

THE CONCEPT OF  
CONSCIOUSNESS

# THE CONCEPT OF CONSCIOUSNESS

BY  
EDWIN B. HOLT

LONDON  
GEORGE ALLEN & COMPANY, LTD.  
44 & 45 RATHBONE PLACE, OXFORD STREET  
1914

5299

## PREFACE

IN view of the diversity of philosophical essays a writer may well at once say something of his purpose, and of what the human interest of his effort is to be. Pragmatically speaking, one seems to distinguish two kinds of philosophers. There are on the one hand those who, looking on the world about them, the folded earth and the brave canopy of heaven, desire to account for all this and to see behind the maddening variety that unity which something prompts them to believe is there. So sane and wholesome seems this desire, so proper as a philosophic aim, that one could wish all lovers of knowledge passionately possessed of it. But on the other hand one beholds the high pontiffs of philosophy, builders of massive systems, constructing their edifices not as a frugally devised and modest housing for the data of experience, to hold them compact and demonstrate their kinship, but rather as 'a kind of marble temple shining on a hill,' pompous monuments dedicated ostensibly to Academe and Dialectica—but with the pontiff's name engraved not small upon the portal.

So ornate and splendid are these systems of philosophy and so replete with this and that, that a mortal once beguiled by them becomes henceforth a stranger to the

initial problem—which was to trace, mayhap to reproduce, the plan and framework of our concrete world, to show the unity that lies behind such prodigal variety. These great systems come to be an end in themselves, pieces of virtuosity often so express and cunning as to dumbfound every visitor, yet to the mind of the pious and sober wayfarer, for whom philosophy is an avenue and not a goal, they are ostentatious and frivolous—useless save as show-places for the philosophic tourist. And the student who is captivated by such an architectural triumph, who lingers hat off and commentary in hand around, say, the mausoleum of Hegel, has forgotten his errand in life. For philosophy, I conceive, is not a free play of the creative imagination, however nicely logical, loosed from all mundane reference; it is, as Professor James has said, not a ‘clear addition’ erected on high over the plain of our mortal experience, not “a classic sanctuary in which the rationalist fancy may take refuge from the intolerably confused and Gothic character which mere facts present.” Philosophy is grounded in these facts, it is everywhere knit close to the mundane fabric, and as soon as these ties are loosened philosophy as little fulfils its function of service to human beings as would a successful airship to the leafy denizens of the forest. For the love of knowledge commits us to a quest after coherence, demonstrable structure, unity—and this not aside from what we are wont to call the facts, not a detached mass, howsoever compact, floating loose and free, but a unity



within the facts, the unity of the facts. And these facts are the concrete whole of experience, and conspicuously though by no means pre-eminently that domain that is called the physical world. That demonstrable coherent structure toward which philosophy should lead is not the structure of a philosophic system, but the structure inherent in all *being*, running through everything that is.

Clearly the present volume will not aim to be a system. But it does profess not to forget the initial quest of philosophy, and toward this goal it seeks to indicate some little way of advance. Its scope is limited, for it proposes only to give a consistent account, a definition, of one very common yet perplexing feature of the universe—consciousness. Of course, this has been defined many times before, and much discussed, yet so often without consistency and so strikingly without agreement that the last word, very obviously, has by no means been said.

But if to define anything is, doubtless, to point out by word or gesture that which is its essence bared of all its accidents, how can a human being comprehend and define consciousness, when his own entire experience is just a case of it? Can a part include a definition of the whole, or a person step outside his consciousness in order to survey it? Yet we all do persist in discussing the subject, and even this would be not merely unwarranted but sheerly impossible if by principle consciousness could never be defined. And so, although

the experience of anyone is indeed conterminous with his own consciousness, yet it must be that somehow within this experience there is some necessary distinction between subject and object. Somehow that which is called the knowledge relation may lie within one consciousness; one experience may witness the knowing process. This comes about most significantly, I think, when one individual observes a fellow-man together with some section of their common environment, and then further observes a division of this environment into two parts, one of which is, while the other is not, he somehow knows, accessible to the experience of his fellow. Thus the prompter from his station at the side of the stage sees a portion of the painted scene that is presented to persons whom he sees in the audience; but he also sees much else behind the scenes that he knows these others cannot perceive: so too the present reader, doubtless, will note from time to time, along with that which I as writer have intended to say, sundry stylistic shortcomings, which the reader will know that I am unconscious of, else must I have remedied them. Howsoever one may interpret such a situation philosophically, one certainly meets it very frequently in daily life. We often know something of both the contents and the limitations of another's mind. And this is at least to say that somehow one consciousness may overlap another. The knowing process is similarly known when one's present consciousness recalls an incident of one's own past, and now supplements that

memory with items which one had not known then. Without such glimpses of other minds, or of one's own mind in the past, this knowledge of knowledge, in short, the attempt to define consciousness would indeed be vain in principle. But we do have these glimpses, and to describe this matter more fully is the aim of the following chapters.

