"It is neither Hegel nor Leibniz nor Descartes nor Locke, but Berkeley, who seems to me—judging from our examination of the foundations of Whitehead’s philosophy of natural science—to have been the member of the European tradition in philosophy who was most relevant to Whitehead’s own conceptions in their formative stage."¹

This remark invites reflection. Though Mr. Lowe may have indulged in a bit of harmless exaggeration to underscore his point, there is truth in the contention that Berkeley was relevant to the formative stage, in the philosophy of natural science, of Whitehead’s basic ideas. But the scope of these ideas, even in the formative stage, was not limited to a narrow philosophy of science. Whitehead’s philosophy of science was also a philosophy of nature within which science was possible. He searched at the foundations of natural science for ideas possessing widest metaphysical generality. Moreover, “relevance,” if it is vital at the formative stage, may be expected to carry over into the maturity of a philosopher’s thinking. If Mr. Lowe’s remark is correct, then Berkeley must retain some relevance to the developed philosophy of Whitehead, and the nature of the relevance becomes a topic for elucidation. It is the subject of these pages.

We are not concerned with “influence” or “borrowing,” but with systematic analogies. In his predecessors Whitehead habitually found points of view that generations of readers had hardly suspected, and whatever he picked up in his reading underwent constructive transformation. Whitehead responded affirmatively to certain of Berkeley’s insights, but rejected his philosophy. In the chapter on the eighteenth century in Science and the Modern World, which heralded the great construction of Process and Reality, he praised Berkeley for having “made all the right criticisms” of the scientific abstractions of his epoch. He principally noticed Berkeley’s alleged criticism of “simple location” and used it to open the way to his own new analysis of “the complete concreteness of our intuitive experience.” That type of analysis lay “embedded in Berkeley,” he claimed, but

¹ Editor’s Note: Mr. Fulton is Professor of Philosophy at Rice University; he is also Chairman of the Department of Philosophy and Acting Dean of Humanities.
had to add that Berkeley had "overlooked" it. What had in fact seemed important to Berkeley is dismissed by Whitehead with hardly a word. And what he, rather generously, found "embedded" in Berkeley, he actually expounds with the help of allusions to Leibniz and Spinoza. The index of Process and Reality lists under Berkeley's name but two entries (both trivial); that of Adventures of Ideas, none at all. Whitehead certainly found he could say what he wanted to, without mentioning Berkeley. Yet, in spite of all that, the points of contact remain and make the relevance of Berkeley worth closer inspection.

Accordingly, I shall place the two philosophers side by side, ignoring the two centuries separating them. Attention will be focused on a single problem, that of sense perception, though with the purpose of following its ramifications as far as seems necessary in a short paper.

First, an abbreviated statement of some cardinal points. For Berkeley, some "objects of human knowledge" are "ideas actually imprinted on the senses." Collections of ideas constitute a stone, a tree, a book, and the like sensible things. In a word, the sensible world is a determinate order of definite particular objects imprinted on the mind. How? By the direct creative efficacy of the Divine Being. This is a theory of direct perception. Ideas are presentations, not representations. They are not images of anything; though as members of a divinely ordained order, they may serve as signs of other ideas to come, and as tokens (letters in the book of nature) of God's goodness and benevolence. In addition to the things perceived, there is "a thing entirely distinct from them," the mind, "this perceiving, active being," on which they are imprinted. The world of sense, nature, is all display. It has a transcendent ground, but no inherent efficacy, no substantive character, and no organic ties.

The existence of a thing is a good deal more complex than the abbreviation, "collection of ideas," suggests. A few lines below that description we find Berkeley enlarging his account to include the continuing identity of a thing in time, which goes far beyond that of the apparently static or enduring entity described as a collection of ideas. "The table I write on I say exists; that is, I see and feel it: and if I were out of my study I should say it existed; meaning thereby that if I were in my study I might perceive it, or that some other spirit actually does perceive it." Thus Berkeley offers two alternative, not exclusive, accounts of the empirical meaning of the continued existence of his table while he is not himself observing it. The first asserts the objective observability of the same table; the table (or any thing) is a potentiality for repeated perception, and it implies an established, reliable order of nature. The second assumes the intersubjectivity of things: the same table that he wrote on may have continued actual existence because it is being observed by other minds. If the table exists as a
collection of ideas, then its continuing empirical existence implies either 
that the ideas constituting it continue to exist (as perceived by God or other 
minds) or that the thing is the set of all actual experiences of the table plus 
the law ordering the set in a world created for man's use. But the assertion 
of the law governing the reception of sense ideas identifies the unity of the 
thing with the unity of the empirical law of the many experienced aspects 
of it. The thing exists as a potentiality of experience and not simply as a 
momentary actuality. The other alternative—that the same ideas may con- 
tinue to exist as long as observed by any mind—entails that the existence 
of ideas includes a potentiality for further perception; that is, the table you 
see while I am absent is the same that I shall see if I return.

