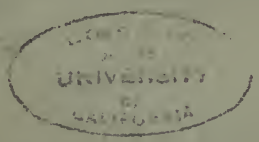
A Study of the Realistic Movement in Contemporary Philosophy--

by

Matthew Thompson McClure



Submitted in partial fulfilment of the requirements for the Degree of
Doctor of Philosophy, in the Faculty of Philosophy,
Columbia University

1912

A Study of the Realistic Movement in Contemporary Philosophy

1. The Issue of New Realism.

The issue of new realism may be set forth by giving the simplest possible description of any situation in which a human being consciously takes part. Anything purporting to be a "naive" description is usually, on the face of it, open to suspicion, so highly sophisticated do such unsuspecting accounts often turn out to be. A description to be naive, means, among other things, a description which does not import into the situation described any elements which are not elements of the situation; and these elements must be such that any one may identify them and admit their presence.

We may take a situation in which a human being is playing a part, and for our present purpose term that situation behavior. So far as one's body is an active factor in a situation the term behavior is inclusive of all its actions. It includes internal, organic reactions, reflex and automatic movements, and all higher bodily functions. My body, moreover, is active within a situation which extends beyond the limits of my body. It directly encounters an environment with which it is in continuous contact and with which it is homogeneous. It receives stimulations from it and adjusts itself with appropriate reactions. Now at some point in the genesis of behavior there enters the element of consciousness, and at this point a distinction is to be made between behavior and *conscious* behavior. Just how much the term conscious behavior includes it is unnecessary at present to say. Surely the environment does influence my body and elicit responses without any advent of consciousness. The savage gulping down his food, may, like the dog barking at the moon, be acting without any element of consciousness being present at all. The environment may be sensed with or without the presence of consciousness. In the former case it *is there;* and re-acted to, often with a high degree of direction and control; in the latter case it is not only there, but is *known.* The environment *is,* it may be *reacted to,* and then in ad-

dition it may be *known*. When it is known I say that I am aware of it. Getting into appropriate and successful contact with the environment may be the significant thing, and the one in the interest of which knowledge has arisen. But then it is knowledge which has arisen, and the fact of conscious behavior, however generated, invites analysis.

We may take, therefore, any situation which, in the loosest possible sense, may be termed conscious behavior. Within that situation at least one distinction may be made, the validity of which every one, whatever his philosophical views may be, would it may be supposed, admit. There is *being conscious* and there is *something of which* one is conscious. This is at once the simplest and, at the same time, the widest possible generalization of any situation into which a human being enters consciously as a factor. What is going on in such a situation represents two elements. No matter what "being conscious" is, how or for what purpose it appears, some activity or process termed *being conscious* is present. And it is equally plain that being conscious is always of something; *something* whether ideas, or thoughts, or images, or facts, or things, or objects, in the interest of which consciousness is operating. The act of being conscious is always concerned with something other than itself. Being conscious, it is plain, is never just that; there is "content" of some sort, and which, in some sense, *is;* and which, it is equally plain, is, in some sense distinguished from and other than the act of being conscious. Conscious behavior yields the distinction of a "that" and a "what": there is the act or process termed "being conscious"; and there is, in the broadest and loosest possible meaning of the word, the "content" of which one is conscious. The content element is easy to identify. The process element may be more difficult to identify. It may be so exceedingly "transparent" that its existence is never suspected. It may be completely void of any internal differentiation. Yet upon reflective analysis, it is always found to be there. In calling the act of being conscious, or what is the same thing, "awareness," an element of conscious behavior, it is not meant to suggest anything so definite as a term. It may turn out to be, upon closer analysis, either a term or a relation. At present it is only intended to point out that a distinction exists, and that the element distinguished may be identified; but the identification does not yield, *prima facie,* any metaphysical information about the status or the nature of the element distinguished.

Awareness and content are therefore, the two compresent elements in all conscious behavior. Any analysis invariably yields such a

polarization, all so-called "cognitive" functions are expressed in terms of this distinction. There is knowing and something known; believing and something believed; asserting and something asserted; feeling and something felt, etc. It may be that in feeling this duality is at a minimum, that the "that" and the "what" are less distinguishable here than elsewhere. The distinction is the result of a direct empirical analysis of the concrete situation. The two elements are what we find to be there. So far naive description may go and no further.

Into this simple description we may introduce refinements, and then we have a philosophy. The cardinal problems of philosophy are set in terms of this simple and discoverable distinction. They represent attempts to mark off the limits of the two elements; to ascertain their respective natures, and to adjust the relations between them, or at least to inquire into the possibility of there being such relations.

Some of the essential problems may be briefly indicated. From consciousness as an activity, it is easy to slip over to an agent who acts; or, expressed in terms of knowledge, from knowing as a function to a "knower" who knows. And so we may speculate touching the existence of a self, or ego, or soul. Questions as to the nature of the process arise. It is a purely psychical process, or is it generated out of material conditions and itself material? Does it antedate its content and thus come to be regarded as possessing the greater significance? Is it a creative activity somehow productive of its content which, consequently, sustains to it the relation of product? Is it an *actus purus,* or does it deposit, as it were, some by-product of a nature singularly like its own? Being conscious is variously designated as perceiving, judging, remembering, feeling, willing, etc. Is the *act* the same for all, or is there some qualitative differentiation between an act of remembering and an act of willing? Is it possible to describe the differences in terms of content, thus leaving awareness as undifferentiated? Has consciousness any mechanism of its own? Philosophical speculation has been directed more, however, to the content element, using the term "content" to stand for the other element of our description. What is the nature and status of contents? Does the content element occur in the absence of the process element? Or when contents occur in the same context with consciousness, are they dependent upon consciousness for their being? Do they all possess the same degree of reality, that is, do all exist, or do some merely subsist? Are all physical, or are all psychical? If not, some may be

physical, and some psychical; and of those which are psychical some may and some may not be dependent upon the process for their being. The content does not itself possess any intrinsic mark which gives away its metaphysical nature. It *is* but does not in addition proclaim itself to be either physical or spiritual. This is a problem to be determined.

These various questions, seemingly haphazard, may be grouped around two considerations. Some of the questions have reference to the sort of *reality* which content and process possess, namely, whether they are physical or psychical. As such they give rise to metaphysical or ontological problems. Others have reference to the type of relation obtaining betwen process and content. As such they are properly termed logical or epistemological problems.

The new realism is not interested in the question, what is it to *be* a physical content? or what is it to *be* a psychical content? It is interested in determining whether contents are physical or psychical, and if they are distributed over the two realms, in assorting them with respect to their proper place. But even the question as to the proper realm to which contents belong is a secondary one with the new realist and one in regard to which there are various answers. The primary problem is, according to realism, an epistemological inquiry.

Epistemology, most simply put, is an inquiry into the relations holding between knowing and the something known. Does the act of knowing in any sense alter or in any way modify the content known? Is the content *of which* one is conscious determined by the process which is conscious of it? Just what is the type of connection between the two elements? Is the connection so intimate that the one cannot exist apart from the other? Is there merely invariable association or does one element really constitute the other? Such questions indicate the so called epistemological inquiry.

As to the type of connection mentioned there are two views. One is that the content known cannot exist apart from the knowing of it. The two elements are inseparable, and the latter is constituted by the former, has no existence independent of it. Relations obtaining between them are intrinsic, essential, *internal*. The opposite view is that the content, or some part of it at least, exists quite independent of whether it is connected with thinking, or even where it is so connected, the connection is only that of juxtaposition or togetherness or compresence. The one does not owe its existence to the other.

Relations obtaining between them are *external*. Knowing makes no difference to what is known.

Technically put, the issue of new realism resolves itself into the simple question of whether relations are external or internal. New realism maintains that, in so far as knowledge is concerned, relations are external. The various ways in which this doctrine is asserted, and the evidence supporting the assertion, it will be our task to determine.

The above discussion, it is to be hoped, serves to set forth the issue with which the neo-realistic movement is chiefly concerned. One of its main contributions, as subsequent exposition will show, is the attempt, at least on the part of the American realist, to say something concrete about the process element of conscious behavior. Traditional philosophy has rested on the assumption that the process is psychical, something mental. It has given little attention to this element, more than to assume it. The emphasis has been placed on the content element, breaking it up into states of consciousness, or sensations, or images, or things, or what not. There are many indications at present of more interest in the analysis of the psychical act, resulting in the attempt to isolate and investigate it. There are indications of a general reaction to the traditional conception of consciousness with its corresponding doctrine of "states" as psychical existences. Among these tendencies the neo-realistic movement is to be reckoned. It has in common with other tendencies of contemporary thought the general revolt against the pre-suppositions and unbridled career of idealism. It is one of the many present day movements all of which are directed against the excessive extension of idealistic assumptions, and all of which are alike in according greater value to naive and immediate experience. In addition to this common tenet, it has much peculiarly characteristic which entitles it to a place as a distinct current in contemporary thought.

II. Historical Survey

The neo-realistic movement has arisen largely in reaction to the excesses of idealism. It not only attempts to refute idealism, but to supercede it, to state the fundamental problems of philosophy in such terms as to render meaningless many of its persistent problems.

Since contemporary realism is to be viewed as a counter movement to the various forms of idealism, an exposition obviously necessitates an account, even if very summary, of the trend of modern idealism. And this, it may be said, really means a statement of the develop-

ment of modern philosophy. Modern philosophy when viewed in its complete historical sweep, presents three essential features. In the first place, modern philosophy has accorded greater significance to the element of consciousness. Taking as its starting point the world of mental life, it has assumed consciousness as the primal fact. It has rested on the assumption that the immediate data of knowledge are psychical. It has traveled from the inner world to the world outside. That consciousness existed, that there was a world of inner mental existences, that ideas, or states of consciousness, or psychical entities of some sort were the immediate objects of knowledge was never questioned. From the world as "idea" it has moved to the world as "fact." The *immediacy of the psychical* has been the dominant conception which has reigned supreme throughout the course of modern philosophy.

In the second place, the content element has tended to be taken over more and more by the process element, to be absorbed by it, to be integrated into some sort of psychical tissue. There has been an unbroken progression in which more and more of the outside world has been relegated to the domain of the inner life. Things as external objects have receded step by step and in their withdrawal have given way to mental existences. The universe of content, however, has remained fairly constant. What the outer world has lost, the inner world has gained. The ego, from being a substance supporting states of consciousness, has, by a process of absorption, swelled to the absolute.

In the third place, the problems of modern philosophy are secondary to its controlling assumption. What significance they imply and what meaning they possess is an acquired significance and meaning growing out of the postulate of the immediacy of the psychical. The problems, therefore, are not direct, but derivative, not generated from an empirical analysis of concrete situations, but set in the reflected light of an hypothesis. So long as this hypothesis has endured, problems have been transmitted from age to age with various refinements and accessions, but always under its control. It is for this reason that the meaning of modern philosophy is to be read largely in its history.

Each of these three features deserves some elaboration.

Modern philosophy has been largely idealistic for the reason that it has taken its start with the mental and rested on the common postulate that the immediate objects of knowledge are psychical. Such

a postulate is by no means without foundation. We have seen that the simplest possible analysis of conscious behavior portrays two factors, the fact of being conscious or aware, and the content *of which* one is conscious. It is easy to see how this simple analysis affords a basis for the assumption of modern philosophy. The presence of awareness in all cognitive experience is an impressive fact. Idealism points out that any experience whatever which may be termed conscious behavior contains the element of consciousness. Any content which may be mentioned or pointed to, or in any way identified is, by that very act, brought into relation with consciousness. It becomes an element in a cognitive context. The ubiquity of awareness in all cognitive experience gives to the element of awareness a peculiar significance, a significance readily lending itself to over-emphasis. This over-emphasis has taken the form of confusing awareness with its content and the setting up of certain contents as psychical.

Furthermore, conscious behavior is a term descriptive of a body encountering an environment. Being conscious has reference to some centre. The contents cluster around it, arrange themselves with respect to it. Consciousness and content present the features of a centre and a margin, of a focus and a field. The process of being conscious is always going on at the focus. The contents represent a gradual shading off and filling in with respect to the field. The question naturally arises as to the significance of what appears at the focus in comparison with what lies beyond in the field. Shall the focus or the field receive the emphasis?

Portions of the field, we say, appear in the focus. The term appearance has two meanings.*

That which appears is, on the one hand, immediate and most directly obvious. On the other hand, that which appears is held to be in contrast with something more ultimate than itself, something more real. Philosophy is familiar with the distinction between appearance and reality. Which of these two meanings attaches to the term appearance when we speak of contents appearing in the focus? Is what appears there more real than what lies outside, or is it less real, only apparent, phenomenal?

Greek philosophy, it may be said in general, accorded more reality to what lay beyond the focus. That which appears, according to Plato is fleeting, changing, imperfect. Reality on the other hand is

*For the two meanings of appearance and their bearing upon the present problem, I am indebted to Professor Dewey.

permanent, static, eternal. The Greeks have more respect for nature than the moderns. Plato's reality, so far from being what appears in the focus, even transcends the field. Aristotle's reality, however, is confined to the limits of the field. Greek philosophy, consequently, in being more interested in the field than in the focus, is mainly realistic and cosmological. It has little to say about psychology. What we have here designated as the act of being conscious was rarely ever isolated and set out as a definite object of reflection.

Modern philosophy, on the other hand, presents a marked contrast. It tends to take what immediately appears in the focus of consciousness as the real, and that which lies beyond the focus as the apparent, the inferential and more or less hypothetical. The focus is the starting point, and what is presented there, it is *assumed* is psychical and immediate.

Descartes is more certain of the existence of his own mind than he is of the existence of his body. The fact of self-consciousness is the one indubitable reality. The self is, above all, a thinking being, and thought constitutes the essence of its nature. The distinction is made between thinking as an operation and thought as content. The traditional "clearness" and "distinctness" which for Descartes are the tests for the validity of knowledge apply, not to thought as content, but to the mind's own operations. I may think that blue is white, and thus on the side of content be in error, but I can never doubt that *I think* that I think blue is white. The operation of the mind as a process of thinking is so clear and distinct that it transcends the possibility of doubt. Modern philosophy may be said, therefore, to begin with the clear and distinct knowledge of mind or self, whose essence is to think, and whose operations stand self-revealed.

The view of the mind held by Locke and Berkeley is essentially the same as that of Descartes. "Since the mind, in all its thoughts and reasonings, hath no other immediate object, but its own ideas, which it alone does or can contemplate, it is evident that our knowledge is only conversant about them."

I

A somewhat similar passage may be cited from Berkeley's *Principles of Human Knowledge.* "It is evident to any one who takes a survey of the objects of human knowledge, that they are ideas actually imprinted on the senses, or else such

*Locke: *Essay C. Human Understanding,* IV, I. I.

as are perceived by attending to the passions and operations of the mind; or, lastly, ideas formed by help of the memory and imagination. * * * * But besides all that endless variety of ideas or objects of knowledge, there is likewise something which knows or pictures them. * * * * This perceiving, active being is what is called Mind, Spirit, Soul, or Myself." With Hume ideas are distinguished into impressions and ideas. Kant uses the term "representation," Mill, "sensation." Later "states of consciousness" was the term. But under whatever name, the Immediacy of the Psychical is the fundamental postulate of modern idealism. In a more recent form, we may quote Bradley. "Sentient experience, in short, is reality, and what is not this is not real. We may say, in other words, that there is no being or fact outside of that which is commonly called psychical existence, feeling, thought, and volition (any group under which we class psychical phenomena) are all the material of existence, and there is no other material, actual or even possible."* In further support of this view one has only to turn to the ordinary text-book in psychology to find psychology defined as the science of consciousness.

