Bertil Belfrage has drawn attention\(^1\) to a curious phase of Berkeley's thought, in which he believed that numbers were not divisible into indefinitely small fractions, or surds,\(^2\) and even doubted Pythagoras' theorem because it led ineluctably to the concept of a surd\(^3\) (but cf.\(^4\) ). There is some irony in this situation because in the 5th and 4th centuries B.C. Pythagorean teaching embraced the integral nature of numbers and the impossibility of surds, strongly foreshadowing Berkeley's early theory of numbers. The impact of Pythagoras' theorem on Pythagorean teaching was as traumatic as it was later to be on Berkeley's theory, although we need to recall that the Pythagoreans eschewed written records, and later writers attributed their work to Pythagoras to enhance its authority, so that the mists of time hang heavily over this school.\(^5\)

The object of this note is to enquire whether Berkeley knew of the antecedents of his number theory, and, if we conclude that he did not, how it came about that in an age and a University imbued with classical learning (W. B. Stanford describes Berkeley as a good classical scholar\(^6\)) he got as far as working up his early theory without anyone telling him of its antecedents, and the philosophical objections to them dating from classical times. There are 23 indexed references to Pythagoras or the Pythagoreans in the Luce and Jessop edition of the Works,\(^7\) and one other missed by the indexers.\(^8\) None bears on number theory, nor is there any reference to Pythagorean views in the essay on surds,\(^9\) an omission I consider incompatible with Berkeley's knowing the relevance of Pythagorean number theory. A concise statement of Pytha-
goras' teaching that all things consist of (integral) numbers occurs in Francis Bacon's writings published in 1623 and listed in the 1667 manuscript catalogue as being in the Library of Trinity College, Dublin. Surprisingly, there are only 2 references to Bacon indexed in Berkeley's Works, neither of any help to us. Bacon's works may not have been readily accessible to Berkeley, as only one (not the relevant 1623 Opera) is listed in the catalogue of about 1715, which is not necessarily comprehensive. It is hard to believe, however, that no one in Berkeley's circle knew of this or similar references available roughly contemporaneously, any of which would have alerted him to his precursors.

Belfrage, again, draws attention to the danger to its author inherent in Berkeley's paper 'Of infinites' read in Dublin in 1707. It seems to me that had Berkeley been able to do so, he would have been safer, and historically more just, to cast that debate into a pre-Christian context (e.g. Pythagoreans versus Aristotelians) enabling him to air his view without incurring the wrath of the ecclesiastical establishment. Much academic information gets passed by the spoken word, often not registered for posterity, and it is a matter of chance whether Berkeley would have discussed his number theory with a contemporary who would have appreciated the relevance of Pythagorean number theory. I see no way forward on this point.

Nevertheless, there is an additional reason why Berkeley might have chosen to disregard Pythagorean views on number theory, had he known of them. Guthrie notes that later Pythagorean teaching introduced the concept of points flowing to create lines, lines to planes, and planes to solids. These ideas correspond to the modern distinction between scalars, vectors and tensors. I know of no evidence that the Pythagoreans saw any contradiction between flowing and integral (corporeal) numbers, as the flow of an entity does not predicate the nature of what flows. Berkeley appears to reject the possibility of knowing about flowing entities.

NOTES

2. "I say there are no incommensurables, no surds, I say the side of any square may be assigned in numbers". Notebook A, Works of George Berkeley (eds. A. A. Luce and T. E. Jessop) (subsequently cited as Works) vol. I, p. 58, note 469.
4. "Besides, we may suppose the particles of light to be indefinitely small, that is, as small as we please, and their aggregate to bear as small a proportion to the void as we please, there being nothing in this that contradicts the phenomena". Siris, Works, vol. V, p. 102, section 209.
Reviews


The prospective reader of Essays on Berkeley should not be put off by the fact that its editors have gone outside their own universities for only three of its thirteen chapters, and that few of the contributors are known for their previous work on Berkeley; the standard of the essays, in scholarship and interest, is generally high. Perhaps the most remarkable feature of the volume is the willingness of its editors to argue that something like Berkeley's phenomenalism may be true, although in this they have not found contributors to follow them.