It is obvious that Berkeley leaves his attempted reduction of things to 
primordial objects of sense in dark obscurity. He was content to let in just 
enough light to enable us to see (as he believed) that the existence of sense 
objects is conclusive evidence of the power of God, the creator; and the 
order and regularity with which they are impressed on our minds is con- 
clusive evidence of His benevolent concern for man's well-being.

The characteristic peculiarity of Berkeley's position is that sense ideas 
are conceived to be effects that are not, in turn, causes—that is, to be 
primitively given entities devoid of causal efficacy. It goes along with his 
assertion that the existence of ideas consists in being perceived. They are 
different aspects of the basic insight or shift of attitude by which Berkeley 
thought he had evaded the dualistic puzzles bequeathed by Descartes.

Whitehead accepts all this—with a difference. First, he agrees that sense 
qualities as such (presentational immediacy) are themselves deficient or 
wanting in causal efficacy, though they emerge in processes derived from 
true causes' enactment of their reality in entities beyond themselves (a view 
more akin to Locke's than to Berkeley's). Second, Whitehead accepts the 
subjectivist principle: "that apart from the experiences of subjects there is 
nothing, nothing, nothing, bare nothingness." It should not be overlooked 
that this is not the same as "to be is to be perceived." It is the "reformed 
subjectivist principle," that to be involves perception; that is, it denies the 
existence of vacuous actualities and asserts natural causal ties between 
actual entities. The principle is a version, as Whitehead observed, of the 
"category of relativity": that "it belongs to the nature of a 'being' that it is 
a potential for every 'becoming.'" It is the category turned inside out or 
viewed from the inside of the newly emerging actuality. The intimate 
implication of entities in others has no real counterpart in Berkeley's 
philosophy. Already it is obvious that the theory of perception required to 
sustain this view must differ profoundly from Berkeley's; but this topic must 
be postponed for the present.

First we must note the aspect of agreement. Berkeley, no less than 
Whitehead, denied the "bifurcation of nature." Whitehead, no less than
Berkeley, denied the existence of “matter” in the sense of eighteenth- (and nineteenth-) century scientific materialism. But Berkeley himself achieved no more than a variant of Descartes’ substance philosophy: only minds exist substantially, matter being self-contradictory. Whitehead reconstructed the notion of reality in terms of process (rather than substance) involving both “mental” and “physical” poles.

Whitehead’s actual entities or occasions of experience bear closer resemblance to Aristotle’s *ousia* than to Berkeley’s minds or souls. Their stubborn physical reality is indefeasible, each being the center of effects worked in it by the world of prior actualities, as each is also an entity in the world and an efficient cause of determinate effects. Each has a mental pole too; that is, it functions selectively among possibilities abstractly open to it. Efficient causality thus depends on an actuality involving final causality.

Berkeley’s objects of perception are vacuous actualities. His world of sense ideas depends on mind, without being mental, and is essentially mechanical, without machinery. By the latter remark I mean that sense ideas occur in rigid conformity to laws of succession (and co-existence?) that have no basis whatsoever in the nature of the ideas themselves. The former remark requires justification because it has been so often denied, even though Berkeley makes himself plain enough.

Berkeley distinguishes between the states or activities and the objects of mind. A state or act of mind is mental, as being a mode of mental substance, a way in which a mind exists. A sense object is not mental in that way at all. Its existence as a thing perceived obviously is conditional upon the presence of a perceiver; but it also requires a true cause, God. Being visibly inert, ideas of sense can be causes neither of other ideas and changes in ideas nor of the mental activities by which they are themselves perceived. They point to a transcendent power of creation. Ideas of imagination are derivative from sense originals and so fall within the scope of the reproductive pseudo-creativity of finite minds, one of the activities by which these minds establish their substantial reality. By “imprinted on the mind” Berkeley can only mean “present as an object to the mind by virtue of a power not the mind’s.” Consequently, when he asserts, as he sometimes does, the identity of sensed object and sensation, he is not affirming that the object is a psychological state or psychological event, but that the object is what is directly sensed and not something else that cannot be sensed, “behind” it.