In illustration of the second essential characteristic of modern philosophy, we may begin with the dualism of Descartes. Set over against the realm of mind, wholly discontinuous with and qualitatively different from it, is the realm of body. These two spheres of existence are mutually exclusive. The one is thinking, active, inextended; the other, non-thinking, passive, extended. The thinking mind is without content, the extended body without quality. But there arises, as a result of the connection between these juxtaposed realms, a host of contents of a peculiar nature, namely, sensations, memories, imaginations, volitions. The definite position of this peculiar realm of contents, the future states of consciousness, is somewhat unclear. Viewed in connecton with Descartes' treatment of animal automatism, there is ground for supposing them non-psychical. At any rate, modern philosophy begins with two worlds, the one mental; the other extra-mental, an external world of physical reality the existence of which is totally independent of mind. Furthermore, due to connections between them, there is an order of existences whose status is somewhat uncertain, an order of contents whose metaphysical nature and relations to the act of being conscious is but vaguely determined.

**Appearance and Reality*, p. 144.

If Descartes is somewhat indefinite in the fixation of this third realm, we find an explicit localization of it by Locke. Locke's problem is set in terms of the mind-object relation. The connection between the related terms are "ideas." A "representative" theory of knowledge is specifically formulated. We have the self and its ideas, or states of consciousness, purely psychical existences, which are the immediate objects of knowledge and beyond which the self can never directly pass. But in addition, there is the whole outside world, the real existence of which Locke never questions, and somehow he feels that an adequate doctrine of knowledge must include some relationship between ideas and things. In consequence ideas are regarded as "representative" of things. We know things only through the "intervention" of the ideas we have of them. Matter is divided into primary and secondary qualities. In the case of the former the idea is a copy of the quality, a photographic reproduction, a faithful representative of it just as it exists *in rerum natura;* in the case of the latter, we are at a loss to formulate any correspondence. Secondary qualities of matter have no known existence apart from the mind which perceives them. The subjectivity of the secondary qualities is the first step in the concession of matter to mind. The primary qualities, however, are real existences within the physical world, adequately though indirectly known through the vicarious function of ideas. Locke's view may be termed hypothetical or representative realism.

With Locke, therefore, content breaks up into the psychical and physical, into intra-mental and extra-mental. Only intra-mental content can be an immediate object of knowledge. Locke distinguishes the internal operations of the mind from the data upon which it operates. The mind is endowed with an elaborate mechanism, but the psychical data, simple ideas, or the combination of these by the active operations of the mind, have no existence apart from the mind which creates them. Psychical contents not only are, but in addition are dependent on the psychical act for their being.

A second step in the direction of complete subjectivity is taken when Berkeley points out that the same arguments which go to show the subjectivity of secondary qualities, will, when logically carried out, lead to the subjectivity of the primary. The transition from an idea to a thing is impossible and absurd. On the assumption that the psychical data are the only immediate objects of knowledge, there is no place for material reality beyond the mental. As to the

supposed correspondence between idea and thing, Berkeley asks, How can an inextended idea be a copy of an extended thing? An idea can only be like another idea. The concession of matter to mind is now complete.

A further point is to be noted. The "esse est percipi" of Berkeley, whatever be its logical implications, is not *intended* to lead to solipsism. The real existence of other minds, of relations, and of God Berkeley has no intention of reducing to the psychical content of a perceiving mind. Their existence is independent of their being apprehended. The components of Berkeley's world are the self and its states or ideas, other selves and their ideas, God and his thoughts. So far as the existence of other minds and of God are concerned, though spiritual in their nature, they are in no sense conditioned or in any way dependent on their being known. Though immaterial, they are real beyond any individual, human or divine, perception of them. All content for Berkeley is psychical, some of which owes its existence to its being perceived, and some which does not, namely, other minds, relations, and God.

Subjectivity reaches its limit in Hume. The self of Descartes, Locke, and Berkeley disappears as an entity. It is lost in the flow of conscious states and an empirical search fails to find anything over and above an aggregate of states of consciousness. Locke's ideas are now differentiated into impressions and ideas, the former preceding and giving rise to the latter. Relations and connections between psychical contents are reduced to psychological laws of association grounded in the constitution of human nature. Locke's primary qualities are reduced to impressions of unknown origin, and the self to a bundle of perceptions.

Such was the course from external reality to subjectivity, from physical content to psychical content as it progressed in British philosophy. It is a passage from nature to a logically implied solipsism. Different is its course in continental philosophy, and different its conclusion. Here it is passage from external reality to absolutism.

Pre-Kantian rationalism was the attempt to deduce, from the activity of the knowing process, all the contents of knowledge. The origin of knowledge was to be sought in the productive power of psychical operations, which, it was concluded, were capable from their own exercise of an out-put of cognizable content. Kant was influenced both by Hume and by Leibniz. Hume's conclusions were disquieting, but on the empirical assumption, incapable of refutation.

Kant returns to the original point of view of Locke, his problem is set in terms of the mind-object relation. The solution is also one in which, in post-Kantian philosophy, the object tends more and more to disappear. But it is a compensatory progression; what the object loses, the mind absorbs. The mind term of the relation does not embrace the object and then dwindle, it embraces the object term and swells to the absolute.

The mechanism of Locke's doctrine comprises primary qualities of matter (the object), the self (the subject), and intervening ideas, the materials of knowledge; and knowledge represents a synthesis of these ideas. The machinery of Kant's doctrine comprises the thing-in-itself (the object), the transcendental ego (the subject), and the world of phenomena, or experience, the result of the inter-connections of the two terms. For Locke the mind, in its reception of simple ideas, was passive, consequently viewed as passive throughout the course of British empiricism, the psychical dwindles. For Kant the ego is creative in its initial activity consequently the psychical enlarges. Nature for Kant is a construct, and the understanding prescribes its laws. The universe of content is phenomenal with an outstanding thing-in-itself.

What Berkeley did for Locke's concept of matter, Fichte does for Kant's thing-in-itself. It is throughout the course of subsequent philosophy dropped out. But the transcendental ego undergoes a vastly different history from the destruction of Locke's and Berkeley's ego at the hands of Hume. The various transcendental ego's of Kant are gathered together and merged into the absolute. The absolute is developed in the direction of intellectualism by Hegel, and in the direction of voluntarism by Schopenhauer.

The third feature of modern philosophy pertains to the source, pertinency and directness of its problems. Its issues are chiefly logical or epistemological, dealing with the origin, extent, and validity of knowledge. Such problems are secondary to the underlying assumption of all idealism, the immediacy of the psychical; their value is derivative, is acquired in virtue of this one controlling assumption. If the immediate data of knowledge are states of consciousness, then the problems touching the validity of knowlerge, correspondence and coherence theories of truth, analogical and ejective inferences are genuine problems. On such an assumption, physical reality beyond the domain of consciousness is at most hypothetical, can never be brought within the circle, is impossible of identification. No wonder

it should have dropped out! Epistemological dualism could obviously not maintain itself. Some form of pure idealism is the only satisfying conclusion to be reached on the given assumption. If the immediate is psychical, and the psychical can only know the psychical, then everything is psychical. Modern philosophy may be said to be a series of descriptions each given *in such a manner that* no violence is done to its underlying postulate. The postulate has been maintained, even at the price of dialectic.

Let us suppose that the immediate objects of knowledge are "ideas," then what follows? It follows that if there be any physical reality, it can be known only in terms of ideas. Consequently a representative theory of perception follows. If the psychical and physical are two orders of existence then theories touching their interaction are of genuine interest. Furthermore the doctrine of ideas gives rise to an atomistic psychology. And since knowledge is a synthesis of ideas, the synthetizing material is naturally first sought among the ideas. So long, therefore, as Hume failed to find relations and connections among the contents of experience, it is natural that T. H. Green should have gone outside of experience in search of relating material. It is natural also that Professor James, sticking to the standpoint of experience, should have come forward with the feelings of "and" and feelings of "if," purporting to find relations as felt relations within experience itself. Professor James' refutation of associational psychology is evidence that the assumption on which it rests is open to question.

New realism is one among several contemporary movements which take the view that many of the problems of modern philosophy have remained insoluble chiefly because of the way in which they have been stated. If, under a given assumption, they are incapable of solution, perhaps the trouble lies with the assumption.

III. The New Realism In England

1. In 1888 Thomas Case published a book entitled *Physical Realism,* with the sub-title, *Being an Analytical Philosophy from the Physical Objects of Science to the Physical Objects of Sense.*

The theory of Physical Realism as brought forward by Case affords an admirable orientation of the study of English realism. It is a pioneer, though stalwart, protest against the pre-supposition of idealism. Psychological idealism, it is pointed out, began with the suppo-

sition of Descartes that all the immediate objects of knowledge are ideas. Every form of idealism rests upon the common postulate that all sensible data are psychical. Upon such an hypothesis, pure idealism is the only logical conclusion.

The theory of Physical Realism, as the sub-title indicates, takes its start with the results of science. This is significant. The entire neo-realistic movement, as we shall see, is characterized by a healthy recall of philosophy to science. Case's book opens with a quotation from Professor Tait's *Recent Advances in Physical Science,* and its closing paragraph is headed with the sentence, "My main trust is in the philosophy of science." Natural philosophy, it is asserted, is not a sham and the whole fabric of the physical world is not an invention. And yet, according to Case, this physical world known to science is an "insensible" world, we can have no immediate knowledge of it. Real, beyond sense, actual in nature, it must remain an inferred world. Not only is the world of physical science insensible, but portions of it are imperceptible, as for example, corpuscles, and the undulations of ether. Now the idealistic hypothesis, maintaining that the immediate data of knowledge are psychical, is totally inadequate for the explanation of the external world of physical science. The physical cannot logically be inferred from the psychical. A new theory is required, and it is in response to this logical demand originating in consequence of the results of science being taken as the starting point, that the theory of Physical Realism is advanced.

Physical Realism is the doctrine that the immediate data of sense are *physical* and not psychical. The immediate object is the nervous system itself sensibly affected by external objects. The sensible object is neither identical with the external object which causes it nor with the internal operation of consciousness which apprehends it; it is neither the physical object without nor a psychical object within; it is within, but physical. The results of physical science, it is held, establish the fact that the sensible object is internal, a modification of the nervous system due to its sensible affection from external causes. The results of logic establish the fact that it is physical, homogeneous with the outer object of which it is representative, for in no other way can physical objects of sense be inferred.

There is, therefore, numerical duplicity between the physical object of science and the physical object of sense. Both, however, are

physical, and belong to the same order of reality. The transition from one to the other is unbroken and homogeneous. There is no rupture of physical continuity, no transformation from physical to psychical.

The history of idealism, as we have seen, marks the gradual absorption of content on the part of consciousness, an absorption ending in complete subjectivity. With Case there is inaugurated a movement in an opposite direction. At least part of the universe of content, according to Case, takes its place outside the mind, is physical and independent of the psychical operation which apprehends it.

2. The more direct impetus to the English neo-realistic movement proper is given by Mr. G. E. Moore. Among its later advocates are Messrs. Russell, Nunn, and Alexander. Mr. Russell affirms in many places that his philosophical position is derived from Mr. Moore, and Mr. Nunn acknowledges indebtedness to both Mr. Moore and Mr. Russell.

As early as 1899 Mr. G. E. Moore published in *Mind* an article entitled "The Nature of Judgment." In this article Mr. Moore attacks the idealistic logic of Mr. Bradley. In Judgment, according to Bradley, an idea is predicated of reality. Furthermore, what we have above loosely termed content is viewed, on the assumption of idealistic logic, as a quality of the idea. When we judge, it is held, we use ideas as ideas, and when we have an idea of *something,* the *something* is part of the content of the idea.

This intellectualistic assumption is called in question by Mr. Moore. The *something* about which a judgment is asserted is other than part of the content of the idea involved in the assertion. Mr. Moore employs the word "concept" to designate any entity of the universe. They are not mental facts, and their nature is in no sense dependent upon whether any one thinks them or not. Concepts are irreducible, incapable of change, and independent of the process called thinking. Any "thing" which I may point to or identify is a complex of concepts, and Mr. Moore assigns to this complex the important, and in later realistic writings, significant term, "proposition." A proposition is a synthesis or combination or complex of concepts. A judgment asserts a proposition, and the proposition about which the assertion is made is other than content of the assertion. A proposition, therefore, is nothing subjective of psychical. Truth and falsity

are immediate properties of propositions. Perception is the cognition of an existential proposition.

Mr. Moore begins, it is seen, with a refutation of idealistic logic. He continues with a refutation of idealism.* All idealistic arguments, it is asserted, involve the necessary and essential step, *"esse* est *percepi"*; "being" and "being experienced" are necessarily connected; whatever *is* is *also* experienced. Mr. Moore asserts "that the most striking results both of idealism and agnosticism are only obtained by identifying blue with the sensation of blue: that *esse* is held to be *percipi* solely because *what is experienced* is held to be identical with *the experience of it."* Idealism maintains that *objects* of sensations are the contents of sensations, that "existence" and "content" are inseparable, that "blue" is related to the "sensation of blue" as its content. Such an assumption is claimed to be "utterly unfounded."

In opposition to the idealistic analysis of sensation, we have, according to Mr. Moore, the true analysis. "In every sensation or idea we must distinguish two elements, (1) The object, or that in which one differs from another; and (2) 'consciousness' or that which all have in common."

In the first place, Mr. Moore contends that the blue "is probably not part of the content of the sensation at all." What the idealist calls "content" is an "object," a "thing," *not* an inseparable aspect of the experience. "Blue is as much an object, and as little a mere content, of my experience, when I experience it, as the most exalted and independent real thing of which I am ever aware. There is, therefore, no question of how we are to get outside of our ideas and sensations: merely to have a sensation is already to *be* outside that circle. It is to know something which is as truly and really *not* part of my experience, as anything which I can ever know." The contents of sensation which Case localized in the nervous system are now thrust beyond the body, and are re-instated as physical existences, the real status of which is unaffected by their relation to consciousness.

We may now turn to the other element present in every sensation, that "in respect to which all sensations are alike." "The term blue is easy enough to distinguish, but the other element which I have called 'consciousness'—that which the sensation of blue has in common with sensation of green—is extremely difficult to fix * * * * and, in general, that which makes the sensation of blue a mental

*"Refutation of Idealism," *Mind*, Vol. 12, 1903.

fact seems to escape us: it seems, if I may use a metaphor, to be transparent—we look through it and see nothing but the blue." Or, as expressed elsewhere "it seems as if we had before us a mere emptiness, when we try to inspect the sensation of blue, all we can see is the blue: the other element is as if it were diaphoanous."

Such a conception of consciousness is significant. Two points must be noted. First consciousnesss "really *is* consciousness. A sensation is, in reality, a case of 'knowing' or 'being aware of' or 'experiencing' something. When we know that the sensation of blue exists, the fact we know is that there exists an awareness of blue." Second, the unique element, "awareness," present in every sensation, has also a unique relation to the other element, the blue or the object. Consciousness has to blue "the simple and unique relation the existence of which alone justifies us in distinguishing knowledge of a thing from the thing known, and indeed in distinguishing mind from matter."

The realistic views of Mr. Moore are further elaborated in subsequent articles published in the *Proceedings of the Aristotelian Society.**

We may cite a single quotation from the article on Kant's Idealism. "What I do think is that certain *objects* of sensation do really exist in a real space and really are causes and effects of other things * * * * And one other thing is certain too, namely, that colours and sounds are *not* sensations; that space and time are *not* forms of sense; that causality is *not* a thought. All these things are things of which we are aware, things of which we are conscious; they are in no sense parts of consciousness. Kant's Idealism, therefore, in so far as it asserts that matter is composed of mental elements, is certainly false. In so far as it asserts this, it differs in no respect from Berkeley's and both are false.†

Mr. Moore believes that the Idealist, on the *"esse* est *percipi"* assumption, is unable to prove that Solipsism is not true. The article on "The Nature and Reality of Objects of Perception" is concerned chiefly with two questions: 1. How do we know that other persons exist? 2. How do we know that *any* particular kind of thing exists?