John Foster ('Berkeley on the Physical World') seeks to clarify Berkeley's views by distinguishing between 'mentalistic realism' in the Dialogues and 'mentalistic reductionism' in the Principles; roughly, the former departs from common-sense on the nature of physical things, the latter on their existence. The unexplained phrase 'ultimate reality' is worked hard; one might suppose that not to be ultimately real is (ultimately) not to be real at all, but if one consults Foster's book The Case for Idealism one discovers that it may only be to exist just because something else does—which is a way of existing, not a way of not existing. Thus reductionists who 'deny that [physical] objects feature in the ultimate reality, but admit them as things whose existence the ultimate facts in some way logically sustain' (p. 89) are not as confused as they sound. Foster hopes to reconcile the autonomy of physical concepts with the non-ultimacy of the physical world by arguing that the sustainment of the latter by sensory organization is something like an a posteriori necessity (pp. 106-7).

Only a study of The Case for Idealism would show whether he has good answers to the many questions that his essay provokes; for instance, is the proposition that 'the physical world
is nothing over and above the organization of our experience' (p. 104) compatible with the apparent truth that there would have been a physical world even if our minds had never existed?

Howard Robinson ('The General Form of the Argument for Berkeleian Idealism') seeks to refute naive realism by arguing that the same account should be given of both hallucinatory and perceptual experiences when they have the same neural cause, so that if the former have internal objects, so would the latter. In order to establish that the former do have internal objects, Robinson assumes that 'any experience must be of something' (p. 172), but, in the sense in which "ofness" is a relation to an object, is he entitled to assume more than that any experience must be as of something? Why should the naive realist not say that hallucinatory and perceptual experiences are alike in being as of external objects and in not being of internal ones? Robinson also seeks to refute representative realists, roughly on the grounds that they identify the transcendental world of physical things as they really are with the physical world investigated by physical science, while making approximate realization of the laws proposed by physical science essential to the latter but not to the former. Why cannot representative realists say that it is a reasonable presumption, not a metaphysical necessity, that the actual physical world approximately realizes these laws?

Christopher Peacocke ('Imagination, Experience and Possibility: a Berkeleian View Defended') maintains—qualifications aside—that to imagine a physical object is to imagine perceiving it, so that to imagine an unperceived tree is to impose incompatible conditions on what is imagined. He takes this to tell against an argument from the imaginability to the possibility of unperceived physical objects, not against the conclusion of that argument. The point is a restricted one: perhaps one can paint a picture of an unperceived tree (p. 30 n17), and the argument from picturability to possibility may be no worse than that from imaginability to possibility. Moreover, depicting the tree as unperceived can be more than merely painting no observer and labelling the picture 'Unperceived Tree'. For instance, one might depict the tree as surrounded by water reflecting all the viewpoints from which the tree could be seen (including that from which the perspective was calculated) and showing them to be unoccupied by observers (to claim that such a picture is neutral as to the existence of invisible observers need be no more reasonable than claiming that a picture of someone in shoes is neutral as to whether they have webbed feet; pictorial representation depends on which arrangements of objects would normally cause certain patterns of reflected light, not just on which ones could possibly do so). Peacocke applies his discussion to the idea that we grasp the possibility of other minds by imagining their experiences from the inside. He argues that one is imagining someone else—rather than oneself—having those experiences only in virtue of something like a stipulation to that effect, since the imagined experiences are in themselves neutral as to their subject; the stipulation can be made only by someone who already has the concept of other minds. Would this still be true if one imagined from the inside memories as of the other's life, experience as of their body, and so on?


*Timothy Williamson*  
Trinity College, Dublin
Now available

GEORGE BERKELEY'S
MANUSCRIPT INTRODUCTION
An editio diplomatica transcribed and edited
with introduction and commentary
by Bertil Belfrage
ISBN 1-85220-202-5. Limited to 500 numbered copies. £35.-

TIMO AIRAKSINEN, Professor of Philosophy,
University of Helsinki:
"It is a handsome volume which should be of considerable interest to
all Berkeley scholars... This new volume edited by Belfrage provides
new opportunities and opens new vistas."