We are now in a position to return to Whitehead’s strongly contrasting theory of perception. Whitehead found the primary role of perception in the process of generation of entity rather than in the process of conscious cognition. He is less interested in sophistications of sense than in the dim dynamism by which new actuality emerges to enjoy the fleeting triumph
of existence. And this most primitive indebtedness of the emerging being
to its world Whitehead calls "prehension," precisely for the purpose of
avoiding any suggestion of the primacy of consciousness. Prehension is the
transaction by which an entity accepts the actuality bestowed upon it by
the actual world. The world as it is provides the specific energies and deter-
mine possibilities that the emerging entity uses or rejects in establishing
its own concrete, completely determinate identity. It is as if the multiplicity
of concrete entities, by contributing something of themselves, provide
ingredients for the self-formation of a new moment of process with its
unique individuality. Thus it is that achieved actuality is objectified and
has "objective reality" by entering as a constituent into the being of subse-
quent actual entities through their prehensions. It is also thus that conscious
experiences have explicit objects that are more than ingredients of
subjectivity.

This must be read with generosity. The world that communicates being
to each new occasion is the whole world, involving possibility as well as
actuality, and the divine as well as the natural. In Whitehead's world of
process, existence is ever being renewed; there is perpetual coming-to-be
of what was not before and will not be again. Thus all existence is grounded
in a principle of creativity, "the category of the ultimate." An eternal
ordering of importance or value is also necessary, which Whitehead calls
the "primordial nature" of God. This gives direction and significance to
process. It guarantees the teleology without which a cosmos is not intel-
ligible.

Granted these ultimates, which enter into every existence, the particular
concrete entity must be understood in terms provided by other particular
concrete entities. What-is-coming-to-be uses what-is. Conversely, what-is
makes a real, dynamic, or organic difference to the course of events, simply
by virtue of being just what it is. Each actuality is casually efficacious
simply by being actual. What comes to be makes itself felt by other entities.
Moreover, according to Whitehead, nothing is felt without a true cause or
agent contributing its "objective reality." Every cause is, for him, a vera
causa or actual entity; and every actual entity is a cause, for its being makes
a difference to others or somehow takes effect in them. We may therefore
say of an actual entity, in paraphrase of Berkeley, that its being consists in
prehending and being prehended.

That is the basic analysis. Of course, Whitehead has far more to say.
Much of it carries beyond the present context; but the distinction between
physical and conceptual prehension is highly relevant. Physically, an entity
prehends concrete actualities; conceptually, itprehends abstract possibili-
ties. Physical prehension derives from the past; conceptual prehension
entertains self-identical forms (eternal objects), which thus have relevance
to the future actuality undergoing attainment. At the level of reflective
consciousness, the contrast is akin to that between feeling an object and having an idea; but Whitehead reads the distinction back into processes far too primitive to sustain consciousness. Every actual entity begins with physical prehensions through which it receives its being as a "datum" from the existent world. Yet to become itself it must make something of this gift, and what it makes of it is its own doing, by which it both makes and discovers its concrete identity. It is as if it feels its way along among felt alternatives towards a concrete, fully determinate satisfaction of its own individual tendency, or "subjective aim." The feeling for possibilities, near and remote, is essential to every occasion of experience.

What an actual entity is obviously depends on its derivation as well as on its subjective aim. It derives elements of determination from the determinateness of its datum. It receives—roughly speaking—not merely some impulse but this particular, definite impulse, and it must shape itself on or with the determinateness of it. The past thus poses a constraint on the present and makes some possibilities inherently more relevant to the future than others.

When these distinctions are applied to conscious perception at the human level, they lead to Whitehead's distinction of perception in the mode of causal efficacy from perception in the mode of presentational immediacy. In presentational immediacy, felt determination is transmuted with the aid of conceptual prehension into conscious qualities that "illustrate" a region of space. This mode of perception is clear, sharp, and vivid, but derivative and superficial. Perception in the mode of causal efficacy is massive and vague, but primordial and rooted in the dynamism of actual process. Berkeley took presentational immediacy to be primary, and attempted to reduce the physical world to a display of sense ideas. Whitehead takes causal efficacy to be primary, and thus goes behind Berkeley to a more ancient realistic tradition, which is in fact nearer to common sense. Even when he goes no farther back than Locke and Descartes, he takes from them realistic elements that they had not themselves made central.

