

Keynes's 1938, My Early Beliefs, has Nothing to do with Keynes's Logical Theory of Probability as Presented in His a Treatise on Probability

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Submitted: 22 Sept 2026; Accepted: 28 Sept 2026; Published: 8 Oct 2026

Citation: Brady, M. E. (2026). Keynes's 1938, My Early Beliefs, has Nothing to do with Keynes's Logical Theory of Probability as Presented in His a Treatise on Probability. *J Business & Eco Insights*.,2(4):1-8.

Abstract

A severe error ,very similar to the errors made originally by F P Ramsey in 1922 and 1923 and later made, independently of Ramsey, by Berel Lang in 1964, has been made repeatedly by J B Davis in some 50 papers that were published between 1988 and 2024. Davis's error badly confuses Moore's Platonic, metaphysical, speculative Intuitionism with Keynes's Boolean, logical intuition, which was concerned with the logical connections that exist between related sets of propositions structured as premises and conclusions in an argument form. Keynes's "My early Beliefs" is claimed by all heterodox and Post Keynesian economists to support Davis's claim that Keynes rejected his Boolean, relational, propositional logic and accepted Ramsey's claim that Keynes's use of propositions was concentrated on propositions that were UNRELATED to each other. Consider the following summary of Davis's claims by Mitchell.

A New Interpretation of Keynes

John Davis directs that we look at those newly discovered, early, unpublished Apostles' papers Keynes wrote on themes from Moore's Principia. Davis claims that these give further insights into Keynes's development of his own philosophical views, asserting that "in them Keynes both advances for the first time the central philosophical idea of the Treatise, namely that probability relationships are known through intuition rather than through a knowledge of relative frequencies." These early ideas were later published in Keynes's "My Early Beliefs."

But the reason Davis finds these Apostles' papers important is "because, read in conjunction with 'My Early Beliefs,' they provide the philosophical end-points for an intellectual development which began on the epistemological terrain of the Treatise, and then abandoned that terrain for the very different one of The General Theory"(Mitchell, 2017).

This claim incorporates the central error made by all Keynes Scholars(see references), which was that Keynes's *A Treatise on Probability* was based directly on Moore's Platonic Intuitionism when it was actually based on Boole's relational, propositional, symbolic logic.

Introduction

The paper will be organized in the following manner. Section Two will deal with the many, many errors of Mitchell that are based on Mitchell's ignorance of what one can call the Boole -Keynes connection. Mitchell ,like all other economists,

philosophers and social scientists in the 20th and 21st centuries, who have written on Keynes's views on probability ,philosophy, epistemology, and methodology, has erroneously assumed that Keynes's *A Treatise on Probability* (TP, 1921) was based on Moore's ethical, moral and religious intuitionistic Platonic philosophy .One only needs to read chapters I,XI and XII of Boole's *The Laws of Thought*(1854, LT) ,and compare that material with Keynes's chapters I and II of the TP, to realize how closely Keynes is following Boole, which has absolutely nothing to do with Moore. However, to fully understand how intertwined Keynes's theory is with Boole's theory requires a reader to have been able to simultaneously read Part II of the TP and chapters XVI-XXI of LT. Keynes's substantial improvement on Boole will then be clear. However, there are no academicians currently alive who have done this.

Section Three will demonstrate that Mitchell repeats the errors of Runde (1994a, b), which follow Davis's very severe error of basing Keynes's theory on Moore instead of Boole, an error that vitiates all of the nearly 40 years of work on Keynes done by Davis, as well as by Runde and other Keynes scholars. Davis, in effect, argues , although Boole is not mentioned once in that forty-year period by Davis, that Keynes rejected his Boolean relational, propositional logic and objective, logical probability relation, which connected RELATED propositions, based on Ramsey's erroneous assertions made about UNRELATED propositions. I am unable to find a single, published article written by any academician in the 20th or 21st century that points out that Ramsey's critique is completely based on Keynes's

supposed use of UNRELATED propositions since the TP was published in 1921.

