In Search of Lost Reason: Ramsey, Keynes, and the Intellectualism Debate

by Soroush Marouzi

CHOPE Working Paper No. 2024-03
April 2024

Center for the History of Political Economy at Duke University

In Search of Lost Reason:
Ramsey, Keynes, and the Intellectualism Debate

By Soroush Marouzi*

Abstract:

The outbreak of the Great War facilitated a shift in the dominant view of human nature within the Bloomsbury-Cambridge intelligentsia, steering it away from an optimistic view toward a pessimistic one. The conceptualization of human reason and rationality, however, remained intact by the war. Frank Ramsey and John Maynard Keynes produced some of their most notable works within this evolving intellectual context. The two Cambridge philosopher-economists followed the interwar orthodoxy by adopting its description of human nature. But they departed from that orthodoxy by revising its underlying conceptual commitment concerning what constitutes human reason and rationality. Ramsey and Keynes developed their ideas in tandem. They both argued for the pragmatist idea that our normative theory of human life ought to be sensitive to what we can ask from human nature. Ramsey made that argument in his philosophy. Keynes made it in his economics.

Acknowledgement: I am profoundly grateful to Kevin D. Hoover, Cheryl Misak, and Joseph Berkovitz for their extensive and invaluable comments on the earlier draft of this paper. I am also indebted to Michael Kremer, William E. Seager, Bradley W. Bateman, Jason Brent, E. Roy Weintraub, John B. Davis, Mark Solovey, Ata Heshmati, and Filippo M. Sposini for their comments and suggestions. I also thank the audiences at the annual postgraduate conference in the British Society for the History of Science (University of Oxford, 2023), the annual conference of the History of Economics Society (Vancouver, 2023), and the lunch workshop at the Center for the History of Political Economy (Duke University, 2024) for their constructive feedback.

* Visiting Research Scholar at the Center for the History of Political Economy at Duke University.
Email address: soroush.marouzi@duke.edu

Center for the History of Political Economy Working Papers are the opinions of their authors
and do not necessarily reflect the views of the Center or of Duke University.

They had their own way of life, swiftly moving away from the Victorian world and its morals, heading toward a distant place where "eminent Victorians" were not eminent but rather hypocrites, where new forms of art and literature were to be born, where homosexuality and free love were considered commonplace. The Bloomsbury group of the early twentieth century lived far from the land of orthodoxy, poverty, and social upheaval. They were a set of British artists, writers, and intellectuals, bridging the gap between the dream and reality with their way of life. They were promised "a new heaven on a new earth," believing that "human nature *is* reasonable," said one of them - John Maynard Keynes (1938 [2013]: 435, 447; emphasis added). But the bridge that brought their heaven to earth, that closed the gap between the natural form of human species and its ideal epistemic outfit, was among the first to be destructed by the war, and unlike factories and buildings that were going to be reconstructed later, that bridge remained shattered, forever.

The Great War, along with people, killed the optimism in human nature. It invited pessimism. Not only that; it demanded a new type of explanatory framework in human psychology to make sense of that pessimism. The Bloomsbury members were not alone. They were part of a larger British intellectual milieu whose account of human nature had to catch up with the collective mood. The war thus facilitated a shift in the dominant tradition of psychology: intellectualism gave the way to anti-intellectualism.

Intellectualism was a tradition in psychology that advanced the thesis that, roughly put, human behaviors are typically supervised by the mental faculty of the intellect, a positive characteristic feature of human nature that was supposed to set it apart from other animals. Anti-intellectualism was the competing tradition in psychology. It posited that human behaviors are typically driven by habits, impulses, instincts, or unconscious drives, thus framing human life within the context of the animal kingdom. On the common view after the war, a surgeon was a surgeon not because she had contemplated the expected consequences of that career choice, but because she had acted upon the unconscious thirst for power, the instinctive need for violence,

the habit of competing with friends, and so on. Intellectualist psychology was considered naïve. Anti-intellectualist psychology was taken to give a faithful explanation of the unfortunate reality.

It was in this evolving intellectual context that Frank Ramsey and Keynes produced some of their most notable works in philosophy and economics in Cambridge. Influenced by the interwar orthodoxy, they adopted anti-intellectualist psychology to describe human nature. Nonetheless, they departed from that orthodoxy by revising its underlying conceptual commitment concerning what it takes to be reasonable. Ramsey and Keynes became attracted to this conceptual project because they thought the common account of reasonability leads to insuperable issues at both theoretical and practical levels. They developed their normative theories of human life in tandem, arguing for the pragmatist idea that our account of reasonability must be sensitive to what we can ask from human nature. Ramsey made that argument in his philosophy. Keynes made it in his economics. The trend was to advance social and educational projects to promote what was taken to be reasonableness. Ramsey and Keynes, however, were primarily concerned with what reasonability is. They were in search of lost reason.

I begin with presenting a new historical account of the evolving intellectual context in Cambridge by looking into the interdisciplinary debates on human nature and reasonability before and after the Great War. Subsequently, I show a benefit of this historical account by using it as a backstory of the Ramsey-Keynes intellectual friendship in the interwar years, thus adding a fresh perspective to how the philosophical and economic ideas of the two evolved in tandem.

1. Optimistic Intellectualism

"Cambridge rationalism" was at its "height;" this is Keynes's short description of the intellectual scene in Cambridge when it was yet to fully grapple with the horrors of the Great War (Keynes 1938 [2013]: 434). Keynes says these words in "My Early Beliefs," a memoir he read to a close circle of his Bloomsbury friends in 1938. The bulk of the memoir is about how G.E. Moore, with

his *Principia Ethica* (1903), shaped the early beliefs of the Bloomsbury group. Cambridge rationalism was one of those early beliefs. It embodied the view that "human nature *is* reasonable" (Keynes 1938 [2013]: 447; emphasis added). Indeed, what was Moore's Cambridge rationalism? And how did it make such an optimistic claim about human nature believable?

Keynes does not bother to elaborate what precisely "Cambridge rationalism" means, implying that he assumed the term must sound familiar to his audience. Such assumption would have been safe. "Cambridge rationalism" was a label attributed to Moore by Clive Bell, an art critic and a core member of the Bloomsbury group. Bell was after a new renaissance in art. He was deeply influenced by Moore, similar to other Bloomsbury members. Nonetheless, he soon realized that in order for his renaissance to prosper, he must rule out what he took to be Moore's Cambridge rationalism. This was not an easy task for a number of reasons: Moore was a highly respectable figure, his Cambridge rationalism was in continuation of the philosophical outlook of Leslie Stephen (Bell's father-in-law), and it was staunchly defended by other Bloomsbury members, including Leonard Woolf (Bell's brother-in-law) and Keynes (once Bell's flat-mate).[1] Bell eventually took up the challenge, while carefully adopting the necessary politics of expression that he hoped would prevent the expected coming tension: "Cambridge rationalists," Bell said, are "those able and honest people… headed by Mr. G.E. Moore" (1914: 87). Those able and honest people, however, were clearly wrong-headed, Bell thought.

Cambridge rationalists, according to Bell, held onto the epistemological thesis that the domain of reason (as what guides us to truth) is exhausted by human intellect (which is the business of science).[2] It was the very implication of this thesis that non-intellectual elements, such as human feelings, emotions, and passions, have no genuine epistemic value. This was in sharp contrast with a central theme of Bell's renaissance. Bell (1914) argued at length that one comes to

[1] For Stephen's Cambridge rationalism, see, Annan (1977: chapter 4). For Leonard Woolf's attraction to this tradition and his later debate with Clive Bell on this matter, see Rosenbaum (2003: chapter 2). For the Keynes-Bell friendship, see, Bell (1956); Harrod (1957); Skidelsky (1983: 166-175).
[2] For details, see Marouzi (2023).

know something about the world in virtue of having aesthetic experience, the experience that consists in *feeling* the *emotions* excited by a work of art. Bell said all this while Moore's discussion of the aesthetic experience was centered around the idea that feelings and emotions are excluded from human cognitions and epistemic faculties (Moore 1903: §114-117). In Keynes's words, the chapter of *Principia Ethica* (1903) in which Moore's treatment of aesthetic experience appeared "left altogether some whole categories of valuable emotion." Keynes continues in his memoir, Moore passed on a view to the Bloomsbury group that "ignored certain powerful and valuable springs of feeling" (Keynes 1938 [2013]: 448). This is Keynes in 1938, looking back to his early beliefs with regret, implying that he lost his belief in the epistemological thesis of Cambridge rationalism at some point. We shall see later that Keynes's changing treatment of this rationalism left its mark on his philosophical and economic work.