With the statement of this rather obvious result, we may bring to an end the preliminary confrontation of these opposed philosophical constructions. But as the confrontation has taken place at a fundamental level, there is a most important sense in which the preliminary study is also final. The opposition is virtually complete. For Berkeley, man is the spectator of a passing show, though somehow "active" as a spiritual being in relation to a transcendent God. Whitehead's man is an active participant in events, certain that what he is will matter in the long run in this world, which is grounded in creativity and the primordial nature of God and redeemed in His consequent nature. Whitehead restores to cosmology the principles of efficient and final causality that were discarded at the time of Bacon and Descartes. Berkeley's world was empirically mechanistic, but rationally
unintelligible. Whitehead reverts to the world model of the Greeks: the organism, with its complex causalities.

As a kind of appendix to the main discussion, I shall in conclusion add, instead of a summary, a few comments on points that may stand in need of further elucidation.

A. **ACTIVE-INACTIVE.** The basic distinction in Berkeley’s idealism is not that between mind and matter (matter being nothing real) but that between active and inactive modes of existence. Minds are active and hence substantial, whereas ideas are inactive and have a wholly dependent being. Berkeley is entirely consistent in denying that the mind can have an *idea* of itself; the reason being that “to have an idea” means to have the object itself present to the mind, whereas an inert idea cannot *be* an active mind. There is clearly for Berkeley a *rerum natura* having its own complexly dependent mode of being, distinct but not separate from the minds that perceive it. The true source of the paradoxes that beset his philosophy is not the supposed assertion of the mental character of everything in the world, but the strange doctrine that the reality of an object of perception is identical with its appearance. Its being is identical with what is actually perceived and is exhausted in its display.

Berkeley, whatever his difficulties, tried to view the world as composed of active substances (minds) and inactive (hence, non-mental) objects. It would have better served his purpose to distinguish more consistently between the activity of mind in perceiving and the object perceived. As we have seen, he establishes the essence of the distinction in maintaining that the idea perceived is “in the mind” not as mode or attribute but as *object.* But when he considers the distinction of perceiving and perceived as proposed by Hylas, the materialist in the *Dialogues,* he irrelevantly argues that the mind is *passive* in sense perception. He must insist on this as a man of common sense as well as an empiricist, for the objects of sense perception are stubborn data independent of our volition. The human mind does not *create* its empirical world. Nevertheless, if the mind is not in some sense active, as distinguished from the inactivity of ideas, then the cardinal doctrine that to be (as regards ideas) consists in being perceived is totally devoid of meaning. Mind perceives; ideas are perceived. Mind must realize itself substantially in being aware of, awakening to, the objects presented to it by a transcendent causality with respect to which it is passive. But it must be admitted that Berkeley left the difficult alternatives in this situation largely confused and indefinite. Even if we make every possible concession with the best of will, we cannot rid Berkeley’s world of the air of paradox that clings to it.

On Whitehead’s interpretation, the occasion of experience is receptive toward a world that confers being upon it from “outside” by installing itself objectively in the occasion. The occasion is also active, being a synthesizing
of selected aspects for special emphasis in a concrescent unity that also involves the originative functioning of conceptual prehensions of "conceivable" alternatives. The "external" world is felt as both beyond and within the occasion. Being, in short, is not simply located but embraces a spatio-temporal diversity of modes.

B. SPECTATOR-PARTICIPANT. Berkeley was revolting against dualism. Descartes had made the difficulty. Beginning with a doubt of the veracity of his senses he proceeded to establish, to his own satisfaction at least, the real distinction between mind and body, and thus found himself captive in his own mind, until in the last of the Meditations he succeeded in proving the passivity of feeling and sense towards the action of some non-mental agency. He concluded the latter could only be material substance. He thus was provided with a causal and naturalistic theory of perception that, in Locke, was to transform the traditional view of an idea from a mental act of apprehension to an effect representative of its cause. Somewhat waveringly, Locke perceived the skeptical implications of the theory, for how from the idea in experience can we confidently infer the true description of a cause that itself lies beyond experience? Having noted that if matter is substantially distinct from mind, then physical processes are entirely irrelevant to our perceptions, Berkeley applied Occam's razor and accepted the alternative which Descartes had rejected in Meditation VI. There he had argued that the objective reality of ideas (their determinate reference) does not have an eminent cause (God), but a formal cause (matter). Berkeley denied both claims. The result was the theory of direct perception, which we have been discussing. Sense ideas are appearances of nothing but themselves; and if they "represent" anything, it is not by pointing to their transcendent causes but by "signifying" other ideas to come.