*Experience and Empiricism, 1902-1905, p. 80.
Kant's Ieadism, 1903-1904, p. 127.
The Nature and Reality of Objects of Perception, 1905-1906, p. 68.
The Subject-Matter of Psychology, 1909-1910, p. 36.

†Op. cit. page 140.

The answer to both questions is the same. The existence of other minds and of objects can be proved only on the ground that "sense contents" *do* exist. If "sense contents" as idealism maintains, resolve themselves into perceptions, one's observations of his own perceptions, thoughts and feelings do not afford the slightest reason for believing in the existence of material objects or other minds. Only on the ground that the thing perceived exists separately from the perception of it can the contrary of solipsism be maintained.

In the article entitled "The Subject-Matter of Psychology," Mr. Moore seeks to determine what kind of entities are mental or psychical and what it is that distinguishes them from the other contents of the universe. Accordingly it is said that every act of consciousness, as distinguished from what it is conscious of, is a mental entity. To be a mental entity *is* to be an act of consciousness, and this is the most fundamental meaning of mental. But besides being conscious, one may be conscious in a particular way, there may be a certain quality or tone of consciousness. Although as Mr. Moore has pointed out in the analysis of sensation, there is no difference in the consciousness of blue and the consciousness of green, yet there is a very significant difference between the consciousness in willing an action and merely thinking it, between liking an object and merely seeing it. As a third sort of undoubtedly mental entities, Mr. Moore mentions "Any collection of acts of consciousness which has some sort of unity." Such and only such entities are undoubtedly mental. Others, for example, the mind itself, images, and contents of conscious acts are doubtful.

It is in connection with the second type of mental difference that Mr. Moore's position seems open to question, namely as to whether there are qualitative differences in the mode of consciousness. So far as sensation goes, consciousness is that in respect to which they are all alike. Sensations differ only in respect to content. The consideration at least seems plausible that perhaps all differences may be described in terms of content, and that the awareness pertaining to acts of believing and acts of willing reveal no qualitative differences whatsoever.

In the history of idealism, as we have seen, the act of being conscious has tended more and more to absorb the content element and render it inseparable from itself. We are beginning to see, according to realism, a movement headed in the opposite direction. Complete

subjectivism represents congestion of content. For lack of room, an elaborate epistemology was devised to give the content the appearance of spatial and temporal extensity. This congestion was partly relieved when Case shoved sense content into the nervous system. It is further relieved when Mr. Moore turns it completely out of doors. The movement thus started will not stop until the mind is, as it were, turned inside out. For subjectivism we shall encounter the doctrine of the objective. The problem then will be, not how consciousness constitutes reality, but how reality generates consciousness.

3. The realistic views of Mr. G. E. Moore are taken over by Mr. Bertrand Russell* and made the "premises" for the development of Symbolic Logic. It is Mr. Russell's opinion that the obscurities of the Philosophy of Mathematics are due to insufficient assumptions. The tendency of idealism has been to regard mathematics as dealing with mere appearance. The Kantian doctrine that space and time are *a priori* forms of sensibility has given to mathematics only phenomenal validity. Such a view, as Mr. Russell holds, is "capable of final and irrevocable refutation." All mathematics, it is pointed out, "deals exclusively with concepts definable in terms of a very small number of fundamental logical concepts."† All mathematical constants are "logical constants;" and from them, ultimate and indefinable, all mathematics can be strictly and formally deduced.

Mr. Russell is at once anti-idealistic. Logical constants are not forms of thought, not a priori institutions, nor Kantian categories. The discussion of indefinables, he tells us, "is the endeavour to see clearly, and to make others see clearly, the entities concerned in order that the mind may have the kind of acquaintance with them which it has with redness or the taste of a pineapple."‡ The "constants" are to be defined, we are told, only by enumeration; they are obtained "as the necessary residue in a process of analysis."

In the matter of inference, it is important to note, Mr. Russell holds to a passive psychology. "But it is plain that where we validly infer one proposition from another, we do so in virtue of a relation

---

*cf. *Principles of Mathematics,* Vol. I. pp. 1-110. Meinong's "Theory of Complexes and Assumptions," I, II, III, *Mind,* N. S. Vol. XIII, 1904 ,in *Proceedings of Aris. Society. Philosophical Essays.*

†*Principles of Mathematics,* I.

‡Ibid, p. V.

which holds between the two propositions whether we perceive it or not: the mind, in fact, is as purely receptive in inference as common sense supposes it to be in perception of sensible objects."*

Mr. Russell states in the *Preface* to the *Principles of Mathematics* that on fundamental questions of philosophy his position, in its chief features, is derived from Mr. G. E. Moore. This position involves three premises: (1) The non-existential nature of propositions; (2) Their independence of any knowing mind; (3) Pluralism including a doctrine of external relations. A brief elaboration of these three positions will be sufficient to indicate the essence of Mr. Russell's realism.

In the first place, what does Mr. Russell mean by a "proposition?" When I assert any judgment there is always the assertion and *something about which* the assertion is made. The thing asserted is the object of which the assertion is the verbal formulation. Now the object of a judgment is what Mr. Russell calls a *proposition*. Propositions except those which are linguistic, do not contain words; they contain the entities indicated by words. "If I say 'I met a man,' the proposition is not about *a man*: this is a concept which does not walk the streets, but lives in the shadowy limbo of the logic-books. What I met was a thing, not a concept, an actual man with a tailor and a bank-account or a public-house and a drunken wife." †Any complex whatsoever that can be pointed to or mentioned is a proposition. Mr. Russell further designates a proposition as anything that is true or false. Truth and falsehood are characteristics exclusively of propositions, they depend, not upon the person judging, but upon the facts about which the judgment is made. Every judgment must have an object other than itself. Following Meinong, the objects of judgments are called "objectives." All objectives are propositions. Some propositions are true and some false, just as some roses are red and some white.

In the second place, Mr. Russell holds that propositions are independent of any knowing mind. This is the primary and essential thesis of realism. It may be variously stated. The knowledge relation is an *external relation;* knowing makes no difference to the thing known. The question touching the nature of propositions, is, Mr. Russell affirms, distinct from the question of knowledge. The proposition known is not identical with the knowledge of it, and this is only another way of stating that psychical processes are not to

*Ibid, p. 31.
†*Principles of Mathematics,* p. 53.

be confused with their objects. The object of a presentation is the actual external object itself, and not any part of the presentation. The object of external perception is not in the mind of the percipient; it is a wholly extra-mental thing, an outside related entity. Every presentation has an object other than itself, and this object, except where mental existents are concerned, in extra-mental. Perception has as its object an existential proposition.

The widest word in the philosophical vocabulary, Mr. Russell says, is the word *term*. And the admission of many terms, he holds, destroys monism. "Whatever may be an object of thought, or may occur in any true or false proposition, or can be counted as *one* I call a *term*."* A man, a moment, a number, a class, a relation, or anything else that can be mentioned, we are told, is sure to be a term. Pluralism is at once evident when we consider, further, the characteristics assigned to terms. Every term is immutable and indestructible. Every term has numerical identity with itself and numerical diversity from every other term. What a term is, it is, and no change within it is conceivable.

The category of subsistence is all-inclusive. Every term has being, it subsists, is an entity. Terms are subdivided into "things" and "concepts." All "things" and most "concepts" are existents. Some "concepts," however, are merely *subsistents,* as for example the false conclusions of a syllogism. It does possess being, however, it may be an object of thought, it may be mentioned, is, in short a term. Existents, it may be added, may be either mental or extra-mental. But in either case they are equally independent of the psychical act which apprehends them.

Mr .Russell's doctrine of relations is extremely important in the history of realism. There are two opposing theories of relations, known as the theories of internal and external relations. The doctrine of internal relations is thus expressed by Mr. Russell: "Every relation is grounded in the natures of the related terms." It is that relations "modify" their terms, that when two objects are related there is something in the "natures" of the object in virtue of which they have the relation. Relations exist as adjectives of their terms, as either constituted by the nature of the terms, or as grounded in those natures.

The two connected doctrines of logical monism, or the theory that Truth is one, and ontological monism, or the theory that Reality

**Prin. of Math.,* p. 43.

is one, are logical deductions, it is asserted, from the axiom of internal relations. And, moreover, the axiom of internal relations, as evidenced in the conclusions of Bradley, leads to the denial of relations all together, and is equivalent to the assumption of one final proposition with one subject and one predicate.

In contrast to the above theory, Mr. Russell holds that relations are external, that they possess genuine reality, "absolute metaphysical validity." "There are such facts as that one object has a certain relation to another * * * * they do not imply that the two objects have any complexity, or any *intrinsic* property distinguishing them from two objects which do not have the relation in question."* There are ,therefore, among the contents of the universe, distinct ultimate entities called relations. All individual relations are existents. And no relation is a part of the term which it relates. Relations are terms and as such are eternally what they are. The internal nature of terms is not changed or altered by virtue of possessing relations, but all terms are capable of sustaining different relations at different times.

4. For Mr. Russell's universe of terms, Mr. Nunn† substitutes the word objective, a term introduced into philosophy by Meinong and adopted later by Mr. Russell in his *Philosophical Essays.*

In order to be a true part of the objective any content whatsoever must meet a primary test. The essential and necessary mark of the objective is "Priority" to and "Independence of" our thinking. As secondary marks the objective is characterized by "sameness of all" and "relevance to purpose." The objective represents a "pooling" of a common part of our experience and this common part is there to be "reckoned with."

What are the actual contents of the objective? An inventory does not contain everything which Mr. Russell, for example, held to possess Being, everything, that is, which may be mentioned. Mr. Nunn maintains, for instance, that a round square or Colonel Newcome are not contents of the objective. The range of the objective may be represented by the following scheme:

$$\text{Objective} \begin{cases} 1.\ \text{Existents} \begin{cases} a.\ \text{Physical} \\ b.\ \text{Psychical} \end{cases} \\ 2.\ \text{Subsistents} \end{cases}$$

Objective existents which are physical include both Primary and

**Philosophical Essays,* p. 161.

†*Aims of Scientific Method,* and various articles in *Proceedings of the Aris. Society,* especially "Are Secondary Qualities Independent of Perception?" 1909-1910, p. 191.

Secondary qualities, both being extra-mental. Objective existents which are psychical include mental entities as distinguished from cognitive acts. Both a "post" and my "idea of" a post are objective existents and meet the necessary test of the objective. The former does because it is there as a post whether I perceive it or not; the latter because it would have its particular content even if, Mr. Nunn says, I do not happen to perceive that I had "had" it. As examples of objective subsistents may be mentioned the tangent to an elipse, or relations.

We have, therefore, a precise marking off of the limits of the objective with a standard test of objectivity. The objective embraces all primary facts as data, and it is the function of science "to render the objective in its actual determination intelligible." The primary facts as interpreted enter into an apperceptive system and thus form "secondary constructions."

Mr. Nunn's realistic position is summed up in three main assertions: (1) the existence of primary and secondary qualities of material bodies independent of their being perceived; (2) the fact that, though never given except under conditions, these conditions do not affect the character of the qualities; (3) the uselessness of sensations as mental entities endowed with a "representative function."

Enough has been said touching the first two assertions to make their meaning sufficiently plain. The third assertion implies a presentative theory of perception. Mr. Nunn holds that in sensation one is in immediate and direct contact with independent reals. That which is directly present to the mind is the extra-mental object, the objective physical existent, no intermediate psychical existent which some how functions in behalf of its prototype. In perception the mind directly encounters the thing or some aspect of the thing, and the existential status of the thing perceived is in no sense dependent on its presence or absence in some one's perception of it. Perception as a cognitive act, breaks up into two elements, the thing cognized, and the psychical act of cognition. The act of cognition contains only the element of "awareness." All the content is extra-mental. Mr. Nunn starts with "the recognition that in perception the object announces itself as having a certain priority to an independence of our act and that this announcement is itself the sufficient certificate of the object's extra-mental status."*

*Proceedings of Aris. Society, "Are Secondary Qualities Independent of Perception?" 1909-1910, p. 201.

Now realism, in holding that knowing makes no difference to what is known, is committed to a passive psychology. The content given in perception is read off as presented. In perception what is presented is accepted without suspicion, and without question. The senses do not deceive, perception is infallible. But then there are such contents as illusions, hallucinations, and error. Perception is confronted with all sorts of spatial and temporal displacements which endanger the position of realism. The entire topic of illusory and erroneous experience is admirably discussed by Professor Montague and Professor Holt in *The New Realism* and it seems, therefore, unnecessary to enter here into any detailed account of the problem. Mr. Nunn's position, however, may be briefly stated.

Touching the problem of qualitative differences, any object actually contains all the various qualities attributed to it by different observers under different conditions. The buttercup really owns all the colors which it may present under various possible conditions. The staff seen bent in the water, so far as its visual properties are concerned, really is bent. The visual qualities of the staff under the water are different from what those qualities are out of the water. "Error may spring either from ignorance that the staff is partially in water, or from ignorance of the visual aspects belonging to a straight staff in these circumstances."* No deviation is made from the rigid realistic position that "sensational experience carries with it a guarantee of the extra-mentality of its content" even the cases of hallucinations. Regarding examples like the "voices" of Joan of Arc, Mr. Nunn maintains that "the evidence at least warrants the speculation that real sensational visual and auditory characters are directly cognized without the help of ordinary mediating machinery.†

In the doctrine of objectivity set forth by Mr. Nunn, the objective embraces both physical and mental existents. The test of objectivity is priority to and independence of thinking. Any content is objective the existence of which is not dependent upon being perceived.

It does not seem to me that Mr. Nunn can apply his test of priority and independence to mental existents. If there be such entities as mental existents, they certainly are not prior to and independent of their being perceived. Mr. Nunn says that my idea of a post "would be an idea with just that particular content, even if I did not happen to perceive that I had 'had' it." Of course mental exis-

*Ibid. p. 209.

†Ibid. p. 216.

tents are prior to and independent of any reflection about them. My idea of a post may exist prior to and independent of my perception that I was having a perception of an idea of a post, but it does not exist apart from and independent of the operation involved in the perceptive process in which it occurs. Mental entities are products of and inseparable from the very acts which give them birth. We may add another operation subsequent to the one which is simultaneous with and constitutive of its existence. Either, it seems to me, mental entities do not exist, or we must put them down as Subjectives, if I may capitalize a word. If they exist as entities they have no existence independent of their being perceived, and as such are subjective and not objective. But are we compelled to believe there are any such things as objective psychical existents at all? Surely I have an idea of a post, a stone post with a horse hitched to it. It is also plain that the content which I am thinking of is not created by my thinking it, for I cannot by thinking bring into the post any quality which the post does not have. I can't think it wooden instead of stone, blue instead of gray. Then, I may ask, is the content "psychical" content at all? Haven't I been all the while thinking about *the* post and not about any idea at all? Of course the difficulty presents itself as to how I can think about an actual physical object which is not sensibly present. How, I am sure I do not know, but *somehow* I believe that I do. If there are such things as psychical existents they must be subjective, not subjective in the sense of intra-mental, but subjective as opposed to Mr. Nunn's objective; subjective in the sense that they do not exist independent of being perceived. If my memory content is an image-entity separate from the content remembered, then its existence is identical with its being perceived. But I cannot be sure that such contents exist. Either they do not exist, or they are true parts of the Subjective.