The epistemological thesis of Cambridge rationalism was sometimes called "intellectualism" during the first half of the twentieth century, perhaps because it confined the domain of reason to the intellect.[3] Intellectualism thus conceived entails a *normative* principle of rationality: one's actions ought to be guided by the intellect. Nonetheless, around the same time, "intellectualism" sometimes denoted a *descriptive* claim about human nature. This descriptive form of intellectualism embodied the idea that the typical motives in human actions *are* intellectual elements. It was a view of human psychology grounded on the mind-body dualism. As far as human's mental life is concerned, intellectualism was the thesis that the mental act of human judgment gets shape through intellectual processes. Consequently, non-intellectual elements, such as feelings and emotions, were deemed to lack causal efficacy on the formation process of judgments; they were rather taken to be the mere after-effects of those judgments already formed. As far as human's bodily life is concerned, intellectualism conceived human action as a two-stage process: initially, one engages one's intellect to generate thoughts, ideas, or

[3] See, for instance, Bell (1918: 147); Russell (1922: 502); J.C. Hardwick (1932 [1986]: 295).

judgments, and subsequently, those products of the intellect guide one's actions - one thing happens in mind, and then another in body.[4] This descriptive form of intellectualism was sometimes known as "the intellectualist theory of action" or "intellectualist psychology;" it stood in opposition to "anti-intellectualist psychology," which advanced the view that human actions are typically motivated by instincts, habits, impulses, or unconscious drives.[5]

The social psychologist William McDougall and the political psychologist Graham Wallas were among the influential critics of intellectualist psychology in the early twentieth century (Kremer 2017). McDougall's anti-intellectualist psychology was in part motivated by his criticism of economics. He wrote in his widely read book, *An Introduction to Social Psychology*: "the great assumption of the classical political economy was that man is a reasonable being." According to McDougall, however, "mankind is only a little bit reasonable" (McDougall 1908 [1919]: 11). The bottom line of McDougall's theory of psychology was that human actions are typically guided by instincts, not the intellect. Wallas argued for something similar in *Human Nature in Politics* (1908). He said most political theorists have misconceived human nature by holding that human actions are generally guided by the "intellectual calculation" or "the idea of some preconceived end." These political theorists commit "the intellectualist fallacy" as they fail to see that it is not the intellect that drives human actions but rather instincts, habits, or impulses (Wallas 1908: 22-25).

Anti-intellectualist psychologists believed that intellectualist explanations of one's behaviors are ex-post rational construction of what goes into one's mind with no corresponded reality. It is noteworthy to mention that anti-intellectualist psychologists shared the conceptual commitment of their opponents: to be *reasonable* is to act from *reason*, and the domain of reason is exhausted by the *intellect* (see, Kremer 2017: 22-23). That is, both sides of the intellectualism

[4] For more details, see, Kremer (2017); Marouzi (2024).
[5] See, for instance, McDougall, (1908 [1919]: 406); Russell (1927: 2-3); Parsons (1935: 423, 435).

debate in psychology took the epistemological thesis of intellectualism for granted. But they disagreed over the descriptive significance of that thesis in human life.

The primary objective of *Principia Ethica* (1903) was to give us an account of the nature of goodness and the proper method of moral investigation, not to offer us an account of human nature. Nonetheless, Moore's discussions at times *assume* an account of human nature that was grounded on intellectualist psychology. He asserts that ideas cause feelings or excite emotions (not the other way around) – an intellectualist account of human's mental life (Moore 1903: §42, 131). Moore carries this intellectualist insight to the domain of human's bodily life, arguing with F.H. Bradley that "the motive to action" is "thought," which comes in various forms (Moore 1903: §42).[6]

What I said above suggests that Moore's Cambridge rationalism embodied an *inflated* form of intellectualism: he adopted intellectualism as both an epistemological thesis (about what it takes to be reasonable) *and* a thesis of human psychology (concerning the nature of motives in human actions). The combination of these two theses of intellectualism motivates an optimistic account of human nature, for the psychological fact that the intellect is the typical motive in human actions suggests that there is an apt ground for human beings to be reasonable creatures. Moore, so to speak, advocated an *optimistic intellectualism*. It was in virtue of this optimistic intellectualism that one could find it thinkable to live in "a new heaven on a new earth," and find it believable that "human nature is reasonable."

Anti-intellectualist psychologists, such as McDougall and Wallas, raised their voice against optimistic views regarding human nature in the beginning of the twentieth century, before the war. But their voice was not heard by the Bloomsbury- Cambridge intelligentsia of the time. This was most likely because Keynes, Leonard Woolf, and their like-minded friends were living in the Cambridge of the philosopher Moore, the economist Alfred Marshall, and the psychologist G.F.

[6] For a critical exposition of Bradley's intellectualist theory of action, see McDougall (1908 [1919]: 376).

Stout – highly influential figures with (implicit or explicit) commitments to some kind of inflated intellectualism.[7] The early beliefs of Bloomsbury members took shape when Cambridge rationalism was at its height, when there was an optimism in the air. We shall see that things changed quickly after the war.

2. Pessimistic Anti-Intellectualism

In the wake of the war's chaos, one could hardly believe that human nature is reasonable. In fact, the war experience gave rise to an urge for a collective pathological inquiry into human nature. This inquiry was *collective*, for it was an attempt to make sense of the *shared* experience of the Great War in epistemic terms, explaining why it came about by pointing toward the now apparent fact that human nature is not reasonable. It was *pathological*, for it aimed to explain what is *wrong* about human nature that renders it unreasonable. This collective pathological inquiry adopted explanatory frameworks in human psychology presented by the anti-intellectualist tradition. It was in particular Sigmund Freud's anti-intellectualist psychology that gained popularity in the interwar Cambridge. Freud's theory of psychology was anti-intellectualist, for it claimed that one's springs of actions are instincts and drives residing at the bottom of unconsciousness (see, Deigh 2001: 1245-55; Kremer 2017: 21). It could serve the urge for a collective pathological inquiry into human nature, for it could explain why individuals behave in the way they do, while simultaneously identifying the underlying reasons for wrongdoing.

Russell found himself in "the highest possible emotional tension" soon after the war began. The prospect of the disaster of the war filled him "with horror." But, in his own words, what filled him "with even more horror was the fact that the anticipation of carnage was delightful to

[7] In his psychological piece titled "The Machine," written in the late 1860s, in Vincent Barnett's words, Marshall "posited that external inputs caused internal sensations in the brain, which produced associated ideas; these then included ideas of action, which caused bodily actions" (Barnett 2017: 121). Stout, who trained Moore, argued for something similar in *Manual of Psychology*: "man constructs 'in his head,' by means of trains of ideas, schemes of action before he begins to carry them out" (Stout 1899: 266) – for details, see Kremer (2017).

something like ninety per cent of the population." This observation convinced him that he must revise his account of "human nature." Russell reports that at the time he was ignorant of psychoanalysis, but he arrived for himself "at a view of human passions not unlike that of the psychoanalysts," hoping that this view could aid him in comprehending "popular feeling about the war" (Russell 1968: 6).[8]

Russell's revised account of human nature was reflected in his *Principles of Social Reconstruction* (1915). In the preface of the book, he says that his "aim is to suggest a philosophy of politics based upon the belief that impulse has more effect than conscious purpose in molding men's lives" (Russell 1915: 5). The book was the product of Russell's emerging methodological insight of the time, according to which "politics could not be divorced from individual psychology" (Russell 1968: 11) – with which Graham Wallas would whole-heartedly agree.[9] The experience of war convinced Russell that the intellectualist is wrong in holding that non-intellectual elements are the mere after-effects of how the intellect operates. Nonetheless, he thought it is also not the case that the intellect takes the back-seat and follows non-intellectual elements wherever they go. He took a somewhat middle ground by holding that the intellectual and non-intellectual sides of human psychology shape one another. This is evident from his characterization of the inter-play between beliefs and passions, an inter-play that, in his words, "an old-fashioned intellectualist psychology" fails to explain (Russell 1927: 2-3).

Leonard Woolf was another active figure of the interwar orthodoxy in Cambridge. He used psychology to understand social and political orders. His approach was motivated by the worry that people are *not* in general rational or reasonable. He repeated his pessimism about human

---

[8] Freud revised his instinct theory after the war. He came to the view that human aggression is an expression of innate destructive urges, which were to be captured by the concept of death instinct. Thus, he arrived at his dual instinct theory: human life is governed by the life instinct (Eros) and the death instinct (Thanatos) - for details, see Hoffman (1981). It seems that the experience of war led Russell to come close to Freud's view that human aggression is an expression of the death instinct.

[9] There is no mention of Wallas in Russell's *Principles of Social Reconstruction* (1915). But, decades later, in his *Human Society in Ethics and Politics* (1954), Russell endorsed Wallas's psychological analysis of social behaviors as appeared in Wallas's "excellent book *Human Nature in Politics*" (Russell 1954: 16).

nature throughout his writings: “all of us are politically not rational animals” (1940 [1972]: 121fn1; see also, 240-241). Woolf’s methodological approach to politics and his worry about human nature were on par with Wallas and Russell. His books on politics, including *After the Deluge* (1931), *Quack Quack* (1935), and *Barbarians at the Gate* (1938), served an overarching purpose: acknowledging the irrationalities of the masses, helping them to find their rational capacities, and bringing positive political change as a result (see, Butler 2010: chapter 3).