In referring to other writers I have consistently not prefixed their titles. This is good usage, to be sure, in the case of authors who are not living: but I have omitted titles in all cases, because literature, after all, is gathered from quarters so remote that it is impossible to know the age and state of health of every contributor. Such untitled mention is a trifle strained, I confess, in the case of three or four more immediate colleagues, gentlemen with whom it is my happy privilege to rub elbows nearly every day. Yet on the whole I find consistency no such intolerable bugbear; and, besides, esteem begets in general a certain licence.

Every reader who knows the works of Professor James, Professor Royce, and Professor Münsterberg will be aware how much I owe to them for my general drift of thought. The definition of consciousness proposed in the following pages is in no small part inspired by the Radical Empiricism of Professor James; and is, I believe, throughout consonant with that view. To Professor Royce, and to studies undertaken with his guidance, I owe my notions of the conceptual nature of the universe—a verity which to me argues not for

idealism, but for a realism of perhaps, even, a thoroughly naïve sort. And to Professor Münsterberg, it will appear, I owe my ideas as to the purpose of psychology and the way, more particularly, in which that science may hope to fathom the relations between the body and the soul. To him also, as is lightly hinted in the dedication, I owe indeed the project of this volume. To my mathematical friend, Professor E. V. Huntington, furthermore, I am deeply indebted for penetrating and salutary criticism, and to my friend Dr. H. M. Sheffer for what I must account a very happy invention, the application to some entities, with which we shall have much to do in the following pages, of the term 'neutral.'

EDWIN B. HOLT.

HARVARD UNIVERSITY.

[The manuscript of this book, as it is here printed, was completed in the autumn of 1908.]



# CONTENTS

CHAPTER I		PAGE
THE RENAISSANCE OF LOGIC . . . . .		1
CHAPTER II		
OBJECTIONS TO THE PROGRAMME OF LOGIC . . . . .		19
CHAPTER III		
CORRESPONDENCE : THE PARTICULAR AND THE UNIVERSAL . . . . .		37
CHAPTER IV		
FURTHER IMPLICATIONS OF THE PROGRAMME OF LOGIC . . . . .		53
CHAPTER V		
OUR UNIVERSE AT LARGE . . . . .		77
CHAPTER VI		
THE SUBSTANCE OF IDEAS . . . . .		91
CHAPTER VII		
THE SUBSTANCE OF MATTER . . . . .		115
CHAPTER VIII		
THE NEUTRAL MOSAIC . . . . .		135
CHAPTER IX		
THE CONCEPT OF CONSCIOUSNESS . . . . .		166

## CHAPTER X

THE EMPIRICAL PROPERTIES OF CONSCIOUSNESS . . . . .	PAGE 185
-----------------------------------------------------	-------------

## CHAPTER XI

SENSATION AND PERCEPTION IN THE CONSCIOUS CROSS-SECTION .	208
-----------------------------------------------------------	-----

## CHAPTER XII

MEMORY, IMAGINATION, AND THOUGHT . . . . .	223
--------------------------------------------	-----

## CHAPTER XIII

ERROR . . . . .	259
-----------------	-----

## CHAPTER XIV

VOLITION . . . . .	282
--------------------	-----

## CHAPTER XV

THE EMANCIPATION OF PHYSIOLOGY FROM PHILOSOPHY . . . . .	305
----------------------------------------------------------	-----

INDEX . . . . .	341
-----------------	-----

# THE CONCEPT OF CONSCIOUSNESS

## CHAPTER I

### THE RENAISSANCE OF LOGIC

WITHIN the last two decades the scholarly world has witnessed a revival of interest in logic. The subject of formal logic, which for many years had progressed very little if indeed at all, has been taken up once more, and this time by investigators whose first interest is mathematics rather than philosophy. And a region has been discovered which lies between our older logic and mathematics, adjacent to both and so closely related that the two are now seen to be a single science. In so far as the two older disciplines are to be kept distinct from each other and from the intermediate realm, this last is called the Algebra of Logic or Symbolic Logic. Now the recent investigations in this field have brought out a number of new truths and laid a new emphasis on certain others, which seem to me to bear importantly on philosophy as a whole, and especially on epistemology. And it is on those theories of knowledge which are involved by the idealistic philosophies; in short, it is on idealism that these investigations cast their most searching light.