The analysis of sensation begun by Mr. G. E. Moore, consisting in the separation of the sensation into the object of which we are conscious, and the consciousness of the object, the former being extra-mental, the latter being an undifferentiated, pure transparent process, is pushed to its furtherest possible limit by Mr. Alexander.* Any experience whatever which may be termed mental experience is characterized by a fundamental distinction between what is experienced and the act of experiencing. In all mental experience there

*Articles in *Proceedings of Aris. Society,* especially "On Sensations and Images." 1909-1910, p. 1.

is this polarization, the two poles representing fundamental distinctions of every experience. There is the act of apprehending and the something apprehended, the act of judging and the something judged, the act of remembering or imaging, and the something remembered or imaged.

The *something* experienced is always other than the mind which experiences it. It may be variously termed a thing, an object, a percept. Mr. Alexander seems to prefer the term "cognitum" standing for anything that may be the content of a mental operation. The "cognitum" is extra-mental, physical, and independent of the act in "compresence" with which it invariably occurs.

The significance of Mr. Alexander's doctrine of the nature of the "cognitum" is its extension to include anything which in any sense may be an object or content of a mental act. The contents of memory, imagination, dreams, illusions, judgments are physical and extra-mental and independent of the mind which perceives them.

In addition to the "cognitum" there is the knowing, the thinking, the mental act, which may be termed consciousness. Consciousness is simple, homogenous and absolutely void of any qualitative modality. It has no specific tone. Experience differs only with reference to the "cognitum." The consciousness of blue, of an imaged tree, or of believed truth is the same for all. Consciousness is mental activity, pure and simple. Consciousness, however, has direction, but its direction varies solely in accordance with the physical object to which its activity is directed. Following Mr. Stout, consciousness is one with conation. There is a series of mental movements which in their continuity constitute consciousness. Conation, direction, continuity, are the characteristics of consciousness.

Such are the two elements present in every experience. Their relation to each other is simply that of togetherness. In a recent article in *Mind** Mr. Alexander uses the term "compresence." A table, and consciousness of the table, exist together in precisely the same way that a table and chair are said to be together. Touching the relation of "compresence" Mr. Alexander promises to write more in the future.

From the foregoing sketch of idealism and English realism, the content element of our earlier description is seen to be somewhat migratory in its disposition. The history of idealism marks an emigration. Content moves from the physical realm to the psychi-

**Mind,* January, 1912, p. 2.

cal realm. But consciousness is never able fully to assimilate this foreign material. Just because the content *of which* I am conscious is distinguished from the act of being conscious, it must remain outside and alien to the process. In consequence, content returns to be *naturalized* within the domain of physics. New realism is in a sense an ode in commemoration of the return of primary and secondary qualities to their own native heath.

While English realists differ very much as to the fixation and objectivity of contents, that all agree in two important respects. They all agree that consciousness is a psychical act, a mental entity, a term. So far as the act of being conscious, as distinguished from the content of which one is conscious, is concerned, there is no break with the traditional conception of consciousness as an operation. Furthermore, perception is at all times viewed as a cognitive operation. It is a case of knowing, of becoming aware of. Consciousness is an invariable element of all sense apprehension.

But if consciousness is a term, it must sustain some sort of relation to the other terms with which it is co-present. The mere relation of togetherness or compresence is insufficient. One is at a loss to understand how such a purely diaphanous medium, when viewed as a mental entity, a mental term, can be related to content terms of a nature entirely other than itself. If consciousness is a term it should be possible to isolate it from its compresent associates and identify it as such. If we take away all the content terms, it should be possible to discover, by an empirical analysis, the term consciousness as the necessary residue. The impossibility of such an analysis seems to indicate that perhaps consciousness isn't a term at all. There seems need, therefore, of some modification in the primary conception of consciousness. And this demand, as we shall see, is supplied by the American realist who regards consciousness, not as a term but as a relation. The chief characteristic which distinguishes the American realist from the English realist is the relational theory of consciousness.

IV. The New Realism in America

The new realism in America has consisted largely in the publication of various articles in philosophical journals. Of these *The Journal of Philosophy, Psychology and Scientific Method* contains by far the greater number of articles. It has been the chief organ for the expression of the new realism. The first public indication of a class spirit or school was the publication of "The Program and First

Platform of Six Realists."* These realists are Edwin B. Holt, Walter T. Marvin, W. P. Montague, Ralph Barton Perry, Walter B. Pitkin, Edward Gleason Spaulding. The new realism has called forth many other writers in its partial support and sympathy. Chief among these is, I suppose, Professor Woodbridge.

The most systematic and coherent account of the new movement is to be found in the forth-coming volume, entitled, *The New Realism,* by the same editors of "The Program and First Platform."† The publication of this volume renders unnecessary any detailed or elaborate exposition of the new realism in the present essay. Professor Perry, also, in his book, entitled *Present Philosophical Tendencies,* a volume just from the press, devotes an appropriate part to an account of Realism.

My treatment of American realism will consist, therefore, in a topical account of some of its essential theses.

1. Naive realism maintains that the mind directly and immediately perceives external reality. But such a view goes only a little way before encountering serious difficulties. The illusions of sense perception are so obvious that one begins to question such immediate and direct presentation. The complications arising in connection with sensory illusions, hallucinations, dreams and error have, historically, been taken so seriously that they have enforced a complete abandonment of naive realism. Owing to such difficulties the transition was made from presentative to representative realism, and thence to complete subjectivism.‡ Subjectivism, furthermore, necessitates the improvision of an epistemology whose function has been to re-objectify the "content" and go bail for its validity.

Is it inevitable that philosophy should have been compelled to take such a course. If in the end it is necessary to improvise an epistemology to re-objectify the content, wouldn't it have been simpler never to have made it subjective in the first place? In so far as subjectivism is held to be a forced conclusion of "relativity" is it not possible, it may be asked, to dispose of the complications that were seen to arise in connection with sensory illusions, hallucinations and dreams in a less radical way? Is it not possible to go back to the fundamental position of naive realism, reinstate the existence of primary and sec-

**Journal of Phil., Psy., and Scientific Method,* Vol. VII, 1910.

†Due to the courtesy of Professor Montague I have been allowed access to the proof sheets of this volume

‡cf. W. P. Montague, "The New Realism and the Old," *Journal of Phil., Psy., and Scientific Method,* Vol. IX, 1912.

ondary qualities as independent "reals," and withal account for the difficulties of illusions and relativity, and that too without abandoning a presentative theory of perception? In short, may we not go straight to the object without sailing around on the epistemological circuit?

New realism is the attempt to formulate affirmative answers to the above questions. It is above all a polemic against subjectivism. Its primary contention is that subjectivism is not correlated with relativity. And by subjectivism the new realist means not only that type of idealism which views its content as intra-mental like Locke's "ideas," but any type of idealism which maintains inseparable connection between consciousness and its content.

2. The Relational Theory of Consciousness.

The starting-point of contemporary realism in America consists in a modified conception of consciousness, a conception now termed the relational theory of consciousness. The term consciousness has had a long history, and has been made to stand for many things. One thing in its history is obvious: states of consciousness have tended more and more to be separated off, set over against and contrasted with conscious acts. The more this distinction of content from act has been pressed, the less has the term consciousness been made to imply. In English realism consciousness has evaporated into the element of mere awareness.

In idealistic philosophy consciousness, whatever the term has been intended to connote, has been of primary significance. It has been taken to be the essential element and the content set over against it has been viewed as secondary to and dependent on it. Consciousness, idealism has maintained, is antecedent to the operations upon it, and is, consequently, the pre-condition which renders experience possible. Experience could not be organized as it is except on the assumption of consciousness. Consciousness is logically prior to content and necessary for its relation and coherence.

But, it may be asked, is consciousness logically prior to content and somehow authoritative respecting its organization? English realism has shown that awareness is at best only compresent with content. Is it not possible to go a step further and to maintain that consciousness is not even on a level with, but secondary to and dependent on content; that it is not primary, but derivative; that it is actually generated out of content? Might we not say that when content develops to a certain degree of organization, then awareness

appears? Consciousness is something which happens when contents are related in a specific manner. The element of awareness enters the content of experience as a factor in a natural process.

Conscious behavior does contain the element of awareness; it is *consciousness* which appears, it is *knowing* which happens, that much empirical analysis reveals and so no violence is done to the *fact* of consciousness. Awareness stands for the indubitable fact that things not only are but are *known* to be, that matter somehow gets itself thought. The relational theory of consciousness accounts for this function of awareness as being the result of a nervous system standing in certain peculiar relations to its environment. The qualities of the objects are not due to any relations between a nervous system and the objects; they exist separate from and independent of any such relation; but the fact that they are *known* to exist, is the additional factor due to this special relation. Awareness is, therefore, a relation. It has no existence prior to or apart from the terms of the relational context in which it functions.

The relational theory of consciousness means that awareness is an *external* relation. Consciousness as an external relation, furthermore, carries with it a realistic implication. The terms related are independent of the relation in which they stand, at least so far as awareness goes. *That* relation, at all events, the new realist asserts, is external. The view that consciousness is an *external* relation was first systematically formulated by Professor Montague who takes the view that the relational theory of consciousness and a realistic theory of objects mean the same thing though approached from different points of view. Realism, he maintains, is the logical implication of such a theory of consciousness.* Idealism may also contend that consciousness is a relation, but it would maintain it to be an *internal* relation, a relation that is, where the terms related are constituted by the relation. Consciousness, the new realism maintains, is a relation wholly external. Whatever be the status of relations in general, awareness or the function termed *knowing,* is an external relation. The existence of the terms related is independent of the relation; they are not constituted by it. Whenever any content is said to be *known,* the knowing has nothing to do with the nature or existence of the content known.

Although there seems to be very general agreement among the

*cf. W. P. Montague, "The Relational Theory of Consciousness," *Journal of Phil., Psy. ,and Scientific Method,* Vol. II, 1905.

new realists that consciousness is an external relation, there seems to be little agreement as to any further specification of the nature of the relation. Professor Woodbridge,* for example, would hold that consciousness is the logical relation of implication. Among the many ways in which contents may be related, one is the relation of meaning, and this is termed consciousness. Dr. Montague† regards consciousness as a form of energy. The unit of physiological activity is the sensory-motor arc. Energy is transmitted along the sensory nerve, at the synapses the kinetic energy becomes potential, and then is redirected along a motor nerve. At the point of its redirection the potential energy exists as a kind of intensive stress implicative of its course and it is with this transcendent implication that Professor Montague identifies consciousness.

The relational theory of consciousness, it at once becomes evident, is in striking contrast to the view taken by idealism. The neo-Kantians cling to the notion of consciousness as a logical necessity. It is for them the *sine qua non,* the indispensable condition of coherent experience. Now if instead of viewing consciousness hypothetically as a postulate necessary to ultimate and logical explanation, a simple and more verifiable account of it can be given, an account limiting consciousness to the realm of concrete experience, then *prima facie,* one is inclined to accept that account. A natural explanation is preferable to a supernatural one as given, for example, by T. H. Green. If the function for which the existence of consciousness is called in to explain can be accounted for within experience itself then to go outside of experience is a work of supererogation.

An objector may say that the relational theory of consciousness does not explain what awareness is. It may be answered that perhaps no real explanation can be given any more than one can tell why, under conditions which may be fully described, an explosion takes place. As a matter of observation we see that it does and that is all there is to it. And so for consciousness, it may be that a description of its genesis *is* its definition. At any rate, the relational theory differs from the neo-Kantian view in that it renders the problem of the nature of consciousness approachable. The neo-Kantians hold that consciousness is inexplicable, but indispensable, and

*Compare "The Nature of Consciousness," *Journal of Phil., Psy., and Scientific Method,* Vol. II, 1905. Also "The Problem of Consciousness" in the Garman commemorative volume.

†Compare "Consciousness a Form of Energy' 'in the James memorial volume.

therefore to be postulated. The problem of its origin or nature, by virtue of the terms in which it is stated, is forever an insoluble and unapproachable problem. But once take consciousness out of the realm of hypothesis and put it in the realm of relation, and an important step in advance is taken. The problem is no longer stated in terms which preclude the possibility of its solution, but is re-stated in terms open to investigation and discovery. The way in the direction of an explanation is opened. The relational theory by describing the conditions of the origin of consciousness, is in accord with the biological method that the problem of *genesis* and *nature* are not to be separated.

Whether or not we agree with the new realist in affirming that consciousness is an external relation, a view containing, as we shall later see, certain difficulties, we may certainly agree with him in so far as his doctrine is a revolt against the idealistic view. Consciousness is not logically prior to or the pre-condition of the contents of which there is consciousness. It is something, whatever this may be, which has a genesis and a history. And it is subsequent to, dependent on, and, it may be added, in the interest of, the conditions which determine its occurrence. Surely no event, content, or process in the universe is so remarkable is the fact of consciousness. Two things are evident, and from which two conclusions have been drawn, and both conclusions seem to me to be false. From the fact that consciousness never *is* without content, it has been concluded that content never *is* without consciousness. And from the fact that the function of consciousness is to know, it has been concluded that all action is in the interest of knowledge. New realism is significant because it separates the content of which I am conscious from the act of being conscious of it, and shows the existential independence of the former. Professor Dewey's doctrine of instrumentalism is significant because it shows that sonsciousness arises in the interest of human activity.

3. The Doctrine of Independence.

The concept of independence is the essential thesis of realism. Much confusion has arisen, and consequently much misdirected criticism, as to what is meant by independence. Professor Royce, for example, in his critique of Realism* takes independence to mean *unrelatedness*. Since, it is urged, it is impossible to find any entity which might not stand in some relation to another entity, an independent "real" in the sense of an unrelated term does not exist. But

**The World and the Individual.* Series I. Lecture III.

the neo-realistic, however, by independence does not mean non-relation. Whether or not, as the monist contends, all things are interrelated, many things certainly are, and it is conceivable that all may contain at least the possibility of sustaining an infinity of relations.

The case against independence is put more strongly by Mr. Bradley. "If a thing is known to have a quality only under certain conditions, there is no process of reasoning from this which will justify the conclusion that the thing, if unconditioned, is yet the same * * * If the quality in question is non-existent for us except in one relation, then for us to assert its reality away from the relation is more than unwarranted."* Mr. Bradley's difficulty arises because, on his assumption, knowledge is not separated from what is known . No one can deny that knowledge is determined by the mechanism of perception, that it is conditioned by the human nervous system. Qualities of matter are not known except when related to a perceiving organism. If then, by hypothesis, knowledge and content known are identical, Mr .Bradley is correct in his conclusion. But it is the essential mark of new realism to distinguish knowledge and content known. Knowledge, or awareness, as the neo-realist betetr uses the term, *is* conditioned, but content known is unconditioned. Awareness is dependent; but the content *of which* I am aware is independent of consciousness.

The doctrine of independence is to be stated, therefore, in terms of the separation of knowledge from what is known. It rests upon the distinction between existence and *known* existence. Content so far as existence is concerned is unconditioned, but known existence is conditioned so far as the knowing is concerned. In defining the concept of independence complications arise with respect to the awareness element. Awareness, we are told, is generated. Obviously one begins to inquire into the conditions of its generation. The content is independent of awareness, but awareness is not independent of content. Consciousness is a gift, but the giver is under no obligations for what he gives. Expressed in physical terms, consciousness is generated, but no energy is expended in its generation. Independence, accordingly must be defined in such a manner that it holds between content and awareness, but applies only to content.