Section Four argues that there is no existing Philosophy of Science that can support the claim that Keynes's studies is scientific or that Keynes Studies (Keynes Studies is a term used by Misak (2020) to categorize the work on Keynes of Post Keynesian and heterodox economists like R. Skidelsky, A. Carabelli, R. O'Donnell, A. Fitzgibbons and T. Lawson that appeared in the early to late 1980's. All of this work is based on the claim that Keynes's work on probability was based on G E Moore's Intuitionism) is a science or scientific, given that there is NO error correcting mechanism at work in Keynes Studies regarding the extremely severe errors that have made constantly and continuously over the last 100 plus years, on Keynes's TP.

The Keynes-Townshend correspondence of 1937 -1938, written at roughly the same time period as his "My Early Beliefs" in 1938, shows that Davis's extensive work on Keynes (See Davis references dated from 1991-2025) is completely wrong, just as all of the earlier work of Ramsey and Lang on Keynes was wrong. Nowhere in the Keynes-Townshend exchanges does Keynes abandon the probabilistic, logical, philosophical, methodological and epistemological terrain of the TP. Keynes does exactly the opposite. Keynes makes it crystal clear to Townshend in late 1938 that his Liquidity Preference theory of the rate of interest in the General Theory is built directly on the A Treatise on Probability's logical analysis of the evidential weight of the argument, where "argument" is Keynes's shorthand for the application of a relational, propositional logic. For Keynes, the logical in his logical theory of probability meant the application of Boole's relational, propositional logic.

The only indirect connection to the A Treatise on Probability in "My Early Beliefs" occurs in a discussion of Moore's reliance on the frequency interpretation of probability, which Keynes briefly discusses in chapter XXVI of A Treatise on Probability on parts of two pages in section four: "The large part played by considerations of probability in his theory of right conduct was, indeed, an important contributory cause to my spending all the leisure of many years on the study of that subject: I was writing under the joint influence of Moore's Principia Ethica and Russell's Principia Mathematica. But for the most part, as I have said, we did not pay attention to this aspect of the book or bother much about it... But we set on one side, not only that part of Moore's fifth chapter on 'Ethics in relation to Conduct' which dealt with the obligation so to act as to produce by causal connection the most probable maximum of eventual good through the whole procession of future ages (a discussion which was indeed riddled with fallacies), but also the part which discussed the duty of the individual to obey general rules. We entirely repudiated a personal liability on us to obey general rules" (Keynes, 1938).

Thus, Mitchell is simply incorrect in his belief that Davis had presented a "new" interpretation. There is nothing original, unique, innovative, creative, new or novel in Davis's

interpretation of Moore's alleged influence on Keynes that was not already spelled out by Ramsey or by Lang long before Davis's work.

Davis's "New Interpretation" is built entirely on the erroneous work of F P Ramsey and his claims that Keynes's theory of logical probability dealt with UNRELATED and UNCONNECTED PAIRS of propositions. Ramsey's main example in 1922 was "My carpet is blue; Napoleon was a great general" (Ramsey, 1922).

In fact, such unconnected propositions are excluded by definition by both Keynes and Boole, upon whom Keynes built his logical theory of probability. Keynes's theory rests on an analysis of RELATED propositions ONLY. Ramsey's use of UNRELATED propositions, in fact, is excluded from having ANY operational significance in ALL logical theories of probability, starting with Thomas Aquinas's qualitative logical theory of probability and ending with Rudolf Carnap chapter 9 exposition on estimation, not calculation, of probabilities in his 1950 Logical Foundations of Probability, which emphasized the problems of probabilistic reliability, firmness and accuracy.

The erroneous nature of the works of Ramsey, Lang and Davis conflict completely with Keynes's own characterization of his work as being based only on one main source -a formal, mathematical, symbolic logic approach, of which there is only one main predecessor, George Boole. Moore had absolutely nothing to do with the preparation, development and application of Keynes's logical theory of probability.