Implausible as it seems, it was undoubtedly Berkeley's intention to rescue our everyday world from the strange excesses of speculative philosophers. But he failed so far in this that he left us with a world recognizable only to an abstract philosophical spectator, who does not need to change things by actions of his "body" or to communicate with other finite spirits. Ordinary men think of themselves as embodied minds occupying niches in the order of existence. The Berkeleian world is an insubstantial display visible only to a philosopher who, as a spectator of time and eternity, has assumed the "angelic" point of view of a pure observer, somehow above or outside the whole world.

The role of the "angelic" spectator has certain affinities with the phenomenological attitude of Husserl. But Berkeley never seriously asked what experience unfolds, and how. Instead, he selected what suited his constructive intentions and did not notice the rest.

Whitehead, as we saw, understands perception as participation in an organically interrelated concourse of individual processes. For him, touch
is a better paradigm of sense perception than sight, the preeminent sense for a spectator. Causal efficacy is prominent in touch; presentational immediacy, in sight. Touch is intimate, charged with forces, and with the dynamic excitement of physical contact. Sight is sophisticated, remote, and comparatively superficial. Whitehead’s whole treatment of perception can be read as a denial of the primacy of sight for an understanding of the real. While Berkeley had marked the difference between sight and touch as modalities of sense, he wrote the Principles for the eye. His A New Theory of Vision explored the mutual involvement of touch and sight in maintaining for us a three-dimensional space of stable things. But, unlike Whitehead, he accommodated touch to sight by treating both as displays of sense objects. The participatory immediacy of touch was clouded over by the observational aloofness of reflective tactual cognition.

It remained for Whitehead to bring out the significance of perception in the mode of causal efficacy. He knew how to exploit the fact that we see with the eye, hear with the ear, smell with the nose, as well as feel strain and impact and the stubbornness of things with the body, and within it. His approach is less psychological and more phenomenological than Berkeley’s, and it is directly involved in all his metaphysics of experience.

In Whitehead’s world, all is experience and all is experienced, though conscious mentality is a sporadic and rare, but precious, achievement that flickers palely in the vastness of spaces and times. Nothing, nothing whatsoever, exists for itself alone but from the universe it receives itself in the making and contributes to the universe the individual fact that it becomes. To be is to make a difference to other beings, and this means, in Whitehead’s terms, that it must beprehended, felt, or perceived; that is, it must enter positively or negatively into the inner actuality of other entities. Actuality and agency are opposite sides of the same fact.

C. COMMUNICATION. Agency involves communication, Whitehead holds; communication depends upon a process such as we commonly call the transmission of energy. The emergent occasion feels the teeming multitude of actualities as they furnish objective aspects of themselves to its being. It feels them in its own way, as we saw, both conforming itself to and transforming them, but this is obviously conditional upon a dynamic relation of communication. Physical feeling is the primary and primordial mode of perception, and no mental elaboration and refinement loses its dependence on it. But “energy” is not all that is communicated in relations of causal efficacy; agents are determinately what they are, and their effects are, at least originally, conformal with their causes. Energy carries “information” and conveys “form.” Sharply defined sense data result from processes that translate communicated forms of causal activity into qualitative symbols adorning a region of the extensive continuum that is originally felt as pulsing energies.
This is Whitehead's version of Aristotle's doctrine that sense perceives the form without the matter. Sense data are transmutations of form into vivid consciousness, but the form is communicated or transmitted to the percipient occasion in a material or energetic vehicle. There is nothing mysterious or magical in this account of perception. There is no reception of form without physical transmission.

If this theory bears any resemblance at all to Berkeley's, it is based on a rather superficial agreement concerning the inertness of sense qualities in presentational immediacy. But for Whitehead the real work has already been done—behind the scenes but never wholly concealed. There being no physical actuality for Berkeley, he has no obvious way of understanding communication of any kind. To refer everything to the direct action of God answers all questions—and none. There being no intelligible transactions, nature can be considered only a kind of magic motion picture attended compulsorily by finite minds. Nature and perception alike are standing mysteries. This is a heavy price to pay for security against the skeptical implications of the representative theory. As for Whitehead, he found he could live philosophically with modern science in its most advanced form by resuscitating the old idea of causality as agency involving an aspect of subjective aim and freedom.

NOTES
3. Ibid., Part First, Section 1.
4. Ibid., Part First, Section 2.
5. Ibid., Part First, Section 3.
6. Alfred North Whitehead, Process and Reality, New York, The Macmillan Company, 1929, p. 188. "The conclusion is that, insofar as concerns their disclosure by presentational immediacy, actual entities in the contemporary universe are causally independent of each other."
7. Ibid., p. 254.
8. Ibid., p. 33.
11. For a highly condensed summary, see Process and Reality, p. 474.
12. Principles, Part First, Section 49.