M. R. AYERS, Wadham College, Oxford:
"This elegant edition, the first clear record of the early draft of the
Introduction to the Principles of Human Knowledge with all its dele-
tions and additions, should be a valuable tool to those interested in
the development of Berkeley's thought. The editor's commentary
supplies a good basis for discussion of the interesting philosophical
differences between this piece and the published works."

HARRY M. BRACKEN, Professor of Philosophy,
McGill University:
"Neither Fraser nor Jessop give us satisfactory versions of Berkeley's
Manuscript Introduction. Belfrage has given us a superb editio diplomatica
as well as a philosophically sophisticated commentary on the
text. The Philosophical Commentaries may be the more important
Berkeley manuscript, but interpretations of that work and, more
generally, of the philosophy of the Principles will surely be affected
by the availability of Belfrage's edition."

WOLFGANG BREIDERT, Institut für Philosophie,
Universität Karlsruhe:
"Researching on Berkeley I appreciate this carefully prepared
diplomatic edition of this important text. It will be an indispensable in-
strument for all scholars interested in Berkeley. This book is excel-
 lent, and Dr. Belfrage proved once again that he is one of the most
distinguished experts on Berkeley."

GENEVIEVE BRYCKMAN, Professor of Philosophy,
Université de Paris-X:
"The diplomatic edition of Berkeley's Manuscript Introduction by
Bertil Belfrage is to become the cornerstone of Berkeley scholarship.
With refreshing clarity this critical document provides a long sought
answer to whether there is any significant difference between an early
and a later philosophical standpoint in Berkeley's intellectual deve-
lopment..."

AVRUM STROLL, Professor of Philosophy,
University of California:
"Bertil Belfrage's research investigations into the origins and the
development of Bishop Berkeley's philosophy have resulted in major
changes in our understanding of Berkeley. This is an exciting and im-
portant scholarly contribution, unique in the literature on Berkeley.
No full understanding of Berkeley is possible without reading this
book."

GEORGE H. THOMAS, Professor of Philosophy,
Mount Union College, Alliance, Ohio:
"Dr. Belfrage's edition of Berkeley's Manuscript Introduction is use-
ful, accurate, and beautiful. Its usefulness will be as an indispensable
tool for Berkeley scholars. Combining it with Berkeley's Philosophi-
cal Commentaries and Dr. Belfrage's own commentary in this edition,
scholars will be able to trace the fascinating stages in the development
of Berkeley's philosophy through these unpublished manuscripts to
his published works.

As for accuracy, Dr. Belfrage is one of the most meticulous scholars
I have ever known... Berkeley scholars are all deeply indebted to Dr.
Belfrage and the publisher for this useful, accurate, and beautiful book."

J. O. URMSON, Emeritus Professor of Stanford University and
Emeritus Fellow of Corpus Christi College, Oxford:
"This diplomatic edition of Berkeley's first projected introduction to
his Principles supersedes all others. It throws fascinating light on the
early development of Berkeley's thought possible only in such an edi-
tion. A useful task well executed."

---from Lavis Marketing, 73 Lime Walk, Oxford OX3 7AD---

We have already seen signs of a lively modern French interest in Berkeley evidenced by Geneviève Brykman’s recent thesis and the 1985 Oxford colloquium. Nothing is better calculated to maintain this momentum than a good French translation of his writings, and Professor Brykman and her team here offer a very welcome and well printed first volume of what I believe is to be a 3-volume edition of the main philosophical works. It contains, in order, the standard selection from Notebooks B and A translated by G. Brykman and J.-M. Beyssade, *Of Infinites* and the draft Introduction of the *Principles* translated by D. Berlioz-Bertellier, *A New Theory of Vision* translated by L. Dechery, and the *Principles* translated by M. Phillips. A useful annotated Chronology and register of authors and works cited by Berkeley together with a thematic index are effectively the only kind of commentary on the works supplied within the edition. This may seem surprising. But then, the inclusion of the first three works in the volume at all (including the marginalia of the Notebooks and the different strata of the draft Introduction) is a clear signal that French readers are expected to acquaint themselves at an early stage with the more sophisticated available scholarship on Berkeley’s text.