The severe errors about Keynes's logical theory of probability in Mitchell (2017) regarding Ramsey's reviews of Keynes's TP

Mitchell makes the same, identical mistakes that have been made by all other Keynes scholars on Keynes's theory of logical probability in the 20th and 21st centuries except one-Bertrand Russell's small one footnote example contained on page 120 of his July, 1922 review of Keynes's book for the *Mathematical Gazette that mimicked Ramsey's example- $2+2=4$, Napoleon disliked poodles.*

"Keynes also was indebted to criticisms that Frank Ramsey had made to his Treatise, namely that this young intellectual (who would die in his twenty-sixth year) encouraged Keynes to consider "human logic," in contrast to the formal logic that Keynes had learned from Russell and Whitehead. While formal logic dealt with rules of consistent thought, Ramsey suggested that we have certain "useful mental habits" for handling the material with which we are supplied by our perceptions and by our memory and perhaps in other ways, and so arriving at or towards truth; and the analysis of such habits is also a sort of logic." This formed the foundation for a subjective theory of probability. Ramsey had taught Keynes that "probability is concerned not with objective relations between propositions but (in some sense) with degrees of belief, and he succeeds in showing that the calculus of probabilities simply amounts to a set of rules for ensuring that the system of degrees of belief which we hold shall be a consistent system." Davis observes

that “in them [the recently discovered Apostles’ papers] Keynes both advances for the first time the central philosophical idea of the Treatise, namely, that the probability relationships are known through intuition rather than through a knowledge of relative frequencies, and also a number of additional ideas concerning the philosophical character of intuition.” While the Bloomsbury Group was the first to escape from Bentham’s utilitarianism, they were the last of the Utopians—those who accept the idea of continuing moral progress. Indeed, if one holds a commitment to logically and carefully thinking through the most moral course of action, they would not fall into any moral morass.

The price of such a philosophy, Keynes was fair to note, was that “[w]e had no respect for traditional wisdom or the restraints of custom.” Davis notes that “Keynes ultimately came to distance himself from much of what was involved in the early Cambridge philosophy of Moore, Russell, and the early Wittgenstein, and from relatively early on was searching for additional philosophical resources for his developing analysis of economic life” (Mitchell, 2017).

Pace Mitchell and Davis, Keynes learned his formal, symbolic logic primarily from his father, John Neville Keynes, and William Ernest Johnson, and only secondarily from Wittgenstein, Russell and Whitehead. This is straightforward to discern if one has read Part II of the TP. Neither Davis nor Runde ever read Keynes’s Part II of the TP.

However, B. Russell did provide a simple and complete refutation of Ramsey’s claim in his review of Keynes’s Treatise, which is based directly on pp.54-56 of Chapter IV of Keynes’s Treatise discussion of a relevance -irrelevance logic as it relates to his POI analysis, but did so without mentioning Ramsey’s name or citing his 1922 *Cambridge Magazine* source, so as to avoid damaging Ramsey’s reputation.

“* I do not know whether Mr. Keynes has considered and rejected a definition of irrelevance which, prima facie, would be simpler than his. He does not state definitely whether every pair of propositions has some probability-relation, but I think he does not hold this view. I think he would say, e.g., that there is no probability-relation between the propositions ‘ $2+2=4$ ’ and ‘Napoleon disliked poodles.’ If so, it would seem natural to define h as irrelevant to a when a/h does not exist” (Russell, 1922).

Now this refutation of Ramsey also follows directly from Keynes’s discussion of the requirements needed to apply the argument form of his relational propositional logic on pp.4-6 of his 1921 Treatise. The h propositions and the a propositions must be related, associated or connected (similar) in order for there to be a logical, objective relation between a and h . It should have been obvious that there is no connection between Ramsey’s, my carpet is blue ‘and ‘Napoleon was a great general’, just as there is no connection between Ramsey’s 1926 examples of ‘this is red’ and ‘that is round’ or ‘this is red’ and ‘that is blue’. All of Ramsey’s examples are simply nonsense, as illustrated by Russell’s ‘ $2+2=4$ ’ and ‘Napoleon

disliked poodles” (Russell, 1922).