We may quote the definition of independence given by Professor Perry. The realistic doctrine of independence "means that things may be, and are, directly experienced *without owing either their being or their nature to that circumstance.* * * * * According to realism, ex-

*Bradley, *Appearance and Reality,* p. 16.

perience may be expressed as (*a*) *Re* Where *a* is that which is experienced, and R*e* the experience-relation; and where *a* is independent of *Re.*"* If independence be called a relation, it is an asymmetrical on non-reciprocal relation.

It has been pointed out that independence does not mean unrelatedness. Any complex may sustain different relations at different times. And it seems obvious that when any content takes on a new relation it is different *by that much* from what it was before. It is dependent an the new relation to the extent that it was, in its pre-existing state, susceptible to sustaining its subsequently acquired relation. Now knowing is an external relation which any complex, under appropriate conditions, may assume. Surely content and *known* content are different, but the difference is precisely like the difference which any relational addition makes to the content which assumes it. Awareness is something which happens to content just as a thunderstorm happens to the pre-existing elements involved. It represents a new relational context. The susceptibility on the part of content to assuming the knowing relation is not qualitatievly different from its capacity to assume any other external relation.

4. Emancipation of Metaphysics from Epistemology.

Neo-realism is primarily a revolt against subjectivism, consequently its initial conclusions are mainly negative. But not entirely so, for the arguments adduced in opposition to subjectivism involve a positive platform.†

The most notable feature of new realism according to Professor Marvin, is the emancipation of metaphysics from epistemology. The claim has often been put forward that epistemology is fundamental to all the other sciences. The history of modern philosophy furnishes ample evidence of the existence of such a claim.

In contrast to the faith which new realism places in the results of science may be cited a passage from the Preface to the 1911 edition of Karl Pearson's *Grammar of Science.* "Nobody now believes that science *explains* anything; we all look upon it as a shorthand description, as an economy of thought. * * * * It seems almost unnecessary now to republish a book, the lesson of which is that objective force and matter have nothing whatever to do with science, and that atom and ether are merely intellectual concepts solely useful for the purpose of describing our perceptual routine. * * * * Or, again, may there not be some danger that the physicist of to-day may treat

*Perry, *Present Philosophical Tendencies,* p. 315.

†Compare "The Program and First Platform of Six Realists," *Journal of Phil., Psy., and Scientific Methods,* Vol. VII., 1910.

his electron, as he treated his old unchangeable atom, *as a reality of experience,** and forget that it is only a construct of his own imagination?" The facts of science according to Pearson, are "constructs" formed from "the union of immediate sense-impressions with associated stored impressions," and "its field is essentially the contents of the mind."† Now the new realist is filled with the overwhelming conviction that the facts of science are not mental content and that they exist in total independence of the mind which discovers and investigates them.

That epistemology is fundamental means, Mr. Marvin‡ points out, three things. 1. Logical priority; 2. Ability to infer the limits of possible knowledge; 3. Ability to give a theory of reality.

New realism maintains, on the contrary, that the theory of knowledge is not logically prior to the special sciences, but is rather to be viewed as one of them. It is a science which studies knowledge as physics, for example, studies light. On the basis of the relational theory of consciousness, if for no other reason, the realist is entitled to maintain that a theory of knowledge is logically subsequent to content known, and is thus based upon physics and biology. Since knowing is something which is generated, a theory of knowing must assume the generating environment.

Realism has, with equal force, the right to contest the claim that epistemology may set the bounds to possible knowledge. Much of modern philosophy, especially the writings of Locke and Kant, has dealt precisely with this topic. An Inquiry into the Human Understanding has as one of its essential tasks, according to Locke, the attempt to fix the limits of knowledge. The realist's right to question such high-handed dispensations is based upon his thesis of independence, the essential thesis of realism. If the content known is independent of its being known, then obviously it is there to be discovered, and only an empirical discovery can reveal the limits of what exists. Knowing being an external relation, an inquiry into it as such, is incapable of revealing anything whatever touching the contents related.

That the theory of knowledge is taken to be fundamental rests, according to Mr. Marvin, on the error of idealistic logic, or indeed on any logic which takes as its task a study of the laws of thought.

*Italics mine.

†*Grammar of Science,* 1911 edition, p. 78.

‡cf. Mr. Marvin's Essay in *The New Realism* on "The *Emancipation of* Metaphysics from Epistemology."

It is plain that if the mind has laws of thought of its own which it follows, and which antedate the content upon which they operate, then a study of these laws is logically prior to a study of the contents of any of the sciences. And further, if these laws are of universal character, then a knowledge of their form may determine the nature of the content to which they apply. Only such content may be known which fits the knowing form. If there are categories of thought, by all means study those categories first. But here neo-realism appears with a new logic.

We have already seen that the new realism in England began with the publication by Mr. G. E. Moore of an article on the "Nature of Judgment" in which opposition was asserted to idealistic logic. Following Mr. Moore, Mr. Russell has asserted that the mind is as purely passive in inference as common sense supposes it to be in perception. Propositions are complexes entirely independent of any knowing process. The subject matter of any science is concerned with the terms occurring in the system of propositions which constitute its field of inquiry. The propositions with which logic is concerned, new realism asserts, are as "non-mental as rocks and ocean currents." One proposition implies another whether or not any one asserts the implication. "Logic," Mr. Marvin says, "is not a science of the knowing process. Its principles and formulæ are not laws of thought. Its terms and relations are as clearly distinct from those of thought as are the terms and relations of physics." It is not meant to deny that epistemology has an important place to fill and function to perform. What is meant is that the so-called laws of thought are not laws of thought at all, but laws of things. But the discovery and formulation of those laws and their bearing upon human activity is still a highly important task.

The emancipation of metaphysics from epistemology means in the third place, the inability of epistemology to give a theory of reality. It is maintained that the issue of new realism is independent of ontological questions, that it is confined solely to the relations obtaining between knowing and the something known. The something known it is asserted, may be spiritual or material, but new realism is interested only in ascertaining whether its spiritual or material status is effected by its becoming known.

Such a position, it is clear, is a deduction or conclusion based upon the realistic doctrine that knowing is an external relation. It rests on the assumption that content *does* exist independent of process. If it

be admitted that the content known is not identical with the knowledge of it then the ontological question touching the nature of the content is distinct from the question touching the nature of the relations obtaining between the two elements.

Such a position is in a marked contrast to idealism. If knowing is a psychical act, and if, on the theory of internal relations, what is known owes its existence to the fact of knowing, then that *does* imply a metaphysical theory as to the nature of the something known. If the relations are internal then the terms constituted by the relation are at least homogeneous with the relation, and to that extent there is a metaphysic.

And yet on the supposition that the cognitive relation is external, the question arises for the realist as to whether the doctrine of the externality of the cognitive relation applies to the entire universe of content, or whether content splits up into two divisions, one to which the doctrine of the externality of the cognitive relation is applicable, and one to which it is not. If the latter alternative is true, then there is some conent which does owe its existence to its being known, and some which does not. And to the extent of that difference there is a metaphysical implication. Only on the supposition that *all* content is independent of its being known, can it be maintained that new realism is solely an epistemological inquiry. And not all realists held this view. Professor Perry, for example, holds that moral values are constituted by consciousness. And Prof. Montague would maintain that pleasure and pain do not eixst apart from consciousness. The content felt cannot be distinguished from the act of feeling it.

5. Tendency Toward Pluralism.

The tendency of neo-realism, it is further contended, is in the direction of pluralism. We have already seen, in the study of Mr. Russell, that monism rests upon the theory that relations are internal. This theory is reaffirmed by the American realists and the universality of cognition is added as a second ground for monism.

The most effective weapon of idealism is its contention that it is impossible to escape the cognitive relation. This is a crucial problem in connection with idealism and realism. The issue of neo-realism is, it may be repeated, an issue respecting the nature of the relations holding between knowing and the content known. This issue involves two considerations which must be carefully separated. The first pertains to the determination of whether or not a universe of content, or some portion of it, is invariably compresent with awareness. Common sense is

inclined to suppose that some contents at least occur as independent entities quite apart from any one's knowledge of them. The thing which is now known continues to exist when it is no longer known. The issue here involves the independent existence of contents in the absence of the element of "awareness." And also the further question, if the content element does exist apart from awareness in a context beyond the possibility of its influence, does it undergo any modification when it occurs in the same context with it? The second consideration has reference to the situation termed conscious behavior. In this situation the two elements are certainly together. The problem here is to examine the nature of and relations between the two elements *in the situation in which they both occur.*

Now the former consideration, idealism asserts, it is useless to discuss. What the content is outside of a conscious situation it seems impossible to say, for the moment you have said anything about it, you have, *ipso facto,* brought it within a conscious situation and made it an element compresent with consciousness. It is altered at least to the extent that is now *thought of* when befofre it was not. Thd content may, for all we know, flit in and out of a conscious situation. When it is in, it is compresent with consciousness; when it is out, the situation is no longer open to observation. The only legitimate issue, according to the position of the idealist, is an attempt to determine the nature of content and process and their relations to each other in the situation in which they both *do* occur.

The fact that knowing is the universal form which all conscious behavior takes has been termed by Professor Perry "the Ego-centric Predicament." This predicament, however, at best may limit, but is not destructive of realism. The error of idealism is to suppose that, because consciousness is present as an element in all conscious behavior, all the other elements are of the same metaphysical constitution as the stuff of consciousness. It is wrong to suppose that because consciousness is an invariable accompaniment of cognitive behavior, therefore the entire situation is resolved into consciousness. Idealism does not separate knowing from the something known. It resolves the latter into the former. The realist may still maintain that within the bounds of the cognitive situation content is independent of consciousness.

But, in view of two considerations, the realist may go further. The cognitive situation is undoubtedly the starting point for reflective observation. It is, furthermore open to investigation and analysis.

And such analysis soon reveals the fact that the content which figures in my cognitive context is *also* an element in the history of the world. I do not have to transcend my cognitive behavior to find that the same content may function in two sets of relations. What the content is in another context may be the very thing of which I am now conscious. Furthermore, and this is the main contention of realism, from an analysis of the content in a cognitive situation, arises the concept of its independence. From the way in which content behaves in a conscious situation it is discovered to be independent of the act which cognizes it. The concept of independence, when applied to the content in a cognitive context is *such that* it may be applied to the same content or any content when not in a cognitive context. The existence of contents apart from cognitive acts is a legitimate inference based upon an analysis of the concept of independence, the concept of independence arising in the first instance from an empirical analysis of a cognitive situation.

Monism, in the second place, rests upon the theory that all relations are internal. New realism is as much opposed to the doctrine that all relations are intrinsic as it is to a deduction of monism from the thesis of the universality of cognition. Realism, however, is not openly pluralistic. A thoroughgoing pluralism is, it seems, committed to the thesis that all relations are external. This view is certainly held by Mr. Russell, and among American realists, Professor Holt seems avowedly committed to such a view. The new realist, however, is most interested in the declaration that knowing is an external relation, whatever be the status of other relations.

There seems need, on the part of new realists, for a more careful analysis of the doctrine of relations. Independence, as we have seen, does not mean unrelatedness. There are, according to realism, certain simple entities, ultimate terms of experience, entities "at large," as Professor Perry calls them, which are independent of all relations whatsoever. So far as relation applies, it must apply to the complexes which are formed out of the atomic entities.

Leaving knowledge as an external relation aside, we may raise a question as to whether all physical relations are external. That some are seems obvious. When I say the picture is on the table, the relation *on-ness* makes no difference to the picture. Now in the formation of complexes it seems plain that some relations are also internal. An external relation is one that makes no difference to the terms which it relates, an internal relation is one that does make a difference

to the terms which it relates. It seems clear that certain qualities which are found in physical complexes owe their peculiar tone to the relations in which they stand. We may take, for example, three graduated complexes, a, b, and c. B we say is large in relation to a. We are not concerned with the logical difficulty of how the same complex can be both large and small at the same time; it may be when figuring in different relational contexts. The issue is whether or not the property of the complex is constituted by its relational context. We certainly do consider the attributes "large" and "small" as belonging to the complex to which they are attributed. Largeness is a quality or adjective belonging to b, and it is that in virtue of its relation to c. There is no such thing as absolute largeness or smallness. They are relative terms depending upon the context in which they occur.

The same thing is true when we say that a physical object changes its color when seen in different lights. The brick wall, when seen in the morning with the sun shining on it, is light grey; when seen in the affternoon with a shadow cast over it, is dark grey. Indeed we may be sure that no two people ever perceive quite the same content. There is sameness, at least so far as numerical identity of the complex is concerned, but the qualitative differences are as numerous as the different relations in which the complex stands. Qualitative difference is no evidence for subjectivity, but it is evidence in support of internality of physical relations. It is hard to see how it is to be accounted for in any other way. Physical complexes are not immutable reals impervious to the physical influences playing upon them; on the contrary, they take up these influences and express them in their own natures. The qualities "larger than" and "brighter than" are not psychological contributions of judgment, but, according to the realistic logic, they are qualities of the thing about which the assertion is made. So far, therefore, as adjectives are expressive of the variable states of physical objects, their variation is due to the constitutive character of relations.

And we may go beyond the secondary qualities. When I say the day is gloomy, the gloominess is as much a part of the day as the rain or the wind. Many terms enter into the constitution of a day. Among them one is my body. And part of what the day is, it seems plain, is due to the fact my body is one of the factors entering into its composition. Gloominess is not a state of mind, it is an actual quality belonging to the day. My body is not only a term figuring

in a relational context, but it functions in a peculiar way. It may be an *affective* term, and hence productive of "tertiary qualities." I not only react, but I may react emotionally, that is, under a condition of stress and strain.

When this view is pressed it has interesting connections with the element termed awareness. Awareness is something, we are told, which happens to pre-existing things. It is not constitutive of terms, but the terms are constitutive of *it*. If awareness is a quality generated by the other physical qualities, then the relations functioning in the context in which it is generated seem to be internal relations. They make the difference of consciousness.

The above considerations are not intended to initiate an opening in the direction of monism. *Once* to be related is not always to be related. If a quality in a complex is constituted by the relations, a complete change in relations is followed by the disappearance of the quality. We seem forced to conclude that certain qualitative existences are due to relations, and when the relations are completely changed, the qualities are no longer existent. And furthermore, in opposition to monism, because a thing is related in many ways, it does not follow that it is related in every way. Because a complex means many things is no evidence that it means everything.

6. The Element of Platonism.

The neo-realist is a Platonic realist. When we say that Plato was a realist, what is meant, I should presume, is that the idea which for Plato is reality, exists independent of any knowledge of it. Plato's ideas do not depend on finite thinking for their being. They are eternal, immutable entities.

Idealism, as we have repeatedly observed, tends toward the identification of the knowing process with the content known. The strongest case for the idealistic position is cited in respect to the truths of mathematics. Mathematical truths, the idealist may say, are made by the mathematical mind which thinks them. Surely, he may contend, a tangent to a circle did not exist before some one conceived the tangential relation, and thus created it as a mathematical entity. It is in response to the demand to say something touching the status of such entities as mathematical truths that the new realist returns to Platonism. The neo-realist is a Platonic realist. "He accords full ontological status to the things of thought as well as to the things of sense, to logical entities, as well as to physical entities, or to subsistents as well as to existents." The propositions of mathe-

matics exist and are there eternally, to be discovered in precisely the same sense in which Columbus discovered America.

It is easy to see how the new realist is forced to such a doctrine. The separation is made between the content known and the knowing of it, and the knowing plays no part in the constituting of content. Consciousness is absolutely void of any internal mechanism of its own. Knowing makes no difference because it has no difference to make. It is an undifferentiated process; it has no forms to impress, no conditions to impose. Consequently "The things of thought as well as the things of sense" must derive their title to *be,* whether that of existence or that of subsistence, form a source other than that of the knowing process.