I leave it to native readers to assess the stylishness of the versions. Those familiar with the originals will quickly sense that the translators generally strive to reproduce as faithfully as possible Berkeley’s English sentence structures. This can work smoothly enough on occasion. But to the extent that it was a deliberate policy it reflects a misunderstanding of the nature of translation and of what it means to speak of or capture a given author’s style. That is something which is defined relative to other writers of his own language, not of someone else’s. Once in a while the translators refreshingly break free of the Berkeleian mould and recast in an idiom natural to themselves. Thus Notebook B, entry 270:

I wonder how men cannot see a truth so obvious, as that extension cannot exist without a thinking substance.

Translated as:

L’étendue ne peut exister sans une substance pensante: je me demande comment les hommes ne voient pas une vérité aussi evidente.

It is perhaps a delicate question whether “without” here does mean “sans” rather than the usual translation “hors de”. But it must be said that the translators by and large show a better understanding of 18th-century English than many anglophone readers do. They have the advantage that modern French forms nearest to, e.g., English “evidence” or “discover” still retain the older meaning.

I have not checked every line but I have sampled each work. The only straight error I found is in Notebook B, entry 206, where “magnitude” (normally “grandeur”) is unaccountably rendered as “distance”. “‘Tis wondrous to contemplate ye world empty’d of intelligences” (entry 23) seems to have attracted inappropriately visual associations in “c’est un curieux spectacle…”.

At entry 265, “From Malebranche etc. it cant be prov’d that…” it changes Berkeley’s sense to render “from” as “d’apres”: Berkeley was not saying that in M’s view it cannot be proved. In entry 294, “seeing after a sort” means “a sort of seeing”—nothing to do with “à partir de”. The reader of the Notebooks has no way of differentiating Berkeley’s parentheses (e.g. entry 256) from the translators’ glosses (e.g. 142, 324).

The freest translation is that of the Draft Introduction (here called *Introduction Manuscrite*)—a harmless modification, though based on the misapprehension that “draft” necessarily has the associations of “brouillon”). The freedom seems to be due to more than the translator’s need just to find his own style. “Des côtés obscurs ou inaccessibles” (p. 153) for “its dark sides” is closer to paraphrase; and “ici pour commencer” (p. 155) is not “here in the entrance” (Berkeley has already “commenced”). “Repousser” (p. 160) is a good deal stronger...
than Locke's "enlarge", and while St Paul may well have been for Berkeley an "inspir'd writer" he was surely not a "prophète" (p. 175). These are small matters of nuance. A more serious and loaded example is this translator's fondness for "remplacer" for the semantic relation of "standing for", where the others use "représenter". There is a clear mistranslation on p. 154 where "plusieurs sectes philosophiques" is not the same as "the several sects of philosophy". Where the same phrase recurs in Berkeley's printed version of his Introduction Miss Phillips correctly renders it later as "les diverses sectes de la philosophie"; and here I come to a more substantive issue.

The draft Introduction and the printed Introduction are not really two different works. This edition follows Fraser and Jessop in the unhelpful practice of printing them quite separately as if they were; and because the draft (only the draft?) was written before NTV was published the latter work intervenes incongruously in this edition between the draft and fair copy Introductions. This was a missed opportunity. The two versions with their respective strata should certainly have been printed together. If it was too awkward to print them as a single work with a single critical apparatus, they should at least have been reproduced on facing pages. And because the two versions were strangely assigned to different translators with no cross-checking between them, the French reader is left to believe that there was vastly more verbal recasting between the two versions than there ever was.

Several translators comment sensitively on problems of translation but I am not sure that they always ask themselves the right question. Their concern is to capture Berkeley in modern French, but they reconstruct his sense solely from what they perceive as the internal logic of his English argument read in isolation. Yet Berkeley's language reflects a debate which was itself largely informed by French-language traditions. It is unrealistic to pretend that the interpretation of Berkeley's use of "mind", "existence", "actual", "real", etc. can be settled without reference to the whole Malebranchist controversy of the time.

