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Platonism has nothing to do with Keynes's A Treatise on Probability or General Theory: On F P Ramsey's critique of an imaginary, Platonic, metaphysical, Keynesian, probability relation that never existed

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Abstract

F P Ramsey's 1922 review in Cambridge Magazine, his 1923 paper, "Induction: Keynes and Wittgenstein" and 1926 paper, "Truth and Probability" are all based on claims and assertions about Keynes's logical theory of probability which do not exist anywhere in Keynes's A Treatise on Probability or in anything written by Keynes in his lifetime. One possible explanation is that Ramsey suffered from hallucinations, delusions or illusions.

The role of Keynes's non numerical probabilities, evidential weight and the relations between Keynes's General Theory and the A Treatise on Probability were first pointed out by Hugh Townshend in 1937-38 in correspondence with Keynes. Townshend was the only economist who had read, and understood, the role played in Keynes's liquidity preference theory of the rate of interest of (a) Keynes's non numerical probabilities, the name given by Keynes to his Boolean, interval valued probabilities, and (b) his evidential weight of the argument, which Townshend called the weight of the evidence.

In 1969, Hishiyama, who was unaware of the Townshend-Keynes correspondence, not only validated the points made in the Keynes-Townshend correspondence about liquidity preference, but showed how the imprecise approach to probability (interval valued probability, decision weights) in the A Treatise on Probability directly supported Keynes's approach to measurement, in the form of inexact measurement and approximation, discussed by Keynes in Chapters 4, 11, 12 and 17 of the General Theory, where Keynes demonstrated the impossibility of applying strict or exact mathematical expectations, which is the fundamental concept underlying Benthamite Utilitarianism, which underlies all classical, neoclassical, new classical and new neoclassical approaches to economics, in decision making.

Key Words: *Keynes's Boolean, relational, propositional, mathematical logic, Keynes's Boolean, interval valued probability, imprecise probability, Evidential Weight of the Argument, the measure of Evidential Weight-the completeness of the evidence, Ramsey's metaphysical, Platonic entities, G E Moore's Platonic intuitionism*

Introduction

The paper will be organized in the following fashion. Section Two will examine Ramsey's confusions about (a) Keynes's formal ,mathematical ,symbolic logic being based, not on Boole, but on some version of Moore's intuitionism, which was based on Plato's theory of forms and (b) Ramsey's claims about "Mr. Keynes's mysterious probability relations" that he could not perceive .Section Three will examine J B Davis's 35 plus years of interpreting Keynes's logical theory of probability as being founded on a Platonist conception as claimed by Ramsey. Section Four will examine Bateman's very similar evaluations of Keynes 's logical theory of probability, which are completely based on Ramsey's false claims. Section Five deals with B. Gerrard's severe confusions, which are closely related to the work of Davis and Bateman, about Ramsey's erroneous assessments of Keynes. Section Six concluded the paper.

There is no discussion in Keynes's *A Treatise on Probability (1921,TP)*, *General Theory (1936,GT)*, the Keynes -Townshend correspondence of 1937-38 or Hishiyama's 1969 paper, of any of the following topics:

- F P Ramsey
- Subjective probability
- Intersubjective probability
- Betting quotients
- Plato
- Platonism
- Platonic forms
- Platonic entities
- Platonic metaphysical relations
- Neo-Platonism

These topics appear only in the publications of economists and philosophers who are basing their work on Keynes, the *A Treatise on Probability*, or the *General Theory* on the false claims and assertions made by F P Ramsey about Keynes and Keynes's *A Treatise on Probability*.

Currently, what is called "Keynes studies "is made up of articles and books, written over the last 100 plus years by severely confused economists, philosophers, historians and social scientists, that have no foundation in anything written in the *A Treatise on Probability* and/or *General Theory*. Instead of basing their work on what Keynes actually wrote, all of this work is based on what Ramsey claimed Keynes had written.

Ramsey's Plato myth about Keynes first appeared in his 1923 paper, titled "Induction: Keynes and Wittgenstein." It then reappears in his 1926 "Truth and Probability." Everything written by Ramsey on Keynes's logical theory of probability and the *A Treatise on Probability* is not only wrong, but badly confused containing confusing ruminations that needs to be removed from consideration as being serious, scientific scholarship.