The Platonic element of new realism may be stated from the standpoint of universals. That universals are contents of some sort is a fact revealed by direct empirical introspection. That man, circularity, beauty are contents of some description cannot be denied. They are there and must be reckoned with, they influence human action, they give validity to much of our thinking, and in the case of the universals of mathematics, their formulæ may be written.

Modern psychology has endowed the mind with the mechanism of conception. From an empirical observation of a sufficient number of particulars, the mind abstracts qualities which are alike and thus fabricates a universal. If the mind is ever constitutive of its content, it is certainly in the case of the formation of abstract and universal contents.

But it seems plain that the mind can not do any such thing. In the first place, if there is no mechanism of consciousness, consciousness being the element of mere awareness, it has no such internal power of conception. And in the second place, even if such a power were resident in the nature of thinking, it seems impossible to understand how such an operation as the fabrication of a universal could be performed. I am unable to see how the mind could tear off qualities from their context and re-piece them into an alien something which is then termed a universal. Reality does not so easily lend itself to disruption. Even on Mr. Bradley's assumptions, first, that certain contents work loose from reality, and second, that in judgment contents are predicated of reality, I can not see how any number of floating contents could ever be merged into a universal. And furthermore, if the universal is constructed by the disremption and rewelding of qualities, it seems that the universal would in the end turn out

to be a particular much like the ones from which the qualities were originally stripped. On any theory of the reduplication of contents, therefore, it seems impossible to understand how the mind can generate a universal. The conclusion must be, consequently, that if an inventory of the contents of the universe includes universals, those universals have not been constructed. They are eternal entities, they exist.

Professor Woodbridge, whose lead I have largely followed in the account of universals, makes it very clear that universals cannot be perceived. Only particulars are given in perception. Universals exist, though by their nature they can never be contents of perception. I perceive circles, but I never perceive circularity. Circularity can only be thought.

The realistic doctrine of the existence of universals is sufficient evidence that the new realism, with all its allegiance to science, is not materialism. Materialism means, among other things, that the whole of reality is comprised within a space—time—quality universe where all complexes may conceivably be perceived. Of course ultra-violet rays cannot be perceived, but for the reason that we have no mechanism of perception whose range is wide enough. But in opposition to materialism, new realism maintains that there are existents whose nature transcends a space—time—quality system, and which can never become objects of perception.

7. The Doctrine of Subsistence.

The term realism is somewhat misleading and is not fully descriptive of the meaning which new realism is intended to convey. Reality means existence, and the new realist by no means asserts the existence or reality of all contents. The most inclusive of all categories is the category of *subsistence*. All contents whatsoever have *being;* they *subsist;* they *are*. "We use the term 'subsistent'," says Professor Montague, "to denominate the totality of actual and possible objects of thought." Existence or reality is a less wide category and applies to some contents within the realm of subsistence. All contents of which I am or may be aware subsist, but not all contents of which I am or may be aware exist. Now it is the essence of realism to assert that all contents, whether existents or subsistents, are what they are independent or whether they are known. "But what I suppose," says Professor Holt, "that realism insists on is that every content, whether term or proposition, real or unreal, subsists of its own right in the all-inclusive universe of being; it has being as any mathematical

or physical term or proposition has being; and that this being is not 'subjective' in its nature."

Among the new realists Professor Montague and Professor Holt make use of the doctrine of subsistence for the explanation of illusions, dreams, hallucinations, and error. Realism meets the problem of error, writes Professor Holt, "by borrowing from Logic and Mathematics the well-authenticated distinction between reality and being. The universe is not all real; but the universe all is." Dr. Montague holds that "*the true and the false are respectively the real and the unreal, considered as possible objects of belief or judgment.*" And by unreal he means the *merely* subsistent. The *real* universe, he maintains "*consists of the space-time system of existents together with all that is presupposed by that system.*" The content of error, dreams, illusions, and hallucinations, when such content is directly presented to the knower, is merely subsistential, that is to say, such content is an object of thought but has no existential status in a space-time-quality system. The ground for such a view is fully cleared by Professor Montague in his doctrine of consciousness as a form of energy implicative of contents, into an exposition of which it is beyond the present essay to go.*

It is the essential thesis of subjectivism that any content which exists only in being perceived is psychical. Now there is evidence that such contents as dreams, illusions, hallucinations and error exist only in being perceived, consequently they are taken by the idealist to be subjective.

One thing about an illusion that every one will admit is that as "perceived content" it appears and disappears. The perceived illusion, so far as awareness goes, begins and ends. What I perceive in my dreams is perceived only while I am dreaming it. A spatial illusion, as illusion, endures so long as it is perceived. Now it is obvious that in perceiving an illusion I am perceiving something. The content of an allusion cannot, on the realistic view, be a reality, that is, an existent, for in that event, its existence, it is thought, would be due to its being perceived. And furthermore, the realist contends that the perceived object is numerically identical with the real object, and it is quite certain that the perceived content of an illusion is not numerically identical with the real object for which it is taken to be, for in that case it would not be an illusion. It is plain that, on

*cf. Dr. Montague's Essay in *The New Realism*, "A Realistic Theory of Truth and Error."

the realistic view, the content of an illusion cannot be non-being, for the neo-realist has no such category. There is a category of non-existence. Non-existence is the *unreal,* and by that is meant the *merely* subsistent. Nor can the content of the illusion be subjective, for it is against subjectivism that new realism is primarily a polemic. The conclusion is, therefore, that the content of an illusion is neither an existent, nor non-being, nor subjective content. It is a *subsistent.*

Prof. Montague and Prof. Holt, consequently, modify the idealistic thesis which asserts that anything which *exists* only in being perceived is psychical. They maintain that contents so designated are subsistents. Contents which appear only in being perceived are subsistential. An illusion is a perceived subsistent, and the subsistent known is independent of its being known. We call it an illusion because when its *being* is a content of awareness, it resembles a physical existent which we often take it to be.

What seems plain from the foregoing account is that there are certain contents which appear only while they are being perceived. From this the idealist concludes that such contents are psychical. The realist concludes that they are merely subsistent. It seems more than a coincidence that the class of contents which has led the idealist to a doctrine of subjectivism has forced the new realist into the position of mere subsistence.

8. The Physiological Issue.

It has been repeatedly stated that there is no mechanism of consciousness. But there is a mechanism of perception. What is needed is scientific inquiry into the conditions of perception. Perception, at least under normal conditions, takes place through the mechanism of the nervous system. And the mechanism, it seems obvious, may be interferred with. The entire issue of realism may be stated from the physiological point of view. Does the fact that objects are perceived through the medium of a nervous system at all modify the objects perceived? Is the function of the nervous system *merely* to receive, transmit, or inhibit stimuli, or does it exercise the additional function of reacting to the stimuli in such a way as to change or transform them? Do the qualities of the object perceived as being what they are taken to be in any sense depend upon their relation to a nervous system? Let us suppose a universe without a single nervous system, just precisely what difference would be made in the constitution of the universe by the sudden supervention of a number of human nervous systems? There would be the difference due to the produc-

there be any further difference save that of awareness?

The physiological issue is fully discussed in an admirable essay* by Professor Holt in *The New Realism*. Such topics as optical illusions, spatial displacement, the time lapse in perception, positive, negative, and complementary after-images are adequately explained by physics and physiology, and that without any recourse to subjectivism, or any abandonment of the claims of realism.

Most noteworthy is the doctrine of nerve conduction which is formulated by Professor Holt. The argument accounting for the qualitative differences of the secondary qualities based upon the doctrine of the specific energy of nerves is thoroughly reviewed and rejected. No ultimate and unresolvable differences among nerve impulses, nerve fibrils, cortical cells, or synapses, have been discovered by nerve physiology. The doctrine advanced by Professor Holt, formulated from the recent investigations of Rutherford, Meyer, More, Meislung, and others, is that the quality of sensations is transmited to the brain by vibratory nerve impulses, and that the vibration rate corresponds to the rate of the stimulus. In the case of sound, the nervous impulse presents "periodic vibrations identical in rate with the vibrations of the outer sound stimulus." And in the case of vision, it is asserted that the visual impulse in its course along the optic nerve is "a vibratory impulse whose period corresponds with the vibration rate of the impinging stimulus." This theory is based upon the investigations of Meislung who has "adduced facts and arguments of great weight to show that the visual cones are electromagnetic resonators, and that the optic nerve must carry impulses of a frequency proportional to that of waves of light." The theory of nerve conduction set forth by Professor Holt is an admirable example of the method of new realism, a method recognizing and according value to the results of science. New realism is, in this respect, in marked contrast to the speculations of idealism and its claim of authority respecting scientific investigation.

According to this view the knower† is in continuous, sympathetic contact with the object known. The intervening vibrations are not the object. The red does not fill all the space between the rose and the eye. Into Profssor Holt's doctrine of secondary qualities it is unnecessary for our present purpose to go. There are independent

*"The Place of Illusory Experience in a Realistic World."

†Realism repeatedly uses the term knower, though it offers no metaphysical theory as to its nature. cf W. P. Montague, "May a Realist be a Pragmatist?" *Journal of Phil., Psy., and Scientific Method,* Vol. VI, 1909.

reals, existents with which the knower is in homogeneous contact. And the function of the mechanism of perception is to put the knower into sympathetic relations with the objects to be known.

Now the problem arises as to the explanation of the nature and origin of that class of contents which are centrally induced. Dreams and hallucinations involve no peripheral stimulations. "How then," it is asked, "can realism pretend to assert the reality of the color, sound, and perhaps tactile or olfactory sensations which are avowedly present in the dreams of a person sleeping, it may be, in a box no bigger than his coffin? The case has still two aspects: first, how can these purely hallucinatory secondary qualities have, even in themselves alone, any sort of being other than a subjective and mental being? Second, * * * how can they pretend to *assert themselves to be,* or how can *the realist pretend* to *assert them to be* the real object?"

Now dreams and hallucinations are, according to Professor Holt, subsistents. And when such contents become known, what happens, so far as I understand the implications of Professor Holt's treatment, is that cognitive relations are set up between them and their knower without the intervention of the usual mechanism or perception. Touching this view I shall only remark that, to say that the world of subsistents contains contents with which I may negotiate relations in a manner different from ordinary perception seems to me to be mysticism, a doctrine which the new realist expressly repudiates.

V. A Realistic Doctrine of the Objective

Along with the foregoing account, largely sympathetic, of the new realistic movement viewed in its reaction to idealism, I have offered already, with extreme diffidence I confess, random comments. It seems a part of my task, however, to add further a sketch of such a realistic doctrine as I myself feel inclined to accept.

The most interesting of all problems is the problem as to the nature of consciousness. Whatever consciousness may be, it seems to me that it is something which is generated, it is subsequent to and dependent on the generating environment. Nature develops to the point where consciousness appears, and consciousness performs for nature the function of knowing. Matter gets itself kown, and this tion of such contents as owe their existence to the organism-environment interaction such as tertiary qualities, for example. But would

knowing is in the interest of human activity. Consciousness is not only a product, but it is developed in a situation in which *some* relatons are internal. For I cannot conceive of anything as remarkable as consciousness coming into being within a universe where all entities are immutable and where all relations are external. Either consciousness must be one of the entities and itself eternal, or else some relations are constitutive. This does not mean that consciousness is itself an internal relation. Among the qualities which enter into a physical complex, many of them, both as to their presence there and as to the specific tone which they exemplify, are what they are on account of the relations in which they stand, but *among these relations* consciousness is never one. The distinction must be kept in mind between physical relations being constitutive of qualitative differences, between my body and its interactions with the environment being constitutive of contents, and consciousness being constitutive of contents. Now it seems plain that both physical relations, and the organism-environment interaction are productive of contents, but this does not mean that consciousness has had anything whatever to do with such productions.

Let us begin with two theoretical categories, the *Objective* and the *Subjective*. Contents are true parts of the Objective when their existence is independent of their being known. Contents are true parts of the Subjective, let us say, when their existence is constituted by their being known.

Now this distinction between the Objective and the Subjective does *not* imply any ontological dualism. There is only one order of being, the order of nature, and all the contents of which one is conscious as well as the act of being conscious of them belong to this order. Reality and nature are synonomous. All contents are natural existents, and any distinctions that have to be made are distinctions *within* the natural order. By Subjective, therefore, it is not meant to suggest any realm of existence discontinuous with or qualitatively unlike the order of the Objective. The very fact that consciousness is something which is generated in a natural environment is evidence of the fact that its existence is homogeneous with the natural order. When, therefore, the process termed consciousness or awareness is called psychical, it is not intended to suggest any process belonging to an order of reality wholly disparate from the contents which generate it. All that psychical means is a process or act of becoming aware of. And the awareness belongs as much to the natural order

as any content to be found there. It is one thing to have a natural and a supra-natural order, supra-natural being used in the sense in which T. H. Green employs the term; it is another thing to make distinctions within the natural order. Both the Objective and the Subjective belong to the order of nature, and the psychical act of *being conscious* also belongs to that order.

We have held that some relations are constitutive of contents. And we have held that consciousness is something which is generated. Now might not consciousness, when generated, become itself an efficient factor in a further relational context and so become productive of other contents? In the situation in which consciousness is first generated it is an external relation, but in the second situation in which it figures as a term it is constitutive of content in a manner similar to the terms which were originally constitutive of it. If there are such contents, then let us employ the term Subjective to describe them. And I want to make it plain that by Subjective I do not mean subjective in the sense in which idealism uses the term, that is as mental entities existing within a mind like Locke's ideas.

The problem before us is to determine whether or not the subjective must be retained as a category; whether, that is, all contents belong to the Objective.

1. The Objective.

The test of the Objective is independence of being known. Mr. Nunn, as we have seen, also adds the test of priority. But this view does not seem to me to be tenable. Most contents do exist prior to their being known, but very often the conditions which generate contents are contemporaneous with the conditions which generate an awareness of them. This seems to be true in the case of optical distortions due to pressing on the eye-balls.

So far as the Objective is concerned, we have a thoroughgoing realism. I shall now seek to give an inventory and brief description of the contents belonging to the Objective, including only those which seem to me undeniably to belong to that order. Those contents are true parts of the Objective which are indicated by the terms sensing, affection, tertiary qualities, memory, universals and perception. These contents may be briefly discussed in the order indicated. It is in connection with a realistic account of perception that my chief interest lies, and the brief discussion of the contents of the Objective given in the other processes indicated is intended to clear the way for a doctrine of perception. To postpone the discussion of perception is somewhat

awkward, but I can only state my view after a discussion of more elementary processes.

a. It is evident that my body is at all times receiving stimulations from the environment with which it is in homogeneous contact. And these stimulations are continually eliciting responses from my body. Whenever my body directly encounters its environment or where one part of my body is directly encountering another part, I mean for such behavior to be described by the term sensing. Both the act of sensing and the content sensed are purely physical. Sensing is completely void of any element of awareness. In the responses of an amoeba and the automatic and reflex adaptations of a human being there is no qualitative distinction. Of course among human beings sensing may be done alone with consciousness, but the consciousness is not part of the sensing. All sensing is primarily in the interest of human action.

b. The Objective contains not only the contents designated by the physical objects given in perception* and sensing, it also includes the affective states within my body. My feelings, by which I mean my pains and pleasures and emotions are existentially present when they are felt. My contention is that the realistic doctrine applies to the contents of feeling equally as well as to contents denoted as physical objects outside of my body.

