hadot, *Exercices spirituels et philosophie antique*, 2nd ed. [Paris: Études Augustiniennes, 1987], 9). Hadot reads the entire history of philosophy as a history of spiritual exercises aimed at producing such a turning of the soul. "More and better than a theory of conversion, philosophy always remains itself essentially an act of conversion. One can follow the forms that dress this act throughout the history of philosophy,

philosophy with that of Hellenistic philosophy enabled him to see aspects of another forms of philosophy that others could not even recognize as philosophy. Further, Hadot's early work on Plotinus has been well received not only because of its scholarly value, but for its ability to ask us to also reflect on ourselves.[21]

The relevance of Bergson's vision of philosophy for contemporary work lies here. He offers a vision of the goal of philosophical writing and of the form of the philosophical life often missing today. He calls our attention to the effects one produces in one's self and in one's readers by writing as a philosopher.

Moving Forward

Philosophy has not marked time since Bergson, and anyone wishing to continue the direction of his work must face up to debates that did not concern him. The primary challenge to Bergson comes not from those who would be his most

---

recognized, for example, in the cartesian *cogito*, in the *amor intellectualis* of Spinoza, or again in the bergsonian intuition of duration. Under all these forms, philosophical conversion is tearing away and breaking from the connection to the everyday, the familiar, the falsely 'natural' attitude of common sense; it is return to the original and to the originary, to the authentic, to interiority, to the essential; it is absolute recommencement, new point of departure which transmutes the past and the future. These same traits are found again in contemporary philosophy, notably in the phenomenological reduction that Husserl, Heidegger, and Merleau-Ponty have proposed, each in their manner." (Hadot, *Exercices spirituels*, 181).

[21] "I have been deeply touched by the testimonies I have received from many readers, telling me of the spiritual benefit they had derived from reading this little volume. They also surprised me, I confess; I am very much aware of the distance separating Plotinus' Platonism from this, our end of the twentieth century. . . . Doesn't this prove that, above and beyond differences of mentality and civilization, the 'call of the mystics' still remains mysteriously alive?" (Hadot, *Plotinus, or The Simplicity of Vision*, trans. Michael Chase [Chicago: University of Chicago Press, 1993], 115).

antagonistic critics, but from those working in neighboring fields. That is, though Hadot's work on the effects of philosophy on spiritual formation may be unique in its Bergsonian inspiration, his work is not today an isolated project. Other well known examples include the work of Alasdair MacIntyre, Michel Foucault's later work, Martha Nussbaum's *The Therapy of Desire*[22], and Peter Brown's *The Body and Society*.[23] This recent work tends to emphasize the importance of the community for shaping the interior life and that the particularity of these communities cannot be mediated by any conception of universal reason. Such research challenges conceptions of reason that we have accepted on the authority of the enlightenment.

In the debate between universalists and communitarians, Bergson's *Les Deux sources* comes out as a universalist, in spite of his constant concern for particularity and individuality. From a contemporary point of view, this looks like a tension in Bergson's thought that could fundamentally alter the way in which his thought on morality and religion might proceed. In this last section, then, I will briefly look at Bergson's treatment of mysticism and consider how a communitarian might criticize his work.

---

[22] *The Therapy of Desire: Theory and Practice in Hellenistic Ethics* (Princeton: Princeton University Press, 1994).

[23] *The Body and Society: Men, Women, and Sexual Reenunciation in Early Christianity* (New York: Columbia University Press, 1988).

The Difference Between Bergsonism and Mysticism

Bergson charges philosophy with enhancing experience and with not remaining satisfied with a merely verbal knowledge or reality, such that he insists that "metaphysical experience will be bound up with that of the great mystics" (PM 50; CM 50). He insists that they mystics are not troubled by the idea of nothingness or by non-existent problems, and that they already understand the way to dissolve them. Nevertheless, throughout *Les Deux sources* Bergson explicitly maintains a distinction between mysticism and philosophy, both from the side of mysticism and from the side of philosophy. To get at this distinction, we need show where the characteristics of philosophy and mysticism diverge.

The philosophical consideration of mysticism

The definition of philosophy. In *Les Deux sources de la morale et de la religion*, Bergson identifies philosophy closely with a form of empiricism. "Philosophy is the work of experience and reasoning" (MeR 278; MaR 262). This means that all questions--about the nature of the soul and the nature of God, for example--in so far as they can be addressed by philosophy, "must be posited in terms of experience" (MeR 280; MaR 263). Thus, some aspects of the nature of the soul can be treated by psychical research, while the nature of God is given in the experience of the mystic.

The notion of experience with which Bergson operates is of an experience which is universally shared and open to all. Thus in turning to religious experience, "philosophy . . . ignores revelation which has a definite date, the institutions which

have transmitted it, the faith that accepts it: it must confine itself to experience and inference" (MeR 265-6; MaR 250).

Mysticism from the perspective of philosophy. Based on this definition of philosophy, Bergson distinguishes between true mysticism and a mysticism tied to the particularity of a religion. The mysticism of an imaginative and passionate adherent of a particular religion, for whom the mystical experience cannot be distinguished from their religion will not offer philosophy much to work with. At best, religion is a popularized mysticism (MeR 318; MaR 298). At worst, religion is a tool by which nationalism and imperialism can imitate the force and power of mysticism. Philosophy, then, brackets, if it does not completely dismiss, the particularity of all religions.

True mysticism, by contrast, might draw from the source of an institutional religion but it remains "independent of all that religion owes to tradition, to theology, to the Churches" (MeR 265; MaR 250). In language closer to that of *L'Évolution créatice*, true mysticism makes contact with the impetus for the creation of new religious forms. Older religious forms are merely the skin shed and left behind by the life of previous mystics. What is that impetus? Bergson puts forward his "formula" for true mysticism without hesitation:

> God is love, and the object of love: herein lies the whole contribution of mysticism. About this twofold love the mystic will never have done talking. His description is interminable, because what he wants to describe is ineffable. But what he does state clearly is that divine love is not a thing of God: it is God Himself (MeR 267; MaR 252).

The Bergsonian philosopher, then, makes a bargain with mysticism. Mysticism will furnish for philosophy an experience of God. Philosophy will provide for mysticism, in return, the possible confirmation of this experience (MeR 255, 266; MaR 240-1, 250-1). The philosopher aims to consider the mystic's experience, to judge it, to write about it.

Considered in this way, Bergson maintains a clear distinction between mysticism and philosophy. Mysticism can be an object of study for the philosopher. Philosophy can provide a service to the mystic.

Bergson's fear of mysticism.

This account of the philosophical treatment of mysticism reveals a profound ambivalence toward mysticism. This becomes apparent, first, by comparing the description of philosophy which Bergson offers here to the way he understands the goal and methods of philosophy in other works. In the essays collected in *La Pensée et le mouvant*, Bergson always insists that philosophy can grasp what is individual or particular to a thing. However, when he turns to mysticism, Bergson refuses to consider the particularity of either individual mystics or particular religions. He exchanges their particularity for the universality of "religious" or "mystical" experience. A reader familiar with Bergson's earlier works and his first conception of philosophy cannot help but wonder whether Bergson does not group heterogeneous realities under one heading. Can the experience of one who meditates on the name "Jesus" be assimilated to that of any Jewish mystic, or the mysticism of Plotinus?

Thus, certain passages of *Les Deux sources* indicate that Bergson operates with a different, a second, notion of philosophy when he considers mysticism.

This second philosophy and its concern with universal mystical experience provides the basis on which Bergson differentiates true and false mysticism. True mysticism, unlike false mysticism, is not tied to particularity. Thus, it is true mysticism which interests second philosophy. Here, however, second philosophy simply reaps what it has sown. True mysticism interests philosophy because the division between mysticisms was carried out on the basis of the concerns and interests of second philosophy. This means, however, that the distinction which Bergson draws within mysticism are drawn by a perspective external to mysticism. Second philosophy does not submerge itself in the reality itself.

We also see the externality of philosophy to mysticism from the side of mysticism. For mysticism, the bargain with philosophy above holds very little interest. By Bergson's own account, mysticism is not interested in the confirmation of its experience which philosophy offers it. For the mystic, there is no doubt about the veracity of the experience. Perhaps one could be both philosopher and mystic and thus carry out the project. But, the fact would remain that one carries out the project *as* a philosopher rather than as a mystic, for the bargain is driven entirely by the interests of philosophy and not by the interests of mysticism. There would need to be a split within oneself between the mystic which experiences, and the philosopher which observes and stands apart from the experience. Philosophy and mysticism

would remain external to each other, even when combined in one person. The philosopher as philosopher remains outside of mysticism.[24]

The Transformation of Philosophy by Mysticism

If we turn from Bergson's second philosophy, revealed by explicit statements in *Les Deux sources*, to Bergson's first philosophy, a very different picture of the relation between philosophy and mysticism emerges.

Bergson's first philosophy requires that the philosopher have direct access to the phenomena about which he writes. This requirement lessens the distance which Bergson's second philosophy would establish between philosophy and mysticism. Recall that in the "bargain" which second philosophy foists upon the mystic, mysticism is supposed to provide for the philosopher an experience of God. How can

---

[24] Gilson's reflections on Bergson reveal this aspect of Bergson's thought. "His philosophy of nature had been for us a liberation. In this respect, I had contracted toward him a debt that nothing will ever make me deny; but the situation was different as far as religion was concerned. I had one, I knew what it was, and my very effort to deepen my knowledge of its nature turned me away from attempting other approaches. While I was thus living my religion, Bergson was still looking for one. How could I hope to receive enlightenment from him on an order of fact whose meaning he could not penetrate for lack of personal experience.

"*The Two Sources* was published in 1932. . . . I never confused philosophy with religion. If religion is truly at stake, then our whole life is involved. Now I knew that Bergson's book could not transcend the level of philosophy. This was a perfectly natural and reasonable fact. . . . One does not find the sources of religion at the term of any philosophy, but beyond it. If one wishes to speak of religion, one must start from it, which has no source but is the source. There is no other way to reach it. What I still wanted to know about religion was not anything that Bergson could teach me. . . . Still, my worst fears proved more than justified. It was not this or that idea, this or that development, that was out of focus; the whole book was out of focus. The author had established himself outside the focus of his subject and had remained there. (Etienne Gilson, *The Philosopher and Theology*, translated by Cécile Gilson [New York: Random House, 1962], 108-110).

mysticism do this? Where does the philosopher find this experience? In books? Shall the Bergsonian philosopher analyze mysticism as an external observer? Bergson's first philosophy is clear that one cannot write from experience one has not had. The Bergsonian philosopher can consider mysticism only if the philosopher is also a mystic, only if the philosopher is not only a lover of wisdom, but the beloved of God. "For the love which consumes him is no longer simply the love of man for God, it is the love of God for all men" (MeR 247; MaR 233).

Even from an external point of view, there is some indication that the philosopher who becomes a mystic will discover the power that love is. We see this because throughout history mysticism has introduced moral and social reform by this power. These advances, thus, have a religious basis. Philosophy cut off from the religious dimension lacks this power and thus remains incapable of such far-reaching effects (MeR 77-8; MaR 77). Philosophy needs this power found in mysticism to find its own prophetic voice. Thus, the mystical spirit and its attendant emotions must precede philosophy. Without this spirit, philosophy itself will falter (MeR 59-60; MaR 60-1).

Philosophers of religion, then, must become mystics to speak of the experience of God. This requires a conversion, both on the grounds of Bergson's notion of first philosophy and by the self-understanding of mysticism. This is a possibility for philosophy because, while mysticism is the experience of the few, each person, including the philosopher, may be a latent mystic (MeR 102, 269; MaR 100, 253). It is also risky, however, for it is to abandon oneself to another power. This conversion

may not be within the control of a brilliant philosopher, but may depend on the power and self-revelation of another. Thus, we "cannot tell when it will succeed or even if it will succeed at all" (MeR 269; MaR 253).

If this possibility were to succeed, what would this do to philosophy? What will philosophy look like when its practitioners have been consumed by love? Is not philosophy itself transformed when the identity of its practitioners changes from active lovers of wisdom to being the beloved of the One who is God's Wisdom? Bergson knows that some transformation would follow, but that we cannot predict what form will finally emerge. It remains a possibility which has yet to find form in modern philosophy.

APPENDIX A

SPACE AND TIME IN ANALYTIC PHILOSOPHY

Bergson's claim, that philosophers think time using the model of space, holds true not only for Aristotle and Kant, but for Quine and McTaggart, two modern philosophers writing after Bergson, both of whom have made significant contributions to the discussion of the philosophy of time in the 20th century.

W.V.O. Quine

There can be no doubt that Quine treats time like space. He explicitly claims that this procedure will dissolve outdated metaphysical problems such as Zeno's paradoxes and the identity of an object over time.[1] The real motive behind embracing this position, however, lies in following through the implications of a "logical point of view." Experiences are often expressed in what Quine calls, "occasion sentences." An

[1] "Once we put the temporal extent of the river on a par with the spatial event, we see no more difficulty in stepping into the same river at two times than at two places. Furthermore, the river's change of substance, at a given place from time to time, comes to be seen as quite on par with the river's difference in substance at a given time from place to place; sameness of the river is controverted no more on the one count than on the other. . . . Similarly for perplexities of personal identity: the space-time view helps one appreciate that there is no reason why my first and fifth decades should not, like my head and feet, count as parts of the same man, however dissimilar. There need be no unchanging kernel to constitute me the same man in both decades, any more than there need be some peculiarly Quinian textural quality common to the protoplasm of my head and feet; though both are possible." (Willard Van Orman Quine, *Word and Object* [Cambridge, MA: The M.I.T. Press, 1960], 171).

occasion sentence is any sentence which is true on some occasions and false on others. Examples include "It is raining," and "I am at home." Occasion sentences often contain temporal or token-reflexive terms such that the truth value of the sentences will either change or acquire a determination which they previously lacked. Quine aims to move from occasion sentences to eternal sentences, "sentences whose truth value stays fixed through time and from speaker to speaker."[2] Logic can deal more easily with eternal sentences because the truth-value of eternal sentences does not change.

Quine moves from occasion sentences to eternal sentences by using only the present tense of verbs and by treating the present tense as temporally neutral.[3]

> This artifice frees us to omit temporal information or, when we please, handle it like spatial information. 'I will not do it again' becomes 'I do not do it after now,' where 'do' is taken tenselessly and the future force of 'will' is translated into a phrase 'after now,' comparable to 'west of here.'[4]

'Now,' in turn, can be replaced by a date to produce an eternal sentence. Replacing the token-reflexive expression 'now' with a date *does not* produce a sentence with an equivalent meaning, which, of course, is the whole point. The question is whether the

---

[2] *Word and Object*, 193.

[3] "The form that [ordinary language] takes--that of requiring that every verb form show a tense--is peculiarly productive of needless complications, since it demands lip service to time even when time is farthest from our thoughts." (*Word and Object*, 170).

[4] *Word and Object*, 170.

change is a benefit or a loss to philosophy.[5] Quine claims that such a translation pays off because it "lays inferences . . . open to logical inspection."[6] Quine, thus, bases a significant part of his program on treating time like space.

J.E. McTaggart

McTaggart's "The Unreality of Time," published in 1908, has defined the terms in which contemporary analytic philosophy most commonly draws temporal distinctions.[7] McTaggart distinguishes between an A-series and a B-series. In the A-series, each position in time has the quality of Past, Present, or Future. These qualities are not permanent qualities, however, because a given position in time -- August 21, 1995, for example -- is now future but will be present and then past. In the B-series, the positions in time are defined by their relation to other positions in time, as "earlier than" or "later than." These relations are permanent, for August 21, 1995 always comes after August 20, 1995. In both cases, the order of the terms in the series, and thus the series itself, does not change.

Some philosophers assume that McTaggart's taxonomy captures Bergson as an 'A-theorist.' Clearly, however, *both* series presuppose that time is, by Bergson's

---

[5] There is the additional question as to whether a date, and all the complicated and various systems used to establish a date, is truly independent of notions of change and of time. Pushing the question of change back into our conventional ways of measuring change cannot be considered an adequate philosophical treatment of the nature of change or time.

[6] *Word and Object*, 170. Quine notes, "Such rephrasing of tense distorts English, though scarcely in an unfamiliar way; for the treating of time on par with space is no novelty to natural science." (*Word and Object*, 171).

[7] J.E. McTaggart, "The Unreality of Time," *Mind* 17 (October, 1908): 457-474.

definition, homogeneous or spatial. McTaggart's own language betrays this fact. First, he talks primarily in terms of "positions in time" and only later defines a part of time proper: "A position in time is called a moment."[8] The idea of position is more primitive than, and the basis for, the idea of temporal moments. Second, he assumes that positions in time are numerically distinct from one another, separated from each other by other positions or a continuous line. Third, each series is given all at once, at least to the mind of the philosopher who thinks the series. The events with the quality of the future are already given in the A-series. Events in the B-series with a relation of "later than" to the date on which the philosopher's activity happens are also already given. The philosopher, thus, stands both inside and outside of the series.[9] Fourth, taken at face value, McTaggart's argument shows that construing time as a B-series or an A-series does not allow for change. With this, Bergson concurs, for any spatial multiplicity will be simultaneous, fixed, and unchanging. McTaggart draws the conclusion that time is not real, whereas Bergson, writing 19 years earlier, concludes that we need to stop thinking of time as if it were space.[10]

---

[8] "The Unreality of Time," 458.

[9] Dummett formulates this point as a question of whether it is possible to give a complete description of reality. If one can give a complete description of reality, if everything is really given at once, then time is not real. (Michael Dummett, "A Defence of McTaggart's Proof of the Unreality of Time," *The Philosophical Review* [October, 1960], lxix). See PM 9-10; CM 18.

[10] As Nicholas Rescher points out, however, McTaggart's and Michael Dummett's "discussion can be construed as being inimical to the 'revolt against process' in that their support of the 'unreality' of time may be viewed as an argument for its *sui generis* character and a protest against its assimilation to space." ("The Revolt Against Process," *The Journal of Philosophy* LIX [1962]: 410). More specifically, Dummett argues that McTaggart has shown that if "reality" is given all at once, time cannot be real. Dummett, "A Defence of McTaggart's Proof of the Unreality of Time."

APPENDIX B

THE METAPHYSICS OF SPACE

We have seen in chapter four what Bergson means when he claims that pure perception provides a completely objective experience. This model of perception, sketched out in *Matière et mémoire* differs significantly from that of the *Essai.* In the *Essai* perceptions are unextended, unquantifiable, internal states. Space is a concept of an empty, homogeneous medium that we impose on those perceptions in order to make them extended, divisible, and quantifiable. In fact, the claims (1) that reality is unextended, and (2) that space is metaphysically ideal, imply one another. This is why Bergson can use the unextended nature of perception as the basis to undercut all empiricists' attempts to derive the concept of space from perceptions.

This dual position is, in fact, just a mirror of the dualism considered at the end of chapter four. In this case, space is purely ideal and does not apply to things in themselves, while perceptions refer to a reality which is completely outside space. This dualism leads Kant to skepticism concerning metaphysical knowledge. Kant's skepticism leads Bergson to abandon this position.

In *Matière et mémoire*, Bergson claims that perception is a function of the body and of the body's involvement with the real world. Perceptions are extended on the surface of the body. Perceptions themselves have a sense of volume. The concept

of space, while homogeneous, is never completely empty (PM 106; CM 97), nor completely a priori. Space does indeed tell us something of the nature of reality and the concept of space is derived from past experience.

This reversal does not undercut all that Bergson says in the *Essai*. Indeed, it extends the criticisms of Kant already put forward in that work. But neither should one undervalue the shift.[1] This shift signals a fundamental reorientation of Bergson's thought. For the later Bergson, all concepts are derived from percepts. If one wishes to critically evaluate concepts, one must be able to give an account of how one forms concepts from percepts. This account will enable Bergson to criticize not only the concept of space as a priori, empty, and homogeneous, but, as we see in chapter five, the concept of nothingness.

In order to get at the issues in Bergson's change of position, let us consider the metaphysical status of space. The metaphysical theories of space are distinguished by whether or not space is dependent on the mind for its existence. Bergson distinguishes between the realistic theory of space, which he identifies with Descartes' position, and the idealistic theory, which he identifies with Kant's position. Unlike his procedure spelled out in chapter two on the epistemology of space, Bergson's aim is to show that these are not the only two options.

---

[1] "Yet the discrepancy is less serious than it appears. The whole opposition between the *Essai* and *Matière et mémoire* is only the difference between the sweeping simplicity of the original view and its more balanced and more mature formulation." (Čapek, *Bergson and Modern Physics*, 210).

According to the realistic theory of space, space exists independently of the mind which conceives it. Both relative and absolute theories of space are versions of this view.[2] "Extension, according to Descartes, is the essence of matter and consequently space is a reality independent of the mind although it is not independent of the body" (TLM 406). The reasons Descartes offers for this position, however, are theological and scientific. Indeed, only by reducing matter to extension and physics to mathematics, a reduction guaranteed by God, does Cartesian science become possible. "In this sense one can say that the realistic theory of space is a scientific theory, appropriate to encourage the efforts of science and which receives from science a more and more striking confirmation" (TLM 406).

The arguments against real space come from Kant and from the analysis of knowledge rather than from science. Kant's analysis of knowledge in the Transcendental Aesthetic shows that all our experiences of external phenomena presuppose the form of space. Further, Kant's antinomies show that realist theories of space are committed to the claims that space is both finite and infinite, infinitely divisible and composed of simple indivisible parts. Kant's position, then, is that space

---

[2] The theory of absolute space claims that space differs from the bodies or properties of bodies which exist in space, that space exists like material bodies but independently of those bodies, and that the properties of space are not altered by the bodies which it contains. Absolute space would provide stationary points which would be sufficient to determine the motion of any body. According to the theory of relative space, space is abstracted from the order and relation between bodies. Spatial extension "is an aspect of these physical qualities -- a quality of a quality." Space does not exist apart from bodies and its properties depend on the actual relations which hold between bodies. Since space is co-extensive with bodies, space is finite if bodies are finite.

is not found in things-themselves but is a form which the mind imposes on things, which structures the phenomena.

On Bergson's account, Kant conceived of his own position as one of only three possibilities for relating the structure of space to the mind and matter. The realist theory claims that space describes the structure of things-in-themselves, and our mind understands this structure when it sees the things-in-themselves. The idealist theory claims that space is metaphysically ideal, so that our mind imposes this structure on the perceptions and does not know the structure of things-in-themselves. Or, third, one could might claim there is a pre-established harmony or a mysterious agreement between things-in-themselves and the mind, a position Kant calls "an idle hypothesis" (TLM 407).

Bergson says, "in our opinion, [Kant's position is] definitive in what it denies. But in what it affirms, does it give us the solution of the problem?" (EC 206; CE 205). Kant denies (1) the empiricists' account of the origin of our idea of space and (2) the theory of real space. Kant affirms an idealistic theory of space. Does the idealistic theory of space explain how it is that we come to perceive things as objects in space?

Bergson is not convinced that the "mysterious agreement" solution can be dismissed with a mere epithet. If the realist theory of space must confront Kant's antinomies, the idealist theory must address how and why the sensuous manifold conforms to the form of space. Kant offers no explanation as to why things-in-themselves, or sensations, can be given as spatially ordered at all.

> It does not suffice to say that we impose the form of space on the matter of our perceptions. If this matter has no relation with space, how will it enter into space? If the thing-in-itself has no extension, how can the manifestations of this thing-in-itself to human intelligence present themselves so easily to the application of the forms of space and of the laws of geometry? How can we construct a science of nature with mathematically formulated laws? (TLM 407 / EC 206; CE 205).[3]

From Bergson's perspective, the "mysterious agreement" solution looks like an idle hypothesis only because Kant has assumed that the form of space is given as a one, fully developed, definite structure. Bergson denies this assumption. The agreement, he claim, is a product of evolution, by which the human mind and the material world mutually responded to one another. Thus, he maintains that there are "degrees in spatiality" (EC 206; CE 205) or, more precisely, degrees of extensity. On this model, the concept of space is simply the extreme endpoint of one tendency of extensity. At the other extreme is the completely unextended.

Neither extreme is ever completely instantiated, but some realities come nearer to the extremes than do others. Matter, for example, tends toward homogeneous space. Even matter, however, is not perfectly spatial. The physics of Bergson's day was beginning to show that the structure of matter does not conform perfectly to homogeneous space.

> Perfect spatiality would consist in a perfect externality of parts in their relation to one another, that is to say, in a complete reciprocal independence. Now, there is no material point that does not act on every other material point. When we observe that a thing really *is* there where it *acts*, we shall be lead to say (as Faraday was) that all the

---

[3] This is Bergson's argument against Berkeley also, that he cannot explain the success of science. (MeM 3; MaM 11). See also DI 70-2; TFW 95-7, where Bergson urges the distinction against local signs advocates.

> atoms interpenetrate and that each of them fills the world (EC 204; CE 203).[4]

According to Bergson, homogeneous space is not a thing-in-itself, neither does it completely describe the structure of relations between things in themselves. Matter does have a structure, however, which can be more or less spatial and this structure is called extensity. The mind knows this structure according to one of its tendencies in the concept of space.

---

[4] See MeM 225; MaM 201. H. Wildon Carr points out, in a very friendly correction, that of course it takes a time for the effects of an event to be felt in at the edge of the universe. "Symposium: The Time Difficulty in Realist Theories of Perception," *Aristotelian Society Proceedings*, N.S. 12 (1911-12): 125.

BIBLIOGRAPHY

Works by Bergson:

Bergson, Henri. "Aristotle's Concept of Place." Translated by John K. Ryan. *Ancients and Moderns* 5 (1970): 12-71.

_____. *Cours I.* Edited by Henri Hude. Paris: PUF, 1990.

_____. *Cours II.* Edited by Henri Hude. Paris: PUF, 1993.

_____. *Les Deux sources de la morale et de la religion.* 1932. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991. (*The Two Sources of Morality and Religion.* Translated by R. Ashley Audra and Cloudesley Brereton. Garden City, NY: Doubleday Anchor Books, 1935).

_____. *Durée et simultanéité.* 1922. *Mélanges.* Presses Universitaires de France, 1972. (*Duration and Simultaneity.* Translated by Leon Jacobson. Indianapolis: The Bobbs-Merrill Company, Inc., 1965).

_____. *Essai sur les données immédiates de la conscience.* Paris, 1889. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991. (*Time and Free Will: An Essay on the Immediate Data of Consciousness.* Translated by F. L. Pogson. London: George Allen & Unwin Ltd., 1981).

_____. *L'Evolution créatice.* Paris, 1907. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991. (*Creative Evolution.* Translated by Arthur Mitchell. New York: Henry Holt and Company, 1911).

_____. *Matière et mémoire, Essai sur la relations du corps avec l'esprit.* Paris, 1896. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991. (*Matter and Memory.* Translated by Nancy Margaret Paul and W. Scott Palmer. New York: Zone Books, 1988).

_____. *La Pensée et le mouvant.* 1934. *ŒUVRES.* Presses Universitaires de France, 1959, 5th ed., 1991. (*The Creative Mind.* Translated by Mabelle L. Andison. New York: A Citadel Press Book, 1992).

_____. *Le Rire: Essai sur la signification du comique*, 1900. *ŒUVRES*. Presses Universitaires de France, 1959, 5th ed., 1991. (*Laughter*. In *Comedy*. Garden City: New York: Doubleday Anchor Books, 1956).

Works by other authors:

Aichelle, Ronald B. "Russell on 'The Theory of Continuity.'" *Dianöia* 5 (Spring, 1969): 1-11.

Amidou, Philippe R. *Memory and Duration in Bergson: A Study of Terminology in* Matter and Memory *and an "Introduction to Metaphysics."* Ph.D. dissertation, St. Louis, 1968.

Aquinas, St. Thomas. *On Being and Essence*. Translated by Armand Maurer, C.S.B. Toronto: Pontifical Institute of Mediaeval Studies, 1983.

Aristotle. *Categories*. Translated by E.M. Edghill. In *The Basic Works of Aristotle*. Edited by R. McKeon New York: Random House, 1941.

_____. *On Interpretation*. Translated by E.M. Edghill. *The Basic Works of Aristotle*. Edited by Richard McKeon. New York: Random House, 1941.

_____. *Metaphysics*. Translated by W.D. Ross. *The Basic Works of Aristotle*. Edited by Richard McKeon. New York: Random House, 1941.

_____. *Physics*. Translated by R.P. Hardie and R.K. Gaye. *The Basic Works of Aristotle*. Edited by Richard McKeon. New York: Random House, 1941.

Bahm, Archie J. "Meanings of Negation." *Philosophy and Phenomenological Research* 22 (1961-2): 179-184.

Barthélemy-Madaule, Madeleine. *Bergson, Adversaire de Kant*. Paris: PUF, 1966.

_____. "Lire Bergson." *Les Etudes bergsoniennes* 8 (1968): 85-120.

Benda, Julian. *Le Bergsonisme or une philosophie de la mobilité*. Paris, Mercure de France, 1913.

Berger, Gaston. "Le progrès de la réflexion chez Bergson et chez Husserl." Chap. in *Henri Bergson*. Edited by Béguin and Thévenax. Neuchatel, La Baconniev (1943): 257-63.

Bergson et nous. Actes du X[e] Congrès des Sociétés de philosophie de langue française. Paris: Librairie Armand Colin, 1959.

Berthelot, René. *Un Romantiisme utilitaire. Étude sur le mouvement pragmatiste.* Paris: Alcan, 1913.

Bosanquet, Bernard. "Negation, and Opposition of Judgment." Chap. in *The Essentials of Logic.* London: Macmillan and Co., Limited, 1897; reprint, New York: Kraus Reprint Co., 1968.

Boudot, M. "L'espace selon Bergson." *Revue de Métaphysique et de Morale* 85, 3 (1980): 332-56.

Bradley, F.H. "The Negative Judgment." Chap. in *The Principles of Logic.* Second Edition, Oxford University Press, 1922.

Brown, Peter. *The Body and Society: Men, Women, and Sexual Reenunciation in Early Christianity*. New York: Columbia University Press, 1988.

Buchdahl, G. "The Problem of Negation." *Philosophy and Phenomenological Research* 22 (1961-2): 163-178.

Canguilhem, Georges. "Commentaire du troisième chapitre de *L'evolution créatrice.*" *Buletin de la Faculté des Lettres de Strasbourg* 21, 5-6 (1943): 126-43; 21, 7 (1943): 199-214.

Čapek, Milič. *Bergson and Modern Physics: A Reinterpretation and Re-evalutaion.* Dordrect: Kluwer, 1971.

_____. "Immediate and Mediate Memory." *Process Studies* 7 (2, 1977): 90-96.

_____. *New Aspects of Time: Its Continuity and Novelties*. Dordrecht: Kluwer Academic Publishers, 1991.

Carr, H. Wildon. *Herni Bergson: The Philosophy of Change*. Port Washington, NY: Kennikat Press, 1970.

_____. "On Mr. Russell's Reasons for Supposing that Bergson's Philosophy is not True." In Bertrand Russell, *The Philosophy of Bergson,* With a Reply by Mr. H. Wildon Carr and a Rejoinder by Mr. Russell. Cambridge: Bowes & Bowes, 1914.

_____, F.B Jevons, W Brown, and G. Dawes Hicks. "Symposium: The Time Difficulty in Realist Theories of Perception." *Aristotelian Society Proceedings*, N.S. 12 (1911-12): 124-187.

Chambers, Connor J. "Zeno of Elea and Bergson's Neglected Thesis." *Journal of the History of Philosophy* 12 (1974): 63-76.

Chenu, J. "Gilles Deleuze: Le Bergsonisme." *Études philosophiques et litteraires* 1 (1967): 47-50.

Chevalier, J. *Bergson.* Translated by L.A. Clare. London: Rider, 1928.

_____. *Entretiens avec Bergson.* Paris: Plon, 1959.

Costelloe, Karin. "An Answer to Mr. Bertrand Russell's Article on the Philosophy of Bergson." *Monist* 24 (1914): 145-155.

_____. (Mrs. Adrian Stephen). "Complexity and Synthesis: A Comparison of the Data and Philosophical Methods of Mr. Russell and M. Bergson." *Aristotelean Society Procedings*, N.S. 15 (1914-15): 271-303.

_____. "The Notion of Truth in Bergson's Theory of Knowledge." *Aristotelian Society Proceedings*, N.S. 13 (1912-13): 224-256.

_____. "What Bergson Means by 'Interpenetration.'" *Aristotelian Society Proceedings*, N.S. 13 (1912-13): 131-155.

De Boer, Jesse. "A Critique of Continuity, Infinity, and Allied Concepts in the Natural Philosophy of Bergson and Russell." Chap. in *The Return to Reason.* Edited by John Wild. Chicago, Henry Regnery Company, 1953.

Deleuze, Gilles. "Bergson." Chap. in *Les philosophes célèbres.* Edited by Merleau-Ponty. Edition d'Art Lucien Mazenod, Paris (1956): 292-299.

_____. *Le Bergsonisme.* Presses Universitaires de France, 1966. (*Bergsonism.* Translated by Hugh Tomlinson and Barbara Habberjam. New York: Zone Books, 1991).

_____. *Bergson: Memoire et vie.* Paris: PUF, 1957.

_____. *Cinéma 1: L'Image-Mouvement.* Les Editions de Minuit, 1983. (*Cinema 1: The Movement-Image.* Translated by Hugh Tomlinson and Barbara Habberjam. Minneapolis: University of Minnesota Press, 1986).

_____. *Cinéma 2: The L'Image-temps*. Les Editions de Minuit, 1985. (*Cinema 2: The Time-Image*. Translated by Hugh Tomlinson and Robert Galeta. Minneapolis: University of Minnesota Press, 1986.).

_____. "La conception de la différence chez Bergson." *Les Etudes Bergsoniennes,* 4 (1956): 77-112.

_____. *Différence et répétition.* Presses Universitaires de France, 1968.

_____. *Mille plateaux*. Paris: Les Editions de Minuit, 1980. (*A Thousand Plateaus*. Translated by Brian massumi. Minneapolis: University of Minnesota Press, 1987.)

Delhomme, Jeanne. "Durée et vie chez Bergson." *Les Etudes bergsoniennes* 2 (1949): 129-91.

_____. "L'exercice de la pensée et ses conditions dans la philosophie d'Henri Bergson." *Les Etudes bergsoniennes* 3 (1952): 151-158.

_____. "Nietzsche et Bergson: la représentation de la vérité." *Les Etudes bergsoniennes* 5 (1960): 37-62.

Delfgauuw, Bernard. "Bergson et la philosophie existentielle." Chap. in *Bergson et nous* Paris: Librairie Armand Colin, 1959.

Demos, Raphael. "A Discussion of A Certain Type of Negative Proposition." *Mind,* N.S. 102 (April 1917): 188-196.

Descombes, Vincent. *Modern French Philosophy*. Translated by L. Scott-Fox and J.M. Harding. New York: Cambridge University Press, 1980.

Dewey, John. "Perception and Organic Action." *The Journal of Philosophy* 9, 24 (November, 1912): 645-68.

Douglas, Paul. "Deleuze's Bergson: Bergson Redux." *The Crisis in Modernism: Bergson and the Vitalist Controversy*. Edited by Frederick Berwick and Paul Douglas. Cambridge University Press, 1992.

Dummett, Michael. "A Defence of McTagart's Proof of the Unreality of Time." *The Philosophical Review* (October, 1960).

Fabre-Luce de Gruson, Françoise. "Bergson, Lecteur de Kant." *Les Etudes bergsoniennes* 5 (1960): 169-90.

Fataud, Jean-Marie. "Roman Ingarden, Critique de Bergson." Chap in *For Roman Indarden: Nine Essays in Phenomenology*. Martinus Nijhoff, 1959.

Fawcett, Edward Douglas. "Matter and Memory." *Mind* 21, 82 (April, 1912): 201-32.

Felt, J.W. "Philosophy, Understanding and the Continuity of Becoming." *International Philosophical Quarterly* 18, 4 (1978): 375-93.

Ford, Lewis S. "The Duration of the Present." *Philosophy and Phenomenological Research* 35 (1974-5): 100-106.

Gale, Richard M. "Bergson's Analysis of the Concept of Nothingness." *The Modern Schoolman* 51 (May 1974): 269-300.

_____. "Has the Present Any Duration?" *Nous* 5, 1 (February 1971): 39-47.

_____. *The Language of Time*. New York: Humanities Press, 1968.

_____. "On What There Isn't." *Review of Metaphysics* 25 #3 (March 1972): 459-488.

Gilson, Etienne. "Bergsonism and Teleology." Chap. in *From Aristotle to Darwin and Back Again: A Journey in Final Causality, Species, and Evolution*. Translated by John Lyon. Notre Dame: University of Notre Dame Press, 1984.

_____. "The Glory of Bergson." *Thought* 22 (December, 1947): 581-584.

_____. *The Philosopher and Theology*. Translated by Cécile Gilson. New York: Random House, 1962.

Giroux, Laurent. *Durée pure et temporalité: Bergson et Heidegger*. Tournai (Belgium): Bellarmin, 1971.

_____. "Bergson et la conception de temps chez Platon et chez Aristote." *Dialogue* 10, 3 (1971): 479-503.

Griffin, Nicholas. *Russell's Idealist Apprenticeship*. Oxford: Clarendon Press, 1991.

Gunter, Pete Addison Y. "Bergson, Conceptualism and Indeterminacy: A Rejoinder to Capek." *The Southwestern Journal of Philosophy* 9, 3 (1978): 135-37.

_____. "Bergson's Philosophical Method and Its Applications to the Sciences." *Southern Journal of Philosophy* 16 (1978): 167-181.

_____. "The Dialectic of Intuition and Intellect: Fruitfulness as a Criterion." Chap in *Bergson and Modern Thought: Towards A Unified Science*. Edited by Papanicolaou and Gunter. Harwood Academic Publishers, 1987.

Hadot, Pierre. *Exercices Spirituels et Philosophie Antique*. 2nd ed. Paris: Études Augustiniennes, 1987.

_____. *Plotinus, or The Simplicity of Vision*. Translated by Michael Chase. Chicago: University of Chicago Press, 1993.

Hardt, Michael. "Bergsonian Ontology: The Positive Movement of Being." Chap. in *Gilles Deleuze: An Apprenticeship in Philosophy*. Minneapolis: University of Minnesota Press, 1993.

Hartshorne, Charles. "Bergson's Aesthetic Creationism Compared to Whitehead's." Chap. in *Bergson and Modern Thought: Towards A Unified Science*. Edited by Papanicolaou and Gunter. Harwood Academic Publishers, 1987.

_____. "The Neglect of Relative Predicates in Modern Philosophy." *American Philosophical Quarterly* 14, 4 (October 1977): 309-318.

_____. "The Reality of the Past, the Unreality of the Future." *Hibbert Journal* 37, 2 (January, 1939): 246-257.

_____. "Review of *The Creative Mind*." *The Journal of Religion* 27, 1 (1947): 64-5.

_____. "Strict and Genetic Identity: An Illustration of the Relations of Logic to Metaphysics." Chap. in *Structure, Method and Meaning: Essays in Honor of Henry M. Sheffer*. Edited by Henle et al. New York: The Liberal Arts Press, 1951.

Harward, J. "What Does Bergson Mean by Pure Perception?" *Mind* 27, 106 (1918): 203-07; 28, 112 (1919): 463-70.

Heidegger, Martin. *The Basic Problems of Phenomenology*. Translated by Albert Hofstadter. Bloomington & Indianapolis: Indiana University Press, 1988.

_____. *Being and Time*. Translated by Macquarrie and Robinson. New York: Harper & Row Publishers, 1962.

Heidsieck, François. *Henri Bergson et la notion d'espace*. Paris: PUF, 1961.

Hylton, Peter. "Logic in Russell's Logicism." *The Analytic Tradition: Meaning, Thought and Knowledge.* Philosophical Quarterly Monographs, Vol. I. Edited by David Bell and Neil Cooper. Cambridge MA: Basil Blackwell, 1990.

Hyppolite, Jean. "Du bergsonisme à l'existentialisme." *Actas primero Congreso Nacional de Filosofia* 1 (July 1949): 442-455.

_____. "Aspects divers de la mémoire chez Bergson." *Revue internationale de philosophie* 3, 10 (October, 1949): 373-391.

Ingarden, Roman. "L'intuition bergsonienne et le problème phénoménologique de la constitution." Chap. in *Bergson et nous.* Paris: Librairie Armand Colin, 1959.

James, William. "Bradley or Bergson?" *Journal of Philosophy* 7, no. 2 (January, 1910): 29-33.

_____. *A Pluralistic Universe.* NY: Longmans, Green and Co., 1943.

_____. *The Principles of Psychology.* Dover Publications, Inc., 1950].

Jankélévitch, Vladimir. *Henri Bergson.* Paris: PUF, 1959.

Jourdain, Philip E.B. "Logic, M. Bergson, and Mr H.G. Wells." *Hibbert Journal* 10 (July 1912): 835-845.

Kant, Immanuel. *Critique of Pure Reason.* Translated by F. Max Müller. Garden City, New York: Anchor Books, 1966.

Kemp Smith, Norman. *Commentary to Kant's Critique of Pure Reason.* 3d ed. Atlantic Highlands, NJ: Humanities Press International Inc., 1984.

Kretzmann, Norman. "Continuity, Contrariety, Contradiction, and Change." Chap. in *Infinity and Continuity in Ancient and Medieval Thought.* Ithica: Cornell University Press, 1982.

Kuntz, Paul. *Alfred North Whitehead.* Boston: Twayne Publishers, 1984.

_____. *Bertrand Russell.* Boston: Twayne Publishers, 1986.

_____. *The Concept of Order.* Seattle: University of Washington Press, 1968.

Lacey, A.R. *Bergson.* The Arguments of the Philosophers. Edited by Ted Honderich. London: Routledge, 1989.

Leibniz. *Philosophical Essays*. Indianapolis: Hackett Publishing Company, 1989.

Levinas, Emmanuel. *Autrement qu'être ou au-delà de l'essence*. Phaenomenologica 54. 1974. 2d ed. by Martinus Nijhoff Publishers. 1978. (*Otherwise than Being or Beyond Essence*. Translated by Alphonso Lingis. The Hague: Martinus Nijhoff Publishers, 1981).

_____. "L'Ancien et le nouveau." *L'Ancien et le nouveau*. Edited by Joseph Doré. Paris: Editions du Cerf. 1982. pp. 23-37. ("The Old and the New." *Time and the Other*. Translated by Richard A. Cohen. Pittsburg: Duquesne University Press, 1987. 121-138).

_____. "Diachronie et représentation." *University of Ottawa Quarterly*. Vol. 55, No. 4, 1985. 85-98. ("Diachrony and Representation."in *Time and the Other*. Translated by Richard A. Cohen. Pittsburg: Duquesne University Press, 1987. 97-120).

_____. *Dieu, la mort et le temps*. Paris: Bernard Grasset, 1993.

_____. *Ethics and Infinity: Conversations with Philippe Nemo*. Translated by Richard A. Cohen. Pittsburgh: Duquesne University Press, 1985.

_____. "Le temps et l'autre." *Le Choix, Le Monde, L'Existence*. Edited by Jean Wahl. Grenoble-Paris: Arthaud, 1947. ("Time and the Other." *Time and the Other*. Translated by Richard A. Cohen. Pittsburg: Duquesne University Press, 1987. 29-94).

_____. *Théorie de l'intuition dans la Phénoménologie de Husserl*. Paris: Librairie Philosophique J. Vrin, 1989. (*The Theory of Intuition in Husserl's Phenomenology*. Translated by André Orianne. Evanston, IL: Northwestern University Press, 1973).

_____. "Tout Autrement." *Noms Propres*. Paris: Fata Morgana, 1976. ("Wholly Otherwise." *Re-Reading Levinas*. Translated by Simon Critchley. Edited by Robert Bernasconi and Simon Critchley. Bloomington and Indianapolis: Indiana University Press, 1991).

Lorand, Ruth. "Bergson's Concept of Order." *Journal of the History of Philosophy* 30 (October, 1992): 579-595.

Lovejoy, Arthur O. *The Reason, the Understanding, and Time*. Baltimore: The Johns Hopkins Press, 1961.

Mabbott, J.D., G. Ryle and H.H. Price. "Symposium: Negation." *Aristotelian Society: Supplement* 9 (1929): 67-111.

McTaggart, J.E. "The Unreality of Time." *Mind* 17 (October, 1908): 457-474.

Marcel, Gabriel. "Bergsonisme et musique." *La Revue Musicale* 6 (1925): 219-229. ("Bergsonism and Music." Translated by C.K. Scott Moncrieff. Chap. in *Reflections on Art: A Source Book of Writings by Artists, Critics, and Philosophers*. Edited by Susanne K. Langer. NY: A Galaxy Book, Oxford University Press, 1961).

Mellor, D.H. "McTaggart, fixity and coming true." Chap. in *Reduction, Time and Reality: Studies in the Philosophy of the Natural Sciences*. Edited by Richard Healey. Cambridge: Cambridge University Press, 1981.

Merleau-Ponty, Maurice. "Bergson in the Making." Chap. in *Signs*. Translated by Richard C. McCleary. Evanston, IL: Northwestern University Press, 1964.

_____. *Phenomenology of Perception*. Translated by Colin Smith. London: Routledge & Kegan Paul, 1962.

Mortley, Raoul. *French Philosophers in Conversation*. London: Routledge, 1991.

Nevo, Isaac. "Difference without the flux: Pragmatic vs. romantic conceptions of alterity." *Man and World* 25 (1992): 149-164.

Nussbaum, Martha C. *The Therapy of Desire: Theory and Practice in Hellenistic Ethics*. Princeton: Princeton University Press, 1994.

Oaklander, L. Nathan. *Temporal Relations and Temporal Becoming: A Defence of a Russellian Theory of Time*. Lanham, MD: University Press of America, 1984.

Owen, G.E.L. "Plato on Not-Being." Chap. in *Logic, Science, and Dialectic: Collected Papers in Greek Philosophy*. Edited by Schofield and Nussbaum. Ithica: Cornell University Press, 1982.

Peperzak, Adriaan Theodoor. *System and History in Philosophy*. Albany: SUNY Press, 1986.

Plato. *Sophist*. Translated by F.M. Cornford. *Collected Dialogues of Plato*. Edited by Edith Hamilton and Hunington Cairnes. Princeton, NJ: Princeton University Press, 1982.

Protevi, John Lawrence. "The Economy of Time: Heidegger and Derrida on Aristotle, Time and Metaphysics." Ph.D. diss., Loyola University Chicago, 1990.

Quine, Willard Van Orman. *Word and Object.* Cambridge, MA: The M.I.T. Press, 1960.

Rescher, Nicholas. "The Revolt Against Process." *The Journal of Philosophy* 59 (1962): 410-17.

Robinet, André. *Bergson et les métamorphoses de la durée.* Paris: Éditions Seghers, 1965.

Russell, Bertrand. "The *A Priori* in Geometry." *The Collected Papers of Bertrand Russell, Volume I.* Cambridge Essays: 1888-99. London: George Allen & Unwin, 1983.

_____. "Bergson." Chap. in *A History of Western Philosophy.* NY: Simon and Schuster, 1945.

_____. *Human Knowledge: Its Scope and Limits.* NY: Simon and Schuster, 1948.

_____. *Introduction to Mathematical Philosophy.* New York: Simon and Schuster, n.d.

_____. "Is Position in Time and Space Absolute or Relative?" *Mind* 10 (1901): 293-317.

_____. "The Logic of Geometry." *The Collected Papers of Bertrand Russell, Volume I.* Cambridge Essays: 1888-99. London: George Allen & Unwin, 1983.

_____. "Mysticism and Logic." *Hibbert Journal,* 12 (July 1914): 780-803.

_____. *Mysticism and Logic.* Totowa NJ: Barnes & Noble Books, 1981.

_____. "On the Experience of Time." *The Monist* 25 (1915): 212-233.

_____. "On the Notion of Order." *Mind* 10 (1901): 30-51.

_____. "On the Relations of Universals and Particulars." *Aristotelian Society Procedings* N.S. 12 (1911-12): 1-24.

_____. "On Propositions: What They Are, and How They Mean." *Aristotelian Society: Supplement* 2 (1919): 1-43.

_____. *Our Knowledge of the External World.* New York: W.W. Norton & Company, Inc., 1914, 1929.

_____. "The Philosophy of Bergson." *The Monist* 22 (July 1912): 321-347.

_____. *The Philosophy of Bergson.* With a Reply by Mr. H. Wildon Carr and a Rejoinder by Mr. Russell, Cambridge: Bowes & Bowes, 1914.

_____. *The Philosophy of Logical Atomism.* Edited by David Pears. La Salle, IL: Open Court Publishing Company, 1985.

_____. *Principles of Mathematics.* New York: W.W. Norton & Company, @@@@.

_____. "The Professor's Guide to Laughter" *The Cambridge Review* 33 (18 January 1912): 193-4

Sartre, Jean-Paul. *L'Être et le Néant. (Being and Nothingness.* Translated by Hazel E. Barnes. New York: Philosophical Library, 1956).

_____. *L'Imagination: Étude critique*, 1936. (*Imagination: A Psychological Critique.* Translated by Forest Williams. Ann Arbor: University of Michigan Press, 1962).

Sigwart, Christoph. "The Negation." Chap. In *Logic, Volume I: The Judgment, Concept, and Inference.* London: Swan Sonnenschein & Co., 1895; reprint, New York: Garland Publishing, Inc., 1980.

Smith, John E. "Time and Qualitative Time." *Review of Metaphysics* 40 (September 1986): 3-16.

Spiegelberg, Herbert. *The Phenomenological Movement: A Historical Introduction.* Boston: Kluwer Academic Publishers, 1982.

Taylor, Richard. "Negative Things." *The Journal of Philosophy* 49, 13 (June 1952): 433-449.

Theau, Jean. *La critique bergsonienne du concept.* Toulouse: Édouard Privat, 1968.

Wahl, Jean. *Bergson: Le Cours de Sorbonne.* Paris: Centre de Documentation Universitaire, 1969.

Weiss, Paul. "The Nature and Status of Time and Passage." Chap. in *Philosohical Essays for Alfred North Whitehead.* NY: Russell & Russell, 1936.

Whitehead, Alfred North. *The Aims of Education and Other Essays*. New York: The Free Press, 1967.

_____. *The Concept of Nature*. Cambridge: Cambridge University Press, 1971. (1920)

_____. *Essays In Science and Philosophy*. New York: Philosophical Library, 1947.

_____. *The Interpretation of Science: Selected Essays*. Indianapolis: The Bobbs-Merrill Company, Inc., 1961.

_____. *An Introduction to Mathematics*. New York: Oxford University Press, 1958.

_____. *Modes of Thought*. New York: The Free Press, 1968.

_____. *Principles of Natural Knowledge*. Cambridge: Cambridge University Press, 1955.

_____. *Process and Reality*. Corrected Edition. Edited by David Ray Griffin and Donald W. Sherburne. New York: The Free Press, 1978.

_____. *Science and the Modern World*. New York: The Free Press, 1967.

_____ and Russell, Bertrand. *Principia Mathematica*. New York: Cambridge University Press, 1990.

Williams, Clifford. "The Phenomenology of B-Time." *The Southern Journal of Philosophy* 30, 2 (1992): 123-137.

Williams, Donald C. "The Myth of Passage." *The Journal of Philosophy* 48, 15 (July 1951): 457-472.

Wilson, John Cook. "Negation or the Quality of Propositions." Chap. in *Statement and Inference: With Other Philosophical Papers*. Edited by A.S.L. Farquharson. Oxford: The Clarendon Press, 1969.

Wolfson, H.A. "Albinus and Plotinus on Divine Attributes." *Harvard Theological Review* 45 (1952): 115-130.

_____. "Infinite and Privative Judgments in Aristotle, Averroes, and Kant." *Philosophy and Phenomenological Research* 8, 2 (December 1947): 173-187.

_____. "The Knowability and Describability of God in Plato and Aristotle." *Harvard Studies in Classical Philology* 57 (1948): 233-249.

VITA

The author, Gregory A. Clark, was born on August 21, 1963 in Normal, Illinois. He attended St. Joseph-Ogden High school and graduated in 1981. In 1985 he graduated with a B.A. in Philosophy and in Biblical Literature from Wheaton College. After writing a thesis on creation and providence in process theology, Wheaton College Graduate School granted him an M.A. in theology in 1989. He is currently visiting professor of philosophy at North Park College.

APPROVAL SHEET

The dissertation submitted by Gregory A. Clark has been read and approved by the following committee:

Dr. Adriaan Th. Peperzak, Director
Arthur J. Schmitt Chair of Philosophy
Loyola University Chicago

Dr. Kenneth Thompson
Professor, Philosophy
Loyola University Chicago

Dr. Harry Gensler
Professor, Philosophy
Loyola University Chicago

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

10/5/95
Date

Adriaan Peperzak
Director's Signature