The many, many errors made by Mitchell are what can be expected if one relies on Davis’s claims which are never backed up with citations to the TP. As we shall see in Section 3 below, Mitchell, in essence, also repeats the errors of Runde in 1994 (Runde, 1994a, b), where Runde accepted Davis’s claims that Keynes rejected his Boolean logic of relational propositions. It is obvious that Keynes could never do this, as his Boolean relational, propositional logic not only permeates all five parts of the TP but is the logical glue that holds the entire theory of logical probability together. Without the Boolean framework and foundation in relational propositional logic, Keynes’s entire logical theory of probability would collapse.

How Mitchell was completely misled by Davis’s assessment of Keynes

Consider the following error filled claims made by Mitchell based on his readings of Davis:

“Thus, says Davis, “when Keynes wrote the Treatise he had not yet become sensitive to the complexities inherent in the ordinary exercise of intuition or judgments on the part of economic agents in concrete social historical contexts.” Keynes had left philosophy for economics in his early years at Cambridge, but apparently, he was still reflecting on those epistemic foundations that would underlie his later thinking. Therefore, even early on, Keynes had been distancing himself from the ideas of Moore, Russell, and the early Wittgenstein “(Mitchell, 2017) and “Davis observes that “in them [the recently discovered Apostles’ papers] Keynes both advances for the first time the central philosophical idea of the Treatise, namely, that the probability relationships are known through intuition rather than through a knowledge of relative frequencies, and also a number of additional ideas concerning the philosophical character of intuition” (Mitchell, 2017).

Davis’s claims, that “Keynes both advances for the first time the central philosophical idea of the Treatise, namely, that the probability relationships are known through intuition rather than through a knowledge of relative frequencies, and also a number of additional ideas concerning the philosophical character of intuition. “and “...”, says Davis, “when Keynes wrote the Treatise he had not yet become sensitive to the complexities inherent in the ordinary exercise of intuition or judgments on the part of economic agents in concrete social historical contexts...” are nonsense Keynes never advanced “... for the first time the central philosophical idea of the Treatise, namely, that the probability relationships are known through intuition...” Boole was the first to do so in 1854 in his LT. What Keynes did was advance Boole’s formal logic in Part II of the TP and then apply it. Of course, the intuition that Keynes was talking about is not Plato’s metaphysical, speculative, logical relations, used by Moore to support his “Intuitionism”, that was supposed to be applied ONLY to fields such as ethics, morals, aesthetics and metaphysics, not probability and statistics. Boole’s symbolic, formal, mathematical logic is built on the INTERNAL logical connections that exist between the premises and conclusions by a logical analysis called relational, propositional logic based on an argument form.

One needs to go back to the early 1990's to find the first clear case of Davis's confused influence. This occurred in two papers published by Jochen Runde (Runde, 1994 a, b). We can concentrate on the second of these two papers because the title gives away the very severe confusions in Runde's mind as he wrote this paper in regard to his understanding of what Keynes was doing in the TP-building on Boole's LT and NOT on Moore's *Principia Ethica* (PE, 1903).

The title of Runde's paper is "The Keynesian Probability-Relation: In Search of a Substitute". Runde's summary of this paper shows the intellectual trap that Mitchell fell into-basing his work on an economist and philosopher, Davis, who had read Moore, but, due to his own shortcomings in symbolic logic, mathematics, probability and statistics, could never read Boole's LT or Keynes's TP. Davis thus misinterpreted Keynes's use of the word intuition to mean Moorean intuition and not Boolean intuition. This mistake is catastrophic and vitiates all work done on Keynes's TP by all academicians, especially economists and philosophers in the 20th and 21st centuries, since the origin of this error comes from F P Ramsey's 1923 "Induction: Keynes and Wittgenstein."

"The main substantive point that Davis makes about Keynes's philosophical development is that he later abandoned his earlier commitment to "intuitionism". I now agree with this, although I am not sure that the practical consequences for Keynes's economic analysis of behavior under uncertainty are quite so dramatic as Davis suggests. By intuitionism Davis means Keynes's view in the *Treatise on Probability* that a rational degree of belief in a proposition arises out of the apprehension (intuition) of a logical relation of partial implication (RPI) between that proposition and some set of evidential propositions. The RPI is written a/h, in Keynes's notation, and reads "Hypothesis relative to the evidence... Ramsey and doubts about the existence of RPIs are not as damaging as they may seem, since these do not entail anything about the formal structure of Keynes's theory of comparative probability." (Runde, 1994).