The idealist points to pains as existing only when they are felt. Surely it is said, my head-ache exists only when I am conscious of it. Remove the consciousness of it, and the pain is with the same stroke, annihilated. Therefore, the existence of the pain, it is concluded, is physical. This is, I take it, on its philosophical side and independent of religious implications, the position of Christian Science. And if the existence of pains and illusions is due to their being perceived, then that position is unassailable. Cease to be aware of the pain and the pain forthwith disappears. But the connection holding between pains and the awareness of them is precisely like the connection holding between physical objects and the awareness of them. The fallacy of Christian Science, it seems to me, is the failure to distinguish the content felt from the feeling of it. The act of feeling is psychical, and like any other act of being aware of. The content felt is physical and independent of its being felt.

And some realists, too, as Professor Montague, for example, hold that feelings do not exist apart from their being felt. Professor Mon-

*Assuming for the present a realistic doctrine of perception.

tague would still hold that pains are natural events, thus distinguishing his position from idealism, only that consciousness, which is also a natural event, is constitutive of feelings. Feelings are for Professor Montague what I have above described as constituting the contents of the Subjective.

Both views, it seems to me, are wrong. Feelings are not psychical existents in the idealistic meaning of the term, nor are they contents of the Subjective, in the sense in which I use that term. They are true contents of the Objective. A pain is as much a natural event as any happening in the physical universe, only my pains are always localized in my body. A fever is as much a physical event as a thunder-storm. It may be that the conditions which generate pain contents are usually those which generate awareness of them. Pain is the result of generating physical conditions which are so violent that one is forced to take cognizance of them. But this is not always true, for sometimes pains are *not* felt. This does not mean that they do not then exist; they are there, though awareness is inhibited, precisely as an object of perception is there though attention is not directed to it. The feelings of the fever are as independent of the awareness of them as are the rain-drops in the thunder-storm. If the fever runs sufficiently high, one becomes *un*conscious, awareness may entirely disappear, but surely the fever is still there.

Pains are physical facts. Ordinarily they do not exist except *along with* awareness because the conditions which give rise to them are *also* coincident with the conditions which produce the consciousness of them. And I can see no reason for withholding from pains the realistic thesis of independence. The pain which I now feel is real independent of its being felt, and it *may* (but usualy does not) continue to exist when I no longer feel it.

One may feel inclined to object to this view on the ground that two people may perceive the same external object, but no two people can perceive the same pain. Pains are peculiarly *mine* in a way in which no other contents are. If pains are physical events like thunder-storms they should be isolated and identified as such. The argument does show that nobody else can feel my pain, but it does not show that the pain is psychical or subjective. All that the argument can possibly mean, as Professor Woodbridge has pointed out, is that we do not have any affective mechanism for perceiving other peoples' pains.

I wish here to revert to the theory of physical realism as set forth by Thomas Case. His thesis was, it is recalled, that sense data were

localized in the body, that they were the nervous system sensibly affected. Realism has since removed these sense data and placed them in external nature where they really belong. Now what Case did for sense data, it seems to me, can be done for feelings. The feelings are the nervous system sensibly affected. Just as the object of perception is out there in space where common sense supposes it to be, so the content of feeling is there in my body where it is felt to be.

This realistic doctrine of feelings is intended to include emotions. The content of an emotion is as much physical and as independent of any consciousness of it as the content of boiling water. The content of emotions is always localized somewhere in my body; the bodily reactions *are* the contents of the emotions. The James-Lange Theory is to the effect that the bodily changes precede the emotions, and that the emotion is the "feeling" of the bodily reactions. If by "feeling" Professor James means no more than mere awareness, I have nothing to add to his view. The content of physiological changes going on within a nervous organism is different from the content of internal changes going on in complexes which have no nervous system, and feeling and emotion is, among other things perhaps, that which makes the difference.

The content of perceived physical objects is outside of my body. The content of feeling is inside my body. In the case of so-called tertiary qualities, as the gloominess of the day, the fearfulness of the danger, the qualities are given in an environment-organism interaction. They are constituted by this interaction, but it is an interaction in which consciousness has nothing to do. Tertiary qualities are true parts of the Objective.

c. Memory. It is one of the leading tasks of philosophy, I suppose, to recognize genuine problems. The problem in connection with memory is to state how a content which once existed but no longer does, or which was once perceived, but no longer is, continues to be thought of under subsequent conditions. Subjectivism has an easy way out. It offers as a solution that the mind re-creates its contents by thinking them. According to Hume, the mind takes a copy of its sense-impressions and these copies, purely subjective mental creations, are perpetuated as ideas, or at least re-created when the occasion demands. I use the term subjectivism in the wide sense in which the new realist employs the term, to stand for any type of idealism which maintains that the subject—object relation is a cognitive relation, a relation which presupposes consciousness as a

sine qua non of existence. Whenever you find an object, that object, the subjective contents, is found as known. This does not mean that contents are necessarily intra-mental like, for example, Locke's ideas; it merely means that they cannot exist *apart from* the psychical act which knows them. But new realism, with its concept of independence as its essential thesis, is opposed to subjectivism. The subject-object relation cannot be reconciled with the thesis of independence in such a manner as to account for the realistic presentation of memory contents. Such contents are not only not intra-mental, but their being is independent of their being known.

Let us say that I call to memory yesterday's sunset. That sunset does not exist to-day, but I continue to think of it after it ceases to be. Now in thinking about the sunset which no longer is, just *what* am I thinking about? Thinking I have said is always about something. What, therefore, is the status of the content now before my mind? If any contents are actually present to my mind, it seems clear that they are contents of the Subjective. But I do not believe that memory contents belong to the Subjective. In thinking about yesterday's sunset I am thinking about *the* sunset which *was*. So far as remembering can be said to have content, it is the actual content which *did* constitute the real sunset. In order to remember something which once occurred does not mean that I re-create any present content, nor does it mean that the content has all the while been tucked away somewhere as a sort of psychical hang-over. An awareness of content is generated in the absence of the content of which I am aware. How I can think of an object which was once perceived but no longer is, or which once existed but no longer does, I am sure I do not know. But consciousness is the kind of a function which can perform just that sort of an act.

d. In connection with the topic of universals it seems unnecessary to say more than that I accept the realistic view that universals exist, that they may be thought, but that they can never be perceived.

e. Perception. The amoeba *merely* senses. The content sensed is never interpreted. Human beings interpret the contents they sense, or may do so. The act of sensing with interpretation I call perception. All perception is a case of being aware of, and all awareness involves at least a minimum of reflection.

Some confusion in contemporary philosophy has arisen over the question as to whether perception is a case of being conscious; whether, that is, perception is rightly termed a cognitive function. Surely

we may all agree that the content perceived is not cognitive. *It* does not know anything. Only the act of knowing is cognitive. A further misunderstanding arises in connection with how much the term perception is intended to include. Many contents, both bodily and extra-bodily may be *sensed* and reacted to without any presence of consciousness whatsoever. And those actions are not cognitive. And if the term perception is extended to include those actions, then that much of perception is not cognitive. But then certain contents, both bodily and extra-bodily, are sensed and reacted to with the presence of awareness. And these actions are cognitive. If the term perception be confined to those actions which to sense *is* to be aware of or to apprehend, apprehend meaning to become conscious of, then perception is cognitive. To say that I perceive an object is to say that I become aware of it.

If we use the term "sense-contents" to cover all contents usually said to be given through the senses, then it is obvious that much of this type of content is encountered without any presence of consciousness. Furthermore, it seems plain that all sense-contents are natural events. Now to some sense-contents awareness is attached, and then I say I perceive them. And as to the origin of awareness, it may be said that it appears at the moment when *mere* sensing is inadequate, when some other fact is required. Awareness appears as a reflective instrument in behalf of the successful issue of the situation.

The distinction is often made between consciousness and self-conscionsness. The dog barking at the moon is sensing the moon, but it is unlikely that he knows that he is sensing the moon. Now I do not believe that mere sensing ever contains awareness. When awareness enters, it means that more than just sensing is going on. The distinction between consciousness and self-consciousness is, I am inclined to think, a meaningless distinction. All consciousness is self-consciousness. Just stareing with no adjustment, with no comparisons, with no reflection, contains no awareness at all. To be conscious means to *know* what you are about.

The word perception, I may add, usually has associated with it two meanings. It stands for the content perceived and the operation involved. A difficulty at once arises as to the nature of the operation. All perception is sensing, though not all sensing is perception. Now in sensing both the content sensed and the act of sensing are physical. Perception is all this *plus* awareness. It is evident, therefore, that we must in the case of perception distinguish not only the

content perceived, but also the physical process of perception and the psychical act of being aware. I shall use the term perceptive process exclusively in the sense of the physical process, to stand for the mechanism involved when a perceived object is given. There is a mechanism of the physical operation involved in perceiving, but there is no mechanism of the psychical act of being aware of what is given in perception. Idealism, it seems to me, has not only confused the content perceived with the act of perceiving, it has also confused the physical operation of perceiving with the psychical act of perceiving.

All psychical acts involve a physical operation. Those involving the higher cortical centres evade empirical investigation. The physical mechanism of imagination evades description. The physical mechanism of sensing and perceiving is at all stages amenable to physical description. The physical process of perception embraces a continuous and unbroken chain of casual activity starting with a real object, a true content of the Objective, stretching across an intervening medium, entering a human body and making there a sensory-motor circuit and terminating in certain reactions in some way connected with the original real object. Just *where* the process ends, I do not feel disposed to say. The motor reaction is certainly continuous with the preceding part of the process, but whether it should be taken as a part of perception, I leave an open question. The perceptive process must be taken as a whole and as such it occupies time. No process can be so shortened that it does not consume some time, and none is so long that there can be any causal break in the line of its transit.

Furthermore, any interference with the perceptive process is a physical interference, is open to empirical investigation, and may, conceivably at least, be described in terms of physical and mechanical laws. Influences in their passage from real objects to bodies or in their circuit inside of bodies may be disturbed or badly transmitted or blocked, but such mishappenings are always open to physical computation.

That the extra-bodily portion of the process is physical, I suppose no one would deny. But objection may be taken regarding that portion of the process in which the nervous system is involved as physical. Physiological arguments have often been put forward in behalf of idealism. I shall not discuss the physiological issue, but state dogmatically my belief that the neural portion of the perceptive process is open to mechanical formulation. I may cite in passing the discussion of this topic in Woodworth and Ladd's *Elements of Physio-*

logical Psychology, Chapter XI, on "The Mechanical Theory of the Nervous System," and also the view of nerve conduction as periodic vibrations given by Professor Holt in his essay in *The New Realism,* a brief account of which has already been given.

In passing it may be interesting to mention the view of Bergson that perception is practical and not theoretical, that it is designed primarily in the interest of action and not for the genesis of knowledge, that its function is essentially biological and has to do with reactions and adaptations for the welfare of the body. It is a significant fact that knowledge arises out of the perception process, is generated in its interest. But that is not the primal fact. Knowledge comes because action lingers.

As a result of the perceptive process, contents are given. A further observation is that *any* perceived content is *a* real content, is a true part of the Objective and exists independent of the psychical act of perceiving.

It is here that the arguments against realism begin to appear. First, it is asserted that the qualitative differences in the same object at different times or in the same object when seen by different people at the same time are so numerous that the content directly presented in prception is not the real object at all. This difficulty, it is to be hoped, has already been disposed of in our earlier contention that physical relations and the organism-environment interaction are constitutive of qualitative differences.

Further argument against the realistic thesis that what is immediately present to my mind in perception is the extra-mental real object is afforded by considerations arising in connection with the "time lapse." Between the start of the ether wave from an outside radiating centre and the occurrence of the brain event, there is a lapse of time. In certain cases, so marked is the consideration of the time element that the radiating centre may in the mean time have disappeared. Of this we have empirical evidence in the case of a defunct star. Consquently the perceived object is said to be localized in the brain and the brain is then endowed with the function of fabricating psychical "representations." We have what Bergson calls a "transformation scene from fairy land," as the stimulations come in "laden with the spoils of matter."

The fallacy here seems to me to consist in isolating a single episode in the perception process and setting that up as *the* perceived object. If the perceived object is identified with the brain event and localized

there, obviously the time element gives rise to confusion, and furnishes evidence in behalf of subjective idealism. And the numerical difference and qualitative distinctness between real object and perceived object would logically follow. But I do not see any adequate reason for identifying the perceived object with any one part of the perceptive process. And yet perceived objects not only *are,* but are also known. The function of "awareness" must somewhere enter, and it does seem plausible to correlate the awareness with the brain event.

Let us now consider the psychical act of perceiving, the act of being aware of the content perceived. We have said that all awareness involves some reflection, that all perception is interpretation. Now does the content of which I am aware contain any elements not given in the perceptive process? I say that I see the ice cold. What I perceive is cold ice. The content sensed fails to give all of which I am aware of when I say that I perceived the ice cold.

Now from this evident analysis, a conclusion has been drawn. It has been concluded that the content of perception is a "construct" and not a real object at all. The type of idealism which maintains this view, I shall, for purposes of exposition, term phenomenalism.

We may now contrast the statement that any perceived object is a real object with the position of phenomenalism. Phenomenalism is set in terms of the subject-object relation. Its essential thesis is, no subject without object, and no object without subject. This mind-object relation involves two separate problems, and the failure to recognize their separateness has given rise to tremendous confusion. Distinction must be made between, first, the stimulus-reaction relation; and second, what may be termed the apperceptive influence of the mind.

Now it seems obvious that the former of these problems is purely academic. Experience, it is said, or more concretely, tables and chairs, are objects constructed in terms of a stimulus-reaction operation. If we take the object as given in perception, it seems absurd to talk about *that* object as being the stimulus to its own construction. How can an object given in perception be viewed as a stimulus antedating its own creation? In order for the stimulus-reaction problem to have any meaning, it is necessary to return to the original position of Locke. The source from which stimulations proceed must be other than the objects given in perception. There must be in every case numerical duplicity between the perceived object and the source

of stimulation. Only the object, the construct, can be known. The source of stimulation may be Locke's primary qualities of matter, Kant's thing-in-itself or Mill's "permanent possibility of sensation," but whatever it is, it transcends knowledge. The stimulus-reaction problem demands some such transcendent cause of stimulation, but which in the nature of the case, by virtue of the terms in which the problem is set, can never become an object of perception. For to be an object of perception means already to have passed through the era of organization. When the stimulations are, the object is not yet; when the object is, the stimulations have performed their task.

The most elaborate example of the stimulus-reaction problem is found in Kant. The *Critique of Pure Reason,* is in a very true sense, an atempt to show how a table is a table. It has already been indicated that Kant returns to the position of Locke. We have the thing-in-itself and the transcendental ego. Now experience, or nature, or the universe represents the interplay of these two terms. On the ground that experience is the product of this interplay, and since experience is found to be a system of connected objects, and not an aggregate of fragments, the mind, in order to account for this coherence, must be endowed with an elaborate mechanism of forms and categories. On the assumption that experience, that nature, that this table is a construct given in a stimulus-reaction operation, it can only be by endowing the constructing terms with all the qualities and relations which the perceived table is seen to have. According to the terms in which Kant's problem is set, that is the only way tables can be tables.

It may be that nature is a construct. But what of it? If so, the construction is inevitable, is the same for all, and the process of construction goes on without my ever being aware of it. It is something which is over and done with before I come consciously on the scene. The understanding, it is said, prescribes laws to the table. Let us suppose that I do not know that: I investigate the table, and *from an analysis of it,* find the laws which are attributed to it. It seems a matter of indifference to me, so long as the laws are found to be there, where they come from. After the Critique of Pure Reason has given me an object, only then do the questions which I am interested in begin to arise.