This light is by no means a favourable one, for it

reveals idealism, as it seems to me, resting insecurely on a fallacy or two. And it may or may not be a mere coincidence that one observes on several sides of the philosophic world a tendency to dispute that claim which idealism, of one form or another, has laid to being the beginning at least of a final solution of the world-problem. With the objections which by and large have been raised against idealism we have here no immediate concern, for it is the purpose of this book first to survey briefly the findings of modern logic, and then to examine, with as little bias as may be, their bearing on epistemology. Yet it is fair to say at the outset that if anyone has foreseen the outcome of such an inquiry, that person was Avenarius.<sup>1</sup> For whatever may be the other merits or the defects of that author's Empirio-Critical theory, and I believe that the defects are several, he was the first in modern times to 'exclude the introjection.' And this exclusion we shall see is one of the lessons of modern logic.

In order to understand the consequences for philosophy of modern investigations in logic, we must take a brief and tentative survey of what symbolic logic is and

<sup>1</sup> The most extended English exposition of Avenarius' theory is so far that of W. T. Bush: "Avenarius and the Standpoint of Pure Experience," *Archives of Philosophy, Psychology, and Scientific Methods*, No. 2, New York, 1905. For other expositions, aside from the original volumes of Avenarius, the reader is referred to that author's briefer statement, "Der Gegenstand der Psychologie," *Vierteljahrsschrift für wiss. Philosophie*, 1894-5, Bde. XVIII-XIX; to F. Carstanjen: "Richard Avenarius' biomechanische Grundlegung" u.s.w., München, 1894; to H. Delacroix: "Esquisse de l'empiriocriticisme," *Revue de Métaphysique et de Morale*, 1897, t. V, p. 764, and 1898, t. VI, p. 61; and especially to J. Petzoldt: "Einführung in die Philosophie der reinen Erfahrung," Leipzig, 1900.



of what it has learned. The first new truth depends on the discovery that logic and mathematics are one ; and that logic is not the science of 'correct thinking,' merely, but that it is a science of what *is*. Algebra, geometry, and the other mathematical systems have never seemed describable, quite, as systems of correct thinking : their validity has been too objective for this, and too independent of whether this man or that, or whether whole generations of men, *thought* in such a way or not. And whether a more than individual being 'thought' in that way has seemed to most mathematicians a meaningless inquiry. Mathematics has always dealt with something that clearly is more than the mathematician's mere thought, with something, that is, which either is so or is not, and is inexorably the one or the other. In questions of logic, moreover, thought, in order to be 'correct,' had to proceed in certain ways, had to conform to laws, and so there was at least a presumption that logic too was a science of something 'correct,' of something at least not identifiable with thought ; since thought might be correct or incorrect. And now logic and mathematics are seen to be only different branches of one science, and this united science would call itself a science of *being*<sup>1</sup> rather than a science of correct thinking. Thus one of its exponents, Bertrand Russell, has said that "truth and falsehood apply not to beliefs, but to their objects ; and that the object of a thought, even when this object does not exist, has a Being which is in no way dependent upon its being an object of thought."<sup>2</sup> What thought is and

<sup>1</sup> We neglect for the moment what philosophers may say to this.

<sup>2</sup> "Meinong's Theory of Complexes and Assumptions," *Mind*, 1904, N.S. vol. 29, p. 204.

how it is related to its objects are strictly other issues, and the new logic believes that it deals with no such entities as thoughts, ideas, or minds, but with entities that merely *are*.

We now turn to the science itself, its methods and its results. The following account, derived mostly from recent papers on mathematical or symbolic logic, does not presume to be an adequate summary of that so actively growing science. If summary at all, it is one merely of such fundamental truths as are now firmly established, and as seem to have a serious bearing on philosophical theory and procedure.

In their article on symbolic logic Huntington and Ladd-Franklin, after mentioning the researches made in the latter half of the nineteenth century, say that, "The first result of these inquiries was the recognition, more clearly than ever before, that every mathematical theory is based on a small number of fundamental hypotheses, or postulates, from which all other propositions of the theory can be deduced."<sup>1</sup> Moreover, it is generally accepted, as by Russell, that "Since all definitions of terms are effected by means of other terms, every system of definitions which is not circular must start from a certain apparatus of undefined terms." And it is desirable "to make the number of undefined ideas as small as possible."<sup>2</sup> The plane geometry of Euclid is a familiar example of such a mathematical theory. Available editions of Euclid are in the light of modern knowledge uncritical to the last degree, and

<sup>1</sup> Edward V. Huntington and Christine Ladd-Franklin: "Symbolic Logic," *The Encyclopedia Americana*, New York, 1905, vol. ix.