Mitchell then claims that Davis's intellectual confusion about the nature of Keynes's meaning of the word "intuit" or "intuition", is substantiated in Keynes's "My Early Beliefs": "Keynes's 1938 Retrospective Reflecting back to those earlier days, Keynes observed that "[i]t seems to me, looking back, that this religion of ours was a very good one to grow up under. It remains nearer the truth than any other that I know, with less irrelevant extraneous matter and nothing to be ashamed of... [I]t is still my religion under the surface."

From that same thirty-some-year-later perspective, Keynes notes, "I see no reason to shift from the fundamental intuition of *Principia Ethica*; though they are much too few and too narrow to fit any experience which provides a richer and more various content." Again, he asserts that "[i]t was an important objective in Moore's book to distinguish between goodness as an attribute to state of mind and righteous as an attribute of action."...By the time Keynes was writing his

Treatise on Probability, both G. E. Moore and Bertrand Russell had rejected their views that propositions existed as having independent reality.

According to Davis, eventually Moore's view that "intuition as a form of cognitive insight ... was contested by the emotivists who regarded normative judgment as affective response to our emotional states, namely, from what we think and feel to be the case. "Keynes in his dissertation was thus himself vulnerable to the same emotivist critique of his underlying ethical theory that ethical truths could be known by intuition.

However, by the time the *Treatise* appeared, Keynes's interests had shifted from ethics and philosophy to economics and politics..." (Mitchell, 2017).

Contrary to Mitchell and Davis, Moore and Russell both adopted the Keynes (Boole) position on propositions, which is that they are no such things as "really existing objective propositions", but that propositions are symbolic and are the subject of the field of symbolic logic.

Nowhere in Keynes's 1938 essay does Keynes mention his logical theory of probability or the *A Treatise on Probability*. Economists and philosophers have simply read their own "interpretations" of what they speculate Keynes's use of the word intuition must mean, which Keynes used accurately in his 1938 essay to deal with issues related to and involving ethics, morality," religion", aesthetics and metaphysics, but not probability or statistics.

Applying standard philosophy of science criteria to evaluate whether a field, discipline or study qualifies it to be termed a science leads to the conclusion that Keynes Studies is not a science or scientific, as there is no error corrections taking place over time in the field

While there are significant differences of opinion on a number of issues studied in the philosophy of science, there is one position that is unanimously accepted by all philosophers of science. That position is that a process of error correction can be observed to be functioning over time so that, in the long run, errors made by practitioners in a particular science are discovered and removed.

It is important for the philosopher of science to recognize that the scientist and science as an institution have been granted a very special, exalted, accepted and highly regarded and rewarded position in society, not because science is guaranteed to discover what is the truth right away, but because, over time, it is claimed that science finds and self corrects its own errors. Peirce expresses this as occurring "in the long run". (Peirce, 1901/1958; See also Laudan, 1981; Mayo, 2005 and Reichenbach, 1938). Unfortunately, this process of self-correction can't be observed to be taking place in the long run in Keynes Studies.

There is no process of review and self-correction taking place. In fact, just the opposite process is taking place. Numerous

philosophers of science, instead of seeking out and correcting the massive numbers of errors made by Ramsey in the gigantic literature on Keynes, probability and decision theory, are doing just the opposite -attempting to cover up Ramsey's errors. Consider the following philosopher of science Donald Gillies's discussion of Ramsey's claims.

"The subjective theory of probability emerged as a solution to certain problems which had arisen in the older logical view of probability.

According to this logical account, a body of evidence *e* justifies just one rational degree of belief in a hypothesis or prediction *h*. This is the logical probability of *h* given *e*. Probability is a relation which we can 'cognize correctly' (to use Keynes's phrase ([1920])).

The difficulty here is that (as Ramsey puts it ([1926])) 'there really do not seem to be any such things as the probability relations he (Keynes) describes'.