In short, the stimulus-reaction problem either must view the object as being the stimulus to its own construction, which is absurd; or, it must view the process of construction in terms of such univer-

sality that it loses all practical and empirical significance. If therefore, the result of viewing experience in terms of the stimulus-reaction operation affords such unsatisfactory conclusions, it is evidence that the fundamental problem should be stated in different terms.

It is one thing to view nature as a construct on the assumption of the mind-object relation. It is altogether a different thing, from a direct analysis of experience, to discover that it yields a polarization. Undoubtedly we do find experience differentiated into the act of experienc*ing* and the content experienc*ed*. But this distinction is the result of analysis, and has nothing whatsoever to do with any stimulation-reaction fabrication.

We may now seek to determine the totally different question touching the apperceptive influence of the mind. This problem is not to be confused with the one we have just described. The problem is still set in terms of the subject-object relation. But the object is now viewed, not as the stimulus to its own primary construction, but to some further secondary construction into which it enters. All sense data may be primary constructs, but that fact seems quite irrelavant and insignificant in comparison with the secondary construction into which they enter.* It is in connection with this problem, it really seems to me, that idealism finds its most effective support. Current psychology views perception as a highly complex process, and the content perceived is usually said to be a synthesis of sensory material plus past experience, habit, memory, attention, and present mental content. Professor James says: "Every perception is an acquired perception." It is commonly pointed out that we see in the world pretty much what we come prepared to see. The perceptive process, it is said, always involves the interfusion of various intellectual elements. Perceived objects are always saturated with meanings.

Obviously if the perceived object represents the interfusion of intellectual elements we can no longer class it as a physical event. For if the perceived object reveals any modification due to the knowing process, then *ipso facto,* it is not a physical event and if not a physical event then its existence as a real object is not independent of its being known. The issue seems to me to be this: In the face of the evidence furnished by idealism regarding the apperceptive activity of the mind, can it be maintained that the perceived object is independent of the

*For the terms, Primary and Secondary Construction, I am indebted to Mr. Nunn.

intellectual nebulus surrounding it? Is the perceived object a "datum" whose existence is physically determined, or is it a "construct" whose existence is due to a mind-object interaction? When a real object becomes a perceived object, what has taken place, it seems to me, represents a process, *not* of addition or construction, but one of *dimunition.* The difference between a real object and a perceived object is a difference sustaining the relation of part to whole. The perceived object is a more or less confused and imperfect presentation of the real object. It *is* the real object not completely, but partially. The perceived object is always the outcome of some sort of *adjustment.* It is just because the perceived object is different from the real object in the sense that it is a variable and adjustable manifestation of it, that two people are said to have different perceptual contents when they are looking at the same numerically identical object. As to the question whether two minds perceive the same real object, we may at least posit sameness if nothing more than that of numerical identity. But the possibility of there being two or more perceived objects expressive of the one real object lies in the fact that each perceived object is a partial and variable presentation of the real object.

But what precisely is the relation of intellectual elements in the determination of this variation and adjustment? The perceived object is always complex. Is it composed of elements belonging exclusively to the real object taken in its physical relations, or does it possess elements derived from sources outside of the real object and its physical context? Idealism maintains that the perceived object is a synthesis of sensory material *plus* added memory images and all sorts of intellectual material. The sensory stimulation plunges along the neural pathway and arouses a whole host of associates, and the final product somehow represents a fusion or blending of these heterogeneous elements.

Now I do not believe that a perceived object represents any such synthetic or constitutive process. Memory, past experience, and attention do undoubtedly have an important connection with the problem of perception, so much so that it is doubtful whether a perceived object is ever totally independent of them. What I do not believe is that they, in any sense, *fuse with or form an integral part of the* content of the perceived object. They have to do with *what* object I perceive. They are the controlling factors in the variation and adjustment which the perceptive process represents, but are not elements which coalesce with the contents perceived.

The real object is rich in qualities and in possibilities of adjustment, inexhaustive and these qualities are all *there* prior to and independent of my experience of them. The datum of my first perception is very meager, and may even be confused and distorted, but partial as it is, it nevertheless is a physical event. The second time I perceive the same real object, new qualities are given. Each new experience brings to light a richer datum. But this growing richness in the content of the perceived object is not a process in which memory projects into the datum images of the prior experience. Past experience has made possible a progressively complex datum. I now perceive together and all at once the qualities which in the past I perceived one by one.

The process of perception is thus seen, to quote a phrase from Bergson, to be a process of selection, and of selection *only*. One may go further with Bergson and maintain that the dominant principle of this choice or selection is that of practical utility. Out of the fullness of the real object we select those aspects which contribute to our needs and uses. We perceive that portion of the real object which interests us. Different people, consequently, have different perceptions just because they *are* different pople. They have different interests and different needs and attend to any object with a view to putting it to different practical uses.

My whole contention, in considering the position of idealism, is that the cognitive function of the mind exercises in perception only a selective and not a constitutive influence, that it determines *what* my perceived object will be, but that it does not determine or in any sense create or modify its existence. A perceived object is usually given along with an intellectual context, it is usually surrounded by a nebulous of non-perceptual contents but so far as it is just *given,* it is through and through a natural event. It is not meant to deny that objects are saturated with "meanings," but those meanings are imported into them. They are not given as existential parts of the perceived object.

There is no need for any relating or synthesising activity of the mind. The perceived object as given *is* a related whole. Objects exist as related and are so given in perception. A table as a perceived object is just as much an element of perception as its color, or shape is an element of sensing. Perception is not a process in which wholes are built up, but rather one in which wholes are broken down.

It seems certain that in the case of perception the content of which

I am aware contains more than what is directly sensed. I sense an aspect of an object but I say that I perceive the object. When I look at the ice and say that I perceive it cold, I mean what I say, only it must be stated that perception includes both sensing and memory. This does not mean that the content "cold ice" is any construct of a stimulus-reaction psychology. It means that the awareness of the content has been generated in different ways. The coldness is in the ice and previous tactual experience has sensed it. Now when I look at the ice an awareness of coldness is generated as well as awareness of its visual qualities.

So far, therefore, as there is any construction going on, it is a construction on the side of awareness and not a construction of contents. Any awareness which flares up at any one moment of my behaving may represent a fufsion of separate awarenesses into a higher unit, or it may represent a continuum, as the case may be. What I feel sure of is that contents do not fuse, but that awareness of content is generated in different ways and these awarenesses constitute some sort of a continuum or whole. The consideration of the awareness element forces us even beyond sensing and memory. I say I perceive the *ice*. We have now on our hands the problem of the particular and the universal. Certain sensed and remembered qualities are subsumed under the universal, and universals can not be perceived.

2. The Subjective.

I shall not attempt a discussion of the contents of the Subjective. The contents of the Subjective are natural events. And it may be, upon more severe analysis, that many and perhaps even all of the contents of the Subjective can be shown to be true parts of the Objective. At present, largely because of insufficient analysis, the abandonment of the Subjective seems to me improbable. In the analysis of desire, will, and ethical values, I am disposed to follow the lead of Professor Dewey, though I have not thought out into clearness the realistic or non-realistic implications of such an analysis, and any speculations regarding them I do not include in the present essay. What seems clear is that the contents of imaginations are more intimately connected with the knowing process than contents which are parts of the Objective. As in the case of physical relations, we have maintained that some are internal and some external; so in case of the knowing relation, it is, in the case of the Objective, external, and it may be, in the case of the Subjective, internal. It is difficult to conceive of such contents as the imaginary numbers of mathematics, golden mountains,

and round squares having any being apart from the act which is conscious of them.

It is a matter of empirical observation that contents function in two different contexts, a perceptual and a non-perceptual context. The term "perceptual" is here intended to include all contents directly encountered through the senses and they may be termed sense-contents; it is intended to include all contents which are sensed whether or not the sensing is attended by awareness. Contents actually given through the senses and contents thought about represent a distincion which concrete analysis yields. The contents designated by such terms as memories, imaginations, volitions, religious and ethical values are certainly not given *in the same sense* as tables, and chairs, and head-aches. An inventory of the Objective, as we have seen, includes some non-perceptual contents, for example, universals and memory contents. In actual experience the contents are usually mixed. Memory enters perhaps into all perception. The child often fails to distinguish the contents of imagination from those of perception.

As to the localization of the non-perceptual contents, none are located in the brain. We seem forced to say that the space-time-quality system of perceptible things does not comprise the whole of reality. There are existents which can not be definitely localized anywhere, existents to which the category of space is not applicable. Some such existents are universals and they are eternal realities. The recognition of this fact should be sufficient to distinguish new realism from materialism. In memory, so far as it seems advisable to speak of its contents, the content is a space-time-quality content located just where the remembered content was when it was given. In the case of other contents, so far as they involve memory, or expectations based on memory, the contents are localized as in the case of memory. So far as the remaining non-perceptual contents are concerned we can not say that they are spatially located anywhere. They certainly are not contents fabricated in the form of mental images located in any mental repository. The difficulty in attempting to localize them is due to the attempt to make them contents of perception, and the success of this attempt would be to destroy the distinction which empirical analysis reveals, the distinction, that is, between perceptual and non-perceptual. If we could locate the contents of imagination in a space-time-quality system, they would no longer be imaginations. In the case of desire, when it becomes satisfied, is no longer a desire. In the case of a volition, it may be said that volition involves deliberation, and the final

issue only gradually emerges as I think the situation through. If I had a definite presentation of the act I will perform, its performance would not be volition.

We may conclude with some observations touching the topic of illusory and erroneous experience. Just what, it may be asked, is the place and status of such experience in the universe of contents which we have briefly sketched?

In the case of optical illusions involving visual displacements and distortions and virtual images, whatever status they have, it is certain that they are what they are independent of the psychical act which perceives them. It may be that such illusions *are* only while they are being perceived. But this can only mean that the conditions which generate illusions are *such that* they *also* generate awareness of them. Perhaps sensory optical illusions never occur apart from consciousness, but this does not mean that consciousness has any thing to do with their appearance. The two happen under co-incidental conditions. The illusion, springing into being under peculiar physical conditions, conditions usually out of the ordinary, is, when the conditions which give it birth are altered, totally annihilated. This does not mean that the content of the illusion is a mental fabrication. A virtual image presents no difficulty to the science of optics, and it should present no difficulty to any other science so long as we let it *be* a virtual image. The man standing on the bridge at midnight sees two moons. No difficulty should arise in seeing the two moons, but then some one adds, "when he ought to see but one." Surely this epistemological reflection regarding the validity of the perception is not out of place, but then we have departed from the purity of the illusion as just given. What happens is that the conditions of perception have been interferred with, and the content given under disordered conditions of perception does not correspond with similar experiences when the perceptive process goes on more normally. People, we might suppose, could wear glasses so adjusted that they would always see double. If such persons, after becoming habituated to this duplicity of visual content, were to raise their glasses, they would have an illusion.

We have already maintained that some physical relation are internal. The physical qualities of an object are what they are on account of the relations in which they stand. And those relations vary with the observer's point of view. The object seen under the microscope is seen larger than the same object when not seen under the microscope.

No difficulty arises so long as we stick to the microscopic or non-microscopic point of view. Only when we mix the observer's point of view, do troubles begin. The visual qualities of an object, when that object is taken in different sets of physical relations, are different. But this view, it seems to me, can only be maintained on the assumption that *some* physical relations are *internal.* Virtual images, are not real images, neither are they mental fabrications nor parts of the Subjective. Virtual images are parts of the Objective, they exist independent of being perceived, and are enmeshed in an unbroken chain of casual connections with contents which are not virtual images.

That all sensory illusions have an objective physical cause and that all pure hallucinations are centrally induced would, I suppose, not be denied. And that the world in which we live is one in which mistakes may be made would also, it may be supposed, not be denied. Every sensory illusion contains elements which are real and elements which are hallucinatory. The real elements are physical existents, true contents of the Objective, and these need not be discussed; only the hallucinatory elements of the illusion need be discussed. I am walking, let us say, in the woods on a moonlight night, and perceiving a shadow I say that I see the figure of a man. Now the shadow is a physical existent, and about that there is no question. But what shall we say touching the content, figure of a man, which I think I see? The illusion consists, not in seeing the shadow, but in seeing the shadow *as a man.*

We have already pointed out that contents are given in two different contexts, a perceptual and a non-perceptual context. Now what happens in the case of an hallucination is that contents given in a non-perceptual context *are taken to be* contents of a perceptual context. So long as the non-perceptual contents are confined to their own context no illusion arises, but when they are mistaken for contents of perception and reacted to *as if* they were contents of the Objective then we are said to have an hallucination. Hallucinations usually occur under the strain of high emotional excitement and this emotional acceleration gives excessive stimulation to the production of non-perceptual contents with the result that they are precipitated with such violence that, in their heightened and vivid presentation, they are comparable to and consequently taken as perceptual. In so far as the hallucinatory content is a pure memory content the status of the hallucination is the same as the status of any memory content; in so far as the hallucinatory contents are contents of the Subjective they have

the status of all such contents. But the hallucination consists in mixing the two sets of contents. The fact that all contents are given in connection with neural processes makes such confusion possible.

The so-called proof reader's illusion is a good one to instance. The reader, it is said, sees the missing word in its right place. What happens is that he has a memory awareness of the right word and the content of his illusions is the remembered word. In the case of the illusions due to hypnotism, a similar explanation may be urged. The hypnotist arouses a heightened array of non-perceptual contents, and due to the power of his suggestion, these non-perceptual contents, either actual memory contents, or contents of the Subjective, are mistaken for contents of the Objective. No two hypnotic patients, the conjecture may be made, even see the *same* snakes. Each sees and reacts to the snakes in *his* non-perceptual field. Of course the difficulty arises as to how the contents of a non-perceptual context ever come to be taken as contents of a perceptual context. How I do not know, but the fact is they are.

Such non-perceptual contents as those which belong exclusively to the Subjective come very near to being what the new realist has described as subsistents. It may be asked, therefore, why I employ the distinction of the Objective and Subjective rather than that of existence and subsistence. I do so for two reasons: first, because I cannot be sure that those contents which the term Subjective has been used to describe have any existence apart from the psychical act which knows them; and second, because I do not feel forced to say that such contents are eternal Platonic entities. I cannot see why it is necessary to maintain that Colonel Newcome had any being, even of a subsistential nature, before the creative work of Thackeray.

But I feel little security touching my views of the Subjective. They are purely tentative. What I feel sure of is that the natural order embraces the whole of reality; that there are physical existents which are objects of actual or possible perception, and universal existents which are objects of thought; that consciousness is a natural happening, that the passage from matter to mind represents no rupture of natural continuity, no hiatus within the natural order. I feel sure that within the field of the Objective a realistic doctrine is fully applicable, contents exist independent of consciousness, and that consciousness, in those cases where it occurs, is a non-efficient factor. I am inclined to believe that consciousness is undifferentiated, the same for all acts, the differences being describable solely in terms

of content; and finally, that consciousness constitutes a continuum with an ebb and flow directed by and in the interest of my body as it encounters its environment.

VITA

(In compliance with the requirements for Doctor's dissertation.)

Matthew Thompson McClure, Jr., was born at Spottswood, Virginia, April 27, 1883. He attended Washington and Lee University 1900-1905; the University of Virginia 1906-1907 and 1909-1910; and Columbia University 1910-1912. Previous degrees: B. A. Washington and Lee, 1904; M. A. University of Virginia, 1907. Previous positions: Principal of the Louisa High School, Louisa, Virginia, 1907-1909; instructor in philosophy, University of Virginia, 1909-1910; assistant in Philosophy, Columbia University, 1910-1911, and University Fellow at Columbia, 1911-1912.

THE McCLURE CO. INC., PRINTERS, STAUNTON, VA.