The translators of the Notebooks are wrong to suggest on p. 21 that Berkeley's method and notations owe anything to Locke: Locke's own use of alphabetic keys is something entirely different. And on p. 419: since the debate with Stillingfleet appeared in 1697-98 it cannot have influenced the 2nd edition changes of Locke's Essay in 1694. The thematic index is one of the most useful Berkeley indexes I know. But it is sometimes undiscriminating in picking up mere quirks of translation; e.g. "reflexion", p. 220, where all that Berkeley wrote in a throwaway comment at NTV 40 was "I propose it to the consideration of the ingenious...". That this volume should be subject to some such criticisms is no great cause for surprise or alarm and I look forward with interest to the sequels.

M. A. Stewart
University of Lancaster


To a very considerable extent this book is not about Berkeley at all. And insofar as it is about Berkeley, to a very considerable extent it is not about what Berkeley believed, but rather about what he ought to have believed. In a nutshell, Berkeley ought to have been a classical realist. Because of his subjectivism, which he shared with other modern philosophers, his metaphysical system is a failure; and that system is, therefore, unable to provide the sort of support for morality and for religion which Berkeley wished it to provide. Young wishes to complete Berkeley's project: the metaphysical theory is to be patched up so that it will do the work which Berkeley wished it to do.

So let us look at the details. Where exactly, in Young's view, did Berkeley go wrong? Berkeley was right to oppose the view that—to simplify—objects have primary qualitites
but not secondary qualities. He was right to oppose representationalism. And he was right to rely on commonsense as a starting point in philosophical reflection. However, because of the grip which the subjectivist bias of modern philosophy had on him, when he noticed that the features of secondary qualities, in virtue of which they were believed to be merely elements in our experience, are also shared by primary qualities, he concluded that the sensible world cannot exist without the mind. And this position faces some difficulties, at least one of which "makes his theory of reality untenable". (p. 121)

The "insuperable difficulty" is that Berkeley was unable to account for the commonsense belief "that there is a world of things... independent of any finite mind, and perceived as they really are". (P. 120) This commonsense belief is what classical realism amounts to, it seems, for Young's full statement of what a classical realist believes seems to boil down to it. (The classical realist believes "that reality is what it is independently of what any human being thinks or knows about it; that reality can be thought about and to some extent known by human beings; that human beings have the capacity to know things as they really are; and that reality is not radically different from what appears to human knowers in their ordinary experience". (p. 1)) Berkeley's only hope, according to Young, if he was to save the "world of things... independent of any finite mind, and perceived as they really are," was to appeal to the divine archetypes, but any attempt to do so is fraught with the perils of representationalism.

Some comments. First, Berkeleian physical objects consist, in part, of ideas of sense. Ideas of sense are externally caused; physical objects are causally independent of us at any rate. Second, and more important, a Berkeleian physical object is a family of sensations, divine perceptions, and divine volitions. (I leave open the question of whether or not this is all that it is). When I perceive a physical object it exists "independent of my mind" in that its existence is not exhausted by my perceiving it, and in that—most of the time—the object continues to exist both before and after I perceive it. Objects can exist in Berkeley's system, without any finite mind perceiving them. In short, Young fails to present an account of classical realism with which Berkeley would disagree.

Third, perhaps Young's objection, or part of it, is that Berkeley is unable to account for the independent existence of objects, as this independent existence is construed by commonsense. We would need a full account of this commonsense view in order to consider carefully Berkeley's attitude to it, but if it involves a belief that there are material things independent of finite minds, then of course this is the view that Berkeley is most anxious to oppose. The whole thrust of his philosophy is against it. In any case commonsense beliefs are not to be deferred to willy-nilly; to do so is to think with the vulgar. Fourth, from the fact that when I see an object, there is much more to it than what I see, it does not follow that I am not really seeing it. This is so whether what I am not perceiving of it is the divine perceptions and volitions which partly constitute it or, for instance, its molecular structure. If the divine archetypes, as well as our sensations, are among the constituents of things, it does not follow that "the archetype is the real thing". (p. 120) Nor does it follow that the "problems of the representational theory of perception... come back to plague [Berkeley]." (p. 121) Berkeley would reject the suggestion that on his theory we do not perceive things "as they really are": the point of his identification—however qualified it turns out to be—of our ideas of sense with things is to ensure that an account of how it is that we perceive things as they are can be given.

This is not to suggest that Berkeley's account of the extent to which physical things are independent of finite minds, and of the entire relationship between minds and physical objects, is without difficulties. But Young has failed to show Berkeley's position to be untenable. Much more needs to be said.

Young also claims that since the metaphysical theory collapses, Berkeley was unable to "provide the underpinning for the classical education, morals, and politics he favored". (p. 137) Young's exploration of this claim leads him to attend to issues which were indeed of great importance to Berkeley,
and which modern commentators tend to neglect; these issues include the theological basis of morality, the reason why rebellion against a supreme power is wrong, the place of religion in society and the reason for social decay. Young devotes more attention to Berkeley’s views on such topics than he does to Berkeley’s immaterialism. So there is a fairly detailed discussion of Berkeley’s political and social writings and of Alciphron. And Berkeley’s social agenda is usefully located in its historical context.

It is helpful to think of Berkeley’s attempt to defend theism and morality as having two parts. One is a destructive part: it involves getting rid of a harmful set of metaphysical theories, namely materialism in all of its forms. The constructive part is the presentation of immaterialism, which takes the physical world to be in part sensations given to us by God. We are, according to Berkeley, constantly in intimate contact with God, and knowledge of this fact is of great moral import. (*Principles* 147-156) Curiously it is immaterialism, the theory upon which Berkeley has based his defense of theism and morality, that Young would have Berkeley abandon in favour of another metaphysical theory. And yet the nature of this other theory is left unclear, as is the nature of the connections between this theory and the morality which it is supposed to underpin.

Finally, much of the book is not about Berkeley. Young wears his social and religious commitments on his sleeve, but this is not the place to comment on these parts of the book, in spite of the interesting, and sometimes admirable, nature of the author’s claims.

*Robert McKim*  
*University of Illinois at Urbana-Champaign*

---

**RECENT PUBLICATIONS ON BERKELEY**

18 RECENT PUBLICATIONS ON BERKELEY

(17) Rodrigo Bustamante, "La critica de Berkeley al infinito categorico", Contrafuerte (1985), 28-34.
(18) Jean-Claude Dupas, "Le visible et l'invisible chez Berkeley", Études Irlandaises (December 1986), 45-56.
(20) Dulce Maria Granja, "Realismo e idealismo en Berkeley", Contrafuerte, 19-27.
(21) A. C. Grayling, Berkeley: the central arguments (Duckworth, 1986), 244 pp.
(27) Patrick Kelly, "Berkeley and Ireland", Études Irlandaises, 7-25.
(34) Patrick Murray, "Money, wealth, and Berkeley's doctrine of signs: a reply to Patrick Kelly", Hermathena, 152-155.
(39) Jean-Michel Rabate, "Berkeley entre Joyce et Beckett", Études Irlandaises, 57-76.
(42) José A. Robles, "George Berkeley, Comentarios filosóficos, Introduccion y traduccion", Contrafuerte, 4-11.
(43) José A. Robles, "Berkeley y los minima", Analisis, 1-12.
(44) Pedro Stepanenko, "La concepcion berkeleyana del yo", Contrafuerte, 12-18.
(46) Avrum Stroll, "Two lines of argumentation in Berkeley's Principles: a reply to George S. Pappas", Hermathena, 139-144.
(47) Ian Tipton, "Ideas' in Berkeley and Arnauld", History, 575-584.
(48) Francois Tricaud, "L'immaterialisme est-il réfutable?", History, 591-596.
(49) Stanley Twyman, "Berkeley's denial of the denial of blind agency: a reply to Kenneth P. Winkler", Hermathena 145-151.
(53) Kenneth P. Winkler, "Unperceived objects and Berkeley's denial of blind agency", Hermathena, 81-100.