The strange claims of F P Ramsey about Keynes's logical theory of probability and Boole's relational, propositional logic

Consider the following claims made up by Ramsey:

"But let us now return to a more fundamental criticism of Mr. Keynes' views, which is the obvious one that there really do not seem to be any such things as the probability relations he describes.

He supposes that, at any rate in certain cases, they can be perceived; but speaking for myself I feel confident that this is not true. I do not perceive them, and if I am to be persuaded that they exist it must be by argument; moreover I shrewdly suspect that others do not perceive them either, because they are able to come to so very little agreement as to which of them relates any two given propositions."(Ramsey,1926;In Kyburg and Smokler (eds),1980,p.27-28).

Of course, Keynes's probability relations are nothing other than Boole's probability relations, which deal with related, similar or relevant sets of propositions that must be logically connected (Keynes,1921,pp.4-6).Neither Boole nor Keynes dealt with Ramsey's pairs of two irrelevant ,unrelated or dissimilar propositions ,where the logical connection is nonexistent as in Ramsey's examples below:

- My carpet is blue; Napoleon was a great general
- This is red; that is round
- This is blue; that is red

These types of Ramsey examples lead to nonexistent ,alleged "conditional probabilities ", which both Gerrard and O'Donnell claim were studied by Keynes in his *A Treatise on Probability* and form the foundation for Ramsey's musings and ruminations about Keynes:

"...He (author's note -Ramsey claims that Keynes supposed this) supposes that, at any rate in certain cases, they can be perceived; but speaking for myself I feel confident that this is not true. I do not perceive them, and if I am to be persuaded that they exist it must be by argument..."

This then leads to Ramsey's claim that Keynes's logical relations are mysterious:

"We shall, I think, find that this view of the calculus of probability removes various difficulties that have hitherto been found perplexing. In the first place it gives us a clear justification for the axioms of the calculus, which on such a system as Mr. Keynes' is entirely wanting. For now it is easily seen that if partial beliefs are consistent they will obey these axioms, but it is utterly obscure why Mr. Keynes' mysterious logical relations should obey them.¹ We should be so curiously ignorant of the instances of these relations, and so curiously knowledgeable about their general laws."(Ramsey,1926;in Kyburg and Smokler(eds),1980,p.27).

The only thing that is mysterious here is why Ramsey's false claims were accepted as a correct representation of Keynes's logical theory of probability by literally thousands of economists, historians, philosophers, social scientists, behavioral scientists and decision theorists for over 100 years.

In 1923, Ramsey claimed the following in his paper, "Induction: Keynes and Wittgenstein":

"Ramsey's first criticism relates to the intuitionist foundations of Keynes's analysis through the assumed individual power to establish degrees of probability by direct intuition. According to Ramsey, we cannot expect individuals to intuitively perceive partial logical relations between two propositions (Ramsey, 1926, p. 57). Ramsey's reservations about such use of a logical intuition is made explicit in one of his lectures to the Apostles Society dated 's 1923 - 'Induction: Keynes and Wittgenstein' (Ramsey, 1923). In this short talk, the above-mentioned reservations took the form of an analogy:

There seems to me to be some analogy between this question and that of objective or intrinsic good; in the latter we consider the justification of our actions, and are at once presented with the simple solution that this lies in their tendency to promote intrinsic value, a mysterious entity not easy to identify; if now we turn to the justification of our thoughts we have the equally simple solution that this lies in their following certain logical probability relations, equally mysterious and difficult to identify [...]. I think that both these simple solutions are wrong, and the true answers are in terms not of ethics or logic, but of psychology [...].

(Ramsey, 1923, p. 300)

Here, Ramsey questions both the intuitionist grounds of Moore's ([1903] 1993) moral philosophy dominating Cambridge at that time, and the logical inference faculty Keynes intends to use.⁶(Gaspard,2014, p.142)

There are many errors contained in Gaspard's assessment. I will cover a couple of them. The first is "According to Ramsey, we cannot expect individuals to intuitively perceive partial logical relations between two propositions (Ramsey, 1926, p. 57)."(Gaspard, ibid.)

Pace Gaspard, Keynes theory, like Boole's, deals with sets of propositions which are related and not Ramsey's "between any two propositions". Gaspard has failed to include what is one of the many, many crucial errors in Ramsey's faulty analysis of Keynes's relational propositional logic, which is his claim that Keynes's relational ,propositional logic deals with "... any two propositions." Second, there is no analogy here between Moore and Keynes. Plato's speculative, metaphysical relations between disembodied entities has nothing to do with Keynes's Boolean, probability relations holding between RELATED, SIMILAR or RELEVANT propositions.

It should now be quite obvious that Plato's metaphysical, speculative relations, which is what Ramsey was talking about in 1923, has nothing at all to do with Keynes's theory of probability, which is based on Boole. Ramsey's false assertions, that there is a close connection between Moore's Platonic based intuitionism concerning ethical goals (the good) and Keynes's theory of logical probability based on Boole, is incomprehensible. There is absolutely no connection between the formal, mathematical, symbolic logic of Boole, that permeates the A Treatise on Probability and which is the foundation for Keynes's logical theory of probability, and Moore's Platonist, intuitionistic concerns.

The musings and speculations of J B Davis on Keynes's theory

Davis has been supporting Ramsey's false claims about Keynes's logical probability relations being Platonic, metaphysical relations for at least 35 years. Consider a small sampling of his assertions:

"Past debate over such a "break" focused upon Keynes's not unambiguous assertion in 1930 that Frank Ramsey had indeed been correct in his critique of the main philosophical ideas of the Treatise, but this debate had preceded the Coddington nihilism charge and the recent Cambridge project of rehabilitating the philosophy of the Treatise. The re-positioning of a "break" in Keynes's thinking is closely associated with what has come to be known as the "continuity thesis," which either denies or deemphasizes significant change in Keynes's philosophical

thinking sometime after his early explorations of Moore's ideas. Moggridge's contribution on the topic is to classify the early Apostles papers into three groups, and argue that "Ethics in Relation to Conduct" appears in the last group, covering the period 1908 and after. A supporting argument for his position occurs in his judgment on the debate over... that "the 'beliefs' concerned related to the period before substantive work on the fellowship dissertation," and agrees with Anna Carabelli (1988) that "Keynes 'accepted none of the main points which are characteristic of the view of probability advanced by Ramsey in his 1926 article' " (p. 623). There are, however, a number of difficulties with this view of Keynes's development. First, Keynes bases his logical account of probability in the Treatise on the idea that we employ intuition to directly grasp (indefinable) probability relations, but is then explicit in "My Early Beliefs" in saying that one of the most objectionable intellectual practices that he and his early friends relied upon was to claim to exercise a "direct unanalyzable intuition about which it was useless and impossible to argue." (Keynes, 1971-89, X, p. 437).

This "Neo-Platonism," as he termed it, "combined a dogmatic treatment as to the nature of experience with a method of handling it which was extravagantly scholastic" (Ibid ., p. 438). Second, and related, after Ramsey had criticized the idea that we intuit probability relations (' I do not perceive them, and ... moreover I shrewdly suspect that others do nor perceive them either" [Ramsey, 1978]), Keynes replied, "I think he is right" (Keynes, 1971-8,X,pp.338-339)."(David,1994,pp.360-362-The reader should note Davis's deliberate misquote about Keynes's reply ,"I think he is right", which dealt ONLY with Keynes's acceptance of a position that he had always held, which was that the purely mathematical laws of the calculus of probability are rational to apply, if, and only if, the probabilities are precise and additive ,numerical probabilities .Ramsey's betting quotient approach would then be acceptable because Keynes's measurement of the evidential weight of the argument ,w ,would have to equal 1,where $0 \leq w \leq 1$.However, if $w < 1$,Keynes totally and completely rejected Ramsey's approach ,as Keynes had always followed Boole's position that numerical ,additive probabilities were generally NOT TO BE HAD,EITHER A PRIORI OR A POSTERIORI.)

Next, consider the errors in the following quotation:

"Prior to Keynes devoting himself to economics, its meaning and significance was restricted to the importance ascribed to it by a relatively small, heterogeneous community of researchers investigating probability theory. Much of our current thinking about probability came after Keynes's Treatise, so how the book was judged at the time by a few commentators, among whom there was limited consensus regarding its contribution, has been largely forgotten. Keynes's view – his logical theory of probability – was novel and its philosophical motivations, rooted in Cambridge philosophy of G.E. Moore and Bertrand Russell (Davis 1994), made it difficult for many to judge. Not a few commentators dismissed it after Frank Ramsey criticized it, and Keynes appeared to make concessions to him – though how serious they were is subject to debate."(Davis ,2021,p.4).

Contrary to Davis

- Keynes's theory is not novel or new. It is an extension of Boole's original theory of logical probability.
- Keynes's theory is not rooted in the work of Moore and Russell. It is rooted in Boole's *The Laws of Thought* (1854).

- Keynes made no concessions to Ramsey because Ramsey's reviews are permeated with many dozens of errors. Keynes did agree that, if the probabilities were numerical, then, and only then, it is rational to make judgements that cohere and are consistent with, the axioms of the purely mathematical calculus of probabilities. However, this could only occur if w , Keynes's measure of the Evidential Weight of the Argument, that was discussed by Keynes in chapter VI of the TP, equaled 1, where $0 \leq w \leq 1$.
- Keynes rejected Ramsey's position because Ramsey's approach could not deal with rational degrees of belief, Keynes's Boolean based theory of mathematical induction, or Keynes's Boolean based theory of imprecise, Boolean based interval valued probability, which has nothing to do with Davis's ordinal probability.

Continuing, we find the following assertions made by Davis:

"Before turning to what Keynes had to say in *The General Theory* about the behaviour of economic agents in a general sense, it will be helpful to review briefly his well-known exchange with Ramsey over Keynes's understanding of intuition in his 1921 *A Treatise on Probability*. At issue is Keynes's theory of judgement, an important component of a theory of decision-making and his early philosophy. Keynes had applied the theory of intuition, developed first by Moore and then by Bertrand Russell at the beginning of the century, to the analysis of probability judgements. In Keynes's view he believed himself to be extending Moore's and Russell's philosophical revolution against the philosophical idealism of E.H. Bradley, Bernard Bosanquet and J.E.M. McTaggart. But Keynes's view was also original in departing from the then widely accepted frequency theory of probability, which made probability judgements out to be empirical statements about the relative frequencies of events. Keynes argued first in his early unpublished Apostle paper, 'On Ethics in Relation to Conduct' (1904) and later in the *Treatise on Probability* that the frequency theory presupposed general rules whose application itself presupposed acts of judgement. This seemed to give a special place to direct, unmediated intuitive judgment, or intuition, and Keynes went on to conclude that probability judgements were ultimately founded upon our intuiting abstract but real probability relations. Ramsey, however, was altogether skeptical of both the idea of intuiting metaphysical relationships and of the notion that individuals possessed a capacity for insight into the nature of the real. He concluded that a fundamental criticism of Keynes's views, "... is the obvious one that there really do not seem to be any such things as the probability relations he describes. He supposes that, at any rate in certain cases, they can be perceived; but speaking for myself I feel confident that this is not true. I do not perceive them, and ... moreover, I shrewdly suspect that others do not perceive them either ..." (Ramsey 1978: 63).

When Keynes finally came to reply after Ramsey's death, he simply agreed:

'I think he is right' (C W. X: 338-9).⁴⁷ (Davis, 1997, pp.206-207-the reader should reread my previous comment on Davis's misrepresentation of what Keynes is agreeing to here in his comment on Ramsey).

Of course, Keynes could never have agreed to a critique that is as error filled as those presented by Ramsey in 1922, 1923 or 1926. There are at least 25 severe errors in Davis's two-page assessment.

It would take me at least 20 pages to correct the myriad errors made by Davis. However, there is one constant error that permeates Davis's two-page summary of Keynes's theory. That error is that Keynes's probability relations are Platonic entities, when, in fact, they are identical to Boole's logical, probability relations, which have nothing to do with Plato or Platonic entities.

We will close our study of the very severe deficiencies in Davis's work on Keynes with an analysis of his following claim:

"Frank Ramsey, who was also an emotivist in ethics, made a similar criticism of Keynes's understanding of the meaning of 'probability'. The heart of Moore's theory of definition when applied to the meaning of 'probability' was that one had to use intuition as a form of rational insight to grasp logical relations between propositions. Ramsey asserted, 'I do not perceive them, and... I... suspect that others do not perceive them either' (1978:63). Ramsey thus cast doubt on there being a Platonic realm of logical relations by exposing intuition as arbitrary and unfounded. People simply did not have perceptions (as he termed intuition) of logical relations. Keynes's understanding of the meaning of probability was consequently shown to be baseless. It was to this criticism that he later responded in his obituary of Ramsey, saying, 'I think he is right' (CWX: 338-9). Note, however, that Keynes's admission did not concern his understanding of the form of probability judgments as essentially non-quantitative and comparative in nature. All that Keynes abandoned in response to Ramsey was his early Moorean view of the meaning of 'probable' as a Platonic logical relation knowable through intuition. "(Davis, 2003, p.102). We can sum up Davis's 35 years of continuous error, made about Keynes logical theory of probability, by examining the following belief of Davis that "All that Keynes abandoned in response to Ramsey was his early Moorean view of the meaning of 'probable' as a Platonic logical relation knowable through intuition."

If Davis's summary was true, then it would have permanently have destroyed the entire logical edifice, foundation and framework for logical probability that Keynes had erected based on Boole's relational, propositional logic, a logic that permeates all five Parts of the *A Treatise on Probability*.

The only conclusion possible is that Davis never read Keynes's *A Treatise on Probability*. Similarly, Davis has no inkling of the close connections existing between Boole's 1854 *The Laws of Thought* and Keynes's 1921(1908) *A Treatise on Probability* and second Fellowship dissertation. Davis has no idea of what Boole's formal, mathematical, symbolic logic entails nor of what Keynes's formal, mathematical, symbolic logic entails either. All of Davis's erroneous 35 years of assertions are based on only one source-the errors contained in the works of F P Ramsey dealing with Keynes's *A Treatise on Probability*/logical theory of probability.

The speculations and musings of B. Bateman about Keynes's logical theory of probability

Bateman presented, some 8 years before Davis (and Runde), nearly identical assessments of Keynes's Boolean, relational, propositional logic that are entirely based on the empty claims made by F P Ramsey and his main propagandist, R B Braithwaite. We will find the same type claims made about Keynes's Boolean, probability relation, that were first made by Ramsey in the 1922-1926 time period, repeated again and again by Bateman.

Bateman's errors can all be traced to his uncritical acceptance of the Ramsey Myth erected by Braithwaite in the editorial foreword to Volume 8 of the CWJMK version of the TP in 1973. Consider the following claim of Bateman:

"Keynes made an apparent capitulation to Frank Ramsey in 1931 which seriously undercut his earlier work in probability and every philosopher and probability theorist who has written on this episode has accepted the capitulation at face value (see Braithwaite, 1975; Good, 1965; Gillies, 1988; Jeffreys, 1961). Likewise, in 1938, Keynes expressly repudiated the conception of rationality that had informed his earlier work and this repudiation had not been previously challenged.² Richard Braithwaite's 1975 essay 'Keynes as a philosopher', the one standard reference on Keynes's first career, takes these two apparent changes to be the central focus in understanding this part of Keynes's life." (Bateman,1991,p.102).

Footnote two is given below:

² This repudiation occurred in a personal memoir, 'My Early Beliefs', first delivered orally in 1938, but not published until 1949 in Two Memoirs. The memoir now appears in JMK, Vol. X. The same sentiments were expressed in correspondence with Hugh Townshend in 1938. This correspondence is reprinted in JMK, Vol. XXIX."

Unfortunately, Bateman ignores the Bertrand Russell, F Y Edgeworth, C D Broad and E Borel reviews of Keynes's book. For instance, on p.120 of his July,1922 review of the TP in the *Mathematical Gazette* in his star footnote, in a paper that Bateman claims to have read, Russell completely refutes Ramsey's entire 1922 review in one tiny counter example. Bateman simply ignored Russell's correct assessment that Ramsey's work in probability had the least value of any of his contributions.

The basic problem here is that the four philosophers listed by Bateman, Braithwaite, Good, Gillies and Jeffreys, never read Keynes's TP. Anyone reading the TP would have realized immediately that there is no Axiom I in the TP as claimed by Ramsey. Thus, their claims, especially Braithwaite's, are intellectually worthless.

However, one economist did actually read and understand Keynes's *A Treatise on Probability*-H. Townshend, as a careful assessment of Pigou's review of Keynes's 1921 book reveals that he had no understanding of Keynes's Boolean mathematical, logical foundations. Bateman's claims, about the 1938 Townshend-Keynes correspondence, has no merit. This correspondence actually refutes Bateman completely and establishes that Keynes's Liquidity Preference theory of the rate of interest is built directly on Keynes's "weight" and "non numerical probability" concepts from the TP. They have absolutely nothing to do with F P Ramsey, subjective probability, intersubjective probability or betting quotients.

Now consider the intellectual deficiencies in Bateman's assessment of Keynes's Boolean, relational, propositional logic and Keynes's Boolean, objective, probability relation that holds between sets of logically connected a and h propositions:

"Like Moore and Russell, however, Keynes focused much more attention on the way we know things (epistemology) than on their actual existence (ontology), hence the complex and arcane

vocabulary of propositions. As O'Donnell demonstrates so well, this is simply an extension of their pioneering work in the philosophy of language as they attempted to reduce experience to a set of propositions about the 'real' world. They envisioned that there are propositions which describe the world, and which really exist themselves, and the process of knowing about the world consists of recognizing or knowing these propositions.¹

Thus, Keynes expressed his concept of probability as a logical relation between propositions... Borrowing from W. E. Johnson, Keynes labelled the propositions about my knowledge and Labour's victory 'primary' propositions and propositions about the correct degree of belief as 'secondary' propositions. In this way he extended Russell's logic of certainty (true and false propositions) to uncertainty (probable, primary propositions).

The exact ontological nature of Keynes's probabilities depended largely and essentially upon G. E. Moore's conception of the real existence of non-natural (i.e. non-physical) entities. The most famous example of this is Moore's idea that 'good' is a real thing that exists in the world and can be identified correctly as existing or not existing in a particular situation... (JMK, X, 444).

This belief in the real existence of non-natural entities is commonly referred to as Platonism. Moore believed in good, and Keynes in probabilities, in exactly the same sense as Plato believed in universal ideal forms.¹

The end result of all this was a conception of probability which relied on intuition as the basis of rational choice. One knew the correct probabilities (degree of belief) of the various outcomes and weighted the value of each outcome by this probability. The entire process was objective by virtue of the real existence of the probability and good (value) associated with each outcome; the entire process was rational by virtue of depending on these true values and probabilities." (Bateman,1991, pp.104-105).

Pace Bateman, Keynes's probabilities have nothing to do with Plato's universal ideal forms, entities or metaphysical relations. Bateman repeats these errors, not only throughout this article, but in every, single article he has written on Keynes and the *A Treatise on Probability*. Given that there is no mention of Plato or Platonic forms or Platonic entities anywhere in Keynes's 1921 book, the only conclusion possible is that Bateman never read Keynes's *A Treatise on Probability*. Consider the following further claims made by Bateman:

"O'Donnell claims that he has identified a second theory of rationality in Probability. Labelled 'weak rationality', O'Donnell associates this type of behaviour with the case where people are simply unable to identify the correct or true, probability relation between propositions." (Bateman,199, p.108).

Bateman has created an immense amount of confusion, which is magnified by Bateman's apparent complete ignorance of the fact that Keynes's logical apparatus, that permeates the TP, comes from George Boole's *The Laws of Thought* (1854) and not from G E Moore, Bertrand Russell, Ludwig Wittgenstein, W E Johnson, Plato, or Plato's theory of forms, which had NO developed propositional logic. It is true that two hundred years after Plato constructed his theory of forms, that the Stoics did become interested in an underdeveloped form of propositional logic that has been generally overlooked; however, this development has nothing to do with either Boole or Keynes.

Bateman makes elementary errors regarding Keynes when he claims there are “correct probabilities” and “true values and probabilities “in Keynes’s theory. There is no such thing as a correct probability or a true probability in Keynes’s theory. Bateman has made an elementary error in confusing “true” and “correct” with the word rational. It is interesting to note that this error was also made by Muth and Lucas in their ruminations and musings on the connections between subjective and objective probabilities in their work on rational expectations.

Bateman continues his erroneous belief that there was a close connection between Keynes’s TP and Moore’s intuitionism, which was based on Plato’s theory of Forms:

“Although no one has made an attempt to link Keynes’s early work explicitly with the Vienna Circle, the standard thesis that Keynes capitulated to Ramsey’s criticism of his early theory of probability suggests that he too came to be influenced by the empiricism that swept away the earlier rationalism of Platonic entities.” (Bateman,1991, p.105).

“Ramsey, in fact, goes on to take his own inability to cognize Keynes’s platonic entities as evidence that they do not exist (rather than as evidence of his own ‘limited logical insights’).” (Bateman,1991, p.109, ft.1).

Of course, this is all false. Nowhere in the text of the TP, its index or bibliography, will one find any references to Plato, Platonic, Platonic entities, Platonic forms, Platonic relations, Neo Platonism, Platonism, etc. B. Bateman has simply read into Keynes’s TP the same kind of imaginary analysis as done by F P Ramsey with his claims about an imaginary axiom I being the foundation for Keynes’s logical theory of probability and baffling, intellectual claims, illustrated in bizarre examples of Keynes’s theory such as “My carpet is blue, Napoleon was a great general.”

The speculations and musings of B. Gerrard about Keynes’s logical theory of probability

Gerrard’s 2023 paper in the CJE incorporates all of the previous errors made by Bateman and Davis, as well as many of which also have appeared in his past works on Keynes written between 1988 and 2012. These many errors are all based on the many errors contained in Ramsey’s 1922, 1923 and 1926 contributions. The most important error made by Gerrard is his total and complete acceptance of Ramsey’s imaginary Axiom I:

“But the three principal targets of Ramsey’s later fuller critique of Keynes are evident in the 1922 review: (i) the concept of a logical probability-relation (i.e., the existence issue); (ii) the non-numerical and possibly non-comparable nature of some probabilities (i.e., the measurement issue); and (iii) the relationship between rational degrees of belief and the degree of logical insight (i.e., the logical issue). At least publicly, Ramsey’s initial criticism of Keynes’s concept of a probability relation is somewhat muted. Misak (2020) quotes Ramsey’s notes on his 1922 review at the time as emphasizing that ‘there are no such things as these [probability] relations’ (p. 114).

By the time of his 1926 paper ‘Truth and Probability’, Ramsey would describe this aspect of his critique as the ‘more fundamental criticism of Keynes’ views’ (1990, p. 57). In his 1922 review, using the example of ‘my carpet is blue’ and ‘Napoleon was a great

general’, Ramsey criticizes Keynes’s first axiom on the existence and uniqueness of a probability-relation arguing that there is no probability-relation between these two propositions, implying that the very existence of a probability-relation must presuppose some degree of connectedness. Formally, Ramsey is correct that Keynes’s first axiom only rules out the existence of probability-relations for self-contradictory and inconsistent propositions and hence allows for the possibility of a probability-relation between two seemingly unconnected propositions. But Keynes deals with the problem of unconnected propositions elsewhere by allowing for non-existent probabilities which would surely apply to Ramsey’s example as would Keynes’s formal definition of relevance/irrelevance. This criticism becomes superfluous in ‘Truth and Probability’ by which time Ramsey explicitly rejects the existence of probability-relations.” (Gerrard,2023, p.199) Gerrard also accepts Ramsey’s 1926 repetition of his assertions about the imaginary “Axiom I”, a figment of Ramsey’s imagination or a hallucination on Ramsey’s part:

“The starting point for Ramsey’s critique remained the same three issues as the 1922 review – the existence issue, the measurement issue and the logical issue. From the perspective of (radical) Keynesian scholarship, the emphasis has been on the existence issue and Ramsey’s ‘more fundamental criticism of Mr. Keynes’ views, which is the obvious one that there really do not seem to be any such things as the probability relations he describes’ (1926, [1990]), p. 57).

As discussed in the next section, the debate amongst Keynesian scholars has been whether Keynes subsequently accepted Ramsey’s critique of objective logical probabilities. In contrast, mainstream economics has focused on the measurement issue and Ramsey’s proposal of the betting-quotient method that has ultimately become the foundation of SEU theory and the economic theory of choice under risk and uncertainty. Both for radical Keynesians and more mainstream economics, Ramsey’s discussion of the logical issue has remained peripheral since the denial of the existence of objective logical probabilities and the proposal of a method for measuring subjective probabilities as a consistent and coherent system effectively resolved the fundamental tension in Keynes’s Treatise between rational and actual degrees of belief. But this is to ignore the critical importance of the pragmatist philosophical foundations of ‘Truth and Probability’ that are particularly prominent in Ramsey’s discussions of the logical issue but also underpin both his rejection of probability relations and the betting-quotient method for measuring probabilities.” (Gerrard,2023, p.201).

The errors made in the quotation above are the foundations for Gerrard’s following five claims, none of which are supported once it is realized that they all require the formal existence of Ramsey’s imaginary axiom I to hold in Keynes’s logical foundation of his TP in Keynes Axiom (i) on pp.134-138 in Chapter XII:

“There are five explicit points to be taken from this passage (author’s note –Gerrard is referring to Keynes’s 1931 assessment of Ramsey’s theory in which Keynes rejected Ramsey’s theory because it fails to deal with Keynes’s theory of rational belief and Keynes’s Boolean based mathematical theory of induction contained in Part III of the TP . Gerrard has never read Part III):

1. Keynes repudiates the analytic project of the Treatise to construct a logical theory of probability as a set of objective relations between propositions
2. Keynes accepts Ramsey's pragmatist approach to probability as concerned with degrees of belief
3. Keynes accepts Ramsey's argument that formal logic should be restricted to showing how a consistent system of degrees of belief can be constructed
4. Keynes accepts that the pragmatist approach entails a new field of study of human logic that is distinct from both formal logic and descriptive psychology and is concerned with the basis of degrees of belief
5. Keynes considered Ramsey to have pointed the way towards the importance of human logic but had not yet resolved either how to distinguish rational degrees of belief from belief in general or the problem of induction "(Gerrard,2023, p.209)

Gerrard's errors lead to evaluations such as the following:

"Likewise, O'Donnell (2021) argues for the continuity of realism in Keynes's thought but recognizes that there was a significant change between the metaphysical (Platonic) realism underpinning the Treatise and the empirical and analytical realism underpinning the General Theory." (Gerrard,2023, p.211).

The fairy tale being pushed here by Gerrard, that Plato's theory of forms underlies Keynes's logical theory of probability, is just a repetition of Ramsey's horribly confused claims about "... Mr. Keynes's mysterious logical relations." made in his 1926 review.

It is a simple matter, for one who has actually read Keynes's *A Treatise on Probability*, to point out that, contrary to Bateman, Gerrard, and Davis, there is nothing related to Plato, Platonism, Platonic entities, Platonic forms, Neo Platonism, Plato's theory of forms or Platonic propositions that appears anywhere in the text, index or bibliography of Keynes's TP or GT.

Conclusions

For over 100 years during the 20th and 21st centuries, 1000's of articles and books have been written on Keynes's *A Treatise on Probability* by academicians, who have never read Keynes's *A Treatise on Probability*. What has been read is Ramsey's reviews. The uncritical acceptance of these reviews has been instrumental in spreading Ramsey's false claims.

The crucial error made by D. Moggridge, which was to insert an editorial foreword, that actually is intellectually worthless, written by an extreme Ramsey partisan, R B Braithwaite, has been instrumental in sowing the seeds of doubt about Keynes's 1921 magnum opus, thus leading to the creation of a belief that asserts that Plato's theory of forms and his metaphysical entities were the foundation of Keynes's theory of probability in his *A Treatise on Probability*. Nothing could be further from the truth.

C. Misak's so called 'Keynes scholars' have all based their assessments of Keynes's logical theory of probability on only one source-F P Ramsey. Ramsey's completely confused understanding of the role of propositions in logical analysis first showed up in the many confused and confusing assertions Ramsey made about Bertrand Russell's use of propositions in his November, 1921 Moral Science Club paper, titled "The Nature of Propositions." Ramsey's many errors made about Russell show up again in his January, 1922 *Cambridge Magazine* review about Keynes. Of course, Russell simply ignored Ramsey's erroneous

misconceptions and understanding in much the same way that Keynes ignored Ramsey's errors about the role of propositions in logical analysis, which had first been put forth by Boole in 1854.

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