<sup>2</sup> B. Russell: "The Theory of Implication," *Amer. Journ. of Math.*, 1906, vol. 28, p. 160.

the apparatus of undefined ideas is usually disguised under 'definitions' and 'axioms.' Thus the 'axiom,' of somewhat doubtful authenticity, that "a straight line is the shortest distance between two points" is strictly speaking neither a self-evident proposition nor yet a definition. The straight line in Euclid is one of the undefined ideas, and this so-called axiom serves merely to point out to the reader, and to name, a familiar instance of one of the entities on which the geometry is based, an undefined idea that it takes ready-made. The truth needs to be emphasized that whatever reference is made in a mathematical system to these undefined entities is solely by way of pointing out (or exhibiting) and naming that which is intended. If terms are defined by means of other terms in the system, the pointing out and designation of terms is not properly definition, and in the following pages it will often be referred to as 'exhibition'; a term that has some ulterior advantages.<sup>1</sup> The 'postulates' in Euclid, although marshalled inaccurately, are correctly propounded as fundamental hypotheses.

Now in regard to the building up of any deductive theory Huntington says: "The first step in such a discussion is to decide on the *fundamental concepts* or *undefined symbols*, concerning which the statements of the algebra are to be made. One such concept, common to every mathematical theory, is the notion of a class (K) of elements (a,—b,—c.)."<sup>2</sup> . . . "Having chosen

<sup>1</sup> Oddly enough, in view of the quotation just made from Russell, that author nevertheless includes this process under definition ("Principles of Mathematics," p. 27). It is hard to see how he can consistently do this.

<sup>2</sup> E. V. Huntington: "Sets of Independent Postulates for the Algebra of Logic," Trans. of the Amer. Math. Soc., 1904, vol. 5, p. 288.

the fundamental concepts, the next step is to decide on the *fundamental propositions* or *postulates*, which are to stand as the basis of the algebra. . . . Any set of *consistent* postulates would give rise to a corresponding algebra—namely the totality of propositions which follow from these postulates by logical deduction.”<sup>1</sup> Thus the fundamental entities are of *two kinds*, the elements or terms (‘undefined symbols’) which if not exhibited have at least to be named; and the propositions or postulates (or hypotheses) from which the entire algebra follows by logical *deduction*. This distinction is of the highest importance, because the terms or elements play, if one may speak figuratively, a *passive* part in the system; while the propositions, one is bound in spite of the metaphor to feel, are the *active* factors. This opposition of active and passive is perhaps not generally recognized and may at first seem highly fanciful. Nevertheless the strictest logicians have not been able to avoid language that implies just this opposition. The postulates it is that yield, by deduction, the subsequent portions of the system. We shall meet with this distinction again, and anyone who has not now and then been aware of logical *agency* should well consider what it is, for instance, when he is drawing an ellipse by the analytic formula (proposition) that *makes* the two ends meet. This same fact of agency can be detected in any deductive system.

Some ambiguity may arise on two points. One is the place of what are called relations, the other is that of existential postulates. Spatial, temporal, and many other relations, such as those of whole to part, likeness and unlikeness, are familiar to everyone; and in sym-

<sup>1</sup> *Ibid.*, p. 290.



bolic logic, if one were to accept the views of Kempe,<sup>1</sup> terms and relations or 'form' would be the sole substance of logic. Yet clearly in a deductive system which is expressed in words rather than algebraic symbols, relations (such as A within B) must become propositions (A is within B). And although many words convey relations in non-propositional form, complete accuracy of form would probably require each relation to be expressed in a separate proposition. Thus—stones down from the wall—means at the least—stones were on the wall, and, stones fell. In our present provisional scheme, then, which confessedly sacrifices much detail to the purposes in hand, relations may be classed as propositions. Relations, however, like any propositions can themselves figure in a system as merely passive entities or terms; their relational or propositional content being irrelevant to the system.

As to existential postulates, if they merely enumerate certain terms and state that these exist, they serve simply as an alternative way of stating that the system starts with these terms as the fundamental, given elements. But such propositions, that *enumerate* all those terms whose existence they predicate, and we

<sup>1</sup> For important discussions on relation, see A. B. Kempe: "A Memoir on the Theory of Mathematical Form," Phil. Trans. of the Royal Society, 1886, vol. 177, p. 1; "On the Relation between the Logical Theory of Classes and the Geometrical Theory of Points," Proc. of the London Math. Soc., 1890, vol. 21, p. 147; Charles S. Peirce: "The Logic of Relatives," Monist, 1897, vol. 7, p. 161; Josiah Royce: "The Relation of the Principles of Logic to the Foundations of Geometry," Trans. of the Amer. Math. Soc., 1905, vol. 6, p. 353; and see specially, it being the most easily read, A. B. Kempe: "The Subject-Matter of Exact Thought," Nature, 1890, vol. 43, p. 156.