Admittedly attempts had been made to evaluate the supposed logical probabilities by using the 'principle of indifference'; but apparently insuperable difficulties were found in this principle. Another weakness was that the axioms of probability were justified only by unsatisfactory appeals to 'logical intuition'.

In the face of these problems, the founders of the subjective theory (Ramsey and de Finetti) proposed independently, and at about the same time, that the apparently non-existent objective degrees of rational belief should be replaced by the degrees of actual belief held by particular persons. They proposed an operational method of measuring such degrees of belief and showed how the axioms of probability could be derived from their point-of-view. They thus established the subjective theory as a viable account of probability." (Gillies, 1972) Gillies' claims about "...The difficulty here is that (as Ramsey puts it ([1926])) 'there really do not seem to be any such things as the probability relations he (Keynes) describes'. Admittedly attempts had been made to evaluate the supposed logical probabilities by using the 'principle of indifference'; but apparently insuperable difficulties were found in this principle ..." (Gillies, 1972) and "...and at about the same time, that the apparently non-existent objective degrees of rational belief should be replaced by the degrees of actual belief held by particular persons."

(Gillies, 1972) are all the result of Gillies' uncritical acceptance of Ramsey's fictional and fictitious definitions of Keynes's logical approach to probability based on examples like "My carpet is blue; Napoleon was a great general." That make no sense at all and claims about a non-existent "...Axiom I ..." that does not exist in Keynes's A treatise on Probability and for which no page citation to the claimed Axiom I has ever been given by any economist or philosopher since 1921 including Gillies. Of course, Russell's 1922 Mathematical Gazette refutation of Ramsey's argument has also never been cited in 104 years.

Gillies's account is the standard account that can be found in all philosophy of science accounts (Braithwaite, Mellor, Hacking, Howson, Howson and Urbach, Stanford Encyclopedia of Philosophy, etc.) explaining why Keynes's logical theory of probability was abandoned, and Ramsey's subjectivist account was accepted. In fact, there was no correct assessment made by Ramsey of anything written by Keynes on probability and statistics in his brief lifetime.

Thus, since there is no self-correction of results taking place for over one hundred years, the required self-correction process does not exist and the only conclusion possible is that Keynes Studies is not a science or scientific.

Conclusion

Davis's late 1980's -2026 work on Keynes's early philosophy works is very similar to Ramsey's 1923 paper "Induction: Keynes and Wittgenstein" and Berel Lang's 1964 paper "Intuition in Bloomsbury", where Lang's conclusion was identical to Davis's conclusion, which was that Keynes and his Bloomsbury associates drew a common, direct line from immediate apprehension, perception and external intuition to foundational truths in ethics, art, and probability. Lang and Ramsey, like Davis, is correct about Moore's position on ethics and art influenced Keynes, but completely wrong about probability and statistics.

The work of Davis, Runde and Mitchell is only the very, very small tip of a gargantuan iceberg of extreme and extraordinary ignorance concerning Boole's The Laws of Thought, Keynes's A Treatise on Probability and his logical theory of probability that currently exists in academia in 2026 in a field called "Keynes Studies". This has been the case since 1921.

Unfortunately, it is not only Keynes's book which has been skipped, but also Boole's 1854 The Laws of Thought. It is unclear to me how this intellectual mess, first alluded to by Hishiyama in 1969, and taken advantage of by R B Braithwaite to publish an editorial foreword to the 1973 CWJMK edition of the TP which is completely erroneous. It can't be revised as that would require Macmillan issue another edition of the TP for the CWJMK in which Braithwaite's editorial foreword was removed. The result is that it will continue to be the case that students starting out to study Keynes's TP will have been seriously misled before that have even reached the start of chapter I on p.3.

Keynes's 1938 My Early Beliefs dealt with his early beliefs about religion, morals, ethics, metaphysics, aesthetics, art, and politics. It doesn't make any sense to claim that Keynes's 1938 work was about his "beliefs" about mathematics, logic, probability and statistics when none of these areas is mentioned [7-99].

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