Woolf wrote a review of Freud’s *Psychopathology of Everyday Lif*e in 1914 (see, Woolf 1964: 167). He reports that “in the decade before 1924 in the so-called Bloomsbury circle there was great interest in Freud and psychoanalysis, and the interest was extremely serious” (Woolf 1967: 164). This was a totally different Bloomsbury group from the one before the war which Keynes called “pre-Freudian” in his 1938 memoir (Keynes 1938 [2013]: 448). Leonard Woolf and his wife Virginia played a crucial role in popularizing Freud’s views in the interwar period, inside and outside of the Bloomsbury group. They founded Hogarth Press in 1917, which published various works of Freud in the 1920s, edited and translated by the other Bloomsbury member James Strachey.

The collective pathological inquiry into human nature, particularly as conducted within the Bloomsbury-Cambridge intelligentsia, was necessarily grounded on a conceptual commitment about the nature of human reasonability. This inquiry was an empirical exploration into the nature of motives in human action, all the while presuming that reasonability entails being guided by the intellect (i.e. the epistemological thesis of Cambridge rationalism or the normative variation of intellectualism). After the war, the perspective of human psychology shifted from intellectualism toward anti-intellectualism. The conceptualization of reasonability, however, persisted without modification. Intellectualism lost its currency as a descriptive thesis of human psychology, but its normative significance survived the war. It was the description of

facts of human life that changed, not the conceptual commitment of reasonability used for the interpretation of those facts.

The experience of war in fact further strengthened the determination of the normative intellectualism advocates to safeguard their thesis against its opponents. Russell and Woolf, among others, contributed to the propagation of the narrative that kept warning about "the revolt against reason."[10] They believed that those calling for the expansion of the domain of reason beyond human intellect, consciously or unconsciously, encourage people to be unreasonable, and thus their unsound epistemological position is responsible for the unfortunate political state of the world.

Such was the interwar Cambridge orthodoxy. The new trend was to explain human behavior with anti-intellectualist psychology. Moore's optimism in human nature was obsolete, and "the masses" were often perceived as unreasonable creatures capable of committing atrocities of the worst kind. The domain of reason was exhausted by human intellect, implying that to be reasonable is to be guided by the intellect. The interwar Cambridge orthodoxy was built upon anti-intellectualist psychology together with the normative variation of intellectualism, a pessimistic combination. In short, the outbreak of the Great War replaced optimistic intellectualism with pessimistic anti-intellectualism. It was in this evolving intellectual context that Ramsey and Keynes developed their philosophy and economics.[11]

[10] See, Russell's "Revolt Against Reason" (1935), and Woolf's 1955 issue in *Political Quarterly* titled "The Revolt Against Reason." Other figures involved with this narrative include Ralph Barton Perry and Karl Popper (see, Kremer 2017a: 21fn9). This narrative found its way to the domain of economics, too, when Ludwig von Mises devoted a full chapter of his *Human Action: A Treatise on Economics* (1949) to "Economics and the Revolt Against Reason."

[11] I do not intend to imply that the orthodoxy discussed in this section was born in (or that it was limited to) Cambridge. My narrowed focus on Cambridge thinkers and their works is motivated by my objective, which is to shed light on the co-development of Keynes's and Ramsey's ideas by reading them against the background of their local intellectual context. Outside of Cambridge, we can mention Wilfred Trotter's *Instincts of the Herd in Peace and War* (1919) and Leonard Hobhouse's *The Rational Good: A Study in the Logic of Practice* (1921) as exemplars of the interwar orthodoxy discussed in this section.

3. An Infant Who Could Not Remember Before the War

Ramsey started his undergraduate degree in mathematics at Cambridge University in the autumn of 1920. This was when Keynes was making the last touches on the final draft of his *A Treatise on Probability*, which eventually appeared in 1921. Ramsey read Keynes's book carefully when it was hot off the press - he took extensive notes from it, close to 30 pages (see, ASP.1983.01: 007-01-01). He started to express his worries about Keynes's system of probability beginning in January 1922, sometimes in private conversations with a friendly tone, sometimes in public.[12] Keynes was a Bloomsbury intellectual, one of those who knew it well that your intimate friends could be your most persistent critics. Ramsey's criticism did not spark any hostility from Keynes's side; it rather contributed to the formation of a friendship that only deepened through time, the friendship that if not lasted more than about 8 years, it was only because Ramsey died early, at the age of 26, in January 1930 – "a heavy loss," Keynes said, what "will take… long to forget" (Keynes 1931 [2013]: 335-36).

Keynes appreciated the bright mind of Ramsey as early as the beginning of 1922, when he consulted Ramsey for some of his mathematical problems. Keynes shared his enthusiasm with C.D. Broad: Ramsey is "certainly far and away the most brilliant undergraduate who has appeared for many years in the border-county between Philosophy and Mathematics." Keynes asked Broad if he knew Ramsey. He did not. Keynes wrote back: it is not a surprise, for Ramsey "is still an infant, aged about 18, and cannot remember before the war" (quoted in Moggridge 1992: 364). There was a generational gap between the two men. Keynes was one of those able and honest followers of Moore who was promised "a new heaven on a new earth," one of those Cambridge rationalists whose optimism about human nature was to falter with the news from the trenches.

[12] The critical points that Ramsey passed on to Keynes in a private manner includes his letter exchange with Keynes in February 1922 (to be discussed below). Ramsey's public critical writings on Keynes include "Mr Keynes on Probability" (1922 [1989]), "Paper to the Society – Autumn 1922" (1922 [1991]), and "Truth and Probability" (1926 [1990]). For a review of Ramsey's critical points, see Bateman (1987).

Ramsey was of the generation that felt the horrors of the war during their teenage years, the generation that could be anything but optimistic. By the time that Ramsey stepped to Cambridge University, Europe was left in chaos, the anxiety about the economic and social order was at its height, and Cambridge rationalism was at its bottom. Ramsey and Keynes had to get used to live in that new world. We shall see that not only they did so, they went on to change that world.

4. Living Under the Shadow of Pessimistic Anti-Intellectualism

Ramsey showed signs of attraction to anti-intellectualist psychology when he was a school-boy during the war. He read and wrote on Wallas and McDougall, asserting that "social instincts" are "necessary antecedents of harmonious cooperation" and the basis of "the moral and intellectual consciousness of man" (ASP.1983.01: 007-02-02; for details, see, Marouzi 2024). But once he became fully integrated in the intellectual context of Cambridge, his favorite psychologist became Freud. In January 1924, he said Freud's psychology is much more advanced than Mill's (Ramsey 1924 [1991]: 308). A few months later, he went to Vienna to be psychoanalyzed by Theodor Reik, Freud's student and colleague (see, Misak 2020: 150-77). During his trip, he wrote to his mother that he has "read a great deal of psychoanalytic literature," and that he has become "an enthusiast for psychoanalysis" (TFL MS/COLL/735, 3/3).

Shortly after his return to Cambridge from Vienna, Ramsey became a formative member of the 1925 Psych An Society group that held weekly meetings to discuss the recent works of the Freudian tradition (Forrester and Cameron 2017: chapter 6). Around this time, he delivered an Apostle talk, titled "Civilization and Happiness" (1925 [1991]), offering a psychoanalytic explanation of some of the societal tendencies in Britain. Last but not least, Ramsey embraced Freud's instinct theory to such an extent that he employed it as a basis of his welfare policy advocacy in his 1923-25 Apostle talks (see, Marouzi 2022). Ramsey was an infant who could not remember before the war. He was a close friend of the Bloomsbury group when its members had come to acknowledge the long distance between their desired heaven and the existing earth, when

they no longer believed that "human nature is reasonable," when they were attracted to Freud's pessimism, not Moore's optimism.[13] Ramsey lived under the shadow of pessimistic anti-intellectualism.

Keynes was not an exception. He breathed the very Cambridge air that Ramsey breathed. In his 1938 memoir, he voices his regret, again and again: the pre-war Bloomsbury group, including himself, "completely misunderstood human nature," held a "pseudo-rational view of human nature" (1938 [2013]: 448), and had "no solid diagnosis of human nature" (1938 [2013]: 449). As Richard Braithwaite once put it, "the genuine volte-face reported in" Keynes's memoir was "the abandonment of the belief that 'human nature is reasonable'" (Braithwaite 1975: 245). After the war, Keynes no longer believed in Moore's account of human nature. He makes his point by using the metaphor of human heart: "as the years wore on towards 1914, the thinness and superficiality, as well as falsity, of our view of man's heart became, as it now seems to me, more obvious," he says to his Bloomsbury friends (Keynes 1938 [2013]: 449).[14] Keynes's close contact with the Bloomsbury circle was enough to keep him on board with the emerging trend. His economic writings in the second half of the 1920s reveal clear signs of attraction to anti-intellectualist psychology. He says that "the essential characteristic of capitalism" is its "dependence upon an intense appeal to the money-making and money-loving instincts of individuals as the main motive force of the economic machine" (1926 [2013]: 293), that businessmen fail to sublimate "their abundant *libido*" (1927 [2013]: 320), and that we should appeal to "Dr Freud" to understand the "peculiar reasons deep in our subconsciousness" that

[13] Ramsey had a close contact with most Bloomsbury members, a theme of his social life as documented by Misak (2020). As a testament to his intimate connection with the Bloomsbury group, it is worth noting his behind-the-scenes involvement with a series of short films with a Freudian theme created by the group, a selection of which are now publicly available on Youtube:
https://www.youtube.com/watch?v=FFOOG9PjlJc.

[14] The metaphor of human *heart* (as opposed to human *mind* or *head*) was widely used in the history of intellectualism debates. The "heart" was used to denote the realm of non-intellectual elements, while the "mind" or "head" stood for intellectual elements – see, Marouzi (2023).

explain "why gold in particular satisfy strong instincts and serve as a symbol" (1930 [2013]: 258; for details, see, Winslow 2017).

Keynes's account of the psychology of human behavior could be also traced in his conception of motives in economic behavior. In *The General Theory of Employment, Interest and Money* (1936), Keynes lists five "motives" to consumption: "Enjoyment, Shortsightedness, Generosity, Miscalculation, Ostentation and Extravagance." He also finds eight "motives" for saving: "Precaution, Foresight, Calculation, Improvement, Independence, Enterprise, Pride and Avarice" (Keynes 1936 [2013]: 108). Keynes mentions these exact eight motives for saving in one of his 1934 lectures, as well. In that lecture, he discusses spending behavior in terms of habit, claiming that "the *habit* or propensity to spend… depends upon" the eight motives for saving (Keynes 1989: 147; emphasis added). Keynes's choice of the term "habit" is not an accident – he uses the term in the very same way for at least five times in that lecture. In a lecture delivered in 1935, Keynes mentions three motives for liquidity preference, which are transaction motive, precautionary motive, and speculative motive, and then goes on to claim that "in the long run," transaction motive "will depend upon changes in *banking habits*" (Keynes 1989: 175; emphasis added). Keynes believed that motives in economic behavior go way beyond the intellectual acts of mind.

Keynes's skepticism about intellectualist psychology in the domain of economic setting manifests itself in one of his widely-quoted remarks in *The General Theory*:

> Even apart from the instability due to speculation, there is the instability due to the characteristic of *human nature* that a large proportion of our positive activities depend on spontaneous optimism rather than on a mathematical expectation, whether moral or hedonistic or economic. Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of animal spirits – of a spontaneous urge to action rather than inaction, and not as

> the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities.... Only a little more than an expedition to the South Pole, is it based on an exact calculation of benefits to come. Thus if the animal spirits are dimmed and the spontaneous optimism falters, leaving us to depend on nothing but a mathematical expectation, enterprise will fade and die (Keynes 1936 [2013]: 161-162; emphasis added).

Keynes specifies animal spirits as "our innate urge to activity which makes the wheels go round" (Keynes 1936 [2013]: 163). He holds that it is "the characteristic of human nature" that most investment decisions of entrepreneurs in real capital are guided by "animal spirits," not calculative thinking. These are very strong words.

There are concrete suggestions in the literature as to the major sources of inspiration for Keynes's psychology of economic behavior. Mentioned sources include James Strachey, Leonard Woolf, Freud, and Ramsey.[15] There seems to be a grain of truth in all these narratives. By and large, the aforementioned sources of Keynes's psychology were all active figures of the interwar Cambridge orthodoxy: they all held that human nature ought to be understood along the line of anti-intellectualist psychology. That said, Keynes was one among many in Cambridge of that time who endorsed the new orthodoxy. His distinctive contribution to that orthodoxy laid in broadening its domain of application: introducing anti-intellectualist psychology to economic theory. The new orthodoxy shaped the psychology of Keynes's economics, as much as it shaped the political psychology of Woolf and Russell, and the philosophy of Ramsey.

[15] Goodwin (2008; 2009) argues that Keynes was guided by the Bloomsbury members in holding that the explanatory power of Benthamite psychology is inferior to that of Wilfred Trotter's and Sigmund Freud's. Hoover (2009) asserts that the Bloomsbury group shaped Keynes's account of the nature of economic motives. Winslow (2017) stresses the importance of Freud in how Keynes's psychological thought developed through time. Finally, Bateman (2021) and Gerrard (2023a; 2023b) identify Ramsey as the primary inspiring source for Keynes's psychology of human behavior.

5. What to Believe? What to Do?

Ramsey and Keynes lived under the shadow of pessimistic anti-intellectualism. But they soon looked for the sunlight. In this section, I discuss what I take to be the most plausible motivations behind Ramsey's and Keynes's move toward an alternative view, diverging from the interwar Cambridge orthodoxy. In the remaining sections, I discuss what that alternative view entailed.

It all started from Keynes's characterization of rationality that appeared in *A Treatise on Probability* (1921 [2013]). In it, Keynes gives us two accounts of rationality: one operates in the domain of our mental life, the other in the domain of our bodily life. The first tells us *what to believe*. The second tells us *what to do*. *A Treatise* presents what is known as a *logical* interpretation of probability. It is *logical* because it takes probabilities to be a matter of logical relations between propositions. The probability relation, Keynes argues, is a degree to which one proposition (premise) warrants the truth of another proposition (conclusion). The probability relation thus conceived has nothing to do with one's subjective degree of belief, or the frequency of events, or whatever non-logical elements that other interpretations of probability might invoke. Keynes's probability relation is objective, fixed, and not "subject to human caprice" or our "opinion" (Keynes 1921 [2013]: 4).

Keynes's conception of the ontology of probability relations provides the ground for his account of rational belief. Given a premise *P*, one may hold that it warrants the truth of a conclusion *C* to a degree. That degree of belief is rational if, and only if, it corresponds to the objective, fixed probability relation that in fact holds between *P* and *C* (Keynes 1921 [2013]: 6-8, 10-12, 17). But how come one is to grasp probability relations? Keynes's short answer would be this: by *intuition*.[16] This was a direct effect of Moore on Keynes's system of probability. Moore (1903) had argued that we come to know goodness by *intuition*. Keynes (1921 [2013]) added that

[16] For details, see, O'Donnell (1990).

intuition enables us to grasp probability relations, too. As Ramsey worryingly observed, Keynes's probability relation was similar to Moore's "objective or intrinsic good;" it was "a mysterious entity not easy to identify" (Ramsey 1922 [1991]: 57).

Neither Moore (1903) nor Keynes (1921 [2013]) tell us how to form the intuitions required for grasping goodness or probability relations. Their silence is telling.[17] We remember that Moore endorsed the optimistic view that "human nature is reasonable," the view that Keynes adopted, too, at least up until the war. In Keynes's words, this optimism entailed that "human race… consists of reliable, rational, decent people…, who can be safely released… to their own… reliable intuitions of the good" (Keynes 1938 [2013]: 447). It is this optimism which seems to account for the lack of explanation on how to form reliable intuitions of goodness in *Principia Ethica*. Moore thought individuals know how to form intuitions of goodness because of their very human nature; why then waste the ink to tell people what they already know?

Is something similar going on in *A Treatise*? The answer is yes and no. *A Treatise* was a product of a mind in change, for Keynes started writing this book in 1906 (when he was a believer in Moore's optimism) and finished it in 1920 (when he no longer retained that optimism). From this it follows that Keynes started off his project in probability when he believed in the optimistic view that people are capable to form reliable intuitions of probability relations, but he ended the project when being skeptical of this point. In fact, there is at least one passage in *A Treatise*, unlike *Principia Ethica*, which reveals its author's skepticism regarding the epistemic capacities of human race. After admitting that in some cases "the weakness of our reasoning power prevents our knowing what this [probability relation] is," Keynes says, "probability is… relative in a sense to the principles of human reason." He continues,

---

[17] Here I am following Weintraub (1991: 54) and Caldwell (2007: 346) in making sense of the past by tracing what did *not* happen – solving the so-called a "dog that did not bark" problem, after a Sherlock Holmes story.

> The degree of probability, which it is rational for us to entertain, does not presume perfect logical insight, and is relative in part to the secondary propositions which we in fact know; and it is not dependent upon whether more perfect logical insight is or is not conceivable. It is the degree of probability to which those logical processes lead, of which our minds are capable…. If we do not take this view of probability, if we do not limit it in this way and make it, to this extent, relative to human powers, we are altogether adrift in the unknown; for we cannot ever know what degree of probability would be justified by the perception of logical relations which we are, and must always be, incapable of comprehending (Keynes 1921 [2013]: 35).

Keynes appears to have eventually failed to come up with a consistent outlook regarding the natural epistemic capacities of human race in *A Treatise*. Keynes's claim above (that the concept of rational belief must be sensitive to the agent's epistemic capacities) is in sharp contrast with his characterization of rational belief as appeared in the earlier part of the book (that says a degree of belief is rational if, and only if, it corresponds to the relevant probability relation, without putting any qualification over the agent's epistemic outfit). Keynes of *A Treatise* had one foot in Moore's distant heaven and the other in the post-war existing earth. We shall see that Ramsey was alert to this tension within Keynes's work and that he did his best to bring Keynes completely down to earth.

Ramsey's most articulated criticism of Keynes's system of probability appeared in "Truth and Probability" (1926 [1990]). In it, having quoted Keynes's passage above, Ramsey says, "this passage seems to me quite unreconcilable with the view which Mr Keynes adopts everywhere except in this and another similar passage" (1926 [1990]: 60). Ramsey was convinced that Keynes's system of probability gives us two unreconcilable accounts of rational belief as early as 1922. His private notes and correspondence in that year give us a clearer picture of his assessment of those two accounts. Shortly after reading Keynes's book, Ramsey wrote down in

his notebook: "Keynes can't even keep to his own view; quite different view keeps coming through; that various observable relations justify different degrees of belief.... But justification is not a matter of logical relations only[.] cf. Keynes on Fermat[.] [H]e [Keynes] does not understand his own principles" (Ramsey 1991: 274; see also, 1922 [1989]: 220). A private letter that he sent to Keynes on February 2, 1922 clarifies his point:

> Sometimes ago I thought of what I think the only solution to the difficulty about the probability of unproved mathematical propositions. But when I talked to you about it at the beginning of term it completely went out of my head.... Suppose Fermat died having asserted 6 mathematical propositions without proof, of which 5 had been subsequently proved but the sixth, say q, was doubtful. Then, whatever h is, q|h = 1 or 0; but the probability (The only one of Fermat's proofs still unproved is true | Five others have been proved etc.) would be between 0 and 1.... That, I think, is the probability which we are obliged to consider when through lack of mathematical ability we cannot perceive the logical relations of q itself. If, like me, you do not know what Fermat's last Theorem is, it is the only probability you can consider (KCA/JMK/TP/1/1/9395).

Ramsey's line of argument seems to be this: if we adopt Keynes's point that a rational degree of belief is the one that corresponds to the relevant probability relation (regardless of the agent's epistemic outfit), then we fail to treat the case of an unproved mathematical proposition properly. While Keynes's point suggests that a rational degree of belief in a truth of such proposition is either 0 or 1, Ramsey thinks it might be rational for us to entertain a degree of belief between 0 and 1 given the body of evidence that we have at our disposal (e.g. that five of the previous unproved theorems of Fermat have been proved) and our lack of mathematical ability. Ramsey quite agreed with the view that our account of rational belief must be sensitive to the limitations of our epistemic capacities. But he was rightly puzzled about how Keynes concedes this point in one passage of *A Treatise*, all the while ignores that very point in the rest of the book.

Ramsey's criticism of Keynes in 1922 was the first sign of his dissatisfaction with one of the most powerful accounts of rational belief presented in that period. We shall see that he was concerned with Keynes's characterization of rational conduct, too.

Keynes of *A Treatise* was concerned with rational conduct as much as he was with the nature of probability and what it takes to hold rational belief. He in fact rejected John Venn's frequentism, the dominant interpretation of probability of his time, at least in part, on the ground that it fails to give us a proper account of rationality for human conduct. This was because, Keynes thought, Venn's frequentism had brought about a problem for which it had not offered a convincing solution. On Venn's frequentism, the probability that an event has a certain characteristic in part depends on the reference class (or, *series*, in Venn's terminology) to which we take that event to belong. But each event can be taken to belong to various reference classes. From this it follows that if the reference class is not given, we need to have an account of what reference class to choose as a basis of our probable inference, the inference that is supposed to inform our rational conduct. What was Venn's solution to the reference class problem? He simply said that the process of choosing the reference class is "to a great extent arbitrary" (Venn, 1888: 214; for more details, see, Verburgt 2022: 118-9). This was hardly a convincing answer for Keynes.

Keynes rejected Venn's frequentist interpretation of probability: if there is an element of arbitrariness in our choice of the reference class, then it follows that probabilities cannot appropriately inform our rational conduct. In Keynes's words, "Venn's theory by itself has few practical applications, and if we allow it to hold the field, we must admit that probability is *not* the guide of life, and that in following it we are not acting according to reason" (Keynes 1921 [2013]: 96). Keynes thus picked up the task of showing how his own logical interpretation of probability makes sense of the idea that probability *is* the guide of life in the chapter titled "The Application of Probability to Conduct." In the concluding paragraph of that chapter, Keynes wrote that "the importance of probability can only be derived from the judgment that it is *rational* to be guided

by it in action; and a practical dependence on it can only be justified by a judgment that in action we *ought* to act to take some account of it. It is for this reason that probability is to us the 'guide of life'" (1921 [2013]: 356; see also, 339, 341). But, indeed, how come probability was to be the guide of life in Keynes's system of probability?

Keynes adopted Moore's consequentialism (see, Braithwaite 1975: 242-245). He followed Moore in arguing that the best course of action among the available alternatives is the one that is likely to bring about the highest amount of good effects (Keynes 1921 [2013]: 339-356). To find that action, Keynes's rational agent needs to go through the mental process of the kind similar to Moore's rational agent: the agent needs to make *rational judgments*, and then act from those judgments such that the resulting action would be rational. Moore and Keynes agreed that what render actions rational are the rational judgments guiding those actions. But they disagreed over what those rational judgments are.[18]

Is Keynes's system of probability immune from the reference class problem? No. According to Alan Hajek (2007), the reference class problem pops up in all interpretations of probability, though clothed in different formal terms. As far as the logical interpretation of probability (such as that of Keynes) is concerned, instead of the *reference class*, we need to know which *proposition* ought to be used as the basis (or premise) of our probabilistic inference. Ramsey echoed this concern. In his notes on Keynes's rejection of Venn's frequentism on the ground that it fails to properly tackle with the reference class problem, Ramsey writes: "what class is appropriate to given premises? We can only decide by considerations of relevance…. And what

[18] Keynes argued that some probability relations are non-numerical, and some pairs of probability relations are not comparable (see, Keynes 1921 [2013], chapter 3). This could make the life of Moore's rational agent difficult who wanted to pick the course of action that was likely to bring about the highest amount of good. In virtue of such concerns, Keynes introduced a new class of judgments that could guide the agent to act in a rational way, including a "direct judgment… respecting the magnitude of 'oughtness' of an action under given circumstances, which may need not bear any simple and necessary relation to" the "direct judgments" of probability and goodness caused by the action (Keynes 1921 [2013]: 349). It must be noted that Keynes's account of rational conduct is grounded on the normative variation of intellectualism as it suggests that the rational status of an action is conferred by the rational status of the judgment guiding that action – for details, see Marouzi (2023).

on this theory [Keynes's logical theory] is relevance?" (ASP.1983.0.1: 007-01). Ramsey seeks clarification on what enables Keynes's rational agent to discern the relevant proposition (or premise) for the probabilistic inference at hand. He appears to be concerned with the fact that Keynes does not give us much clarification on this point, and if so, it would not be clear how Keynes's system of probability is supposed to be an improvement upon Venn's in showing us that probability *is* the guide of life.[19]

On Ramsey's account, Keynes's system of probability could not properly guide us in life. It could not tell us *what to believe*, for it was not quite sensitive to epistemic limitations of human nature. It could also not tell us *what to do*, for it could not make sense of how probability is the guide of life. All this implies that Ramsey had good reasons for not being satisfied with Keynes's account of rationality, and he was motivated enough to look for an alternative account. Ramsey thus gradually sneaked out of the shadow of the existing orthodoxy. He remained a believer in the description of human life in anti-intellectualist terms, but he looked for a new account of rationality to make sense of that description. The ground was ready. He turned to pragmatism.

6. Pragmatism Comes to Cambridge

In January 1924, a few weeks before travelling to Vienna to be psychoanalyzed, Ramsey devoted extensive time to studying the work of a philosopher who turned out to be arguably the most important source of inspiration for his later philosophical writings; that philosopher was C.S. Peirce, a co-founder of American pragmatism (see, Misak 2020: 144). Ramsey would soon go on to develop his own version of pragmatism. Here I confine my discussion to those aspects of his pragmatism that were relevant to the widespread pessimistic anti-intellectualism of the time.

---

[19] The reference class problem would keep Ramsey's mind busy for the next few years. He would implicitly refer to this problem in "Truth and Probability" (1926 [1990]: 91). He would continue to wrestle with this problem later – see, for instance, Ramsey (1928 [1990]: 100-101).

Ramsey is known as one of the founders of the modern Bayesian decision theory. This is because his joint axiomatization of probability and utility in "Truth and Probability" (1926 [1990]) laid out the ground for one of the earliest versions of what is now known as the subjective expected utility framework. This theory models one's decision-making based on the idea that "a person's actions are completely determined by his desires and opinions" (1926 [1990]: 69). Ramsey imposes two distinct structural constrains on the agent's decision-making process. First, the agent's mental content (i.e. desires and beliefs) must satisfy a set of axioms. For instance, the agent's desires are well-defined and rank-ordered, and the agent's degrees of belief obey the axioms of probability theory. Second, the agent's choice behavior is governed by the calculation of the expected utility of outcomes of the available courses of action with an eye on picking the course of action with the highest amount of expected utility. I shall argue below that Ramsey took this model of decision-making to have both *limited explanatory power and limited normative force*. This will lay the foundation for a clearer understanding of Ramsey's pragmatist account of rationality.

I have argued that Ramsey favored anti-intellectualist psychology over intellectualist psychology. But if this is right, how come his decision theory assumes an intellectualist psychology of human behavior given that it suggests human actions are guided by utilitarian calculative thinking? Ramsey writes,

> This theory cannot be made adequate to all the facts, but it seems to me a useful approximation to the truth particularly in the case of our self-conscious or professional life, and it is presupposed in a great deal of our thought. It is a simple theory and one which many psychologists would obviously like to preserve by introducing unconscious desires and unconscious opinions in order to bring it more into harmony with the facts. How far such fictions can achieve the required result I do not attempt to judge: I only claim for what follows approximate truth, or truth in relation to this artificial system of psychology,

> which like Newtonian mechanics can, I think, still be profitably used even though it is known to be false (Ramsey 1926 [1990]: 69).

Ramsey took his own theory as a "fiction" or an "artificial system of psychology," which only gives us "a useful approximation to the truth particularly in the case of our self-conscious or professional life." If we are looking for a more accurate psychological theory of human behavior, we are better to turn to a theory that accounts for "unconscious desires and unconscious opinions;" that is, Freud's theory of psychology. Ramsey believed that his decision theory has a limited explanatory power of human behavior - it gives us only an approximation of one's behavioral patterns in the limited domain of one's self-conscious or professional life.

One might be tempted to suggest that Ramsey's decision theory offers us an apt criterion for what should be counted as rational behavior; that is, one may argue that the fact that this theory has a limited explanatory power simply suggests that much of people's behaviors are cases of irrationality. But this is not how Ramsey understood the matter. Ramsey's chief concern with this suggested line of reasoning would be this: such criterion of rationality does not take the limitations of human nature into account and, as a result, becomes useless in practice. Let me explain Ramsey's concern.

Ramsey says that "it is the business of logic to tell us what we ought to think" or "what it would be reasonable to believe" (1926 [1990]: 80, 89). He then calls the logic suggested by his decision theory "formal logic" or "the logic of consistency." This is most likely because on the normative interpretation of that theory the agent *ought* to hold a belief-system that satisfies the axioms of probability theory and satisfying those axioms brings consistency to the belief-system. For instance, if one believes in the truth of a proposition P to the degree of α, then one ought to believe in the truth of $\sim P$ to the degree of $1-\alpha$. Ramsey is in fact famous for his presentation of the so-called "Dutch book theorem" in "Truth and Probability" (1926 [1990]), which shows that if the agent's belief-system violates the axioms of probability, then she would be willing to accept a set

of bets that leads her to a systematic loss, come what may. Nonetheless, Ramsey clearly denies that the logic of consistency is his favored norm of rationality. His chief concern is the following:

> … *Nor when we wish to be consistent are we always able to be*: there are mathematical propositions whose truth or falsity cannot as yet be decided. Yet it may humanly speaking be right to entertain a certain degree of belief in them on inductive or other grounds: a logic which proposes to justify such a degree of belief must be prepared actually to go against formal logic; for to a formal truth formal logic can only assign a belief of degree 1. We could prove in Mr Keynes' system that its probability is 1 on any evidence. *This point seems to me to show particularly clearly that human logic or the logic of truth, which tells men how they should think, is not merely independent of but sometimes actually incompatible with formal logic* (Ramsey 1926 [1990]: 87; emphasis added).

In the passage above, Ramsey repeats his critical point on Keynes's system of probability as expressed in his 1922 private letter. But his critical point is now supplemented with hints toward a positive alternative account of rationality. Note how Ramsey motivates his argument against adopting formal logic as a proper norm of rationality: *even if* we wish to be rational in the sense suggested by formal logic, *we are not able* to do so. He was against the norms of rationality that were "too high a standard to expect of mortal men" and suggested that "we must agree that some degree of doubt or even error may be humanly speaking justified" (1926 [1990]: 80). Ramsey's negative treatment of the normative force of formal logic is an apt indication of his pragmatic approach. He wanted to ground his account of rationality on what he took to be the right account of human nature. That was what his *human* logic was supposed to offer. For Ramsey, to be rational was to take our very human nature into account, and only then, from that angle, look for possible options for improvement.

Ramsey's characterization of the norm of rationality (or human logic) starts with the following advice: "consider the human mind and what is the most we can ask of it" (1926 [1990]:

90). He then adds in a footnote: "what follows to the end of the section is almost entirely based on the writings of C.S. Peirce" (1926 [1990]: 90fn2). The first thing that comes from Peirce is his account of human nature, the account grounded on anti-intellectualist psychology: "the mind works essentially according to general rules or habits," where "habit" means "simply rule or law of behavior, including instinct." This fact about human nature leads Ramsey to "state the problem of the ideal" as follows: "what habits in a general sense would it be best for the human mind to have?" Ramsey suggests us to narrow down our focus on a "fairly definite conception of human nature" by examining human habits on a case by case basis. He then subsequently discusses the habits of forming opinion, inference, observation, memory, and induction (1926 [1990]: 90-94). The best kind of habits, for Ramsey, are "useful habits;" that is, those habits that serve our purposes, or those that lead us to successful actions (1926 [1990]: 93-94). Thus, to be reasonable, on Ramsey's account, is to possess a complex nexus of habits, which dispose us to meet the future well (1929 [1990]: 149).

The reader might have already noted that there is something quite strange going on in Ramsey's pragmatism: he predicates reasonability on habits, and thus expands the domain of reason beyond human intellect. Ramsey was in fact very clear on this point. In the last section of "Truth and Probability" (1926 [1990]), we find him exploring in what senses the word "reasonable" is used. Sometimes "to be reasonable means to think like a scientist, or to be guided only by ratiocination and induction or something of the sort (i.e., reasonable means reflective)." We use this sense of the word "when we contrast reason and superstition or instinct" (1926 [1990], 90fn2). Nonetheless, Ramsey finds another sense of reasonableness more attractive:

> We may go to the root of why we admire the scientist and criticize not primarily an individual opinion but a mental habit as being conducive or otherwise to the discovery of truth or to entertaining such degrees of belief as will be most useful.... Then we can criticize

an opinion according to the habit which produced it. This is clearly right because it all depends on this habit (Ramsey 1926 [1990], 90fn2).

There is no contrast between reason and habit (or instinct) in Ramsey's pragmatism.[20] Ramsey was busy with crafting this aspect of his pragmatism when the controversy over "the revolt against reason" had become a matter of public debate. *The Nation and Athenaeum*, a popular weekly newspaper, featured a series of five essays penned by the British economist and social scientist J.A. Hobson across its issues from October to December 1925. The topic of the second essay, printed on November 14th, was evident from its title: "The Revolt Against Reason." Hobson's interest in this topic was largely due to his war experience. In September 1920, he wrote an article for *Political Science Quarterly*, arguing that the war came as a surprise because "human relations were believed to be grounded in rationality" (Hobson 1920: 338). The November 28th issue of *The Nation* featured E.L. Ball's letter to the editor titled "The Revolt Against Reason." In it, Ball asserted that Hobson's view implies "the rigid demarcation between reason and instinct." The next issue of *The Nation*, on December 5th, printed Hobson's letter to the editor in which he replied to Ball, denying that he holds the reason-instinct demarcation[21].

What Russell and Woolf considered as "the revolt against reason" was in Ramsey's view a timely invitation for the reconceptualization of reason and rationality. We shall see that Keynes responded positively to that invitation, too. Although the evidence with regard to Ramsey's direct influence on the later Keynes is weak, we will see that, at least as far as their accounts of rationality are concerned, they moved in a similar direction.

[20] This aspect of Ramsey's account of rationality was inspired by his reading of Peirce. He writes, "Following Peirce, we predicate it [reasonableness] of a habit not of an individual judgment" (1928 [1990], 97). A similar view to that of Peirce could be found in the writings of William James and John Dewey, as well (see, Marouzi 2024).

[21] Hobson's series of essays appeared on pages of *The Nation* when Keynes was its chairman and Leonard Woolf was its literary editor. Hobson's essays would later be published by Woolfs' Hogarth Press in 1926, under the title of "Notes on Law and Order."

7. Pragmatism Comes to Economics

Keynes wrote an obituary note on Ramsey shortly after his death. In it, Keynes says that in the last years of his life, Ramsey was moving toward "a sort of pragmatism." Ramsey

> was led to consider 'human logic' as distinguished from 'formal logic.' Formal logic is concerned with nothing but the rules of consistent thought. In addition to this 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 toward truth; and the analysis of such habits is also a sort of logic (Keynes 1931 [2013]: 338)

Keynes then writes that "the application of these ideas to the logic of probability is very fruitful" and gives credit to Ramsey's criticism of his logical interpretation of probability:

> Ramsey argues, as against the view which I had put forward, 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. Thus the calculus of probabilities belongs to formal logic. But the basis of our degrees of belief—or the a priori probabilities, as they used to be called—is part of our human outfit, perhaps given us merely by natural selection, analogous to our perceptions and our memories rather than to formal logic. So far I yield to Ramsey—I think he is right (Keynes 1931 [2013]: 338-339)

Keynes then immediately goes on to propose a mild skepticism about an aspect of Ramsey's notion of probability:

> But in attempting to distinguish 'rational' degrees of belief from belief in general he [Ramsey] was not yet, I think quite successful. It is not getting to the bottom of the principle of induction merely to say that it is a useful mental habit. Yet in attempting to

> distinguish a 'human' logic from formal logic on the one hand and descriptive psychology on the other, Ramsey may have been pointing the way to the next field of study when formal logic has been put into good order and its highly limited scope properly defined (Keynes 1931 [2013]: 339).

Keynes appears to have been on board with Ramsey's account of human logic in principle. Nonetheless, he thought Ramsey's appeal to this logic in order to defend the claim that induction is a useful mental habit is not convincing. It is not quite clear what was wanting in Ramsey's notion of induction in view of Keynes. But I shall attempt to make some comments to clarify this.

Ramsey argued that induction is "a very useful habit" and that it is "reasonable" to be guided by it. That is, Ramsey departed from the skeptic's treatment of induction as he thought the skeptic wants us to prove an unprovable: to ask for a proof of the justification of induction "is to cry for the moon" (1926 [1990]: 93). Ramsey thought induction often leads us to successful actions, and this suffices to think of it as a reasonable habit, and so we shall not further look for a water-tight formal proof of why inductive inferences are justified. But Ramsey's overarching claim that induction is a very useful habit could not offer much help to the economist Keynes. In an economic environment, it is only *sometimes* useful to hold the assumption that the future highly resembles the past. As Keynes put it a few years after writing Ramsey's obituary, there are "abnormal times…, when the hypothesis of an indefinite continuance of the existing state of affairs is less plausible than usual even though there are no express grounds to anticipate a definite change" (1936 [2013]: 154). This means that perhaps Keynes thought Ramsey ought to be more careful in his treatment of induction. We cannot make a context-independent claim that induction is a useful habit. It is useful only in certain circumstances, not always.

Keynes's obituary note on Ramsey appears to suggest that he sympathized with Ramsey's methodological approach to the formulation of the concept of rationality in terms of human logic. Keynes thought Ramsey has "properly defined" the "limited scope" of formal logic, and that

Ramsey has shown us that we have “useful mental habits… the analysis” of which “is also a sort of logic,” meaning that the analysis of habits is integral to our analysis of what it takes to be rational. Keynes’s proposed mild skepticism about Ramsey’s project in rationality makes it difficult to make a definite historical claim about the extent of Ramsey’s influence on Keynes. Nonetheless, whether or not Keynes was fully on board with Ramsey, we shall see that his later economic writings offer us enough textual support suggesting that he moved in a similar direction as Ramsey did: the later Keynes did not hold onto formal logic as an apt norm of rationality, and he suggested that a proper norm of rationality ought to be sensitive to what we can ask from human nature.[22]

I have suggested that there was nothing unusual, at the time, in Keynes’s psychology of economic behavior. Nonetheless, there *was* something unusual about how he conceived the nature of rationality. After telling us that investment decisions of entrepreneurs are generally guided by animal spirits, Keynes quickly writes that “we should not conclude from this that everything depends on waves of irrational psychology” (1936 [2013]: 162). The very fact that Keynes finds it important to discuss and reject this conclusion is itself an indication of his awareness about a popular view in his vicinity – this is the very conclusion that Russell, Woolf, and all those worried about “the revolt against reason” would make from the premise that economic behaviors are generally guided by animal spirits. Keynes continues,

[22] The existing literature on the Ramsey-Keynes relation is vast. For a long time, although the contributors to this literature disagreed over the extent of Ramsey’s influence on Keynes, they shared the assumption that if there is any influence to be found, that influence is restricted to Ramsey’s notion of probability. This assumption has been recently challenged by Bradley Bateman (2021) and Bill Gerrard (2023a; 2023b), who argue that it was Ramsey’s overarching pragmatist philosophy that attracted Keynes. The narrative presented in this paper sympathizes with Bateman and Gerrard in this regard. Nonetheless, I depart from Bateman’s and Gerrard’s views in identifying what elements of Ramsey’s pragmatism influenced Keynes. First, they argue that Ramsey’s influence on Keynes could be partially discerned in Keynes’s later psychology of human behavior. As I have argued in section 4, however, Keynes’s later psychology was not inspired by one person such as Ramsey, but by the interwar orthodoxy in Cambridge. Second, I argue that it was Keynes’s later account of economic rationality that was in the spirit of pragmatism – what Bateman and Gerrard do not discuss.

> We are merely reminding ourselves that human decisions affecting the future, whether personal or political or economic, *cannot depend* on strict mathematical expectation, since the basis for making such calculations does not exist; and that it is our innate urge to activity which makes the wheels go round, *our rational selves* choosing between alternatives *as best we are able, calculating where we can, but often falling back for our motive on whim or sentiment or chance* (Keynes 1936 [2013]: 162-163; emphasis added).

Keynes did not argue for the counter-intuitive idea that we should not rely on our intellect to do calculative thinking when such thing is in fact doable.[23] In a similar manner to Ramsey, he pointed to the limitations of human nature and then questioned the norm of rationality that demanded calculative thinking as a necessary antecedent of all rational economic behaviors. He said that in many cases human decisions "cannot depend" on calculative thinking and that we pick our preferred course of action by calculative thinking only "where we can." In those contexts of action in which calculative thinking loses its normative force, Keynes suggested that it is *rational* if we take certain non-intellectual elements as our guide. An instance of rationality might be the case of being guided by animal spirits. It might also be the case of being guided by certain background assumptions formed by existing conventions (see, Keynes 1937 [2013]: 114). The economist Keynes departed from his own earlier characterization of rationality that appeared in *A Treatise on Probability* (1921 [2013]). He expanded the domain of reason beyond human intellect, thus holding that rational conduct does not require the conscious consultation of the intellect. He wrote to Hugh Townshend in 1938:

> Generally speaking, in making a decision we have before us a large number of alternatives, none of which is demonstrably more 'rational' than the others, in the sense that we can arrange in order of merit the sum aggregate of the benefits obtainable from the complete

[23] This is in particular clear when Keynes finds it apt to appeal to the neoclassical account of rationality in dealing with certain economic problems (see, Hoover: 1995; 1997).

> consequences of each. To avoid being in the position of Buridan's ass, we fall back, therefore, and necessarily do so, on motives of another kind, which are not 'rational' in the sense of being concerned with the evaluation of consequences, but are decided by habit, instinct, preference, desire, will, etc. (Keynes 2013: 294).[24]

There are rational actions of the kind that are guided by the non-intellectual elements of habit and the like, not calculative thinking. These actions are *rational*, not in the restricted sense of the word that limits the domain of rationality to the actions preceded by the intellect or calculating thinking as the epistemological thesis of intellectualism demands. These actions are *rational* in another sense of the word. That alternative sense of rationality could be also found in Ramsey's pragmatist account of human logic. Whether or not Ramsey was the major source of influence on the later Keynes's conception of rationality, the remarks above suggest that Keynes would have sided with Ramsey, not with Russell or Woolf, in the controversy over what it takes to live a rational life. Ramsey and Keynes were representatives of an emerging pragmatist-friendly tradition in the interwar Cambridge that was to challenge the conceptualization of rationality in both sides of the intellectualism debate and the interwar Cambridge orthodoxy.

I have argued that both Ramsey and Keynes adopted an account of rationality in the spirit of pragmatist tradition. Nonetheless, there is a subtle difference between Ramsey's and Keynes's accounts. Ramsey's action theory simply suggests that an agent might have the capacity to rely on some robust habits (that might operate with no intermediate stage of judgment) to act in a rational way, but Ramsey did not elaborate what contexts of action demand such form of rational conduct. Keynes took one step further by illuminating those contexts of action.

The later Keynes famously argued that there is a class of economic situations which deserve to be called situations of *uncertainty*. An uncertain situation is the situation in which the

[24] For more details on why Keynes's remarks on animal spirits and convention-following ought to be understood as an invitation for a broad account of rationality, see, Lawson (1993); Dow & Dow (1985; 2011); Frydman & Goldberg (2011: 124); Hoover (2013).

agent cannot form the required mathematical expectations, for the basis to form the relevant probabilities of outcomes does not exist. This situation occurs when the agent has little relevant evidence to form the probabilities.[25] Keynes gives us an example: "The sense in which I am using the term [uncertainty] is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention, or the position of private wealth owners in the social system in 1970." Keynes continues, "about these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know" (1937 [2013]: 113-114). For Keynes, calculative thinking loses its normative force in situations of uncertainty and these situations thus demand rational conduct of the kind that rely on robust non-intellectual elements. Then, at least one advantage of Keynes's account of rationality comparing to Ramsey's is that Keynes elaborated what kind of situations demand what kind of rational conduct.

8. Concluding Remarks

The description of facts of human life is necessarily grounded on conceptual commitments required for the interpretation of those facts. This is a lesson to be learned from the collective pathological inquiry into human nature that emerged in the wake of the Great War. This inquiry claimed the empirical discovery that human actions are typically guided by non-intellectual elements, all the while holding onto the conceptual commitment that to be reasonable is to be guided by the intellect. This was how the inter-war Cambridge orthodoxy made sense of the view that human nature is *not* reasonable. Ramsey and Keynes were influenced by this orthodoxy; they

[25] That is, *the weight of argument* is very low. The weight of argument indicates the extent of the total relevant body of evidence for a probability estimation. The *relevant* body of evidence is the evidence the inclusion of which in the premise of the probability relation changes the probability estimation. That is, having more relevant body of evidence might increase or decrease the probability estimation, but it definitely increases the weight of argument by definition. Keynes introduces the concept of weight of argument in *A Treatise* and uses it as a basis of his characterization of *uncertainty* in his later economic writings – see, Keynes (1936 [2013]: 148fn1).

adopted the insight that the primary driver behind human actions are habits, instincts, animal spirits, not intellectual calculative thinking. Nonetheless, they diverged from that orthodoxy; they held that a new account of human nature calls for a new account of human reason and rationality. This was because they believed in the pragmatist idea that our normative theory of human life must be sensitive to what we can ask from human nature. They thus adopted the orthodox description of facts of human life, while pushing to change its underlying conception of what constitutes reason and rationality along the line of pragmatism. Ramsey's philosophy and Keynes's economics were developed in tandem.

Archival sources

ASP/FPR.1983.01	Frank Plumpton Ramsey Papers, Archives of Scientific Philosophy, University of Pittsburgh Library System
KCA/JMK	Unpublished writings of JOHN MAYNARD KEYNES, copyright The Provost and Scholars of King's College, Cambridge 2024
TFL MS COLL. 735	Laurie Kahn Ramsey Collection, Thomas Fisher Rare Book Library, University of Toronto

Bibliography

Akerlof, George A., and Robert J. Shiller. 2010. *Animal Spirits: How Human Psychology Drives the Economy, and Why it Matters for Global Capitalism*. Princeton University Press.

Andrews, D.R. 1999. "Continuity and Change in Keynes's Thought: The Importance of Hume." *Journal of the History of Economic Thought*, 6 (1): 1-21.

Annan, Noel Gilroy. 1977. *Leslie Stephen*. Arno Press.

Bateman, Bradley W. 1987. "Keynes's Changing Conception of Probability." *Economics & Philosophy*, 3 (1): 97-119.

Bateman, Bradley W. 2021. "Pragmatism and Probability: Re-examining Keynes's Thinking on Probability." *Journal of the History of Economic Thought*, 43 (4): 619-632.

Bell, Clive. 1914. *Art*. New York: Frederick A. Stokes Company.

Bell, Clive. 1918. *Pot-Boilers*. Chatto & Windus.

Bell, Clive. 1956. *Old Friends*. Chatto & Windus.

Braithwaite, Richard. 1975. "Keynes as a Philosopher." In *Essays on John Maynard Keynes*, edited by Milo Keynes. Cambridge University Press, pp. 237-246.

Butler, Lise. 2010. *Leonard Woolf and the Politics of Reason in Interwar Britain*. Master's Thesis. Queen's University.

Caldwell, Bruce. 2007. "Life Writings: On-the-Job Training with F.A. Hayek." *History of Political Economy* 39 (1): 342-254.

Deigh, John B. 2001. "Emotions: the Legacy of James and Freud." *The International Journal of Psychoanalysis*, 82 (6): 1247-1256.

Dow, Alexander, and Sheila C. Dow. 1985. "Animal Spirits and Rationality." In *Keynes's Economics: Methodological Issues*, edited by Tony Lawson and Hashem Pesaran. Routledge, pp. 34-48.

Dow, Alexander, and Sheila C. Dow. 2011. "Animal Spirits Revisited." *Capitalism and Society* (6) 2.

Forrester, John, and Laura Cameron. 2017. *Freud in Cambridge*. Cambridge University Press.

Frydman, Roman, and Michael D. Goldberg. 2011. *Beyond Mechanical Markets*. Princeton University Press.

Gerrard, Bill. 2023a. "Ramsey and Keynes Revisited." *Cambridge Journal of Economics*, 47 (1): 195-213.

Gerrard, Bill. 2023b. "Keynes, Ramsey, and Pragmatism." *Journal of the History of Economic Thought*.

Goodwin, Craufurd D. 2008. "The Impact of Bloomsbury on John Maynard Keynes." In *Back to Bloomsbury: Selected Papers from the Fourteenth International Conference on Virginia Woolf*, edited by Gina Potts and Lisa Shahriari. The Center for Virginia Woolf Studies Housed at California State University.

Goodwin, Craufurd D. 2009. "Maynard Keynes of Bloomsbury." In "John Maynard Keynes of Bloomsbury: Four Short Talks," Economic Research Initiatives at Duke (ERID), Research Paper no. 23, February 24, 2009, http://ssrn.com/abstract=1348679.

Hajek, Alan. 2007. "The Reference Class Problem is Your Problem Too." *Synthese*, 156: 563-585.

Hardwick, J.C. 1932 [1986]. "A Letter to an Archbishop." In *The Hogarth Letters*. The University of Georgia Press.

Harrod, Roy F. 1957. "Clive Bell on Keynes." *The Economic Journal,* 67 (268): 692-699.

Hobson, J.A. 1920. "Why the War Came as a Surprise." *Political Science Quarterly*, 35 (3): 337-359.

Hoffman, Louise E. 1981. "War, Revolution, and Psychoanalysis: Freudian Thought Begins to Grapple with Social Reality." *Journal of the History of the Behavioral Sciences*, 17 (2): 251-269.

Hoover, Kevin D. 1995. "Relative Wages, Rationality, and Involuntary Unemployment in Keynes's Labor Market." *History of Political Economy*, 27 (4): 653-685.

Hoover, Kevin D. 1997. "Is There a Place for Rational Expectations in Keynes's *General Theory*?" In *A 'Second Edition' of The General Theory*, edited by G.C. Harcourt and P.A. Riach. Routledge, pp. 219-237.

Hoover, Kevin D. 2009. "Keynes and Economics." In "John Maynard Keynes of Bloomsbury: Four Short Talks," Economic Research Initiatives at Duke (ERID), Research Paper no. 23, February 24, 2009, http://ssrn.com/abstract=1348679.

Hoover, Kevin D. 2013. "Beyond Mechanical Markets – Asset Price Swings, Risk, and the Role of the State." *Journal of Economic Methodology*, 20 (1): 69-75.

Keynes, John Maynard. 1921 [2013]. *A Treatise on Probability*. In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume XIII: A Treatise on Probability)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press.

Keynes, John Maynard. 1926 [2013]. "The End of Laissez-Faire." In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume IX: Essays in Persuasion)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press, pp. 272-294.

Keynes, John Maynard. 1927 [2013]. "Clissold." In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume IX: Essays in Persuasion)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press, pp. 315-230.

Keynes, John Maynard. 1930 [2013]. *A Treatise on Money (Volume II: The Applied Theory of Money)*. In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume VI: A Treatise on Money in Two Volumes)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press.

Keynes, John Maynard. 1931 [2013] "Frank Ramsey." In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume X: Essays in Biography)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press, 335-346.

Keynes, John Maynard. 1936 [2013]. *The General Theory of Employment, Interest and Money*. In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume VII: The General Theory of Employment, Interest and Money)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press.

Keynes, John Maynard. 1937 [2013]. "The General Theory of Employment." In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume XIV: The General Theory and After, Part II, Defence and Development)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press, 109-123.

Keynes, John Maynard. 1938 [2013]. "My Early Beliefs." In John Maynard Keynes, *The Collected Writings of John Maynard Keynes (Volume X: Essays in Biography)*, edited by Austin Robinson and Donald Moggridge. Cambridge University Press, pp. 433-450.

Keynes, John Maynard. 1989. *Keynes's Lectures: 1932-35*, edited by Thomas K. