

1914

A comparison of the main points in the epistemological theories of Borden Parker Bowne and Henri Bergson

<https://hdl.handle.net/2144/16493>

Downloaded from DSpace Repository, DSpace Institution's institutional repository

NOT TO BE TAKEN
FROM THE LIBRARY

PhD
1914
mi

BOSTON UNIVERSITY CHENERY LIBRARY

Regulations for the Use of Manuscript Theses

Unpublished theses submitted for the Master's and Doctor's degrees and deposited in the Boston University Chenery Library are open for inspection, but are to be used only with due regard to the rights of the authors. Bibliographical references may be noted, but passages may be copied only with the permission of the author, and proper credit must be given in subsequent written or published work. Extensive copying or publication of the thesis in whole or in part requires also the consent of the Dean of the Graduate School of Boston University.

This thesis by *E. L. Mills* has been used by the following persons, whose signatures attest their acceptance of the above restrictions.

A library which borrows this thesis for use by its patrons is expected to secure the signature of each user.

NAME and ADDRESS of USER	BORROWING LIBRARY	DATE
<i>D. J. Hatch</i>		
<i>64 Central Branch</i>		

A COMPARISON OF THE MAIN POINTS
IN THE EPISTEMOLOGICAL THEORIES
OF BORDEN PARKER BOWNE AND HENRI
BERGSON.

By

Ernest Lyman Mills

(A.B., Boston, 1900; S.T.B., Boston, 1903)

A DISSERTATION
SUBMITTED IN PARTIAL FULFILLMENT OF THE
requirements for the
degree of Doctor of Philosophy.

GRADUATE SCHOOL
BOSTON UNIVERSITY.

1914.

TABLE OF CONTENTS.

A COMPARISON OF THE MAIN POINTS DISCUSSED IN
THE EPISTEMOLOGICAL THEORIES OF BORDEN PARKER
BOWNE AND HENRI BERGSON.

=====

INTRODUCTION.

Aim of dissertation.

To indicate the general trend of the two systems of philosophy by a comparison of their main points of contrast with reference to epistemology.

CHAPTER I.

GENESIS OF CONTRASTED EPISTEMOLOGIES.

A. Main points of Epistemology considered.

1. (Reactive nature of thought
(Possibility of knowledge. Psychical unity.
2. Subjective factors. Time and Space.
3. Objective validity of the categories.

B. Brief Historical Survey.

1. The Greeks. Sceptics. Plato and Aristotle.
2. Hume and Kant.
3. French Positivism. Comte.
4. English Positivism. (Hamilton
 (Mill
 (Darwin
 (Spencer

C. Methods of discussion used by Bowne and Bergson.

1. A priori. Bowne.

TABLE OF CONTENTS

A COMPARISON OF THE MAIN POINTS DISCUSSED IN
THE HISTORICAL THEORY OF KNOWLEDGE
AND THE THEORY OF KNOWLEDGE.

INTRODUCTION.

Aim of dissertation.

To indicate the general trend of the two
systems of philosophy by a comparison of
their main points of contact with re-
ference to epistemology.

CHAPTER I.

GENERAL CONCEPTS OF EPISTEMOLOGY.

- A. Main points of epistemology considered.
 - 1. Objective nature of thought.
 - 2. Possibility of knowledge. Logical unity.
 - 3. Subjective factors. Time and space.
 - 4. Objective validity of the categories.
- B. Brief historical survey.
 - 1. The Greek. Aristotle.
 - 2. The Latin.
 - 3. The French. Descartes.
 - 4. English empiricism. (Locke, Berkeley, Hume, Kant, Mill, James, Dewey, etc.)
 - 5. English idealism. (Hegel, Schopenhauer, Nietzsche, etc.)
- C. Methods of discussion used by Locke and Hegel.

- i. Unity of psychical agent.
Formally treated; contra the sensationalists.
 - ii. Reactive nature of thought.
 - iii. Dependence on Infinite Mind and Will.
2. Experimental. Bergson.

"Introduction to Metaphysics."

- i. Use of the natural sciences.
- ii. "Intuition" as a possible factor in knowledge.
- iii. Bearing of "Intuitionism" on the relativity of knowledge. The self; time.
- iv. "Intuitionism" and Bowne's practical reason compared.

CHAPTER II.

SUBJECTIVE FACTORS IN THOUGHT. SPACE AND TIME.

Discussion limited to the categories treated by both philosophers.

A. Space.

- 1. Considered as a form of thought. Bowne.
- 2. Secondary to time. Bergson.

B. Time.

- 1. Considered from the standpoint of cosmology. Bowne.
- 2. Considered from the standpoint of psychology. Bergson.

"Time and Free Will."

- a). Intensity of subjective states.
- b). Quantitative multiplicity. Space and the mathematical sciences.

- i. Unity of psychological laws.
- ii. Fechner's law of thought.
- iii. Difference on Intuition and Will.
- iv. Experimental. Empiric.

"Introduction to Metaphysics."

- i. Law of the natural sciences.
- ii. "Intuition" as a scientific factor in knowledge.
- iii. Meaning of "intuitionism" on the relative of knowledge. The self; time.
- iv. "Intuitionism" and Hume's practical reason.

Digitized by the Internet Archive

in 2016

Philosophical Inquiry into the Categories treated by both

A. Science.

- i. Considered as a form of thought. Hume.
- ii. Secondary to the primary.

A. Time.

- i. Considered from the standpoint of cosmology. Kant.
- ii. Considered from the standpoint of psychology. Empiric.

"Time and Free Will."

- a) Intensity of subjective states.
- b) Quantitative multiplicity. Space and the mathematical sciences.

- c). Qualitative multiplicity. Time treated as duration. Natural sciences.
- d). "Duration" as related to freedom.
- e). Time as duration contrasted with the Kantian conception.

CHAPTER III.

OBJECTIVE VALIDITY OF THE SUBJECTIVE FACTORS.

The rational and the experimental methods.

A. RATIONAL CRITIQUE. Bowne.

- 1. Reactive nature of universalizing intelligence.
- 2. Relation of the physical and the mental.
- 3. " -- the soul posited by the Infinite." Concomitance. World-Ground.
- 4. Necessary relativity of rationalism.

B. INTUITIONAL CRITIQUE. Bergson.

- 1. The physical as 'privileged image among images.' Actual perception of reality. Bearing on the metaphysics of matter.
- 2. Intellect formed under the necessity for action. Possible bearing on the metaphysics of matter.
- 3. Body and brain as instruments of thought.
- 4. Memory and the unitary self. Dualism?
- 5. Bearing of the above on the relativity of Knowledge. Objective validity assured.

CHAPTER IV.

BEARING OF EPISTEMOLOGY ON COSMOLOGY.

Cosmology and the development of epistemology in Bowne and Bergson.

A. A priori. Bowne.

- d) Qualitative multiplicity. Time treated as duration. Rational elements.
- e) "Duration" as related to freedom.
- f) Time as duration contrasted with the Kantian conception.

CHAPTER III.

OBJECTIVE VALIDITY OF THE SUBJECTIVE FACTORS.

The rational and the experimental methods.

A. RATIONAL METHOD. — BOWEN.

- 1. Relative nature of universalizing intelligence.
- 2. Relation of the physical and the mental.
- 3. " — the soul perceived by the intellect." — Con-
science. — Will-to-act.
- 4. Necessary relativity of idealism.

B. INTUITIONAL METHOD. — BOWEN.

- 1. The physical as privileged factor among factors. Actual reception of reality. Feeling of the rationality of matter.
- 2. Intellect formed under the necessity for action. Possible feeling of the rationality of matter.
- 3. Body and brain as instruments of thought.
- 4. Meaning and the ontic self. — Idealism.
- 5. Basing of the above on the relativity of knowledge. — Objective validity assumed.

CHAPTER IV.

FOUNDATIONS OF EPISTEMOLOGY IN CONSCIOUSNESS.

Consciousness and the development of epistemology in form and content.

A. I. Principle. — BOWEN.

1). Unity of World-Ground.

2). Personality.

Main interest of Bowne religious and theistic.

B. Empirical. Bergson.

"Creative Evolution."

1. The whole as affording a knowledge of the parts.

2. 'The Élan Vital' and the process of evolution.

a). Matter.

b). Organic life.

i. Vegetable.

ii. Animal. Instinct.

iii. Man. Intelligence. Limitations of language imposed on intellect.

iv. Reunion of recovered intuition and intellect.

3. Implicit Theism. Theistic and Religious Interest wanting.

=====

On the value of the Intuitional Method and the possibility of philosophy based on a blending of Rationalism of Bowne and the Intuitionalism of Bergson.

1) Unit of knowledge.

2) Personality.

Main interest of former religions and philosophy.

3) Practical, Bergson.

"Creative Evolution."

1. The whole as affording a knowledge of the parts.

2. The 'élan vital' and the process of evolution.

a) Matter.

1) Organic life.

2) Vegetative.

3) Animal, instinct.

4) Intelligence, limitations of language imposed on intellect.

5) Evolution of recovered intuition and intellect.

6. Implicit: Theism, Theistic and religious interest, waiting.

no the sense of the traditional, and the possibility of philosophy based on a knowledge of rationality of laws and the intelligible at all.

INTRODUCTION.

This dissertation aims to indicate the general trend of the philosophic systems of Henri Bergson and Borden Parker Bowne. That the discussion may be definite in its contrasts, the writer has limited himself to a consideration of the main points in the epistemological methods of these two great thinkers.

The Kantian theory of thought is conceded to be fundamental in both systems. Bowne carries the Kantian rationalism to its logical conclusion, having cleared up Kant's mistaken notions with reference to phenomena and having also added to his discussion of reality the conception of an Infinite World Ground. Bowne strengthens Kant's teaching as to the possible validity of the "Practical Reason"; but it is a serious question whether he entirely avoids the relativism necessarily inherent in the Kantian system.

In order to bring out with sharpness the contrast in method and ultimate outcome for philosophy our exposition of the radically new theories of Bergson is made at somewhat greater length than seems necessary for the more commonly accepted theories of Bowne. Bergson's empiricism is noted with care for we believe that he has called our attention to an oversight on the part of many modern thinkers. The vast developments of biology and zoology demand a consideration which many rationalists have failed to give. Bergson asserts that it is impossible to understand these sciences and their bearing upon ultimate

This illustration also indicates the general trend of the scientific system of thought between the border lines. It is the discussion that is defined in the scientific. The writer has limited himself to a consideration of the main points in the epistemological methods of these two great thinkers.

The scientific theory of thought is considered to be fundamental in both systems. Some carries the scientific rationalism to its logical conclusion, having cleared up Kant's mistaken notions with reference to phenomena and having also added to his discussion of reality the conception of an infinite world. Some carries Kant's teaching as to the possibility of the "practical reason"; but it is a serious matter whether we entirely avoid the relativist necessarily inherent in the latter system.

In order to bring out with accuracy the contrast in method and attitude between the philosophy and epistemology of the two systems, it is necessary to make a somewhat general statement of the main points of each. It is not necessary for the sake of conciseness to mention of course. Kant's epistemology is noted with care for we believe that he has called our attention to an oversight on the part of many modern thinkers. The vast developments of science and philosophy demand a consideration which may well be said to have failed to rise. However certain that it is impossible to understand these sciences and their bearing upon philosophy.

problems by using the method of the Kantian rationalism. The system of Kant and his followers was the result of their a priori study of the purely mathematical sciences. Bergson uses the imagination, with actual empirical investigation, and thereby gains an insight into the natural sciences which the a priori method of Kant and his followers must always fail to give. Hence to the "Critique of the Pure Reason" is added a "Critique of the Intuitions." In this way Bergson seeks to avoid the necessary relativism of Kant.

Chapter I. This chapter states only the important points of Epistemology and traces the genesis of these epistemological ideas which are discussed by both philosophers. The practical character of the system of Bowne as a reaction against current naturalism is fully recognized. At the same time the writer of this paper attempts to show the necessity for the empirical method which Bergson has developed in his doctrine of the Intuitions as elaborated in his "Introduction to Metaphysics."

Chapter II. This chapter considers the treatment of time and space found in Bowne's "Metaphysics" and Bergson's "Time and Free Will". The rational discussion of the categories as 'forms of thought' is put forward by Bowne and the intuitional conception of time as "duration" is advanced by Bergson. Because of the widely divergent character of Bergson's epistemology as contrasted with current epistemology, we have outlined his position with great care.

Chapter III. This chapter considers the question of the

problems of using the notion of the Kantian rationalism. The system of Kant and his followers was the result of their a priori study of the purely mathematical sciences. Kant uses the imagination, with actual empirical investigation, and thereby gains an insight into the natural sciences which the a priori method of Kant and his followers must always fail to give. Hence to the "Critique of the Pure Reason" is added a "Critique of the Intellectuals." In this way Hegel seeks to avoid the necessary relativism of Kant.

Chapter I. This chapter states only the broadest points of Hegel's philosophy and traces the genesis of these philosophical ideas which are discussed by both philosophers. The practical character of the system of Hegel is a reaction against the naturalism which is fully recognized. At the same time the writer of this paper attempts to show the necessity for the empirical method which Hegel has developed in his doctrine of the Intellectuals as is stated in his "Introduction to Philosophy."

Chapter II. This chapter considers the treatment of the subject matter in Hegel's "Philosophy of Language" and also finds in Hegel's "Philosophy of Language" the rational discussion of the empirical as well as the rational forms of thought, is not found in Hegel and the rational conception of the "Idea" is advanced by Hegel. By reason of the highly divergent character of Hegel's system and its contrast with current epistemology, we have outlined his position with great care.

Chapter III. This chapter considers the question of the

relativity of thought. The possibly inherent relativity of Bowne's rationalism is contrasted with the absolute character of knowledge as afforded by Bergson's empirical use of the Intuitions. Bergson's great work, "Matter and Memory" which contains his elaboration of this question dealing with the objective validity of the subjective factors of the thought process is here reviewed with considerable fulness.

Chapter IV. This chapter makes a still clearer contrast of the epistemological teaching of these two philosophers by showing how both have developed their theories largely in contact with the ultimate question of cosmology. Bowne's "Personalism" and Bergson's "Creative Evolution" serve as the framework of this chapter. Bowne's main interest is theistic while Bergson's interest is only incidentally concerned with the questions of theism and religion. The logical deduction of Bergson's system must however, be interpreted as theistic.

The conclusion of this dissertation is that modern epistemological theory will be advanced by a blending of the epistemologies of these philosophers. We believe that Bergson by the proper consideration of the demands made upon our thinking by the development of the natural sciences, offers to modern thought a clue as to the further development of the Kantian epistemology. The à priori and rational should be combined with the empirical and intuitional in any attempt to reach ultimate conclusions in philosophy or to help solve the practical concerns of life.

...of knowledge. The concept inherent in the idea of
 knowledge is contrasted with the absolute character
 of knowledge as affirmed by Bergson's critical use of the
 intuition. Bergson's great work, "Matter and Memory" which
 contains his explanation of the relation between the ob-
 jective validity of the subjective factors of the thought pro-
 cess is here followed with considerable interest.

Chapter III. This chapter makes a still clearer contrast
 of the philosophical teaching of these two philosophers by
 showing how each have developed their theories largely in con-
 tact with the ultimate question of cosmology. Bergson's "Per-
 sonalism" and Bergson's "Creative Evolution" serve as the
 framework of this chapter. Bergson's true interest in the
 philosopher's interest is only incidentally concerned with
 the questions of matter and religion. The logical foundation
 of Bergson's system was however, as indicated as follows.
 The conclusion of this dissertation is that modern sci-
 entific theory will be advanced by a blending of the sci-
 entific and the religious. We believe that science by
 the proper combination of the human and the divine
 by the development of the natural sciences, offers to modern
 thought a line as to the future development of the human
 philosophy. The logical and religious should be combined
 with the empirical and rational in an attempt to reach the
 true conclusions in philosophy as to how solve the practical
 problems of life.

CHAPTER I.

GENESIS OF CONTRASTED EPISTEMOLOGIES.

Rational certainty depends not alone upon the rules of formal logic but also upon the nature of the thought process itself. Theory of thought or epistemology, is concerned with the objective validity of knowledge based upon the facts of sense and elaborated by the understanding. When we study the unity of the psychical agent, the dependence of knowledge upon the subjective factors of the mind and the possible objective validity of these subjective factors, we are dealing with epistemological questions of utmost importance for philosophy.

A review of the history of philosophy reveals the comparative modern character of epistemology. Mathematics, natural forces and astronomy were the major interests of the early Greeks. They discussed such matters as "the universal substance" and sought a clearer definition of the Gods. Greek philosophy turned at first to the Gods as offering an explanation of the universe; then followed a period of naturalism, -- a deifying of natural forces; then came an era which doubted personal existence and even the power of thought. Plato and Aristotle were concerned mainly with this possible impeachment of truth or universally valid statement.

In modern times Hume and Kant have made clear the issues involved in the criticism of the thought instrument. As Kant has demonstrated, Hume only indicated the general limits of the understanding and in so doing created a distrust of our faculties.

CHAPTER I.

GENESIS OF MODERN EPISTEMOLOGY.

Rational certainty depends not alone upon the truth of formal logic but also upon the nature of the thought process itself. Theory of thought or epistemology, as conceived with the objective validity of knowledge based upon the facts of sense and elaborated by the understanding. When we study the unity of the psychological fact, the dependence of knowledge upon the subjective factors of the mind and the possible objective validity of these subjective factors, we are dealing with epistemological questions of utmost importance for philosophy.

A review of the history of philosophy reveals the comparative modern character of epistemology. Hellenistic, partial forces and autonomy were the major interests of the early Greeks. They discussed such matters as "the attainment of knowledge" and sought a clearer definition of the gods. Greek philosophy turned at first to the gods as offering an explanation of the universe; then followed a period of naturalism -- a dealing of natural forces; and then an era which devoted itself to the study of the laws of nature.

That the Middle Ages were dominated by the study of the philosophy of truth of universals, and the study of the laws of nature. It is only in the last century that the study of the laws of nature has demonstrated. Kant only indicated the general limits of the understanding and in so doing created a history of our faculties.

Kant sought to show the à priori capacity of the understanding and thereby discover what were the necessary and final limits of knowledge.

"How is experience possible?" -- This question formed the basis of the Kantian inquiry. The distinct contribution of the great German was his doctrine that in experience the mind is not passive but active and constitutive. The empirical element in experience is not all; there is a distinct à priori activity which makes possible the grasping of the empirical. Space and time are forms which this structural à priori activity gives to experience. Kant's fundamental belief is that experience is the result of an active synthesizing of the mind.

This does not mean that there is not objective reality corresponding to the subjective interpretation. Kant never advanced this theory for he came to the conclusion that there is a noumenal world back of and in constant relation to the phenomenal world with which thought has to do, but into which noumenal world the mind can never enter.

With regard to space and time Kant's doctrine was that these are forms of experience not realities in themselves and relations of "things in themselves" apart from intellect. "The all embracing character of space means simply the applicability of this law to all external objects. The infinitude of space is only the inexhaustibility of the spatial synthesis. None of these properties is an adequate perception of objective fact, but only a reflective implication of a space law."*

* ("Kant and Spencer." Bowne p.38)

but should be shown the practical necessity of the understanding
and thereby clarified what were the necessary and final limits
of knowledge.

"How is experience possible?" -- This question formed the
basis of the Kantian inquiry. The distinct contribution of
the great German was his doctrine that in experience the mind
is not passive but active and constitutive. The empirical
element in experience is not all; there is a distinct transcendental
activity which makes possible the presence of the empirical.
Space and time are forms which this transcendental activity
gives to experience. Kant's transcendental belief is that ex-
perience is the result of an active synthesis of the mind.
This does not mean that there is not objective reality
corresponding to the subjective interpretation. Kant never
abandoned this theory for he came to the conclusion that there
is a transcendental world apart of and in constant relation to the
phenomenal world with which thought has to do, but into which
noumenal world the mind can never enter.

With regard to space and time Kant's doctrine was that
these are forms of experience not realities in themselves and
relations of "things in themselves" apart from relations.

"The transcendental character of space and time simply the empiri-
cality of this law to all external objects. The transcendental
of space is only the proximity of the spatial synthesis.
None of these properties is an adequate conception of objective
fact, but only a reflective implication of a space law."

Kant holds that time is not an empirical concept deducted from experience, but a necessary representation on which all intuition depends. Time is not a general concept but a pure form of sensuous intuition, and the original representation of time must be given as unlimited.

Kant's discussion evidently ignores the truth that while the mind must find an external world in accord with its own laws, yet it may also be true that the law of mind may actually coincide with the law of an external nature. The experience of nature must always be subjective but this subjectivity does not include the unreality of the objective world. While space and time may be the mind's form or its manner of reacting on experience, that fact does not call in question the reality of space and time or their validity for universal experience. Things in space are only phenomenal and the understanding gives to these phenomena substantial form and logical relation by applying the categories of thought to the perceptions of sense. Apart from phenomena to which they are applied these categories have no meaning.

Careful distinction should have pointed out to Kant that not all knowledge is based on visual or tactual experience. We are constantly correcting our sense impressions, as for example in geometry and astronomy. The ultimate conclusions, while valid, are far different from unaided sensations and their perception by the mind. While it is true that such knowledge applies only to phenomena, the knowledge itself is not phenomenal but valid and real in the only sense in which

and points that this is not an empirical concept deduced from
 experience, but a necessary representation on which all
 further depends. This is not a general concept but a
 form of sensible intuition, and the original representation
 of time must be given as unlimited.

Wart's discussion evidently implies the truth that all

the mind must find an external world in accord with its own
 laws. yet it may also be true that the law of time may remain
 if coincide with the law of an external nature. The experi-
 ence of nature must always be subjective and this subjectivity
 does not include the unreality of the objective world. This
 space and time say as the mind's form of its manner of receiving
 on experience, that fact does not call in question the reality
 of space and time or their validity for universal experience.
 things in space are only phenomena and the understanding gives
 to these phenomena substantial form and logical relation by ex-
 plaining the categories of thought to the perceptions of sense.
 Apart from phenomena to which they are related these categories
 have no reality.

Careful distinction should have pointed out the fact that

not all knowledge is based on visual or tactile experience.
 We are constantly carrying out other inferences, as for ex-
 ample in geometry and astronomy. The ultimate conclusions
 which valid, are far different from unaided sensations and
 their production by the mind. While it is true that even
 knowledge applies only to phenomena, the knowledge itself is
 not phenomenal and valid and real in the only sense in which

knowledge can be real. Bowne well says: "--we must define phenomena not as appearances or illusions or masks of any kind, but as something existing only for and through intelligence, -- We apprehend them only through our own intelligence, but they do not depend upon our intelligence for their existence--"*

A follower of Kant finds scepticism unavoidable. "Because objects can exist for us only as they combine or relate to each other the perceptions or phenomena through which we know them, it is maintained that we can not know them as they are; though the universality of the forms of synthesis explain why we suppose that we do know them as they are, independently of our perceptions. Hence, the relativity of the objects to each other is immediately connected with their relativity to the subject and this relativity to the subject is opposed to their reality as things-in-themselves."**

Kant saw this relativity of his system and endeavored to correct it by an elaboration of the doctrine of the "Practical Reason." His criticism of speculative psychology, of speculative cosmology and speculative theology leaves us in agnostic scepticism. Only when he makes an application of his philosophy to life and deals with the ethical religious problem does his system become positive.

The two dominant tendencies of the past century were Romanticism and Positivism. The one starts with the intellect

* ("Kant and Spencer". Bowne. p.124)

** ("Philosophy of Kant." Caird vol.I. p.509)

knowledge can be real. ... we must define
phenomena not as experiences or illusions or states of any kind,
but as something existing only through our own activities, but
-- the knowledge that only through our own activities, but
they do not depend upon our intelligence for their existence--"

... a follower of the ...
... objects can exist for us only as they exist in relation
to each other in the relations of phenomena that we
know them. It is mistaken that we can get away from us as they
are; though the universality of the laws of phenomena explain
why we suppose that we do know them as they are. Inconceivably
of our perceptions. ... the relativity of the objects to
each other is immediately connected with their relativity to
the subject and this relativity to the subject is opposed to
their reality as things-in-themselves."

... saw this relativity of his system and endeavored to
correct it by an elaboration of the doctrine of the "transcendental
Reason." His criticism of speculative philosophy, of scientific
theology and speculative theory leads us in a series
of essential. ... only when it makes an application of its principles
only to life and deals with the ethical relations of human beings.
His system became practical.

... the two dominant tendencies of the past century were
Rationalism and Positivism. The one starts with the intellect

... (Kant and Hegel). ...
... ("Philosophy of Kant," ed. by ...)

and seeks to find out its forms and ideals, --- to see how knowledge is possible. The other begins, and seeks to end, with the facts. In many ways both tendencies are in reality a reaction against the speculation of the Age of Enlightenment, and make an attempt to found knowledge upon the realities of nature and human history. The Positivistic tendency arose as the spirit of Romanticism declined and is not necessarily to be thought of as in decided opposition thereto.

Comte (1798-1857) drew up the three so-called stages of thought: the theological stage when human knowledge governs but a very small portion of the experience, and the imagination plays a most important part; then the metaphysical stage when the explanation of natural phenomena is no longer found to consist of personal beings, but in universal energies or ideas; finally, "the positive stage when both imagination and reflection are subordinated to experience. The only criterion of truth consists of agreement with the facts. Positivism does not however permit the facts to remain in isolation; it seeks after the laws, that is, the constant relations of the phenomena. Science builds on the invariability of natural law, which was anticipated already by the Greeks, but clearly expressed in modern times by Bacon, Galileo and Descartes, the real founders of positive philosophy. ----Our knowledge cannot attain objective unity, unity is only subjective. Subjective unity consists in the fact that the same method --- the explanation of facts by facts --- is consistently applied everywhere. This

and seems to find out its form and limits. -- to see the
knowledge is possible. The other signs, and seems to end
with the theory. In many ways both tendencies are in reality
a reaction against the domination of the age of Enlightenment,
and may be said to have their roots in the reaction of
nature and human history. The positivistic tendency arose
as the spirit of Romanticism declined and is not necessarily
to be thought of as a decided reaction thereto.

Comte (1788-1859) drew up the three so-called stages of

thought: the theological stage when human knowledge comes
out a very small portion of the experience, and the transition
stage a most important part: then the metaphysical stage when
the explanation of natural phenomena is no longer found in con-
stant of natural beings, but in universal energies or ideas;
finally, "the positive stage when both imagination and reflex-
ion are subordinated to experience. The only criterion of
truth consists of agreement with the facts. Positivism does
not however permit the facts to remain in isolation: it seeks
after the laws, that is, the constant relations of the phenomena.
Science builds on the invariability of natural law, which was
anticipated already in the Greeks, but clearly expressed in
modern times by Bacon, Galileo and Descartes. The real founders
of positive philosophy, -- -- but knowledge cannot attain objec-
tive reality, only in only scientific. Scientific inquiry con-
sists in the fact that the same method -- -- the explanation of
facts by facts -- -- is consistently applied everywhere. This

unity of method furnishes a basis for the fellowship of mind, which has not existed since the Middle Ages."*

"Comte's positivism is not empiricism. As a matter of fact the theory of stages presupposes that the facts must always be combined; the only question is, whence is the combining instrument to be derived. In the positive stage the combination can be effected in two ways. We associate phenomena which are given simultaneously according to their similarity of structure and function. We naturally arrange phenomena which follow in succession in a temporal series. The former is a static explanation; the latter is a dynamic explanation. We satisfy mind's native impulse for unity by both methods and thus discover the constant in the midst of change. --- In his latter years Comte came to emphasize the subjective character of our knowledge more and more, until he finally proposed a subjective system instead of the objective system(which was first given.)"***

Turning to the English Positivists we find Sir William Hamilton (1730-1803) consigning philosophy to a docta ignorantia. To think is to condition, to relate, and hence every item of knowledge is purely relative. The laws of space, time, degree, etc., and even the law of causality itself are relative. Hence the value of philosophy consists in its mental exercises and not

* ("History of Philosophy." Höffding. p.226)

** ("Brief History." Höffding. p.228)

("History of Philosophy". Vol. II. pp. 330-338)

... of the ...

in its thought products.

The system of logic brought forward by John Stuart Mill, (1806-1873) contains the answer of the English School to Kant's "Critique" and is the last word in empirical epistemology.

Mill sought to show that all knowledge proceeds from experience; and by experience he means that all perception is due to a sum of impressions, which sum really constitutes a unity. There is no unitary self, -- the ego is a unity of states. The law of association is the supreme law of inference. The reactive nature of thought is here entirely lost sight of and only a mechanical juxtaposition of like experiences affords the unexplained basis of memory and the unity of selfhood.

With the full statement of the theory of evolution which came in with the middle of the century philosophy follows a new method. Darwin's law of the struggle for existence brought forward an entirely new conception of nature and afforded opportunity for a naturalistic interpretation of philosophy.

According to Herbert Spencer (1820-1903), philosophy is unitary knowledge. "Its task consists of the discovery of general principles under which the particular principles postulated by the special sciences can be organized. But this unitary knowledge can neither be obtained by the a priori deductive method nor by the simple encyclopedic collation of facts... Spencer seeks to discover what is common in the special principles and laws by means of the comparative

The system of logic proposed by John Stuart Mill, (1804-1873) contains the essence of the English school of logic. "Logic" in the last word in epistemological epistemology. Mill sought to show that all knowledge proceeds from experience and by experience he meant that all knowledge is due to a set of impressions, which are really sensations of reality. There is no solitary self, -- the ego is a unity of states. The law of association is the proper law of inference. The law of association of ideas is based entirely on the fact of our only a mechanical juxtaposition of the associated objects and the associated basis of memory and the unity of selfhood. With the fall statement of the theory of evolution which came in the middle of the century philosophy followed a new school. Darwin's law of the struggle for existence brought toward an entirely new conception of nature and effected cooperation for a naturalistic interpretation of philosophy. According to Herbert Spencer (1820-1903), philosophy is really knowledge. "Its last consists of the history of general principles which the particular sciences are subjected by the special sciences and be organized. But this unity functions are either obtained by the logical deductive method or by the classic epistemological solution of facts... Spencer seeks to discover that is common in the special sciences and laws by means of the comparative

method." *

"Spencer's theory of knowledge shows the influence of both John Stuart Mill and Sir William Hamilton. He challenged pure empiricism on the ground of the fact that perceptions require elaboration before knowledge can arise and this elaboration presupposes both a faculty and a standard. The ultimate basis of all knowledge consists of the faculty of distinguishing the like from the unlike; even radical scepticism must presuppose this basal principle. The ultimate standards by which truth and error are distinguished consist of the principle that a proposition which is inherently self-contradictory cannot be true. Truth implies a perfect agreement between our ideas (representation of things) and our impressions (presentation of things). Every inference and every postulate assumes the truth of the criterion contained in the principle of contradiction. This criterion cannot therefore be derived from mere experience: it is à priori. Every individual must possess the innate faculty of comparing impressions and drawing inferences from impressions, but this faculty cannot be derived from the impressions alone. But the à priori appertains to the individual alone. If we inquire into the origin of this faculty we must appeal to the race from which the individual has sprung. Empiricism is in error only in so far as the particular individual is concerned, not as respects the whole race. The experiences.

* ("Brief History." Höffding. p. 251)

"History of Philosophy." Höffding. Vol. II. pp.458-467)

acquired by the race during the course of countless generations, the incessantly recurring influence to which it was subjected, evolve dispositions which form the basis upon which single individuals begin their course of development. That is to say, the single individual possesses in his native organization the clear profit of the experiences of untold generations. -- He thereby extends the scope of the older empiricism by going back of the individuals to the race." *

Hence it follows that for Spencer the actual realm of knowledge is marked out by the fundamental function of thought which consists in the distinguishing the like from the unlike. Things which can be compared and related to other things can to that degree be known. The relativity of thought is in this system a necessary conclusion and such relativity applies of course to ultimate conceptions. Since the Absolute is unconditioned it cannot be related to anything else and therefore is unknowable. Yet even this Unknowable must be, after the analogy of our own energy, something positive, a sort of Universal Energy which underlies all objectivity and determines subjective changes and therefore gives form and content to our knowledge.

The Spencerian system as well as the Positivist school in general, furnishes the raison d'être for the work of real constructive thinking on the part of Bowne. In order to understand the full implications of Bowne's system we need to see the

* ("Brief History". Höffding. p. 253)
 ("History of Philosophy". Höffding. Vol. II. pp.467-477)

applied to the case during the course of research. In fact, the necessarily resulting influence to which it was subjected, evolve distinctions which form the basis upon which certain individuals derive their course of development. That is to say, the single individual possessed in his native organization the clear profit of the experience of another generation. -- as therapy extends the scope of the older generation by going back to the individuals to the case. Hence it follows that for example the actual basis of knowledge is marked out by the fundamental factors of thought which consists in the distinguishing the line from the white. Things which can be compared the related to other things and is that degree of known. The relative of thought is in this system a necessary conclusion and also relatively similar of course to similar comparisons. Since the system is therefore divided it cannot be related to anything else and therefore is not known. Yet even this knowledge must be after the fashion of one and every, something positive, a sort of personal feeling which defines all objectively and determined scientific objects and therefore gives form and content to our knowledge.

The general system as well as the Positive school in general, formulates the Principle of the for the work of each successive thinking on the part of Power. In order to understand the full implications of Power's system we need to see the

* "The History of Philosophy", Vol. II, pp. 427-437
 * "The History of Philosophy", Vol. II, pp. 427-437

purpose for which he writes. He is a conscious defender of certain philosophical conceptions by which he seeks to make secure the foundations of religion. We have to do here with no merely disinterested thinker. Bowne taught at a time when materialistic thought and the old associational psychology and the new doctrine of evolution were united in drastic effort to undermine faith in the divine and to substitute for it the seemingly more real, yet in reality more attenuated doctrine of Naturalism. His work is therefore to be judged in its results as much as in its presuppositions and actual contents. His was the chosen task of revealing the falsity of Naturalism and Agnosticism by making evident, not the falsity of science, but its false assumptions. Hence, we do not find in Bowne so much a system of doctrine, as we do a system of critical judgment on current Naturalism and the psychology of Associationism. The great work of Bowne along the lines of positive religious construction will doubtless be considered his chief contribution to the thought of his day.

Bowne succeeds in delimiting the spheres of science and philosophy, giving to the one the function of observing, classifying and arranging facts, to the other the duty of interpretation. Moreover, on the positive side, he adds the fruitful truths of Personalism to the Kantian theory of knowledge and to the doctrine of evolution. He seeks to solve the problems of Naturalism on the basis of epistemology. To quote his own words:-

purpose for which he writes. He is a conscious defender of
certain philosophical positions by which he seeks to make
secure the foundations of religion. We have to do here with
no merely disinterested thinker. Bowne taught at a time when
materialistic thought and the old associational psychology and
the new doctrine of evolution were united in a great effort to
undermine faith in the divine and to substitute for it the
essentially more real, yet in reality more attenuated doctrine
of Naturalism. His work is therefore to be judged in its re-
sults as well as to its presuppositions and actual contents.
His was the chosen task of revealing the falsity of Naturalism
and Agnosticism by making evident, not the falsity of science,
but its false assumptions. Hence, we do not find in Bowne so
much a system of doctrine, as we do a system of critical judg-
ment on current Naturalism and the psychology of Association-
ism. The great work of Bowne is along the lines of positive re-
ligious construction which doubtless be considered his chief con-
tribution to the thought of his day.

Bowne succeeds in defining the spheres of science and
philosophy, giving to the one the function of describing, class-
ifying and arranging facts, to the other the duty of interpreta-
tion. Moreover, on the positive side, he adds the fruitful
truths of Personalism to the Kantian theory of knowledge and to
the doctrine of evolution. He seeks to solve the problems of
Naturalism on the basis of epistemology. To quote his own

words:-

"intellectual campaign --- commonly decided at points quite remote from the apparent battlefield, and without any 'thunder of the captains and the shoutings'. These are the strategic points that command the field and decide the day. They lie in our epistemology and metaphysics - subjects which have little or no practical bearing, yet out of them are the issues of intellectual life or death. Our notions of knowledge and its nature, our conception of reality and causality, our thoughts respecting space and time, --the two great intimidating phantoms, --these are the things that decide our general way of thinking and give direction to our thoughts even in morals and religion." *

Bergson bases his entire system of philosophy, with all its practical deductions, upon a new theory of the knowing process. In the ordinary meaning, science is a knowledge by analysis of the actual facts of life and of the universe. At best, according to Bergson all we can do in this realm is to tabulate and draw deductions that may serve as general truths universally applicable so far as we know. However, in our search after these positive facts we are limited by the inherently symbolic nature of thought. As soon as a process of any sort has been observed and a concept of that process formulated Bergson finds we have left the dynamic and retreated into the purely static; we have lost contact with life and our knowledge is only relative. Bergson would call attention to the truth that in

* ("Personalism". Bowne. Introduction VIII.)

"...and only decided at points
 quite remote from the subject itself, and without any
 'fringe' of the casual and the accidental. These are the
 scientific points that govern the field and decide the day.
 They lie in our epistemology and methodology - subjects which
 have little or no practical bearing, yet out of them and the
 issues of intellectual life or death. Our manner of knowledge
 and its nature, our conception of reality and causality, our
 thought processes, even the time, - the two great initial-
 ing processes, - these are the things that decide our general
 way of thinking and give direction to our thoughts even in
 remote and religious." *

Person does his entire system of philosophy, with all
 its practical implications, upon a new theory of the meaning pro-
 cess. In the ordinary meaning, science is a knowledge by analy-
 sis of the actual facts of life and of the universe. At least,
 according to Bergson all we can do in this realm is to describe
 and draw deductions that may serve as general truths universally
 applicable so far as we know. However, in our search after
 these positive facts we are limited by the inherently symbolic
 nature of thought. As soon as a concrete of any sort has been
 observed and a concept of that process formulated, Bergson finds
 we have lost the dynamic and retreated into the purely static;
 we have lost contact with life and our freedom is only rela-
 tive. Bergson would call attention to the truth that in

* ("Personality", 1909, Introduction VIII.)

addition to the concept and the law and also to the apparent facts of life as treated by the sciences, there is life itself, for which no purely intellectual concept will suffice, and for which no law can be construed in terms that are purely logical. In addition to the symbolic word and the symbolic fact is the reality that must be understood, not alone by mere intellect, but by the new, or rather the newly emphasized, process of intuition. In some way we must gain a knowledge deeper than the truths for which the formulas of thought and the facts of science stand and thereby attain an actual experience of reality. Possibly this deeper knowledge can be attained by refusing to be bound by the symbolic and by placing due emphasis upon life which reveals its nature in other realms than in pure thought. Bergson asks:-

"Must we --- give up fathoming the depth of life? Must we keep to that mechanistic idea of it which the understanding will always give us --- an idea necessarily artificial and symbolical, since it makes the total activity of life shrink to the form of a certain human activity which is only a partial and local manifestation of life, a result or by-product of the vital process? We should have to do so, indeed, if life had employed all the psychical potentiality it possesses in producing pure understanding --- that is to say, in making geometricians. But the line of evolution that ends in man is not the only one. On other paths, diverging from it, other forms of consciousness have been developed, which have not been able to free themselves from

addition to the concept and the law and also to the objects
 facts of life as related by the sciences, there is life itself,
 for which no purely intellectual concept will suffice, and for
 which no law can be constructed in terms that are purely logical.
 In addition to the symbolic word and the symbolic fact is the
 reality that must be understood, not along with the intellect,
 but by the heart, or rather the newly emancipated, process of in-
 tuition. In some way we must gain a knowledge deeper than the

science of which the formulas of thought and the facts of
 science stand and thereby attain an actual experience of reality.
 Possibly this deeper knowledge can be obtained by reflecting to be
 learned by the symbolic and by directing the attention upon life
 which reveals its nature in other realistic than in pure thought.

"Let us -- give up factoring the death of life? What
 we know to that mechanistic idea of it which in understanding
 will always give us -- an idea necessarily artificial and sym-
 bolical, since it makes the total activity of life shrink to the
 form of a certain human activity which is only a partial and
 local manifestation of life, a result or by-product of the vital
 process. We should have to do so, indeed, if life had employed
 all the potentiality it possesses in producing pure
 understanding -- that is to say, in making geometroids. But
 the line of evolution that ends in man is not the only one. On
 other paths, diverging from it, other forms of consciousness have
 been developed, which have not been able to turn themselves from

external constraint or to regain control over themselves, as the human intellect has done, but which, none the less, also express what is immanent and essential in the evolutionary movement. Suppose these other forms of consciousness brought together and amalgamated with intellect. Would not the result be a consciousness as wide as life? And such consciousness, turning around suddenly against the push of life which it feels behind, would have a vision of life complete -- would it not? -- even though the vision were fleeting.

"It will be said that, even so, we do not transcend our intellect, for it is still with our intellect, and through our intellect, that we see the other forms of consciousness. And this would be right if we were pure intellect, if there did not remain, around our conceptual and logical thought a vague nebulosity, made of the very substance out of which has been formed the luminous nucleus that we call the intellect. Therein reside certain powers that are complimentary to the understanding, powers of which we have only an indistinct feeling when we remain shut up in ourselves, but which will become clear and distinct when they perceive themselves at work, so to speak, in the evolution of nature. They will thus learn what sort of effort they must make to be intensified and expanded in the very direction of life.

"This amounts to saying that theory of knowledge and theory of life seem to us inseparable. A theory of life that is not accompanied by a criticism of knowledge is obliged to accept, as they stand, the concepts which the understanding puts at its

external conditions or to regain control over themselves, as
the lower intellect has done, but which, now the last, also

express what is inherent and essential to the evolutionary
movement. But these other forms of consciousness must be
together and reorganized with intellect. Would not the re-
-ult be a consciousness as wide as life? And such conscious-
ness, turning around suddenly against the way of life which it
feels behind, would have a vision of life complete -- would it
not -- even though the vision were fleeting.

"It will be said that, even so, we do not transcend our
intellect, for it is still with our intellect, and through our
intellect, that we see the other forms of consciousness. And
this would be right if we were pure intellect, if there did not

remain, around our intellectual and logical thought a vague
ambiguity, made of the very substance out of which has been
formed the luminous nucleus that we call the intellect. There-
in reside certain powers that are complementary to the under-
standing, powers of which we have only an indistinct feeling

when we remain shut up to ourselves, but which will become clear
and distinct when they perceive themselves at work, so to speak,
in the evolution of nature. They will then learn what sort of
effort they must make to be intellectual and expanded in the very
direction of life.

This amounts to saying that theory of knowledge and theory
of life seem to us inseparable. A theory of life that is not
accompanied by a critique of knowledge is obliged to result, as
they stand, the concepts which the understanding puts at its

disposal: It can but enclose the facts, willing or not, in preexisting frames which it regards as ultimate. It thus obtains a symbolism which is convenient, perhaps even necessary to positive science, but not a direct vision of its object. On the other hand, a theory of knowledge which does not replace the intellect in the general evolution of life would teach us neither how the frames of knowledge have been constructed nor how we can enlarge or go beyond them. It is necessary that these two inquiries, theory of knowledge and theory of life, should join each other, and, by a circular process, push each other on unceasingly." *

Bergson aims, not to minimize intellect, but to bring to its assistance another factor which in the process of evolution has been sidetracked. The acquisitive power of instinct in the animal world is unquestioned while the axiomatic character of the intuitions in human beings constitute a factor not to be neglected. Science should not merely cut up reality into little sections and study reality in these detached parts; - Science should gather up again into the whole and study reality in relation to the generation and growth of the universe. The intellect and the intuitions join hands in observing ("vitally" not logically alone,) the underlying reality. Thus with Bergson does knowledge cease to be relative and become absolute.

As Höffding says, after having demonstrated the practical nature of thought:- "We shall find that under three different

* ("Creative Evolution". Bergson. pp. XII, XIV)

... it has not excluded the fact, which is not
 ... it is not a
 ... a theory of knowledge which does not re-
 ... the intellect in the general evolution of life would
 ... as neither can the traces of knowledge have been con-
 ... it is
 ... theory of knowledge, theory of knowledge and
 ... theory of life, should join each other, and by a similar
 ...
 ... but to bring to
 ... in the process of evolu-
 ... has been identified. The cognitive power of intellect
 ... in the animal world is unquestioned while the existence of reason
 ... of the intellect in human beings constitutes a step
 ... Science should not merely cut up reality in-
 ... in little sections and study reality in these detached parts;
 ... should rather gather up what is the whole and study reality
 ... in relation to the generation and growth of the universe. The
 ... and the intellect, join hands in observing "vitality"
 ... the underlying reality. This with
 ... to be relative and hence absolute.
 ... after having demonstrated the necessity
 ... "the soul finds that order from without"

forms there is always an irrational remainder, viz., in the relation of quality to quantity, in the significance which the time-relation has for the casual concept and in the relation between subject and object." * It is precisely this "irrational remainder" which discloses the province for the intuitions as explained by Bergson. Instead of simply noting its presence in human life and passing it by as something to be tolerated but not fully explained, Bergson gives a place to intuition along with pure ratiocination in the process of knowledge.

Bowne, in answering the question, "How is experience possible?" writes as follows:- "Kant's answer is well known. Experience is not something given ready made from without, but is actively constructed by the mind within. Experience is possible only through a certain constitutive mental activity, according to principles immanent in the understanding. In this way the raw material of sense impressions, which in themselves are fleeting and discontinuous, is built into a rational world of experience. This insight was Kant's great contribution to philosophy, and it remains, in spite of all criticism a permanent possession of reflective thought." **

"This result finally vacates the traditional empiricism which views the mind as only passively receptive in knowledge. . . . The principles of knowing are primarily immanent laws

* ("Problems of Philosophy". Höffding. p.85)

** ("Personalism". Bowne. pp. 55,56)

form there is always an irrational remainder, viz., in the
 relation of quality to quantity. In the significance which the
 time-relation has for the causal concept and in the relation
 between subject and object, it is precisely this "irrational
 remainder" which discloses the province for the further
 steps as explained by Bergson. Instead of simply noting its
 presence in human life and passing it by as something to be
 tolerated but not fully explained, Bergson gives a place to
 intuition along with pure rationalization in the process of
 knowledge.

... in answering the question, "how is experience possible?"
 writes as follows: "Hart's answer is well known. Ex-
 perience is not something given ready made from without, but
 is actively constituted by the mind within. Experience is
 possible only through a certain constitutive mental activity,
 according to principles immanent in the understanding. In this
 way the raw material of sense impressions, which in themselves
 are chaotic and disorganized, is sifted into a rational world
 of knowledge. This insight was Kant's great contribution to
 philosophy, and it remains, in spite of all criticism a central
 element of the philosophy of the present day."
 "This insight" is the central insight of the philosophy of the present day.
 The philosophy of the present day is essentially Kantian in its
 essence.

* ("Problems of Philosophy," 1913, p. 105)
 # ("Introduction," 1913, p. 105)

of mental activity." *

"Knowledge, of course, cannot be defined except in terms of itself, neither can it be deduced from that which is not knowledge. There must always be a certain unique and immediate character to knowledge which can rest on nothing but itself. In some sense, then, there is no answer to the question, how is knowledge possible, for there is nothing deeper or other than knowledge by which to explain it." **

"Knowing as an act never ends in itself as a psychological fact. It always relates itself to a content which the knowing act does not make but reproduces. There is, then, in the very idea of our knowing a presupposition of something existing apart from the knowing as a mental event, and this, indeed, is the very essence of the idea." ***

"Knowledge is conditioned both by the nature of the subject and by the nature of the object. In order that a thing may be known, the subject must act in certain ways and the object must be of a certain nature. If the subject remained passive and inert, there would be no knowledge; and if the object were such as to admit of no rational construction again there could be no knowledge." **** "In all interaction between things the reaction is but an expression of the agent's own nature, for the manifestation of which other things but furnish the occasion. Hence, the mental reaction which we

* ("Personalism". Bowne. p.57)
** (Ibid p.57)

*** (Ibid p.60)
**** (Ibid p.61,62)

"...of course, cannot be defined except in terms of itself, which can be deduced from itself which is not knowledge. There must always be a certain degree of self-knowledge in order to know anything which can rest or rest on itself. In some cases, then, there is no entry to the question, how is knowledge possible, but there is nothing other or other than knowledge by which to explain it." "Knowledge as an end itself ends in itself as a goal."

...it always relates itself to a context which the knowing act does not miss but is lost. There is, then, in the very idea of our knowing a transcendence of ourselves existing apart from the knowing as a mental event, and this, indeed, is the very essence of the idea."

"Knowledge is conditioned both by the nature of the subject and by the nature of the object. In order that a thing may be known, the subject must not be in certain ways and the object must be of a certain nature. If the subject remains passive and inert, there would be no knowledge; and if the object were inert as to itself, no knowledge would be possible. There would be no knowledge." "The all-wise action between things the reaction is but an illustration of the agent's own nature. For the realization of what other things but things are possible. Hence, the subject's reaction which is

* (Introduction, para. 27) see (ibid. 27) and (ibid. 27)

call knowledge can be looked upon only as an expression of our mental nature according to principles immanent in itself." *

"The existence of things is by no means the same as our knowledge of them, and reflection makes plain that if things existed precisely as they appear to us the knowledge of them could arise only as the mind by its own action reproduces the contents of things for thought. Knowledge is nothing which can be imported ready made into a passive mind, but the mind must actively construct knowledge for itself.... The things do not pass ready made into the mind. Indeed they do not pass into the mind at all, but upon occasion of certain action upon the mind the mind unfolds within itself the vision and knowledge of the world." **

"That which is in sense is very different from that which is in thought. The sense world is flitting, fleeting, discontinuous. Epistemology shows that it is all an inarticulate, phantasmagoric flux or dissolving view until thought brings into it its rational principles and fixes and interprets it. The sense world, so far as it is articulate, is already a thought world. Its permanences and identities are products of thought. The complex systems of relations whereby it is defined and articulated is a thought product which can in no way be given to sense. The far-reaching inferences of science whereby our spontaneous thought of the world is profoundly transformed, are something which exists for neither

* ("Personalism". Bowne. p.63) ** (Ibid p.64)

call themselves are in fact only an expression of our
 actual desire according to the law of causality. The
 "The statement of things is of the nature of the law of
 causality of things, and reflection must still be taken
 into account, especially as they appear to be the expression of the
 reality which exists as the thing by its own nature, and the
 contents of things for things. Knowledge is not a mere
 can be learned ready-made into a single thing, but the thing
 itself actively manifests knowledge for itself. The thing
 do not pass ready-made into the thing. Indeed they do not
 pass into the thing at all, but upon occasion of certain action
 upon the thing the thing reveals itself itself, the thing and
 knowledge of the world."

"That which is in essence is very different from that which
 is in thought. The same world is visible, tangible, in-
 visible, and intangible. It is all an indivisible
 unity, that is to say, the thing itself is the thing
 before it is the rational principle and the thing and the
 thing is. The same thing, as the thing is, is
 itself a thought itself. Its presence is not limited by
 concepts of thought. The world of relations, which
 is defined and articulated as a thought moment which can be
 of any nature to itself. The far-reaching independence of
 relations whereby our relations toward the world is not
 toward themselves, are relations which exist for others

eye nor ear, but for thought only. The world of science differs from the world of sense as widely as the conceptions of the astronomer differ from the algebraic signs by which he expresses them." * ----"Thus it is manifest that without this synthetic and interpretative action of the mind there could be no world whatever for us. . . . It must be said that no one can ever perceive any world but the one he makes." **

"But it is manifest that the nature of the object is also a determining factor. . . . For unless the objects themselves were harmonious with these laws and forms, the latter could not be imposed upon them." ***

In criticising Kant, Bowne says: "To this result (the nothingness of things-in-themselves) any doctrine which denies the application of the categories of thought to reality must certainly come. The thing in itself, or things in themselves, must be brought within the range of thought or must go out of existence." ****

"A truly extra-mental existence, in the sense of something beyond thought and independent of it and in no way amenable to it, is an impossible conception. If we assume that the world of things originated in thought and expressed thought they would be homogeneous with thought, and there would be no a priori reason why we should not know them. This theistic suggestion brings the world of things within the thought sphere

* ("Personalism". p.68)
** (Ibid p.71)

*** (Ibid p.75)
**** (Ibid p.90)

and assimilates the problem of knowledge to that of mutual understanding among persons." * Bowne asserts that this theistic suggestion Kant nowhere recognized in his epistemology. **

"The categories in themselves are simply forms of mental arrangement and merely prescribe the form in which experience is to be ordered when it is given. In this respect they are like the rules of grammar." ***

"From a theistic standpoint the universe itself is no proper static existence, but only the divine thought finding the realization through the divine will, and that thought for us must find expression in the order of our experience. But it is quite credible that our present experience does not exhaust the contents of that thought and so does not exhaust the possibilities of experience." ****

"In this sense there may be any number of universes of experience, each of which is relative to its own subjects, and all of which are embraced in the thought or plan of the Infinite Mind and Will on which they all depend.

"Thus we dispense with the extra-mental universe of unreflecting thought. That view arises from confounding extra-human with extra-mental. . . this world can never be explained on an impersonal plane. The world of experience exists for us only as a rational spiritual principle by which we reproduce it for our thought, and it has its existence apart from

* ("Personalism". Bowne. p.92)
** (Ibid. p.93)

*** (Ibid p.100)
**** (Ibid p.108)

us only through a rational spiritual principle on which it depends, and the rational nature which it expresses." *

Bergson makes, as we have noted above, a new approach to the same problem. He adds to rationalism the instrument of the intuitions. "As an examination of the possibility of the mathematical sciences led in Kant to a critique of the understanding, the examination of the possibility of the biological sciences leads in Bergson to a critique of intuition." **

"His doctrine of the intuitions is an attempt to rebuild the bridge between science and metaphysics." ***

From a study of philosophic methods Bergson concludes that there are two different ways of knowing a thing. "The first implies that we move round the object; the second that we enter into it. The first depends on the point of view at which we are placed and on the symbols by which we express ourselves. The second neither depends on a point of view nor relies on any symbol. The first kind of knowledge may be said to stop at the relative; the second, in those cases where it is possible, to attain the absolute." **** This first kind of knowledge is a study of movement from without, the second is a participation in that movement. The first is the mere reading of the characters of a book, the second is, by an effort of the

* ("Personalism." Bowne. pp. 109,110)

** ("The Philosophy of Bergson." Lindsey. p. 17)

*** (Ibid p. 19)

**** ("Introduction to Metaphysics." Bergson. p. 1)

imagination, actually entering into the experiences of the characters and thereby realizing an absolute knowledge of them. "Description, history, and analysis leave me here in the relative. Coincidence with the person himself would alone give the absolute." *

"It follows that an absolute could only be given in an intuition, whilst everything else falls within the province of analysis. By intuition is meant the kind of intellectual sympathy by which one places oneself within an object in order to coincide with what is unique in it and consequently inexpressible. Analysis, on the contrary, is the operation which reduces the objects to elements already known, that is to elements common both to it and other objects. To analyze, therefore, is to express a thing as a function of something other than itself. All analysis is thus a translation, a development into symbols, a representation taken from successive points of view from which we may note as many resemblances as possible between the new object which we are studying and others which we believe we know already.... But intuition, if intuition is possible, is a simple act." **

". . . The ordinary function of positive science is analysis. . . Metaphysics is the science which claims to dispense with symbols." ***

Bergson affirms that there is at least one reality which

* ("Introduction to Metaphysics." pp. 4,5)

** (Ibid p.8)

*** (Ibid p.9)

... the relative coincidence with the given object, which also gives the relative.

"It follows that an analysis would only be given in an initial, which everything else will follow the previous of analysis. If analysis is not the end of initial analysis, which one should expect that an object in an-alytic coincides with what is said in it and consequently in-teractive. Analysis, on the contrary, is the operation which reduces the object to elements already known. That is to elements known both to it and other objects. In analysis, therefore, is to express a thing as a function of something else than itself. All analysis is thus a function, a development into symbols, a representation into the number-ive points of view from which we may take as any perspective as possible between the new object which we are studying and others which we believe we know already. But identical. If analysis is possible, is a simple act." as

... The contrary function of positive science is analy-sis. . . . metaphysics is the science which claims to disagree with symbols." see

Person either that there is at least one reality which

2 ("Introduction to Metaphysics", pp. 4, 5)
see (ibid p. 7)

we seize from within: This is our own personality in its flowing through time, ourselves which endure. He says we may sympathize intellectually with nothing else, but we certainly sympathize with our own selves." *

"There is, beneath these sharply cut crystals and this frozen surface (perceptions, memories, tendencies and motor habits) a continuous flux which is not comparable to any flux I have ever seen. There is a succession of states, each of which announces that which follows and contains that which precedes it." **

"This inner life may be compared to the unrolling of a coil, for there is no living being who does not see himself coming gradually to the end of his role and to live is to grow old. But it may just as well be compared to a continual rolling up, like that of a thread on a ball, for our past follows us, it swells incessantly with the present that it picks up on its way; and consciousness means memory." ***

"The inner life is all this at once; variety of qualities, continuity of progress, and unity of direction. It cannot be represented by images." **** "It is true that no image can reproduce exactly the original feeling I have of the flow of my own conscious life." *****

"If a man is incapable of getting for himself the intuition

* ("Introduction to Metaphysics." p.9)

** (Ibid p.11)

*** (Ibid p.12)

**** (Ibid p.15)

***** (Ibid p.15)

we seize them with this is our own responsibility in the flow-
ing stream, and we are not to be carried away by the
current. We must hold fast to our principles and not
allow ourselves to be carried away by the current.

"There is, however, one thing that we must not forget and that
is the fact that the world is not a static thing, but a
dynamic one. It is constantly changing and moving on.
We must therefore be prepared to meet the changes and
to adapt ourselves to the new conditions. We must not
be content with the old and the familiar, but we must
seek for the new and the better. We must not be
satisfied with the present, but we must strive for
the future."

"This is the way of life that we should follow. It is
not a path of ease and comfort, but a path of
struggle and sacrifice. It is a path that leads
to the highest and the best. It is a path that
requires courage and strength. It is a path that
requires faith and hope. It is a path that
requires love and kindness. It is a path that
requires wisdom and understanding. It is a path
that leads to the future and to the better world."

"The inner life is all this and more; variety of
experience, and a wide variety of knowledge. It
cannot be represented by images. It is that which
cannot be expressed exactly in words. It is that
which is the essence of the human mind. It is
that which is the source of all our thoughts and
actions. It is that which is the foundation of
our character and our destiny."

"It is a path that is impossible of getting for himself the material

and the material is the material of the material.
and the material is the material of the material.
and the material is the material of the material.
and the material is the material of the material.

of constitutive duration of his own being, nothing will ever give it to him, concept no more than images. Here the single aim of the philosopher should be to promote a certain effort, which in most men is usually fettered by habits of mind more useful to life." *

"Just in so far as abstract ideas can render service to analysis, that is, to the scientific study of the object in its relation to other objects, so far are they incapable of replacing intuition, that is, the metaphysical investigation of what is essential and unique in the object. . And, on the other hand, beside the illusion there is also a very serious danger. For the concept generalizes at the same time as it abstracts. The concept can only symbolize a particular property by making it common to an infinity of things. It therefore always more or less deforms the property by the extension it gives to it." **

"Either metaphysics is only this play of ideas, or else, if it is a serious occupation of the mind, if it is a science and not simply an exercise, it must transcend concepts in order to reach intuition. Certainly, concepts are necessary to it, for all the other sciences work as a rule with concepts, and metaphysics cannot dispense with the other sciences. But it is only truly itself when it goes beyond the concept, or at least when it frees itself from rigid and ready-made concepts

* ("Introduction to Metaphysics." pp. 15-16)

** (Ibid pp.18-19)

of sensitive nature of his own being. Nothing will ever
give it to him. content of more than interest. Here the simile
and of the philosopher would be to know a certain object,
which is not yet usually felt as a habit of mind, when
called to life.

What is so far as feeling ideas and other things to
analyze, that is, to the scientific study of the object in
its relation to other objects, as far as they are possible of
relation in fact, that is, the metaphysical investigation
of what is essential and unique in the object. And, on the
other hand, beside the illusion there is also a very serious
error. For the concept generalizes at the same time as it
abstracts. The concept can only symbolize a certain order pro-
vided by nature in common to an infinity of objects. It there-
fore always more or less follows the property by the extension
it gives to it.

Without metaphysics is only this class of ideas, as also,
if it is a serious occupation of the mind, if it is a science
and not simply an exercise, if that transcendent concepts in order
to reach intuition. Certainly, concepts are necessary to it,
for all the other sciences work as a rule with concepts, and
metaphysics cannot dispense with the other sciences. But if
is only truly itself when it goes beyond the concept, or at
least when it frees itself from rigid and ready-made concepts

in order to create a kind very different from those which we habitually use; I mean supple, mobile, and almost fluid representations, always ready to mould themselves on the fleeting forms of intuition." * . . ."Let it suffice us for the moment to have shown that our duration can be presented to us directly in an intuition, and that it can be suggested to us indirectly by images, but that it can never -- if we confine the word concept to its proper meaning -- be enclosed in a conceptual representation." **

The multiplicity of our own duration bears no resemblance to any other multiplicity we know. "---However much I manipulate the two concepts of unity and multiplicity, portion them out, combine them differently, practice on them the most subtle operation of mental chemistry, I never attain anything which resembles the simple intuition which I have of duration; while, on the contrary, when I replace myself in duration by an effort of intuition, I immediately perceive how it is unity, multiplicity, and many other things beside." ***

"We do penetrate into it (duration), however, and that can only be by an effort of intuition. In this sense, an inner, absolute knowledge of the duration of the self by the self is possible." ****

Bergson proceeds to develop the thought that it is as impossible to gain a complete conceptual view of the self as it

* ("Introduction to Metaphysics". p.21) *** (Ibid pp.22-23)
 ** (Ibid pp.21-22) **** (Ibid p.24)

is to gain a complete photographic representation of a city. Taken from no matter how many different angles, the photograph nevertheless reveals, only in part, the complete concept of the city. There is no way of reconstituting a thing by operations practised on symbolic elements alone. But,-

"Such, is, however, the undertaking of the philosophers who try to reconstruct personality with psychical states, whether they confine themselves to those states alone, or whether they add a kind of thread for the purpose of joining the states together. Both empiricists and rationalists are victims of the same fallacy. Both of them mistake partial notations for real parts, thus confusing the point of view of analysis and of intuition, of science and of metaphysics." *

Bergson makes evident in the following passage the mistake of all empiricists like Taine and Stuart Mill. "Psychologists in the method they apply, they have remained metaphysicians in the object they set before themselves. They desire an intuition in analysis, which is the very negation of it. They look for the ego, they claim to find it in psychical states, though this diversity of states has itself only been obtained, and could only be obtained, by transporting oneself outside the ego altogether, so as to make a series of sketches, notes and more or less symbolic and schematic diagrams. Thus, however much they place the states side by side, multiplying points of contact and exploring the intervals, the

* ("Introduction to Metaphysics." Bergson. pp. 29-30)

ego always escapes them, so that they finish by seeing in it nothing but a vain phantom. We might as well deny that the "Iliad" had any meaning, on the ground that we had looked in vain for that meaning in the interval between the letters of which it is composed. Philosophical empiricism is born here, then, of a confusion between the point of view of intuition and that of analysis." *

Bergson then maintains that rationalism is a dupe of the same illusion. "Like empiricism, it considers the psychical states as so many fragments detached from an ego that binds them together. Like empiricism, it tries to join these fragments together in order to recreate the unity of self. Like empiricism finally, it sees this unity of the self in the continually renewed effort it makes to clasp it, steal away indefinitely like a phantom. . .Rationalism persists in affirming the unity of the person." **

"Philosophy does not consist in the choice of certain concepts, and in taking sides with a school, but in the search for a unique intuition from which we can descend with equal ease to different concepts, because we are placed above the divisions of the schools." *** Philosophy will know exactly what unity, what multiplicity, and what reality superior both to abstract unity and multiplicity the multiple unity of the self actually is, "only when it recovers possession of the simple intuition

* ("Introduction to Metaphysics." pp.31,32)

** (Ibid p.33)

*** (Ibid p.38)

of the self by the self...In order to accomplish this (intuition) it is necessary to proceed by a reversal of the usual work of the intellect. Thinking usually consists in passing from concepts to things, and not from things to concepts. . . . Either there is no philosophy possible, and all knowledge of things is a practical knowledge aimed at the profit to be drawn from them, or else philosophy consists in placing oneself within the object itself by an effort of intuition." *

Bergson asks us to note that concepts always remain stationary. "But there is no state of mind, however simple, which does not change every moment, since there is no consciousness without memory, and no continuation of a state without the addition, to the present feeling, of the memory of past moments. It is this which constitutes duration. . . . Without this survival of the past into the present there would be no duration, but only instantaneity." **

"This means that analysis operated always on the immobile, while intuition always places itself in mobility, or, what comes to the same thing, in duration." ***

". . . .From intuition one can pass to analysis, but not from analysis to intuition." **** Therefore we can understand motion, not from study of external positions of the moving object, but only by an act of intuition, placing ourselves within the moving object and experiencing motion. Only so can

* ("Introduction to Metaphysics". pp.38-43)
 ** (Ibid p.45) *** (Ibid p.47) **** (Ibid p.48)

we reach an absolute knowledge of motion.

In brief Bergson's "Intuition" is to be understood as follows. There is a reality which is external and yet is given immediately to the mind. One understands this to mean more than Bowne means by experience of reality. There is in Bergson no hint of an Infinite Agency outside the human which parallels our perception with reality. Bergson means actual participation in reality. The mark of reality is mobility; there is everywhere an incipient change of direction. "In interpreting reality our mind, following its natural bent, proceeds on the one hand by solid perception and on the other by stable conceptions." * Intellect tends to become rigid in its concept-making and fails to experience the mobile. (This static quality of concepts makes possible the various antimonies of thought.)

The truth Bergson brings out is that our thought can, if it will exercise a natural power, place itself within reality. This constitutes a reversal of the ordinary processes of thought, or rather a thinking back to the living mobility. This reversal means that we shall have to revitalize our concepts by adding to them a new content which will escape becoming static and will feel the changing fact as well as form a concept of it.

This reasoning sounds, as it doubtless is, somewhat mystical and exceedingly indefinite. But Bergson points out that

* ("Introduction to Metaphysics." p.66)

we need an absolute knowledge of reality.

An ideal knowledge "intuitive" is to be distinguished as follows. There is a reality which is external and yet is given immediately to the mind. The intellectual act to reach more than some matter by experience of reality. There is in fact a sort of an intuitive agency within the human mind parallel and connected with reality. The way of reality is intuitive. There is everywhere a constant change of direction. The intellectual reality of the mind, following the natural course proceeds on the one hand by solid penetration and on the other by stable concentration. Intellectual truth is not a mere thing in the present-moment and falls to experience the reality. This is the quality of concrete when possible the various aspects of thought.

The truth beyond things out is not our thought, but it will exercise a natural power, when reality itself is realized. This constitutes a revelation of the actual situation of thought, or rather a thinking back to the living reality. This revelation means that we shall have to revise our concepts by which to show a new content which will express more the reality and will bring the changing form of well as bring a process of it.

This reasoning sounds, as it doubtless is, somewhat strange and not essentially intellectual. But various points out that a "transition to holism" is given.

we have all experienced this intuition in the moment of literary or oratorical composition. Without apparent effort, the mind, after it has long dwelt on a certain subject, suddenly feels and under the burst of feeling resolves the mass of apparently inchoate facts into an orderly whole. This act of feeling is not a mere stringing together of items, it is vital assembling into a genuine production. Bergson might have gone on to speak in the same way with reference to art in general. There is much in art that comes, not with great regard to actual intellectual conception or even of reason in the sense of conscious effort. The inspiration of the artist is as apt to be feeling as intellect. Bergson would have us acquaint ourselves with this vital impulse, and thus utilize the unconscious, yet vital, powers that make for genius. Bergson's reasoning, however, goes somewhat deeper than his illustration.

"Metaphysical intuition seems to be something of the same kind. What corresponds here to the documents and notes of literary composition is the sum of observations and experience gathered together by positive science. For we do not obtain any intuition from reality -- that is, an intellectual sympathy with the most intimate part of it -- unless we have won its confidence by a long fellowship with its superficial manifestations. And it is not merely a question of assimilating the most conspicuous facts; so immense a mass of facts must be accumulated and fused together, that in this fusion all the preconceived and premature ideas which observers may unwittingly have put into

we have all experienced this feeling in the moment of life-
 any or several conditions. First, however, the
 mind, which has long been a certain subject, naturally
 falls and goes to the point of feeling, which is the
 normally human state into an orderly world. This act of
 feeling is not a mere feeling, however, it is vital
 ascending into a higher condition. The human mind has gone
 on to feel in the same way with reference to art in general.
 There is much to be said here, not with great regard to art,
 but intellectual perception even of reason in the sense of
 personal effort. The intention of the artist is to feel to
 be feeling as intellectual. Beyond words there is another con-
 dition with this kind of feeling, and that is the intellectual
 and vital, which is the basis for feeling. Beyond's feeling,
 however, goes somewhat beyond the intellectual.
 "Metaphysical intuition tends to be surviving of the sense
 first. That afterwards leads to the conscious and sense of
 itself, which is the law of intellectual and spiritual
 entered, which by positive science. For we do not remain
 any feeling from itself -- and we intellectual, however
 all the more intense part of it -- which we have not the con-
 dition of a long feeling, but the intellectual, however,
 And it is not merely a question of administering the sense, but
 through itself to become a part of itself, which must be assimilated
 and fused together, that in this fashion all the consciousness and
 present state which otherwise may be intelligible, have not been

their observations will be certain to neutralize each other. In this way only can the bare materiality of the known facts be exposed to view. Even in the simple and privileged case which we have used as an example, even for the direct contact of the self with the self, the final effort of distinct intuition would be impossible to any one who had not combined and compared with each other a very large number of analyses. . . .In this sense metaphysics has nothing in common with a generalization of facts, and nevertheless it might be defined as integral experience." *

Bowne's nearest approach made to a use of this theory of intuition is to be found in his "Personalism", where such theory is indicated but not clearly announced. We can see in Bowne's demand for knowledge as based on life something comparable to Bergson's "Intuitionism". He says: "The debates between the empirical and the a priori schools have been carried on in the assumption that the validity of knowledge absolutely depended upon it. This is only partly true. There are two questions at issue between these two schools, -- the form and the validity of knowledge; and these two are to some extent independent. The empiricist seeks to explain the suggested form of knowledge by the association of sensation, and here his failure is complete. The rationalist rightly points out that the form of experience, even as mental facts and without any reference to its validity, cannot be explained in this way." ** But both Hume and Kant

* ("Introduction to Metaphysics". pp.90-92)

** ("Personalism". Bowne. pp.306-307)

their observation will be certain to be mistaken. In
 this way only can the laws of nature be ex-
 posed to view. Even in the simple and privileged case which we
 have used as an example, even for the direct content of the will
 of the law, the first point of distinct intuition would be
 impossible in any one who had not cultivated and exercised his
 own mind a very large number of years. . . . In this sense
 metaphysics has nothing in common with a generalization of facts,
 and metaphysics is either defined as intuitive philosophy,
 or as a method of knowledge which is a use of this faculty of
 intuition as to be found in the "Formalism", where such things
 are indicated but not clearly enunciated. In our case in Kant's
 doctrine of knowledge as based on the something conceivable as
 Kant's "intuition". In other words: "The object of the
 intellect and the logical objects have been defined as in the
 assumption that the validity of knowledge essentially depends on
 it. This is only partly true. There are two questions of
 logic before these two objects -- the form and the validity of
 knowledge; and these two are to some extent independent. The
 logical laws to explain the content of knowledge by
 the association of intuition, and also his failure to complete.
 The rationalist rightly claims that the laws of experience,
 even as general laws and without any reference to its validity,
 cannot be explained in this way." -- But Kant does not say

* ("Introduction to Metaphysics", pp. 10-11)
 as "Rationalism", pp. 10-11

admit that we cannot practically rest in the result of relativity but must fall back on faith in the practical needs and interests of life.

"We are greatly helped in this matter by the growing insight into the practical nature of belief. One of the superstitions of a superficial intellectualism has been the fancy that belief should always be the product of formal logical processes. But, in fact, the great body of our fundamental beliefs are not deductions, but rather formulations of life. Our practical life has been the great source of belief and the constant test of its practical validity, that is, of its truthIn this way the great organism of belief is built up. It grows out of life itself. . . .At last life and experience themselves are installed as the great source of practical belief, and we have sufficiently recovered from the superstition of intellectualism to be able once more to trust the order of life and our moral and spiritual interest. . . .resolute adherence to experience is a counsel of perfection which cannot be too much insisted upon." *

"Not to form abstract theories, but to formulate and understand this personal life of ours is the first and last duty of philosophy. This must be done in its own terms. To tell us that this life as lived is a case of matter and motion is nonsense. To tell us that this life is explained by matter and motion is equally nonsense. This is simply to introduce an

* ("Personalism". pp. 310-313)

... that we cannot possibly get in the world of relative-
ity and must fall back on facts in the physical world and in-
terests of life.

"So we must begin in this matter by the general in-
sight into the essential nature of belief. One of the essen-
tial elements of a scientific intellectualism has been the theory
that belief should always be the product of formal logical con-
cesses. But, in fact, the great body of our knowledge has
been not deductive, but rather inductive of life. The
essential life has been the great source of belief and the
direct test of its practical validity, but it is not
... in this way the great concepts of belief in life are
grown out of life itself. At least life and experience have
always been regarded as the great source of logical belief.
and we have with scientific research how the essential part of
rationalism to be able to give more to what has been of life
And our moral and spiritual interests. . . . Therefore reference to
experience is a source of knowledge which is not to be
omitted from."

"Not to form abstract theories, but to formulate and inter-
stand this personal life of man is the first and last duty of
philosophy. Philosophy is in its own nature. To tell us
that this life as lived is a case of matter and matter is non-
sense. To tell us that this life is explained by matter and
nothing is equally nonsense. This is simply to introduce an

abstraction from experience as explanation of experience. . . .
 For us nature is only an order of uniformity, (established and maintained by an ever living and ever acting Intelligence and Will.... And this uniformity so far from (oppressing us or destroying our freedom), is the absolute presupposition of our having any freedom or rational life whatever." *

We must not think, however, that by this use of language Bowne could possibly be accused of sanctioning Bergson's "Intuitionism". Bowne makes the above statement, not at the beginning of his entrance upon philosophical discussion, but at its close, with reference to practical application to life. His interest is ethical and, above all, theistic and religious.

On the other hand, Bergson makes this reliance upon life more thorough going. (Knowledge is not relative if we exercise the instinctive and intuitive powers of the soul. (Bergson indicates not merely a practical application of life to experience, but an active participation of life in reality. Bowne exhibits a practical rise above relativism. Bergson seeks to transcend relativism and reaches the absolute by way of intuition. Bergson seeks not only belief as does Bowne, but knowledge.

* ("Personalism". Bowne. pp.318-319)

... distinguished from experience as a result of its...
 set of nature as well as order of nature, established and
 maintained by an ever living and ever acting intelligence and
 will... and this will... as the agent's...
 studying our... is the agent's...
 having any freedom or rationality...
 We must not think, however, that by the use of language
 these words possibly be supposed to denote...
 conditional... I have seen the above...
 beginning of his...
 at its close, with reference to practical application to life,
 and interest in ethical and above all, political and religious.
 On the other hand, perhaps...
 were through...
 and...
 does not...
 and, but an active participation...
 and...
 and...
 and...
 and...

(...)

CHAPTER II.

SUBJECTIVE FACTORS IN THOUGHT, SPACE AND TIME.

In our contrast of these two systems, we now turn from the more general consideration of the possibility of knowledge to a more specific examination of certain radical differences in the respective treatments of the categories of time and space made by these writers. As previously noted, with Bowne the method is rational, while with Bergson the empirical predominates.

Bowne's antipathy to experimental psychology and the empirical attitude of mind is seen in the following: "What is the metaphysical nature of space and how is it related to the things which are said to be in it? We exclude all inquiry into the psychological genesis of the idea as irrelevant; for the history of a notion never decides its meaning and validity when it appears. Every idea has a psychological history which might conceivably be written; but the meaning and worth of an idea can be determined only by study of the idea itself as given in consciousness. Neither the geometrical nor the metaphysical properties of space (and, incidentally of time also,) can be discovered by either physiological or psychological theorizing." *

Bergson begins his discussion of the intuition of time by a careful analysis of states of consciousness. His entire

* ("Metaphysics." Bowne. p. 124)

PSYCHOLOGICAL FACTORS IN THE HISTORY OF THE IDEA OF TIME.

In our account of time the question, as we have seen, is not merely one of the more general considerations of the possibility of space-time, but also of a more specific consideration of certain aspects of time in the narrative treatment of the material of time and space as given by these writers. We have already seen, with regard to the work of these writers, that the work of these writers is not merely a philosophical problem.

Some of the writers in experimental psychology and the physical sciences of time is seen in the following: "Time is the metaphysical nature of time and it is related to the things which are said to be in it. It extends all things into the psychological genesis of the idea of time: the history of a notion never ceases to be a history and it is not a history. Every idea has a psychological history which is not necessarily written out in words and facts of an idea are not determined only by the facts of its given in consciousness. Whether the historical for the metaphysical properties of space (and, incidentally of time) also, can be discovered by either biological or psychological theories."

But we begin our discussion of the history of time by a careful analysis of states of consciousness. His entire

* "Metaphysics," Lecture, p. 104.

discussion in "Time and Free Will" is psychological and empirical, and nowhere does he go outside the realm of human personality. Universal mind, as a deus ex machina, does not enter in either as foundation or as buttress for his argument.¹ He deals with time in its bearing upon one of the great puzzles of human life and thought, namely freedom and necessity.

Bowne starts with the Kantian hypothesis and seeks to render it more comprehensive by adding to it a definite theistic interpretation. The following brief outline of Bowne's teaching makes evident this theistic intent.

"Thought is the source of temporal relations; and for their meaning (we must fall back upon experience,¹) rather than any reflection on abstract temporal category.²

"Time, then, is not an ontological fact but is essentially a function of self-conscious intelligence." *

"Time certainly is something real, namely, the real form of our internal intuition." **

"There remains the empirical reality of time only, as the condition of all our experience, while absolute reality cannot, be conceded to it. Time is nothing but the form of our internal intuition. (Take away the peculiar condition of our sensibility, and the idea of time vanishes, because it is not inherent in the objects, but in the subject that perceives them." ***

* ("Metaphysics". Bowne. p.186)

** ("Kant and Spencer". Bowne. p.153)

*** (Ibid p.154, quoting Kant.)

...of the world is "Time and Space" is metaphysical and ep-
 istemic, and that does not mean the realm of human
 consciousness. University also, as a field of knowledge, does not
 enter in either as foundation or as subject for its argument.
 He deals with time in its bearing upon one of the great ques-
 tions of human life and thought, namely freedom and necessity.
 Some starts with the scientific hypothesis and seeks to
 render it more comprehensive by adding to it a definite theo-
 retical foundation. The following will outline of Swamy's
 teaching which underlies this scientific method.
 "Thought is the source of temporal relations; and for
 their meaning we must fall back upon experience, rather than
 any relation in abstract temporal category.
 "Time, then, is not an ontological fact but is essentially
 a function of self-conscious intelligence."
 "Time certainly is something real, namely, the real form
 of our internal intuition," as
 "There remains the scientific reality of time only, as the
 condition of all our experience, which scientific reality cannot
 be considered in itself. Time is real but the form of our inter-
 nal intuition. Let us away the scientific condition of our scien-
 tific, and the form of time vanishes, because it is not inter-
 nal in its essence, but is the subject that perceives them." as

(1) Philosophical Inquiry, p. 152
 as "Time and Space", p. 152
 and 7 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Time according to Bowne can be interpreted only from the side of experience, and more especially from that of self-consciousness. Experience is not in the present as a separate point of time, but rather that present is in experience. We cannot define the present as a point in independent time as it is only a special relation in consciousness.

"Time is primarily the form of individual experience, and would remain relative to the individual were it not for the existence of the cosmic order which marks the cosmic time, and furnishes the common timepiece by which our individual times are regulated. But even this does not remove the relativity of time. We have seen that this process gives no time order until it is related to conscious intelligence; and the temporal judgment will vary with the powers of the one judging." *

"---We cannot have experience in the present, but we constitute the present by the actual in experience. But the range of this experience varies with the range of our powers.

"The present, then, is no point in absolute time, but a relation in conscious experience; and its measure and contents depend on the range of our powers. Every intellect transcends time as a mental form; but the finite mind remains under the law of time as a limitation, by virtue of its finitude." **

Bowne's complete discussion of time may be summed up as follows. Time is primarily an order of relation in our

* ("Metaphysics." p.188)

** (Ibid p.189)

...can be interpreted only from the
 side of the ... and more especially from that of self-
 ... is not in the present as a separate
 ... but rather that present is in ...
 ... the present as a point is independent time as it
 is only a special relation in ...

"Time is primarily the form of individual experience, and
 you'll remain relative to the individual even if not for the ex-
 ... of the ... which is the ...
 ... by which the individual times
 ... the ... the relativity
 ... that this ... the order
 ... to ... the ...
 ... will vary with the ..."

... in the present, but we can-
 ... in ...
 ... with the range of our powers.
 ... in ... but a re-
 ... and ... de-
 ... Every individual ...
 ... the ...
 ... by virtue of its ..."

... of time may be summed up as
 ... in our

...
 ...

experience. We are not to think of the possibility of real ontological time separate from intelligence in which things and events really occur.) Time and change must be referred to intelligence as cause. It is finally impossible to think if we give substantiality to either time or change, apart from thought.

Experience gives color and meaning to time. The self experiences time in an indivisible act and hence is conscious of temporal relations. The intellect has the time-relating power within, and without the unifying act of the unitary self the experience of time would be impossible.

Furthermore, in all his discussion of time Bowne is insistent that while time may well be something substantial and real with relation to our thought it is not however to be considered as something real and substantial with relation to all thought. Theism results. There is no alternative for otherwise thought itself would be impossible.

Like Bowne, Bergson offers a distinct thesis in his theory of time; but unlike Bowne, he does not make use of the rational procedure of Kant. The a priori gives way to the empirical with its analysis of states of consciousness. (Bowne studies the ontology of time and asks not "how we come to a notion of time, but what it stands for after we get it." * Bergson reverses this order and examines the time experience itself in actual states of consciousness.) The question of process is a

* ("Metaphysics". Bowne. p.164)

experience. We are not to think of the possibility of real
 ontological time emerging from intelligence in which things
 and events really occur. Time and causation must be referred to
 intelligence as cause. It is finally impossible to think if
 we give substantiality to either time or matter. Matter from
 thought.

Experience gives color and meaning to time. The self
 experiences that in its individual act and from its conscious
 of temporal relation. The intellect has the time-existing
 never distinct, and without the underlying act of the unitary self
 the experience of time would be impossible.

Furthermore, in all its discussion of time there is in-
 sistence that time may well be something substantial and
 real with relation to our thought. It is not however to be con-
 sidered as something real and substantial with relation to all
 thought. Things really exist. There is no difference between things
 with time and without time in reality.

It is clear, however, that a distinct reality in its theory
 of time for unitary being, we does not make use of the rational
 procedure of Kant. The *Ästhetik* gives way to the *Logik* and
 with the analysis of states of consciousness. Some studies
 the necessity of time and space, but we see in a notion of
 time, but what it stands for when we get it? A language re-
 verses this order and explains the conditions itself in
 actual states of consciousness. The question of process is a

* ("Necessity-act", *Lawrence, p. 124*)

vital matter with Bergson and bears upon his interpretation of the category of time.

Bergson's treatment of time is purely psychological. If we are to measure time we must first deal with the intensity of conscious states. (But, how is quantity to be conceived with relation to such states? Hence his first question is: "Can there be quantitative differences in conscious states?")

Bergson makes the point that the term "magnitude" can be applied only to space, and that if we are to speak of intensity with reference to states of consciousness, the terms "magnitude" and "intensity" are to be understood not in a quantitative but in a qualitative sense. We cannot speak of the magnitudes of consciousness. Hence Bergson distinguishes two sorts of quantity, one applicable to the extensive which can be measured, and one applicable to the intensive which cannot be measured. An in-extensive quantity is a contradiction. Neither can we distinguish intensity with reference to objective causes, for we judge of "intensity of effect without even knowing the nature of the cause, much less its magnitude: indeed, it is the very intensity of the effect which often leads us to venture an hypothesis as to the number and nature of the causes, and thus to revise the judgment of our senses, which at first represented them as insignificant." *

Furthermore, according to Bergson we cannot explain intensity by any molecular movement within the organism. At

* ("Time and Free Will." p.5)

Vital rather than being and being and his interpretation of the category of life.

Weyl's treatment of life is really psychological. It is not to be confused with the intensity of conscious states. But, how is quantity to be perceived with relation to such states? Hence his first question is: "Can there be qualitative differences in conscious states?"

Weyl then asks the question: "Can the term 'qualitative' be applied only to space, and that it be one of intensity with reference to states of consciousness, the term 'qualitative' and 'intensity' are to be understood only in a qualitative but in a qualitative sense. He cannot speak of the magnitude of consciousness. Hence Weyl's distinction between the sorts of quantity, and analogous to the extensive which can be measured, and

one analogous to the intensive which cannot be measured. An in-extensive quantity is a contradiction. Matter can be distinguished accordingly with reference to qualitative causes, for we speak of "intensity of effect" without ever knowing the nature of the cause, and that the qualitative; though it is the very intensity of the effect which often leads us to venture on generalizations as to the nature and nature of the cause, and thus to raise the question of our common, which is first represented

then as "intensity".

Consequently, according to Weyl, we cannot explain intensity by any kind of movement within the organism. At

this stage in his argument, Bergson is seen to be thoroughly Kantian in that he clearly distinguishes between the sensation, that is, the actual nerve-changes or brain-changes and the mental reaction which gives the perception. Clearly this is an acceptance of the theory of the Kantian in preference to that of the Sensational School. Bergson at this point could have insinuated a discussion of the unitary character of the self and so have strengthened his argument.

By studying the facts of desire, the emotions of joy and sorrow, Bergson finds that their successive stages are in reality qualitative, and in no sense quantitative. The increasing intensities are really different feelings. Aesthetic and moral feelings also clearly reveal, not a quantitative, but a qualitative, difference. Moreover from a study of the purely physiological conditions we see that the intensity of violent emotions and deep-seated feelings (which are simple states) is measured by the magnitude of the involuntary movement which follows the stimulus. The sensations of sound, of pitch, of heat and cold, become effective and are measured by the attendant reactions. We do not measure the sensations by any quantitative scheme, but by the extent of the organism involved. We cannot speak of the magnitudinal differences of sensations. Our terms must always be qualitative.

Hence Bergson concludes that the notion of intensity presents itself under a double aspect,—"According as we study the states of consciousness which represent an external cause or

This state is his argument. Wilson is seen to be essentially
 leading in that he clearly distinguishes between the question
 that is, the actual sense-contents of these-contents and the
 the logical sense given the proposition. Clearly that is an
 appearance of the theory of the sense in opposition to that
 of the traditional theory. However, this point would have
 indicated a distinction of the unity of sense of the sense
 and so have distinguished the theory.

By studying the sense of sense, the distinction of the sense
 content, sense and sense that their sense-contents are in sense-
 /3. Qualitative, and in no sense quantitative. The increasing
 qualitative is really different feeling. /3. Qualitative and sense-
 feeling with their power, not a quantitative, but a qualitative-
 time, sense-contents. However, from a study of the sense-contents
 logical conditions we see that the possibility of logical sense-
 those are sense-contents feeling (and its sense-contents) is
 measured by the rationality of the quantitative sense-contents with
 low the standard. The qualitative of sense, of sense, of sense
 one side, because of sense and sense by the standard of
 which. We do not measure the standard of any quantitative
 sense, but by the extent of the qualitative feeling. The sense-
 level of the quantitative difference of sensation. The sense-
 that sense is qualitative.

There is a sense-contents that the sense of sense-contents
 sense itself under a sense-contents, "sensation" as the sense the
 state of sense-contents from which an external sense of

those which are self-sufficient. In the former case the perception of intensity consists in a certain estimate of the magnitude of the cause by means of a certain quality in the effect; -- in the second case, we give the name of intensity to the larger or smaller number of simple psychic phenomena which we conjecture to be involved in the fundamental state; it is no longer an acquired perception, but a confused perception. In fact, these two meanings of the word usually intermingle, because the simpler phenomena involved in an emotion or an effort are generally representative, and because the majority of representative states, being at the same time affective, themselves include a multiplicity of elementary psychic phenomena. The idea of intensity is thus situated at the junction of two streams, one of which brings us the idea of extensive magnitude from without while the other brings us from within, in fact from the very depths of consciousness the image of an inner multiplicity." *

The question now arises as to the relation of this image to number. Is this relation capable of numerical statement or is it something entirely apart from numerical consideration? We find that there are two kinds of multiplicity:-- "Quantitative or discrete multiplicity involves the intuition of space but the multiplicity of conscious states is wholly qualitative. This unfolding multiplicity constitutes duration, which is a succession without distinction, an interpenetration of elements so heterogeneous that former states can never recur. The idea of

* ("Time and Free Will". pp. 72,73)

a homogeneous and measurable time is shown to be an artificial concept, formed by the intrusion of the idea of space into the realm of pure duration." *

In this connection Bergson introduces a discussion of number and develops the thought that we cannot form an idea of number without an accompanying intuition of space. He says, - "Every number is a collection of units, and on the other hand every number is itself a unit. When we assert that number is a unit, we understand by this that we master the whole of it by a simple and indivisible intuition of the mind; this unity thus includes a multiplicity, since it is the unity of a whole. It seems, then, that there are two kinds of units, the one ultimate, out of which a number is formed by a process of addition, and the other provisional, the number so formed, which is multiple in itself and owes its unity to the simplicity of the act by which the mind perceives it. -- By looking more closely into the matter, we shall see that all unity is the unity of a simple act of the mind, and that, as this is an act of unification, there must be some multiplicity for it to unify." **

Bergson goes on to ask "If, in order to count states of consciousness, we have to represent them symbolically in space, is it not likely that this symbolical representation will alter the normal conditions of the inner perception? -- Representative sensation, looked at in itself, is purely quality; but seen

* ("Time and Free Will," Translator's Preface VII.)

** ("Time and Free Will." p. 80)

a homogeneous and continuous field of force (or an activity)
exists, formed by the interaction of the laws of these fields
with the laws of the field.

In this connection, however, it is necessary to distinguish
between two cases: the first is that of a continuous field of
force, in which the laws of the field are continuous, and the
second is that of a discrete field of force, in which the laws
of the field are discrete. In the first case, the field is
continuous, and the laws of the field are continuous. In the
second case, the field is discrete, and the laws of the field
are discrete. In the first case, the field is continuous, and
the laws of the field are continuous. In the second case, the
field is discrete, and the laws of the field are discrete.

It is clear that the laws of the field are continuous in the
first case, and discrete in the second case. In the first case,
the field is continuous, and the laws of the field are
continuous. In the second case, the field is discrete, and the
laws of the field are discrete.

* "The laws of the field are continuous in the first case, and
discrete in the second case." (See also the text on page 43.)

through the medium of extensity, this quality becomes in a certain sense quantity, and is called intensity. In the same way our projection of our psychic states into space in order to form a discrete multiplicity is likely to influence these states themselves and to give them in reflective consciousness a new form, which immediate perception did not attribute to them. -- Now, when we speak of time, we generally think of a homogeneous medium in which our conscious states are ranged alongside one another as in space, so as to form a discrete multiplicity. Would not time, thus understood, be to the multiplicity of our psychic states what intensity is to certain of them, - a sign, a symbol, absolutely distinct from true duration?" *

Students of Bowne will readily recall the manner in which he discussed time with reference to "before and after". Whether or not his argument intended it, we could easily see that there was in his thought a need for this precise distinction which Bergson makes. The very way in which Bowne would speak of "before and after" and divide it with his gesture created the impression that there was in his measurement of time a failure to apply the term in its qualitative sense as distinguished by Bergson. His illustrations were mainly of the spatial and quantitative order and there is not to be found in his writings a suggestion that he clearly made this important distinction.

* ("Time and Free Will". p.90)

through the medium of extension. This quality becomes in a certain sense reality. And is called intensity. In the same way our projection of any psychic state into space is order to form a definite individuality is liable to undergo these stages themselves and to give rise to reflective consciousness a new form, which involves determining its own reality - one to them. -- Now, when we speak of lines, we generally think of a homogeneous medium in which the continuous states are formed along the axis as in space, so as to form a definite individuality. Would not lines, then, necessarily be to the individuality of any psychic state that reality is to certain of them, -- a sign, a symbol, absolutely distinct from the individuality.

Products of power will readily recall the order in which we discussed the will reference to "before and after". Whether or not his judgment founded in, we don't really see that there was in his thought a new or the creative distinction which he was making. The very way in which he would speak of "before and after" was identical with his nature created the impression that there was in his resurrection of the will to apply the term in its qualitative sense as distinguished by Bergson. His illustrations were really of the spatial and quantitative order and there is not to be found in his writings a suggestion that he clearly made this important distinction.

A Little more than will, p. 100

To follow Bergson at this point requires extreme care. Space is to be defined as homogeneous. How about time? Is it homogeneous? If so, time must therefore be considered as spatial and such time is simply a "bastard space". If space is to be defined as homogeneous "it seems that inversely every homogeneous and unbounded medium will be space. For homogeneity here consists in the absence of every quality and it is hard to see how two forms of the homogeneous could be distinguished from one another. Nevertheless it is generally agreed to regard time as an unbounded medium, different from space but homogeneous like the latter: the homogeneous is thus supposed to take two forms, according as its contents co-exist or follow one another. It is true that, when we make time a homogeneous medium in which conscious states unfold themselves, we take it to be given all at once, which amounts to saying that we abstract time from duration. This simple consideration ought to warn us that we are thus unwittingly falling back upon space, and really giving up time. Moreover, we can understand that material objects, being exterior to one another and to ourselves, derive both exteriorities from the homogeneity of a medium which inserts intervals between them and sets off their outlines; but states of consciousness, even when successive, permeate one another and in the simplest of them the whole soul can be reflected. We may therefore surmise that time, conceived under the form of a homogeneous medium, is some spurious concept, due to the trespassing of the

to follow directly at this point negative exists case.
 Given it to be defined as homogeneous. Now about itself is
 it homogeneous? It is not. It is therefore to be considered as
 spatial and such that it is truly a "metric space". It seems
 to be called an "order" in that it seems that for itself every
 homogeneous and bounded metric will be given. The homo-
 geneity here consists in the absence of every quality and it
 is hard to see how two forms of the homogeneous could be dis-
 tinguished from one another. Nevertheless it is generally
 agreed to have two as an undivided metric, different from
 those but homogeneous like the latter: the homogeneous is
 thus supposed to take two forms, according as its contents do-
 exist or follow one another. It is the fact, when we make
 the homogeneous metric in which conditions states itself
 themselves, we take it to be given all at once, which amounts
 to saying that we abstract time from duration. This single
 consideration ought to warn us that we are thus unwittingly
 falling back upon time, and really giving us time. However,
 we can understand that abstract objects, being exterior to one
 another and to ourselves, derive their characteristics from the
 homogeneity of a metric which inserts intervals between them
 and sets off their outlines; but states of consciousness, even
 when successive, formate one another and in the simplest of
 them the whole soul can be reflected. As for duration, we
 give that first, conceived under the form of a homogeneous met-
 ric, is now various content, and in the transcendence of the

idea of space upon the field of pure consciousness. At any rate, we cannot finally admit two forces of the homogeneous, time and space, without first seeking whether one of them cannot be reduced to the other.

"Now, externality is the distinguishing mark of things which occupy space, while states of consciousness are essentially external to one another, and become so only by being spread out in time, regarded as a homogeneous medium. If, then, one of these two supposed forms of the homogeneous, namely, time and space, is derived from the other, we can surmise a priori that the idea of space is a fundamental datum. But misled by the apparent simplicity of the idea of time, the philosophers who have tried to reduce one of these ideas to the other have thought that they could make extensity out of duration. While showing how they have been misled we shall see that time conceived under the form of an unbounded and homogeneous medium, is nothing but the ghost of space haunting the reflective consciousness." *

Thus does Bergson argue that pure duration, divorced from "the ghost of space" is wholly qualitative and our only way of measuring duration must naturally be symbolic. Time as dealt with by the astronomers and scientists in general is time treated as static. They do not study motion itself, but the moving body at rest in certain points of space. In other words, they utterly banish time as duration, and treat all

* ("Time and Free Will". pp. 98,99)

idea of space and the field of many consciousness. At any
 rate, we cannot finally admit the field of the homogeneous,
 like extension, without first seeking another one of these
 cannot be reduced to the other.

"Now, externality is the distinguishing mark of things
 which occupy space, while states of consciousness are essen-
 tially external to one another, and become so only by being
 spread out in time, regarded as a homogeneous medium. If,
 then, one of these two spread forms of the homogeneous,
 namely, time and space, is derived from the other, we per-
 suade ourselves that the idea of space is a fundamental de-
 rive. But raised by the apparent sterility of the idea of
 time, the philosophers who have tried to reduce one of these
 ideas to the other have the fact that time could not exist
 outside duration. While seeking how they have been raised we
 shall see that time conceived under the form of an unbounded
 and homogeneous medium, is not only the great of space
 haunting the reflective consciousness." a

There could be no error that pure duration, divided from
 "the great of space" is really qualitative and our only way of
 measuring duration was actually be symbolic. Time as itself
 with by the astronomer and scientists in general is time
 treated as static. They do not study motion itself, but the
 moving body at rest in certain points of space. In other
 words, they strictly define time as duration, and treat all

a ("Time and Space Will", pp. 10, 11)

things as static. Time in the sense of qualitative duration is apart from their thought.

This distinction is important. We thus recognize that there are two kinds of multiplicity, - a quantitative and qualitative, and that only the qualitative form of multiplicity can be applied to time. However it is impossible to arrive at this truth without applying the method of intuition. By eliminating the superficial psychic states we no longer perceive homogeneous time or measure duration, but really feel it to be wholly qualitative. There are consequently two forms of multiplicity; one which can be measured statically and apart from life and consciousness; the other which must be qualitatively considered.

"In order to recover this fundamental self, as the unsophisticated consciousness would perceive it, a vigorous effort of analysis is necessary, which will isolate the fluid inner states from their image, first refracted, then solidified in homogeneous space. In other words, our perceptions, sensations, emotions and ideas occur under two aspects: the one clear and precise, but impersonal; the other confused, ever changing, and inexpressible, because language cannot get hold of it without arresting its mobility or fit it into its commonplace forms without making it into public property. If we have been led to distinguish two forms of multiplicity, two forms of duration, we must expect each conscious state taken by itself, to assume a different aspect according as we consider it within

... as stated. This in the sense of qualitative quantity
is seen from their formula.

This distinction is important. In fact, the qualitative part

there are two kinds of qualitative, - a descriptive and

qualitative, and that only the qualitative form of quali-

ty can be applied to time. However, it is impossible

to arrive at that point without applying the nature of time-

ness. By including the qualitative part, it is no

longer possible to understand time or beyond duration, but qual-

ity itself is to be really qualitative. There are consequently

two forms of qualitative: one which can be measured and quali-

ty and exact time and exactness: the other which must

be qualitatively considered.

In order to recover this qualitative with the theo-

retical and philosophical work, it is a very great effort

of analysis is necessary, which will lead to the whole form

states from their laws, that is, from their qualitative in-

dependent laws. In other words, and especially, since

time, quality and exactness must be separated: the ex-

act and precise, but qualitative: the other, however, over-

coming, and independent. These laws are not yet fully

of it without suggesting the possibility of fit in the common-

place laws without raising the qualitative property. It is not

seen how to distinguish the forms of qualitative, two forms of

analysis, we must expect some qualitative state taken by itself.

To assume a different exactness as we consider it with

a discrete multiplicity or a confused multiplicity, in the time as quality, in which it is produced, or in the time as quantity, into which it is projected." *

At this point we should notice Bergson's refutation of the associationalists' theory. "The mistake of associationism is that it did away with the qualitative element in the act to be performed and retained only the geometrical and impersonal element; with the idea of this act, thus rendered colorless, it was then necessary to associate some specific difference to distinguish it from many other acts. But this association is the work of the associationist philosopher who is studying mind, rather than that of the mind itself." **

The application of this line of argument to the question of freedom becomes apparent when we consider the confused conception of popular thought brought about by the solidifying effects of language and symbolism. Bergson contends that the whole problem of freedom and necessity is solved at once when the intuitional method is applied and life permitted to express its conviction. The main drift of his argument is that our difficulties arise from taking up our stand after the act has been performed, and from applying the conceptual method of argumentation. "From the point of view of the living, developing self, these difficulties are shown to be illusory, and freedom, though not definable in abstract or conceptual terms,

* ("Time and Free Will". p. 129)

** (Ibid p. 161)

a discrete individuality or a concrete individuality, in the
time at which it is produced, or in the time at
which it is rejected."

At this point we should notice Hegel's definition of
the associationist theory. "The nature of association-
ism is that it begins with the qualitative element in the
act to be performed and retains only the geometrical and in-
determinate elements: the idea of this act, thus rendered
abstract, is not necessary to associate some concrete
differences or distinctions in the act itself. But this
is not the aim of the associationist philosopher who
is starting with, rather than that of the 'act itself'."

The application of this line of argument to the question
of freedom becomes apparent when we consider the contrasted con-
ception of freedom brought about by the scientific
effects of language and symbols. Hegel writes that the
whole notion of freedom and necessity is solved in one when
the individual action is judged and the necessity to ex-
press the individual. The main defect of his argument is that
our distinction arises from taking as one thing the act
has been performed, and from applying the conceptual method of
argumentation. "From the point of view of the living, devel-
oping self, these distinctions are shown to be illusory, and
therefore, though not scientific in a strict or conventional sense,

1 ("The act and the will", p. 102)
see (p. 102)

is declared to be one of the clearest facts established by observation." *

As this part of Bergson's discussion bears but incidentally upon our general theme we quote only his final conclusions. "Every demand for explanation in regard to freedom comes back, without our suspecting it, to the following question: 'Can time be adequately represented by space?' to which we answer; Yes, if you are dealing with time flown; No, if you are speaking of time flowing. Now, the free act takes place in time which is flowing and not in time which has already flown. Freedom is therefore a fact, and among the facts which we observe there is none clearer. All the difficulties of the problem, and the problem itself, arise from the desire to endow duration with the same attributes as extensity, to interpret a succession by a simultaneity, and to express the idea of freedom in a language into which it is obviously untranslatable." **

Bergson in "Time and Free Will" takes issue with the Kantian and modern psychology which show that we perceive things through the medium of certain forms borrowed from our constitution. He sets himself the opposite problem and asks: "...whether the most obvious states of the ego itself, which we believe that we grasp directly, are not mostly perceived through the medium of certain forms borrowed from the external

* ("Time and Free Will", Translator's Preface VIII.)

** ("Time and Free Will". p. 221)

is directed to the fact of the physical facts established by

observation." a

as this part of Bergson's discussion bears but insignifi-

cantly upon the general issue we must only give the general

idea. The very nature of the explanation is related to freedom

and not to the physical facts, as the following

question: how can we adequately understand it, and, do

which we answer: yes, if you are dealing with the fact; no,

if you are speaking of the theory. Now, the two are taken

into account in the same way as in the case of the other

cases. The same is true of the other cases, and among the

facts which we observe there is none which is. All the diffi-

culties of the problem, and the various facts, arise from the

same cause, and are related with the same physical and metaphysical

to interpret a suggestion by a timeliness, and to express the

idea of freedom in a language that which is continuously de-

terministic." a

Belong to "the fact of the matter" and with the fact-

the fact of the matter, and the fact of the matter, and the fact

of the matter, and the fact of the matter, and the fact of the

of the matter, and the fact of the matter, and the fact of the

of the matter, and the fact of the matter, and the fact of the

of the matter, and the fact of the matter, and the fact of the

of the matter, and the fact of the matter, and the fact of the

of the matter, and the fact of the matter, and the fact of the

4 ["The fact of the matter" (1911).
a ["The fact of the matter" (1911).

world which thus gives us back what we have lent it. -----
 For, assuming that the forms alluded to, into which we fit matter, come entirely from the mind, it seems difficult to apply them constantly to objects without the latter soon leaving a mark on them: by then using the forms to gain a knowledge of our own person we run the risk of mistaking for the coloring of the self the reflection of the frame in which we place it, i.e. the external world. But one can go further still and assert that forms applicable to things cannot be entirely our own work, that they must result from a compromise between matter and mind, that if we give much to matter we probably receive something from it, and that thus, when we try to grasp ourselves after an excursion into the external world, we no longer have our hands free." *

Mind is in no sense spatial and the intensity of a simple psychic state is purely quality and our conscious states are not a discrete multiplicity, but rather a qualitative multiplicity. "Outside us, mutual externality without succession; within us, succession without mutual externality," this is the Bergson ultimate of intuition. "Duration - restored to its original purity, will appear as wholly qualitative multiplicity, an absolute heterogeneity of elements which pass over into one another." **
 "In whatever way, - freedom is viewed, it cannot be denied except on condition of identifying time with space; it cannot be defined except on condition of demanding that space should

* ("Time and Free Will." p. 223)

** (Ibid pp. 227-229)

adequately represent time; it cannot be argued about in one sense or the other except on condition of previously confusing succession and simultaneity. All determinism will thus be refuted by experience."*

There are, so to speak two different selves,"- one of which is, as it were, external projection of the other, its spatial and, so to speak, social representation. We reach the former by deep introspection, which leads us to grasp our inner states as living things constantly becoming, as states not amenable to measure, which permeate one with another and of which the succession in duration has nothing in common with juxtaposition in homogeneous space. But the moments at which we thus grasp ourselves are rare, and that is just why we are rarely free." **

"hant's great mistake was to take time as a homogeneous medium. He did not notice that real duration is made up of moments inside one another, and that when it seems to assume the form of a homogeneous whole, it is because it gets expressed in space. Thus the very distinction which he makes between space and time amounts at bottom to confusing time with space, and the symbolical representation of the ego with the ego itself. He thought that consciousness was incapable of perceiving psychic state otherwise than by juxtaposition, forgetting that a medium in which these states are set side by side and distinguished from one another is of course space, and not duration. He was

* ("Time and Free Will." p.230)

** (Ibid p.231)

thereby led to believe that the same states can recur in the depths of consciousness, just as the same physical phenomena are repeated in space; this at least is what he implicitly admitted when he ascribed to the casual relation the same meaning and the same function in the inner as in the outer world. Thus freedom was made into an incomprehensible fact." *

The last passage makes clear that from the standpoint of the living and conscious being time is a totally different thing from discrete homogeneous time in the sense in which science uses it. "--We should see that if these past states cannot be adequately expressed in words or artificially reconstructed by a juxtaposition of simpler states, it is because in their dynamic unity and wholly qualitative multiplicity they are phases of our real and concrete duration, a heterogeneous duration and a living one. We should see that, if our action was pronounced to be free, it is because the relation of this action to the state from which it issued could not be expressed by a law, this psychic state being unique of its kind and unable ever to occur again. We should see, finally that the very idea of necessary determination here loses every shred of meaning, since there cannot be any question either of foreseeing the act before it is performed or of a reasoning about the possibility of the contrary action once the deed is done, for to have all the conditions given is, in concrete duration, to place one's self at the very moment of the act and not to foresee it." **

* ("Time and Free Will." p.232) ** (Ibid p.239)

thereby led to believe that the same thing was going on in the
 course of the experiment. Just as in the case of physical processes
 are repeated in detail; this at least is what is usually said -
 either when we explain in the same relation the same meaning
 and the same function in the domain of the water world. There
 from it was said to be "independent of the fact."

The fact remains, however, that from the standpoint of
 the living and conscious being there is a totally different
 thing from discrete homogeneity, even in the sense in which
 science uses it. -- It should be said that in these past centuries
 of our age, especially in the last few decades, there has been
 a process of a "destruction of the unity of the world," it is because in
 their operations living and feeling organisms are not identical; they are
 objects of our soul and conscious operation, a heterogeneous being -
 living and feeling one. -- We should say that, if we explain the
 phenomenon in the living, it is because the relation of this action
 to the water from which it issues could not be explained by a
 law, the physical state of the water in its kind and under every
 condition. -- We should say, finally, that the very fact of
 necessary development from light energy, which is essential, since
 there cannot be any question either of formation or of the before
 it is followed by a reasoning about the possibility of the
 contrary action and the doubt as to how far it will go. --
 division itself is, in concrete function, no longer a self at
 the very moment of the act and not to be followed by."

"The Living and the World" (1907) - see page 100

In the above discussion of time, there is no decided opposition to the Kantian system, if we consider the sweep of Bergson's thought and do not deal with unessentials. Bergson everywhere takes the reactive nature of thought for granted. When he considers the forms of intellect and their bearing upon experience Bergson makes a decided advance over Kant's "Critique". Throughout "Time and Free Will" Bergson does not definitely consider the external reality of time and space -- that may or may not be -- rather does he undertake to define and distinguish them and show how they can be understood only by a vital intuition in experience. Time is not something that goes on necessarily apart from all intelligence, time is rather the form which intelligence and intuition give to experience. Bergson deals with time not in a discrete, spatial sense but by a new method, namely, - intuition. For him the ultimate understanding of time is realized only in a vital concept of duration, a duration no longer understood as quantitative but as qualitative. All of which argument amounts to the statement that to understand the forms of thought we must add to the processes of intellect the knowledge-finding power realized by intuition in experience.

In the above discussion of the...
 along to the...
 and a...
 everywhere...
 they be...
 of...
 "Philippine",...
 definitely...
 that way...
 and...
 a...
 goes on...
 the...
 version...
 a...
 regarding...
 a...
 clear...
 understood...
 interest...
 expression.

CHAPTER III.

OBJECTIVE VALIDITY OF THE SUBJECTIVE FACTORS.

The preceding chapters indicate the methods whereby Bowne and Bergson have developed their divergent epistemologies. An attempt has been made to contrast the different methods employed by the respective characterizations of knowledge as rational and intuitional. This difference is strikingly apparent where the philosophers discuss time and space as forms of thought related to experience. While Bowne makes full use of the purely à priori method, Bergson adds to this rational procedure the empirical method of intuition. The unitary character of the ego is one of the main issues with Bowne and is fully demonstrated in his writings. While this subject is not of so vital moment with Bergson, it is nevertheless implied and in several passages announced with almost axiomatic certainty. By an examination of the treatments of the deeper questions of time and space we shall discover further contrasts in the conclusions of these thinkers regarding the question as to the external validity of the subjective factors in the thought process.

In "Time and Free Will" Bergson has shown that we attain a clear understanding of time, not from the standpoint of mathematics and language, but from the standpoint of experience and life. Freedom is realized as a fact. The problem of the objective validity of our subjective processes is treated with thoroughness in "Matter and Memory". The principle of

intuition as a revealer of knowledge is therein applied to the problem of the relation of the mind to the body and of the body to all external reality. Bergson's conclusion is that we have, by the agency of thought and nerve with its attendant sensation, actual participation in the external world. There are no "noumena" apart from thought.

Professor Bowne approaches this discussion from an entirely different angle. He does not hold to any demonstration from psychology, rather is he concerned with the underlying ontological and rational considerations. Bowne is eager to prove the reality and unitary character of the soul. This question does not seem to obtrude itself to an appreciable extent in Bergson's thought. Bowne seeks to discredit the associationalist by showing that experience is possible only if there is a unifying factor within the mind itself. He discusses this from purely rational rather than experimental grounds. Bowne's position is seen from the following paragraph.

"It is possible to do detailed work in psychology without in any way going into the metaphysics or the presuppositions of psychology. Detailed studies of the senses, or the general dependence of the mental life on physical conditions, and pretty much all special questions, are of this sort. Such inquiries can be carried on on the general basis of experience without ever asking how experience is possible. It ought, however, to be possible to distinguish between this familiar fact and the denial which the phrase seems to imply. Such phrases are not

needed to express either the problem or its solution. The fact of experience is exhausted in the discovery that the mental life has physical processes for its concomitant; and the aim of the wise man must be to find the law of this concomitance, without confusing or distorting the fact by importing materialistic suggestions into it in the guise of figures of speech." *

Bergson is concerned with demonstrating that through the body one does actually enter into reality. For Bowne this is no question at all. "No theory whatever can escape this sharp antithesis of the physical and the mental. It is no special difficulty of spiritualism, but lies with equal or even greater force against materialism. The materialist and the believer in double-faced substances cannot give the slightest reason why a given subjective phase should attend a certain objective phase and not rather some other. It must be affirmed as an opaque fact, or else the reason must be found in the plan of the whole.

"---The interaction of soul and body takes place under the organic form. It is not, then, all physical elements, or the same physical elements always, which interact with the soul, but only those elements which are comprised within the range of an organic activity; thus the organism seems to be a kind of link between the inorganic physical and the mental. As physical, it is allied to the world of matter; and, as living, it is allied to the world of mind. Thus it appears in a measure to mediate the sharp opposition of mind and matter." **

* ("Metaphysics". Bowne. p.348)

** (Ibid pp.354-355)

Concerning the interaction of the body and the soul we find that Bowne's discussion is wholly from the standpoint of metaphysics and not from that of empirical psychology. "--the soul is posited by the infinite, and the body is simply an order or system of phenomena connected with the soul which reproduces to some extent features of the general phenomenal order, and which also expresses an order of concomitance with the mental life. Thus it becomes a visible expression of the personality, a means of personal communion, and also a means of controlling to some extent the inner life. The concomitance is the only interaction there is; and its determining ground must be sought in the plan and agency of the infinite. -- Each is adjusted to the other in accordance with the plan of the whole; but so far as the two factors are concerned, the connection is logical, not dynamic; and any dynamic relation which we may affirm must be seen to be only a form of speech." *

"The physical and mental series are separate and incommensurable; it is conceivable, however, that there should be a correspondence between them, such that a given state of the one should always attend a given state of the other." **

In the above passages is seen the sharp distinction between the system of Bowne and that of Bergson. Here is the contrasted outcome of the method of rationalism and that of intuitionism. Bowne reaches only "a correspondence" between

* ("Metaphysics". pp.368-369)
 ** (Ibid p. 370)

The first part of the report is devoted to a description of the work done during the year. It is divided into three main sections: (1) the work done in the laboratory, (2) the work done in the field, and (3) the work done in the office. The first section describes the work done in the laboratory, which was devoted to the study of the properties of the material. The second section describes the work done in the field, which was devoted to the study of the properties of the material in nature. The third section describes the work done in the office, which was devoted to the study of the properties of the material in the laboratory.

The second part of the report is devoted to a description of the results of the work. It is divided into three main sections: (1) the results of the work done in the laboratory, (2) the results of the work done in the field, and (3) the results of the work done in the office. The first section describes the results of the work done in the laboratory, which were obtained from the study of the properties of the material. The second section describes the results of the work done in the field, which were obtained from the study of the properties of the material in nature. The third section describes the results of the work done in the office, which were obtained from the study of the properties of the material in the laboratory.

The third part of the report is devoted to a description of the conclusions of the work. It is divided into three main sections: (1) the conclusions of the work done in the laboratory, (2) the conclusions of the work done in the field, and (3) the conclusions of the work done in the office. The first section describes the conclusions of the work done in the laboratory, which were obtained from the study of the properties of the material. The second section describes the conclusions of the work done in the field, which were obtained from the study of the properties of the material in nature. The third section describes the conclusions of the work done in the office, which were obtained from the study of the properties of the material in the laboratory.

A. J. [Name] (1922-1923)
 et al.

the physical and the mental series and posits the paralleling infinite. As we have repeatedly cited, Bergson never makes use of the infinite as explanation; he keeps away from the metaphysical question and insists that through the body thought does actually enter into reality in any particular instance of sensation. This conception of participation marks the real contrast between the two philosophers, and to my mind shows the advance which Bergson makes over the Kantian relativism, a relativism not wholly absent from the pages of Bowne.

In treating this relation of body and mind Bergson endeavors to take his stand "at the point of view unaware of disputes of the philosophers". The reality of spirit and matter is affirmed and the book is "frankly dualistic".* As defined by Bergson "matter", however, has a slightly different meaning from what it usually has. "Matter, in our view, is an aggregate of 'images'. And by 'image' we mean a certain existence which is more than that the idealist calls a representation, but less than that which the realist calls a thing, - an existence placed half-way between the 'thing' and 'the representation'. ** Bergson's position with reference to the metaphysics involved will disclose itself further on.

Bergson does not attempt to deny that there is close connection between the states of consciousness and the brain; he does not feel that this fact of correspondence-in-general

* ("Matter and Memory." Bergson. VII)

** (Ibid Intro. VI, VII)

The position was the central position and would be maintained
 further, as it was necessary after, however, some other
 use of the language in this connection, as found here and the
 conventional position and in this case through the only means
 does actually apply this method in any particular instance of
 grammar. This position of particular interest in the text
 necessary to be in the mind of the reader, and as it shows
 the several parts of the text over the whole structure,
 a method of the text (which) is not the only one.
 In fact, the position of the text and the other parts
 depends to some extent on the point of view of the reader of the
 parts of the text. The method of writing and the
 is different and the point of view is different. It is different
 by means of the text, however, and a different point of view
 is different in each case. The text, as we see, is the same
 parts of the text. The text, as we see, is the same
 also, it may be said for the text and the other parts.
 not less than that which the text and the other parts
 show that only very rarely the text and the other parts
 time, as the text's position and the other parts in the text,
 the text will show that the text and the other parts
 which does not depend on any text and the other parts
 section of the text of the text and the other parts
 does not show that the text and the other parts

(1) "The text and the other parts" (1910, p. 11)
 (2) "The text and the other parts" (1910, p. 11)

demonstrates parallelism, which may or may not be true. In general terms there is far more in the psychical state than can be discovered in the cerebral. Herein he agrees with Professor Bowne who stands out against the sensationalists in asserting that in the act of perception there is added a vital reactive factor not found in the brain or in sensation.

Bergson holds that the brain and its correlated substances are to be considered as instruments designed for action. The psychical state is cramped by the necessity which our bodies and minds find for action; the psychical state does, however, as in diseases of the personality, escape from the cramping physical and in its diseased freedom declares its unbounded extent. Hence, strange as it may seem, Bergson studies the psychical in an un-normal state in order to discover a truth which in the normal state would not ordinarily be disclosed.

The relation of the body to mind is considered at length by Bergson, with the conclusion that the nerves which lead to action, the brain itself and all that takes place therein are images and that neither the nerves nor nerve centres, can, in any sense condition the image of the universe. A careful study of the cerebral substance shows only molecular disturbances and no trace of thought. The brain is, therefore, not a maker of representations in consciousness, but an instrument of action,- action first of all induced by sensation and action transmitted to various parts of our body which is in interaction with other images than itself.

Bergson states at the outset that images belong to two systems, to science and to consciousness. The body is an image occupying a central place among images, and by it all others are conditioned; at each of its movements everything changes, as though by a turn of a kaleidoscope. There is the system of science where all the images influence each other according to the stated law; there is the other system of consciousness which has a privileged action upon all these images.

At this point we are helped by a brilliant illustration in the real Bergson style. "The brain is no more than a kind of central telephonic exchange; its office is to allow communication, or to delay it. It adds nothing to what it receives; but, as all the organs of perception send it to their ultimate prolongations, and as all the motor mechanisms of the spinal cord and of the medulla oblongata have in it their accredited representatives, it really constitutes a centre, where the peripheral excitation gets into relation with this or that motor mechanism, chosen and no longer prescribed. . . In other words, the brain appears to us to be an instrument of analysis in regard to the movement received, and an instrument of selection in regard to the movement executed... (Nowhere) do the nervous elements work with a view to knowledge: they do but indicate a number of possible actions at once, or organize one of them." *

Bergson insists that we must use the method of intuition

* ("Matter and Memory". pp. 19-20)

in order to get behind appearances, and that by so doing we shall find it distinctly not true that consciousness is born of the internal movements of the cerebral process. Only through intuition can we arrive at the fact of perception. We must do away with recollections, and get back to the integral act which compresses a multitude of external moments with their vibrations, etc., and see how this integral act makes for a unifying perception. (This act gives us an immediate and instantaneous vision of matter.) Hence it follows, that conscious perception is but our power of choice, reflected from things, as by a mirror. Not all of the nervous sensation is transmitted back into action, but as the organism is more and more highly developed, the mind, by having indeterminate lines of action open, holds the perception more and more, refusing to let it pass back into action. This retarded perception is consciousness.

"There is nothing positive here, nothing added to the image, nothing new. The objects merely abandon something of their real action in order to manifest their virtual action - that is to say, in the main, the eventual influence of the living being upon them.....This is as much as to say that there is for images merely a difference of degree and not of kind, between being and being consciously perceived." * So that representation results from the omission of that in the totality of matter which has no interest for our needs, and is limited

* ("Matter and Memory". p.30)

by a degree of indeterminate action of which the living being is master. What we have to explain, then, is not how perception arises, but how it is limited, since it should be the image of the whole, and is in fact reduced to the image of that which interests us. But, representation is limited by the degree of indetermination allowed to the acts of the special image, our body.

"It is no wonder, then, that everything happens as though your perception were a result of the internal motions of the brain, and issued in some sort from the cortical centres." *
 "The reciprocal dependence of these two terms is therefore simply due to the fact that both are functions of a third, which is the indetermination of the will." ** "Reject the share (which) memory (has in representation), consider perception in its unmixed state and you will be forced to recognize that there is no image without an object." ***

"Now, if the brain is injured in any way perception is thereby lessened by the lessened appeal to activity. "Perception as a whole has its true and final explanation in the tendency of the body to movement." **** "Perception is no more in the sensory centres than in the motor centres; it measures the complexity of their relations, and is, in fact, where it appears to be." *****

* ("Matter and Memory" p.35) **** (Ibid p. 41)
 ** (Ibid p. 35) ***** (Ibid p. 43)
 *** (Ibid p. 39)

Now it is evident from our reading of Bergson that he means to say that we must begin with the external world (images), and that we are to consider the human body as one of these external images: that sensations are but the reactions between other external images and the body; that the sensations travel through their proper channels from the external to the internal mechanism of the body and that, as they reach centres of indetermination they are reacted upon by the will and either turned in the direction of action or held in the immediate grasp of consciousness. The external world, the body itself with all its nervous excitation and its sensations are likewise images. Consciousness is therefore not a thing apart from images, but an actual fact, itself an image amidst images. It follows that it is not merely a difference of degree that separates perception from affection, but a difference in kind. Affection differs from perception in that it is real instead of virtual action. "That is to say, once more, that my perception is outside my body, and my affection within it." * But, this pure perception exists only in theory; in fact, it is always mixed with affection. In other words, "There is no perception without affection. . The truth is that affection is not the primary matter of which perception is made; it is rather the impurity with which perception is alloyed." ** Everything is clear "if we start from representation itself, that is to say, from the totality of perceived

* ("Matter and Memory". p.59) ** (Ibid p.60)

For it is evident that our knowledge of language is not

based on any kind of direct knowledge of the external world
(things), but that we are to understand the language we use

of these external things: that is, that we understand

language because of our knowledge of things and the world; that is,
language is understood through things and the world, not the other

way round. The external world is the only one that, in

any sense, is independent of language. It is not that we

know things and then we know language, but that we know

language and then we know things. The external world is

not a thing that we know through language, but that we know

language through things. It is not that we know things

and then we know language, but that we know language

and then we know things. The external world is not a

thing that we know through language, but that we know

language through things. It is not that we know things

and then we know language, but that we know language

and then we know things. The external world is not a

thing that we know through language, but that we know

language through things. It is not that we know things

and then we know language, but that we know language

and then we know things. The external world is not a

thing that we know through language, but that we know

images. My perception, in its pure state, isolated from memory, does not go on from my body to other bodies; it is, to begin with, in the aggregate of bodies, then gradually limits itself and adopts my body as a center. And it is led to do so precisely by experience of the double faculty, which this body possesses, of performing actions and feeling affection; in a word, by experience of the sensory-motor power of a certain image, privileged among other images. -- There is then, in the aggregate of images, a privileged image, perceived in its depth and no longer only on the surface -- the seat of affection, and, at the same time, the source of action: It is this particular image which I adopt as the centre of my universe and as the physical basis of my personality." *

There is inherent in Bergson's "Matter and Memory" the same arguments which Bowne makes for the necessary unity of the self. However Bergson comes to this question of the self from a different angle, - that of empirical psychology. He does not consider sensation so much as he does the mental reaction against sensation. Our power of effecting changes in the material of sensation seems to him basal. Our perception is measured by this power of inner reaction, or as Bergson states, by indetermination.

Indetermination requires that images be retained in memory so that there may be a back-look over the past as well as a preview of the future. And in "Matter and Memory" it is clearly

* ("Matter and Memory." pp.63,64)

emphasized that pure memory is not the same as pure perception. Memory is not a faint perception or the continuance of the perception with modified reverberation in sensation. "The actuality of our perception lies in its activity, in the movements which prolong it, and not in its greater intensity: The past is only idea, the present is ideo-motor -- recognize in pure perception a system of nascent acts which plunges roots deep into the real; and at once perception is seen to be radically distinct from recollection; the reality of things is no more constructed or reconstructed, but touched, penetrated, lived; and the problem at issue between realism and idealism, instead of giving rise to interminable metaphysical discussion, is solved, or rather dissolved by intuition." *

This is Bergson's great solution of the problem of matter and mind through the use of the instrument "intuition". Furthermore he believes that it is possible for us to get an inkling of the true nature of matter. "The qualitative heterogeneity of our successive perceptions of the universe results from the fact that each, in itself, extends over a certain depth of duration, and that memory condenses in each an enormous multiplicity of vibrations which appear to us all at once, although they are successive. If we were only to divide, ideally, this undivided depth of time, to distinguish in it the necessary multiplicity of moments, in a word to eliminate all memory, we should pass thereby from perception to matter, from the subject

* ("Matter and Memory." pp. 74-75)

to the object. (He concludes) ---- Questions relating to subject and object, to their distinction and their union, should be put in terms of time rather than of space." *

"Just as pure perception, by giving us hints as to the nature of matter, allows us to take an intermediate position between realism and idealism, so pure memory, on the other hand, by opening to us a view of what is called spirit, should enable us to decide between those other two doctrines, materialism and spiritualism." **

If we mistake not, Bergson is here saying just what Bowne has said regarding matter, - that in the last analysis all power and all expressions of force are spiritual and are to be interpreted in terms that are personal. Our only vital experience of power is personal will and it may be that matter is not something other than spirit. We are to understand that there is in matter something more than, but not something different from, that which is actually given in perception. When we come to contrast our perception of matter and matter itself we see that there is not a difference in kind but in degree. Pure perception stands toward matter as a relation of the part to the whole. This amounts to saying that matter cannot exercise any powers other than those which we realize in perception. Matter has no mysterious noumenal virtue and it can conceal none.

"If it is memory above all that lends to perception its

* ("Matter and Memory." pp. 76-77)

** (Ibid pp. 77,78)

to the effect. The conclusion --- Qualitative differences in this
and quantitative in this distinction and their relation should be
not a matter of fact rather than of theory.

There is some possibility of giving an idea of the
nature of matter, allows us to look at fundamental relations
between position and velocity, to give energy, on the other hand,
by looking at a view of what is called energy. Energy means
us to think between these other two quantities. A relationship
is "scientific."

If we discuss not, perhaps it has been argued that what comes
has been said regarding matter, - that the fact remains that power
and all expressions of force are identical and are so to
behave in that they are identical. The only vital distinction
of power is that it will not be that matter is not
being other than itself. It is in relationship that there is to
either something else than, but not something different from
that which is being given in position. This is some in
contrast our perception of matter and matter itself as we see
there is not a difference in kind but in degree. The relation
two things is either as a relation of fact or as the
This amounts to saying that there cannot be any other
other than those that we define in position. Matter and
matter are identical in fact and in degree.
"It is an empty world with that kind of description in

of matter and energy, and
see (1927, p. 177)

subjective character, the philosophy of matter must aim in the first instance, at eliminating the contributions of memory. . . . It follows that memory must be, in principle, a power absolutely independent of matter. If, then, spirit is a reality, it is here, in the phenomenon of memory, that we may come in touch with it experimentally. And hence, any attempt to derive pure memory from an operation of the brain should reveal on analysis a radical illusion." * Thus a true theory of memory refutes materialism. "It is vain to attribute to the cerebral substance the property of engendering representation." ** "If it could be positively established that the cerebral process answers only to a very small part of memory, that it is rather the effect than the cause, that matter is here as elsewhere the vehicle of an action and not the substratum of a knowledge, then the thesis which we are maintaining would be demonstrated by the very example which is commonly supposed to be most unfavorable to it, and the necessity might arise of erecting spirit into an independent reality." ***

Bergson believes that it is possible for us to enter empirically into the above purely metaphysical problem. He maintains that the brain is an instrument of action, and not of representation and that the difference between perception and recollection is not merely in degree but a radical difference in kind.

* ("Matter and Memory." p.81)

** (Ibid p.81)

*** (Ibid p.82)

Memory has a double form, - motor mechanisms and independent recollection. An act or thought repeated becomes a habit through the creating of a cerebral mechanism that reacts without conscious effort when external stimulus is applied. The recognition of such an act or thought as having had a like deed or thought in the past is a thing of an entirely different order.

According to Bergson, to recognize an object is from one standpoint to know how to use it. As a matter of fact we do commonly act before we become conscious of our recognitions. If, however, the motor mechanism by which we act is injured there may follow a failure to act as formerly in response to stimulus. This failure to act does not necessarily mean that the memory images have been lost, rather that the power to put forth the act that stimulus indicates is lost. Bergson finds that lesions of the brain may affect these movements, but not the recollections. A suppression of the motor mechanism prevents the recollections from becoming actual. Memory is intact, although movement into actual recognition is incapable of realization. There is thus something more to memory than mere sensations however grouped, - that something is an inner power of action, which action is mediated by the motor mechanism.

"It is vain, therefore, to treat memory-images and ideas as ready-made things, and then assign to them an abiding place in problematical centres. Nor is it of any avail to disguise the hypothesis under the cover of a language borrowed from anatomy

and physiology; it is nothing but the association theory of mind; it has nothing in its favor but the constant tendency of discursive intellect to cut up all progress into phases and afterwards to solidify these phases into things; and since it is born à priori from a kind of metaphysical prepossession, it has neither the advantage of following the movement of consciousness nor that of simplifying the explanation of the facts." *

From introspection Bergson finds that distinct perception is brought about by two opposite currents, one centripetal, coming from the external object; the other centrifugal which takes its departure from what he speaks of as 'pure memory'. Passive perception comes from the former, while actual recollection finds its place in the latter. The union of these two currents constitutes recognition.

But, if there be real centres of images then the mind is likely to be a sort of keyboard played upon by memories much as the sense organ is played upon by external objects. "The centres of images, if they exist, can only be the organs that are exactly symmetrical with the organs of the senses in reference to the sensory centres. They are no more the depositories of pure memories, that is, of virtual objects, than the organs of the senses are depositories of real objects." **

Thus Bergson again joins forces with the Kantians against the associationalists. We note once more that the matter of

* ("Matter and Memory." pp.159,160) ** (Ibid p.167)

and especially if it is necessary to understand the theory of
 mind it is better to go to the original sources than to
 the secondary literature. It is not only the original sources
 that are important but also the secondary literature. The
 secondary literature is important because it helps to
 understand the original sources. It is not only the
 original sources that are important but also the
 secondary literature. It is not only the original
 sources that are important but also the secondary
 literature. It is not only the original sources
 that are important but also the secondary literature.

From this point of view, the original sources are
 important because they help to understand the theory of
 mind. It is not only the original sources that are
 important but also the secondary literature. It is
 not only the original sources that are important
 but also the secondary literature. It is not only
 the original sources that are important but also
 the secondary literature. It is not only the
 original sources that are important but also the
 secondary literature. It is not only the original
 sources that are important but also the secondary
 literature. It is not only the original sources
 that are important but also the secondary literature.

It is not only the original sources that are
 important but also the secondary literature. It is
 not only the original sources that are important
 but also the secondary literature. It is not only
 the original sources that are important but also
 the secondary literature. It is not only the
 original sources that are important but also the
 secondary literature. It is not only the original
 sources that are important but also the secondary
 literature. It is not only the original sources
 that are important but also the secondary literature.

The secondary literature is important because it
 helps to understand the original sources. It is
 not only the original sources that are important
 but also the secondary literature. It is not only
 the original sources that are important but also
 the secondary literature. It is not only the
 original sources that are important but also the
 secondary literature. It is not only the original
 sources that are important but also the secondary
 literature. It is not only the original sources
 that are important but also the secondary literature.

the unity of the ego might well have engaged more fully the attention of the philosopher. His charges against the false assumptions of the associational theory of perception are incisive. . "The capital error of associationism is that it substitutes for --- continuity of becoming, which is the living reality, a discontinuous multiplicity of elements, inert and juxtaposed." * That is, associationism takes solid elements, places them side by side and makes of memory only a weakened perception. In vain does it attempt to discover "in a realized and present state the mark of its past origin, to distinguish memory from perception, and to erect into a difference of kind that which is condemned in advance to be but a difference of magnitude." **

On looking at the matter of action and recognition Bergson finds that our memories form a chain and that our character always present in all our acts and decisions is the real synthesizing power that grips all our past states of consciousness and holds them in a present useful deed. We are not to ask in spatial terms where memories are, rather are we to give back to duration the sectional fragments into which we divide time and recognize that we have in duration, not moments external to one another, but contained within.

Seen from Bergson's point of view, indeed, our body is nothing but that part of our representation which is ever being born again, the part always present, or rather, that which at

* ("Matter and Memory." p.171) ** (Ibid p.173)

the ability of the mind will have engaged with the ob-
 - ject of the contemplation. His nature against the finite as-
 - sumption of an essential unity of perception and intel-
 - - lual. The medical error of associationism is that it assumes
 - - - that for -- a continuity of function, which is the living
 - - - reality, a distribution of activities of elements, itself an
 - - - "association." A true association is not a mere
 - - - placed form of mind and matter of matter only a combined
 - - - matter. It is a unity of elements in a unity
 - - - and no moment that the rest of the world exists, to distin-
 - - - guish among the elements, and to give into a difference of
 - - - kind that is concerned in nature to be put a difference
 - - - of matter." as

in regard of the matter of action and reaction between
 - - - things that are realities, and which are not controlled by
 - - - ways present in all our cases and decisions in the real system
 - - - being, that all things are in a state of consciousness and
 - - - order that is a whole useful deed. We are not to see in spe-
 - - - cial terms, where mental and matter are to give back to
 - - - claim the mental aspects into which we enter, and
 - - - theories that we have in question, and moments attached to our
 - - - another, but containing within.

and the progress of view, indeed, our body is con-
 - - - taining but that part of our contemplation which is also being
 - - - born again, the part which is present, in other, that which is

each moment is just past. "Itself an image, the body cannot store up images, since it forms a part of the images; and this is why it is a chimerical enterprise to seek to localize past or even present perceptions in the brain: They are not in it; it is the brain that is in them." *

Moreover general ideas, relations of contiguity or of resemblance can never be explained by the associationalists. The discovery of relations is not explanation. Similarity and contiguity do not account for anything unless they are themselves accounted for. They should be considered first, on the plane of action, where they coincide; and, secondly, on the plane of dream where they are entirely different. Now the normal life oscillates between these two extremes; according to the degree of tension in memory it is near the plane of action, and becomes more personal as it draws toward the plane of dream.

Bergson takes up a discussion of sleep and insanity as bearing upon this particular phase of mental mechanism, and concludes that sleep and insanity detach memory and attention from the sensory-motor functions by which they enter into present reality. Injuries to the brain affect the motor prolongations through which memories are actualized, or the sensory-motor equilibrium whose conditions are attached to life. They cannot destroy memories. They simply destroy the mechanism through which memories get into actual contact with life. The final conclusion is, - "All the facts and all the analogies are in favor of a theory

* ("Matter and Memory." p. 196)

which regards the brain as only an intermediary between sensation and movement, which sees in this aggregate of sensations and movements the pointed end of mental life - a point ever pressed forward into the tissue of events, and, attributing thus to the body the sole function of directing memory toward the real and of binding it to the present, considers memory itself as absolutely independent of matter." *

While not discussing the question with any degree of fullness Bergson nevertheless hints at a conception of matter and spirit and the manner of their union. The problem is one of undoubted obscurity, which obscurity is due to "the double antithesis which our understanding establishes between the extended and the unextended on the one side, between quality and quantity on the other. It is certain that mind, first of all, stands over against matter as a pure unity in the fact of an essentially divisible multiplicity; and moreover that our perceptions are composed of heterogeneous qualities, whereas the perceived universe seems to resolve itself into homogeneous and calculable changes. There would thus be inextension and quality on the one hand, extensity and quantity on the other. We have repudiated materialism, which derives the first term from the second; but neither do we accept idealism which holds that the second is constructed by the first. We maintain as against materialism, that perception overflows infinitely the cerebral state; but we have endeavored to establish, as against idealism,

* ("Matter and Memory." p. 232)

...the ... as only ...
 ... with ... of ...
 ... the ... of ...
 ... into the ...
 ... the ... of ...
 ... the ... of ...

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

that matter goes in every direction beyond our representation of it, a representation which the mind has gathered out of it, so to speak, by an intelligent choice. Of these two opposite doctrines, the one attributes to the body and the other to the intellect of a true power of creation, the first insisting that our brain begets representation, and the second that our understanding designs the plan of nature. And against these two doctrines we evoke the same testimony, that of consciousness, which shows us our body as one image among others and our understanding as a certain faculty of dissociating, of distinguishing, of opposing logically, but not of creating or of constructing. Thus, willing captives of psychological analysis and consequently of common sense, it would seem that, after having exacerbated the conflicts raised by ordinary dualism, we have closed all the avenues of escape which metaphysics might set open to us." *

"The theory of pure perception on the one hand, of pure memory on the other, may thus prepare the way for a reconciliation between the unextended and the extended, between quality and quantity." ** For since pure perception is a part of things, these share in the nature of perception; the idea of extension. And the heterogeneity of sensible qualities is due to their contraction in memory; the idea of tension.

"Memory is, then, in no degree an emanation of matter; on the contrary, matter, as grasped in concrete perception which

* ("Matter and Memory." p.236) ** (Ibid pp.236,237)

that this book is very different from any other...
 of it, the explanation which the book has...
 to be given, by an intelligent...
 however, the one attitude as the book...
 intellect of a high power of...
 our intellectual...
 standing...
 doctrine...
 which...
 determined...
 guidance...
 connection...
 its...
 the...
 that we have...
 that we have to do."

"The theory of...
 on the...
 also...
 to the...
 that...
 extent...
 our...
 "...
 the...
 4 ("...")

always occupies a certain duration, is in great part a work of memory." *

Bergson's teaching develops the doctrine that intellect is enslaved to certain bodily necessities and that thought has been built up in conflict with matter which it has had to disorganize for the satisfaction of its wants. If we can only find out what effect these practical needs have had on thought and discount them, we may thereby get back of the relative to the real. Dogmatism and empiricism alike take reality in a discontinuous form, ignoring the fact of duration.

Applying the intuitional method to matter the following results. Every movement, inasmuch as it is a passage from rest to rest is absolutely indivisible. Movement is therefore relative only for the mathematician while it is real for the physicist. Likewise all division of matter into independent bodies with absolute and determined outline is also artificial. Here Bergson reveals an idealistic trend of thought that makes of matter a state of vibration which, under the rhythm of duration enters into the consciousness as reality. The following paragraphs indicate this.

"In reality there is no one rhythm of duration; it is possible to imagine many different rhythms which, slower or faster, measure the degree of tension or relaxation of different kinds of consciousness, and thereby fix their respective places in the scale of being. To conceive of durations of

* ("Matter and Memory." pp. 236,237)

different tensions is perhaps both difficult and strange to our mind, because we have acquired the useful habit of substituting for the true duration, lived by consciousness, an homogeneous and independent Time.--" *

We are told by Bergson that in sleep something other than the customary self is revealed. Actually one may sleep but a few minutes and yet in his dream have passed through many years of dream-experience. There is in dream a higher tension than is normally experienced. After making this clear Bergson asks us to consider the possibility that the whole history of humanity and the universe might, for a consciousness with a higher degree of tension, be compressed into a comparatively brief period. "In short, then, to perceive consists in condensing enormous periods of an infinitely diluted existence into a few more differentiated moments of an intenser life, and in thus summing up a very long history. To perceive means to immobilize." **

Thus our consciousness sums up for us whole periods of the inner history of things. "But, if you abolish my consciousness, the material universe subsists exactly as it was; only, since you have removed that particular rhythm of duration which was the condition of my action upon things, these things draw back into themselves, mark as many moments in their own existence as science distinguishes in it; and sensible qualities without vanishing, are spread and diluted in an incomparably more divided duration. Matter thus resolves itself into numberless

* ("Matter and Memory." p.275) ** (Ibid p.275)

vibrations, all linked together in uninterrupted continuity, all bound up with each other, and traveling in every direction, like shivers through an immense body." *

Here after a long discussion showing his process of intuition whereby he gets at an intuitive knowledge of matter, Bergson asserts that necessity would rule a being which adopted the rhythm of the duration of matter. But by condensing that duration into our own, we conquer necessity; for, homogeneous space and time are the mental diagram of our eventual action upon matters: they are not properties of things. At this point it is hard to grasp the distinction. He says that if we compare the associationists and Kant we discover in them a common basis:

"--by setting up homogeneous time and homogeneous space either as realities that are contemplated or as forms of contemplation, they both attribute to space and time an interest which is speculative rather than vital. Hence there is room, between metaphysical dogmatism on the one hand and critical philosophy on the other, for a doctrine which regards homogeneous space and time as principles of division and of solidification introduced into the real with a view to action and not with a view to knowledge, which attributes to things a real duration and a real extensity, and which, in the end, sees the source of all difficulty no longer in that duration and in that extensity (which really belong to things and are manifest to

* ("Matter and Memory." p.276)

the mind), but in the homogeneous space and time which we stretch out beneath them in order to divide the continuous, to fix the becoming, and provide our activity, with points to which it can be applied." *

Bergson insists that idealism and realism both regard the different orders of sensation as discontinuous, and so miss the true nature of perception. "Idealism and realism differ only in that the first relegates extensity to tactile perception, of which it becomes the exclusive property, while the second thrusts extensity yet further back, outside of all perception. But the two doctrines are agreed in maintaining the discontinuity of the different orders of sensible qualities, and also the abrupt transition from that which is purely extended to that which is not extended at all. Now the principal difficulties which they both encounter in the theory of perception arise from this common postulate." **

Hence it follows that, if matter is to be considered in terms of duration and, with the thought in mind that matter is vibration, the distinction between body and mind is to be established no longer in terms of space as has been our habit induced by the necessity for action, but in terms of time.

Bergson feels that it is true that such psychology must also be bound up with a metaphysics of the same sort. "The difficulties are less formidable in a dualism which, starting

* ("Matter and Memory." pp. 281, 282)
 ** (Ibid p. 284)

from pure perception, where subject and object coincide, follows the development of the two terms in their respective durations, - matter, the further we push its analysis, tending more and more to be only a succession of infinitely rapid moments which may be deduced each from the other and thereby are equivalent to each other; spirit being in perception already memory, and declaring itself more and more as a prolonging of past into the present, a progress, a true evolution." *

"If matter does not remember the past, it is because it repeats the past unceasingly, because, subject to necessity, it unfolds a series of moments of which each is the equivalent of the preceding moment and may be deducted from it: thus its past is truly given in its present. But a being which evolves more or less freely creates something new every moment: in vain, then, should we seek to read its past in its present unless its past were deposited within it in the form of memory. Thus, to use again a metaphor which has more than once appeared in this book, it is necessary, and for similar reasons, that the past should be acted by matter and imagined by mind." **

The argument is, in brief, that the body is only an instrument of action and that perception and memory, since they point to action are not mere duplicates of each other. If we could draw aside the curtain which has been lowered between knowledge and reality, by reason of the solidifying effect of necessary

* ("Matter and Memory." p. 295)

** (Ibid pp. 297,298)

action, we could by intuition enter into "things-in-themselves."

Of course, perception only gives us a part of these things and therein does Bergson approach close to Kant. "It is not subjective, for it is in things rather than in me. It is not relative, because the relation between the 'phenomenon' and the 'thing' is not that of appearance to reality, but merely that of the part to the whole." *

The brain is not, as Bergson would say, the cause of perception nor its effect, nor in any sense its duplicate. The brain but continues sensation which is reacted upon by the mind and thus in passing from pure perception to memory we definitely abandon matter for spirit. For, - "Memory is something other than a function of the brain and there is not merely a difference of degree, but of kind, between perception and recollection." ** "With memory we are in very truth in the domain of spirit." *** This is fundamental and carries us back to the opening words of the introduction, - "This book affirms the reality of spirit and the reality of matter, and tries to determine the relation of the one to the other by the study of a definite example, that of memory. It is, then, frankly dualistic." ****

One notes here a decided contrast between Bergson and

* ("Matter and Memory." p. 306)

** (Ibid p. 315)

*** (Ibid p. 320)

**** ("Matter and Memory." Intro. VII)

Bowne. Bowne tries dualism and finds it wanting in power to sustain thought, and comes to a thorough-going spiritual monism by positing behind the processes we call matter the World-Ground of spirit. But in any practical discussion it is quickly seen that from the standpoint of human experience Bowne would agree that for all our purposes we must treat the external as though it were in fact apart from our thought, even if not apart from all thought. There is, however, a decided difference in the declared positions.

Bowne's physical position is best stated in his own words. He agrees with Bergson that it is impossible to construe the mind "as a resultant of the interaction of any number of physical or impersonal elements." * Both are clear as to the fundamental unity of the self. But, when Bowne comes to consider reality he says, "Reality for intelligence is intelligible in the forms of intelligence." ** This reality is independent of our thought, but, - "This independence of our thought is mistaken for an independence of all thought. --- the illusion rests upon a failure to distinguish between the phenomenal and the ontological reality. . . The world of things can be defined and understood only as we give up the notion of an extra-mental reality altogether, and make the entire world a thought world; that is, a world that exists only through and in relation to intelligence. Mind is the only ontological reality. Ideas have only conceptual reality. Ideas energized by will have

*("Metaphysics." Bowne. p. 421)

** (Ibid pp. 422,423)

phenomenal reality. Beside these realities there is no other." *

After having discussed the fact of interest in action on the part of perception and the fact of recollection on the part of memory, Bergson further elaborates the union of body and mind. In certain passages his difference in standpoint from Bowne is made apparent.

"For after having successfully studied pure perception and pure memory, we still have to bring them together. If pure recollection is already spirit, and if pure perception is still in a sense matter, we ought to be able, by placing ourselves at their meeting place, to throw some light on the reciprocal action of spirit and matter.---That which is given, that which is real, is something intermediate between divided extension and pure inextension." ** "It is not true that consciousness turned round on itself, is confronted with a merely internal procession of inextensive perceptions. It is inside the very things perceived that you put back pure perception, and the first obstacle is thus removed." *** This is the fundamental conception of "Matter and Memory" and this possible penetration into externality is precisely the point at which we conceive Bergson to have cleared up the Kantian difficulty involved in his well known doctrine of the "noumena."

* ("Metaphysics". pp. 422,423)

** ("Matter and Memory." pp. 325,326)

*** (Ibid p.328)

... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..

CHAPTER IV.

BEARING OF EPISTEMOLOGY ON COSMOLOGY.

So far this dissertation has considered the validity of the knowing process, seeking to arrive at the contrasted conceptions in Bowne and Bergson with reference to the subjective factors of time and space and the objective validity of these subjective factors in the thought process. We have found both philosophers to be in substantial agreement as to the reactive nature of thought, the unity of the self and the validity of the thought process in general. With regard to the categories of time and space we have noted the factor added in Bergson's conception of the validity of knowledge obtained through the intuitions. The thought process with Bergson has in it the double character of ratiocination and intuition-al insight. This constitutes a vitally new conception of epistemology.

A clearer understanding of the divergence of these two epistemologies is realized when we study their respective treatments of cosmological problems. Furthermore, since their epistemological doctrines have been developed quite largely in their study of cosmology we are obliged to note their ultimate positions with reference to the World-Ground. For Bowne this is a world of persons with Supreme Personality at its head. Nature has no substantial existence apart by itself, and cannot be considered as a self-running system into

which intelligent direction does not enter. The world of nature and of persons is throughout dependent, instrumental and phenomenal. "Metaphysics shows that we cannot explain the existence and community of the many without affirming a fundamental reality which is truly one, and which produces and coordinates the many --- we reach the result that the unpicturable many must be conceived as unpicturably depending on the unpicturable one." *

Bowne makes evident from this discussion of epistemology that he considers thought impossible on any other plane than that of belief in the unity of the World-Ground, its freedom, its personality and finally its ethical quality. This has appeared many times in our survey of his teaching concerning the unity of the self and the objective validity of the subjective categories of time and space. Bowne's entire system is throughout committed to Theism and he himself gave to his conclusions the significant title, - "Personalism".

The ultimate conclusions of Bergson's system are easily distinguished. Having demonstrated that we cannot enter into a discussion of these problems on purely rational grounds alone, but that we must utilize the intuitions for an exact understanding of the categories and having, by the same process, also demonstrated that through the body we do actually enter into a participation with reality, Bergson then applies this method to cosmology in his masterpiece of system making, -

* ("Personalism." Bowne. pp. 278,279)

... the ... of ...
 ... the ... of ...

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

"Creative Evolution". This book contains a discussion of cosmology by means of the intuitional method. Bergson summarizes his system at this juncture.

"The considerations put forward in 'The immediate Data of Consciousness' result in an illustration of the fact of liberty: those of 'Matter and Memory' lead us, I hope, to put our finger on mental reality; those of 'Creative Evolution' present creation as a fact: from all this we derive a clear idea of a free and creating God, producing matter and life at once, whose creative effort is continued, in a vital direction, by the evolution of species and the construction of human personalities." *

A casual reader of the pages of Bowne finds that he discusses the question of cosmology from the standpoint of the World-Ground as personal. His interest is metaphysical and theological and not descriptive of processes. On the other hand Bergson is interested in showing that by intuition we can enter into the world process and, by a careful use of natural science, vastly enlarge our knowledge of that world process. Bergson discusses world building and Bowne discusses the World-Ground.

The author of "Creative Evolution" is concerned with finding out what thought plus intuitionalism has to say with regard to world-process. He seeks light in actual growth of mind and evolution of the cosmos. That he emerges in the general

* ("New Philosophy." Le Roy. p.225)

direction of theism we think is quite capable of demonstration. Indeed we are sure that such is the final interpretation which an unbiased opinion must ascribe to the Bergsonian System. It is necessary to read his own words and to follow his reasoning at some length to see how true this is.

"Theory of knowledge and theory of life seem to us inseparable. A theory of life that is not accompanied by a criticism of knowledge is obliged to accept, as they stand, the concepts which the understanding puts at its disposal; it can but enclose the facts, willing or not, in pre-existing frames which it regards as ultimate. It thus obtains a symbolism which is convenient, perhaps even necessary to positive science, but not a direct vision of its object. On the other hand, a theory of knowledge which does not replace the intellect in the general evolution of life will teach us neither how the frames of knowledge have been constructed nor how we can enlarge or go beyond them. It is necessary that these two inquiries, theory of knowledge and theory of life, should join each other, and, by a circular process, push each other on unceasingly.

"Together, they may solve by a method more sure, brought nearer to experience, the great problem that philosophy poses." *

In discussing the evolution of life from the standpoints of mechanism and teleology, Bergson shows that both positions are really untrue to the facts, - but that teleology is nearer the truth. He begins with a discussion of existence as a fact,

* ("Creative Evolution." Bergson. Intro. XIII)

finding that "for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating one's self endlessly. Should the same be said of existence in general?" *

"The universe must be thought of as enduring and hence, as duration means invention, there is a continual elaboration of the absolutely new. Evolution is creative in the truest sense of the word. Hence we can attribute to the universe as a whole something of the duration which is operative in our own individuality."

" -- Like the universe as a whole, like each conscious being taken separately, the organism which lives is a thing which endures. Its past, in its entirety, is prolonged into its present, and abides there, actual and acting." **

Bergson repudiates the mechanistic explanation of the universe because "in such a doctrine time is still spoken of: one pronounces the word, but one does not think of the thing. For time is here deprived of efficacy, and if it does nothing it is nothing. Radical mechanism implies a metaphysic in which the totality of the real is postulated complete in eternity, and in which the apparent duration of things expresses merely the infirmity of a mind that cannot know everything at once. But duration is something very different from this for our consciousness, that is to say, for that which is most indisputable in our experience. We perceive duration as a stream against which we cannot go. It is the foundation of our being, and, as we feel,

* ("Creative Evolution." p.7)

** (Ibid p.15)

the very substance of the world in which we live. It is of no use to hold up before our eyes the dazzling prospect of a universal mathematic; we cannot sacrifice experience to the requirements of a system. That is why we reject radical mechanism.

"But radical finalism is quite as unacceptable, and for the same reason. The doctrine of teleology, in its extreme form, as we find it in Leibniz, for example, implies that things and beings merely realize a program previously arranged. But if there is nothing unforeseen, no invention or creation in the universe, time is useless again. As in the mechanistic hypothesis, here again it is supposed that all is given. Finalism thus understood is only inverted mechanism. It springs from the same postulate, with this sole difference, that in the movement of our finite intellects along successive things, whose successiveness is reduced to a mere appearance, it holds in front of us the light with which it claims to guide us, instead of putting it behind. It substitutes the attraction of the future for the impulsion of the past. But succession remains none the less a mere appearance, as indeed does movement itself."*

"Yet finalism is not, like mechanism, a doctrine with fixed rigid outlines. It admits of as many inflections as we like. The mechanistic philosophy is to be taken or left: it must be left if the least grain of dust, by straying from the path foreseen by mechanics, should show the slightest trace of spontaneity.

* ("Creative Evolution." p. 39)

the very substance of the world in which we live. It is of
no use to hold an object out before the gaze of the intellect
universal and abstract: we cannot abstract from it. It is the
particularity of a system. That is why we must not speak
of laws.

"The radical position is that an object is not
the same as the laws. The domain of the laws, in the extreme
form, is that it is infinite. For example, in the case of
and being merely realize a program previously organized. But
it there is radical uncertainty, no invention or creation in the
universe, that is realized again. As in the scientific sym-
-bolic, there again it is assumed that all is fixed. This
law thus considered is only involved in the law. It is not
free in the sense of the law, with this also difference, that in the
movement of our finite intellects there is no such thing. There
the law is not in a sense in a sense in a sense. It is in
fact of in the light with which it is in a sense in a sense, in fact
of nothing is behind. It is admitted that the nature of the
nature for the intellect of the law. The law is not in a sense
from the law a sense of the law, as if there were no sense in it."
The law is not, the law is not, the law is not, the law is not.

The law is not, the law is not, the law is not, the law is not.
The law is not, the law is not, the law is not, the law is not.
The law is not, the law is not, the law is not, the law is not.
The law is not, the law is not, the law is not, the law is not.

The doctrine of final causes, on the contrary, will never be definitely refuted." * "If there is finality in the world of life, it includes the whole of life in a single indivisible embrace." **

"The error of radical finalism, as also that of radical mechanism, is to extend too far the application of certain concepts that are natural to our intellect. Originally, we think only in order to act. Our intellect has been cast in the mould of action. Speculation is a luxury, while action is a necessity. -- For that reason, radical finalism is very near radical mechanism on many points." ***

--they agree in doing away with time. Real duration is that duration which gnaws on things, and leaves on them the mark of its tooth. If everything is in time, everything changes inwardly, and the same concrete reality never recurs. Repetition is therefore possible only in the abstract: what is repeated is some aspect that our senses, and especially our intellect, have singled out from reality, just because our action, upon which all the effort of our intellect is directed, can move only among repetitions. -- We do not think real time. But we live it, because life transcends intellect. The feeling we have of our evolution and of the evolution of all things in pure duration is there, forming around the intellectual concept properly so called an indistinct fringe that fades off

* ("Creative Evolution." p. 40)

** (Ibid p. 40)

*** (Ibid pp. 40,45)

The doctrine of final cause, on the contrary, will never be
definitely rejected. It is true that in the world
of life, it is not the cause of things, but the
end of them." as

"The scope of radical thinking, as also that of politics
generally, is to extend far beyond the traditional of certain
concrete and well defined in our intellect. Originally, we
find only in order to act. Our intellect has been put in
the world of nature. It is not a faculty, which action
is a necessity. -- For this reason, radical thinking is very
near radical movement in any order." as

"--but action is being with law. This doctrine is
not a doctrine which goes on things, and based on them the
rest of the world. It everywhere is in fact, everywhere
changes inwardly, and the same process really never stops.
Repetition is therefore possible only in the abstract: what is
repeated is some agent that has been, and especially our in-
tellect, have aimed out from reality, just before our action,
upon which all the effect of our intellect is repeated, and
have only some repetition. -- It is not that kind of
but we like it, because life is always different. The fact-
ing we have of our evolution and of the position of all things
in this world is that, having known the conditions, we
are naturally so called as individuals through their bodies and

1. "Positive evolution" (1901)
as 1901 n. 101
and 1901 n. 101

into darkness. Mechanism and finalism agree in taking account only of the bright nucleus shining in the centre. They forget that this nucleus has been formed out of the rest by condensation, and that the whole must be used, the fluid as well as and more than the condensed, in order to grasp the inner movement of life. -- pure intellect is a contraction, by condensation, of a more extensive power." *

Bergson studies the evolution of intellect in the general process of universal evolution. The entire universe has evolved in the direction of vertebrate life in general and human intellect in particular. In this general evolution forward into intellect, life has had to abandon many elements which were incompatible with vertebrate structure and intellectual organization and has compelled the abandoned elements to go along other lines of development. It is in the totality of these elements together with human intellect that we must endeavor to find intellect proper and grasp it in its true nature of vital activity. This means "that something of the whole, therefore, must abide in the parts; and this common element will be evident to us in some way, perhaps by the presence of identical organs in very different organisms." **

Here is the supremely Bergsonian idea, -- that of an original impetus of life, passing from one generation of germs to the following generation of germs through the developed organisms which bridge the interval between the generations. This

* ("Creative Evolution." pp.45,46) ** (Ibid p.54)

into darkness. Mechanical and physical forces in fact are only of the order of those which are in the world. They are not that this motion has not formed out of the rest of the universe, and that the whole out of which it is formed is not a mere extension of life. -- Every individual is a continuation of the evolution of a more extensive group.

Barrow states the evolution of species in the general process of universal evolution. The entire universe has evolved in the direction of vertebrate life in general and human intellect in particular. In some general evolution which went into intellect, life began to appear and elements which were fundamental to vertebrate structure and intellectual organization and are compelled to surround elements to do along their lines of development. It is in the details of these elements together with their intellect that the endeavor to find intellect proper for group is in the line of true of vital activity. This was the evolution of the whole, the whole, and the whole, and the whole. It will be evident to us in some way, perhaps by the use of analogical means in very different conditions.

It is the primary principle that -- that of an individual impact of life, passing from one generation of genes to the following generation of genes through the inherited organs which bring the intellect through the generations. This

* "Creative evolution," (1902), by W. D. H. W.

impetus sustained along the lines of evolution among which it gets divided, is the fundamental cause of variations, at least of those which are regularly passed on, that accumulate, and create new species. In general, when species have begun to diverge from the common stock, they accentuate their divergencies as they progress in their evolution. Yet, on certain definite lines they may evolve identically; in fact, they must do so if the hypothesis of a common impetus be accepted. Nature's simple act divides itself automatically into an infinity of elements which are found to be co-ordinated to one idea. After a thorough discussion of the divergent directions of the evolution of life, Bergson concludes:

"The evolution of life, ---- receives a clearer meaning, although it cannot be subsumed under any actual idea. It is as if a broad current of consciousness had penetrated matter, loaded, as all consciousness is, with an enormous multiplicity of interwoven potentialities. It has carried matter along to organization, but its movement has been at once infinitely retarded and infinitely divided. On the one hand, indeed, consciousness has had to fall asleep, like the chrysalis in the envelope in which it is preparing for itself wings; and, on the other hand, the manifold tendencies it contained have been distributed among divergent series of organisms which, moreover, express these tendencies outwardly in movements rather than internally in representations. In the course of this evolution, while some beings have fallen more and more asleep, others have

more and more completely awakened, and the torpor of some has served the activity of others. But the waking could be effected in two different ways. Life, that is to say consciousness launched into matter, fixed its attention either on its own movements or on the matter it was passing through; and it has thus been turned either in the direction of intuition or in that of intellect. --- On the side of intuition, consciousness found itself so restricted by its envelope that intuition had to shrink into instinct, that is, to embrace only the very small portion of life that interested it; and thus it embraces only in the dark, touching it while hardly seeing it. On this side, the horizon was soon shut out. On the contrary, consciousness, in shaping itself into intelligence, that is to say in concentrating itself at first on matter, seems to externalize itself in relation to itself; but, just because it adapts itself thereby to objects from without, it succeeds in moving among them and in evading the barriers they oppose to it, thus opening to itself an unlimited field. Once free, moreover, it can turn inwards on itself, and awaken the potentialities of intuition which still slumber within it.

"From this point of view, not only does consciousness appear as the motive principle of evolution, but also, among conscious beings themselves, man comes to occupy a privileged place. Between him and the animals the difference is no longer one of degree, but of kind." *

* ("Creative Evolution." pp. 181,182)

From the above it seems evident that Bergson means that we do, by use of the intuitions, actually enter into life itself as we could not do by mere process of intellect. Philosophy thus introduces us into the spiritual life and it also reveals to us the relation of the life of the spirit to the material body. Bergson brings out his thought with great power in one of the most beautiful passages to be found in modern philosophical literature. We quote it almost entire.

"Philosophy introduces us thus into the spiritual life. And it shows us at the same time the relation of the life of the spirit to that of the body. -- Life as a whole, from the initial impulsion that thrust it into the world, will appear as a wave which rises, and which is opposed by the descending movement of matter. On the greater part of its surface, at different heights, the current is converted by matter into a vortex. At one point alone it passes freely, dragging with it the obstacle which will weigh on its progress but will not stop it. At this point is humanity; it is our privileged situation. On the other hand, this rising wave is consciousness, and, like all consciousness, it includes potentialities without number which interpenetrate and to which consequently neither the category of unity nor that of multiplicity is appropriate, made as they both are for inert matter. The matter that it bears along with it, and in the interstices of which it inserts itself, alone can divide it into distinct individualities. On flows the current, running through human generations,

subdividing itself into individuals. This subdivision was vaguely indicated in it, but could not have been made clear without matter. Thus souls are continually being created, which, nevertheless, in a certain sense pre-existed. ---- Finally, consciousness is essentially free; it is freedom itself; but it cannot pass through matter without settling on it, without adapting itself to it: this adaptation is what we call intellectuality; and the intellect, turning itself back toward active, that is to say free, consciousness, naturally makes it enter into the conceptual forms into which it is accustomed to see matter fit. It will therefore always perceive freedom in the form of necessity; it will always neglect the part of novelty or of creation inherent in the free act; it will always substitute for action itself an imitation artificial, approximative, obtained by compounding the old with the old and the same with the same. Thus, to the eyes of a philosopher that attempts to reabsorb intellect in intuition, many difficulties vanish or become light. But such a doctrine does not only facilitate speculation; it gives us also more power to act and to live. For, with it, we feel ourselves no longer isolated in humanity, humanity no longer seems isolated in the nature that it dominates. --- All the living hold together, and all yield to the same tremendous push. The animal takes its stand on the plant, man bestrides animality, and the whole of humanity, in space and in time, is one immense army galloping beside and before and behind each of

us in an overwhelming charge able to beat down every resistance and clear the most formidable obstacles, perhaps even death." *

According to Bergson the history of philosophy is likewise an evolution which we can understand only as we follow out the main ideas which appear and reappear throughout the course of human progress. Dogmatism and vituperation are not worthy aids for the seeker after knowledge. Bergson sees, in all phases of thought, truths which tend in the direction of the ultimate and perfect truth.

Bergson notes that there is a unity among sciences and that no one of them can be studied apart by itself. This suggestion has much the same general trend as is seen in Bowne's discussion of the unity of World-Ground and indeed must be so understood. We reason about the whole in order to have an adequate understanding of the parts. The philosopher, after a complete rejection of scientific symbols sees and experiences life in the pure flux of duration. Thus he may come to understand universal evolution.

With regard to science as such, Bergson teaches that we do not need to enter the dynamic; we can keep to time as static; but in order to understand a growing world, we must put vitality and the feeling of duration into our concepts. We must be no longer mere geometricians, we must be thinkers in terms of the dynamic and vital. Life and consciousness reveal the truth as it cannot be found elsewhere. To quote:-

* ("Creative Evolution." pp. 268-271)

"When once we have grasped them (Life and Consciousness) in their essence by adopting their movements, we understand how the rest of reality is derived from them. Evolution appears and, within this evolution, the progressive determination of materiality and intellectuality by the gradual consolidation of the one and of the other. But, then, it is within the evolutionary movement that we place ourselves, in order to follow it to its present results instead of recomposing these results artificially with fragments of themselves. Such seems to us to be the true function of philosophy. So understood, philosophy is not only the turning of the mind homeward, the coincidence of human consciousness with the living principle whence it emanates, a contact with the creative effort; it is the study of becoming in general, it is true evolutionism, and consequently the true continuation of science --- provided that we understand by this word a set of truths either experienced or demonstrated, and not a certain new scholasticism that has grown up during the latter half of the nineteenth century around the physics of Galileo, as the old scholasticism grew up around Aristotle." *

A thorough review of Bergson's "Creative Evolution" makes apparent the close connection between his theory of the knowing-process and the ultimate question of the world-process. Bergson has aimed in his brilliant book to follow the actual genesis of mind in the cosmological order of evolution. The

* ("Creative Evolution." pp. 369,370)

necessity that the Whole be studied in order to grasp any of its parts leads him to a careful discussion of the static character of the concepts of the instrument of language and reveals to him the fact that such a study of the Whole demands new and vital concepts that shall be more than intellectual; concepts that have in them the full quality of the intuitions. The rise of human intelligence is traced through the long line of the creative evolution of the Élan Vital and the development of the mechanism of thought is worked out from the standpoint of Intuition.

The ultimate bearing of "Creative Evolution" upon cosmology is fairly evident. Bergson manifests a lack of interest in the religious aspect of the entire problem of cosmology and shows no decided preference for Theism as does Bowne. Bergson never discloses his goal. From much of the style as well as the logic of his position, we are led to believe, however, that we may expect from Bergson a further and final work, of more full theistic import. The Élan Vital is creative, is intelligent and is described in terms which stamp it as personal. But Bergson's paramount interest is in world-processes and is not, as with Bowne, centered about a theory of the World-Ground as Infinite Personality. The demand for a theistic grounding of thought does not openly obtrude itself in the pages of Bergson. It seems nevertheless a fair contention that he is implicitly theistic, but that he has not fully thought out the import of his system. For some unexplained

necessarily that the world be studied in order to reach any of
 its main issues. It is a scientific statement of the scientific
 character of the contents of the fragments of language and
 reveals to us the fact that we have a theory of the world, however
 new the vital concepts that have to be added to it.
 concepts that have to be added to the vitality of the world.
 The rise of a new scientific theory is a new step in the
 of the creative evolution of the living world and the evolution
 of the mind of the individual of thought is worked out from the same
 point of evolution.

The direct object of "scientific evolution" is the
 world in living evolution.
 set in the religious aspect of the entire subject of biology
 and shows an ordered structure for living as does science.
 system never distinguishes his goal.
 will be the basis of his evolution, as we have seen.
 that we may expect from science a further and final step
 of the full scientific world.
 intelligence and is described in terms of evolution as a new
 world.
 as well as we, go with him, we have a theory of the
 world-around as a living evolution.
 living foundation of thought and the world outside itself in
 the world of science.
 that he is implicitly religious, but that he is not living
 thought and the world of his system.

reason the religious interest is lacking.

=====

Bergson aims at a further development of the Kantian system which so clearly demonstrated the reactive nature of thought and the unitary character of the self together with the categories as internal forms of the thought process. With Bergson the categories of space and time are interpreted by a process of intuition which process finds its ground in a sympathetic treatment of the natural sciences. To the epistemology of Kant and his successors, which was formed under the dominating influence of the concepts of mathematical science, are added the new epistemological conceptions realized in the intuitions. The validity of the subjective factors of thought, when considered in conjunction with the findings of intuitionism leaves no implicit question of relativity. Bergson demonstrates the possibility of thought actually entering reality and thereby proves the validity of the thought process. Unlike Kant, (and in a measure Bowne,) Bergson does not stop at the "Practical Reason" even though that be found in the demands of life, but aims to reach absolute knowledge. There is no trace of acknowledged relativity in the system of Bergson.

We cannot escape the conviction that there is need for a conception of knowledge which lays due stress upon the truth-finding power of the intuitions. If to this conception of knowledge there is added the rational demand for Infinite Personality as ground of all truth, as in the system of Bowne,

then philosophy ministers to knowledge and to the deeper demands of the soul. Only so can philosophy be made practical.

BIBLIOGRAPHY.

BOWNE, BORDEN PARKER.

- "The Essence of Religion."
Boston. Houghton, Mifflin & Co. 1910.
- "The Immanence of God."
Boston. Houghton, Mifflin & Co. 1905.
- "Introduction to Psychological Theory."
New York. Harper. 1887.
- "Kant and Spencer." A critical exposition.
Boston. Houghton, Mifflin & Co. 1912.
- "Metaphysics. A Study in First Principles."
New York. Harper. 1898.
- "Personalism."
Boston. Houghton, Mifflin & Co. The N. W. Harris
Lectures at Northwestern University for 1907.
- "The Philosophy of Herbert Spencer."
New York. Nelson & Phillips. 1876.
- "Philosophy of Theism."
New York. Harper & Co. 1887.
- "The Principles of Ethics."
New York. Harper. 1892.
- "Studies in Christianity."
Boston. Houghton, Mifflin & Co. 1900.
- "Theism." Comprising the Deems Lectures for 1900.
New York. American Book Co. 1900. A review
and extension of the preceding.
- "Theory of Thought and knowledge."
New York. Harper. 1897.

BERGSON, HENRI LOUIS.

"Essai sur les donnees immediates de la conscience."
Translated under the title "Time and Free Will".
F. L. Pogson. London. Swan Sonnenschein & Co. Ltd.
(Library of Philosophy) 1910

"Matiere et memoire. Essai sur la relation au corps
a l'esprit."

"Matter and Memory." Authorized translation by
Nancy Margaret Paul and W. Scott Palmer.
London. Swan Sonnenschein & Co. Ltd. 1911.
(Library of Philosophy) 1911.

"Introduction a la Metaphysique."

"An Introduction to Metaphysics." Translated by
T. E. Hulme. Authorized edition.
New York and London. G. P. Putnam's Sons. The
Knickerbocker Press. 1912.

"L'Evolution creatrice."

"Creative Evolution." Authorized translation by
Arthur Mitchell.
New York. Holt & Co. 1911.

"L'Essai sur les concepts fondamentaux de la philosophie."
Translated under the title "The Philosophy of Ideas."
Y. L. Peacock. London. Swan Sonnenschein & Co. Ltd.
(Library of Philosophy) 1910

"Matière et méthode." Essai sur la relation de ces
deux concepts.
"Matter and Method." Authorized translation by
Nancy Vanderschueren and W. Scott Wilson.
London. Swan Sonnenschein & Co. Ltd. 1911.
(Library of Philosophy)

"Introduction à la philosophie."
"An Introduction to Philosophy." Translated by
T. E. Hill. Authorized edition.
New York and London. W. W. Norton & Co. The
Philosophical Press. 1911.

"L'Évolution ontologique."
"Ontological Evolution." Authorized translation by
George Mitchell.
New York. Holt & Co. 1911.

WORKS ON HISTORY OF PHILOSOPHY.

Alfred Weber.

"History of Philosophy." Authorized translation by
Frank Thilly, A.M., Ph.D. 1899.
Charles Scribner's Sons.

Hoffding, Harold.

"Moderne Philosophen." Leipzig. O.R. Reisland. 1905.
"A History of Modern Philosophy."
Translated from the German by B. E. Meyers. 2 vol.
London. MacMillan & Co. 1900.

"History of Modern Philosophy." Single volume con-
densed from former.

Windleband, W.

"Geschichte der Philosophie."
"History of Philosophy." Authorized translation by
James H. Tufts, Ph.D. Macmillan. 1911.

Uberweg, Friederick.

"Grundriss der Geschichte der Philosophie."
"History of Philosophy." Translated by George S.
Morris, A.M.
New York. Scribner, Armstrong & Co. 1874.

OTHER WORKS READ AND CONSULTED.

Kant, Immanuel.

"Kritik der reinen Vernunft."

"Critique of Pure Reason." Translated by F. Max
Muller. Second edition revised.
New York. The MacMillan Company. 1907.

Baldwin, James Mark.

"Dictionary of Philosophy and Psychology." Article
on Epistemology.

Sheldon, H. C.

"Unbelief in the Nineteenth Century."
New York. Eaton & Mains. 1907.

Ward, James.

"Naturalism and Agnosticism." Gifford Lectures
1896-8.
London. Adam and Charles Black. 1906.

Hocking, William Ernest.

"The Meaning of God in Human Experience."
New Haven. Yale University Press. 1912.

Caird, Edward.

"The Critical Philosophy of Kant."
Glasgow. Maclehose. 1909.

Höfdding, Harold.

"Problems of Philosophy."
New York. MacMillan Company. 1905.

Spencer, Herbert.

"First Principles."

Herman, E.

"Eucken and Bergson."
Boston. The Pilgrim Press. 1912.

GRAND JURY AND DISTRICT COURT

1901, 1902, 1903

"Critic of the Bureau," reprinted by T. L. ...
New York. The Macmillan Company, 1901.

1901, James Earl

"Philosophy of Philosophy and Psychology," ...
in Philosophy.

1901, 1902

"Belief in the Present Century," ...
New York. The Macmillan Company, 1901.

1901, James

"Materialism and Idealism," ...
London. The Macmillan Company, 1901.

Looking, William

"The meaning of an ...
New York. The Macmillan Company, 1901.

1901, Edward

"The Ethical Philosophy of Kant," ...
London. The Macmillan Company, 1901.

1901, ...

"The Philosophy of ...
New York. The Macmillan Company, 1901.

1901, ...

"First Principles,"

1901, 1902

"Lecture and ...
Boston. The Macmillan Company, 1901.

Le Roy, Édouard.

"Une Philosophie Nouvelle." Henri Bergson.
Paris. Alcan. 1912.

"A New Philosophy of Henri Bergson."
Translated from the French by Vincent Benson.
London. Williams & Norgate. 1913.

Lindsay, Alexander Dunlop.

"The Philosophy of Bergson."
London. Hodder & Stoughton. 1912.

"A Critical Exposition of Bergson's Philosophy."
Stewart. John Mckillan.
London. MacMillan & Co. Ltd. 1911.

In Boy, Edward.

"The Philosophy of Wittgenstein."
London, George Allen & Unwin, 1953.

"The Philosophy of Wittgenstein."
Translated from the German by David Gauthier.
London, George Allen & Unwin, 1953.

London, George Allen & Unwin.

"The Philosophy of Wittgenstein."
London, George Allen & Unwin, 1953.

"A Critical Exposition of Wittgenstein's Philosophy."
London, George Allen & Unwin, 1953.



BOSTON UNIVERSITY



1 1719 02552 3418

51

07

FILE



Boston University Libraries

**Not to be removed
from the Library**

GAYLORD

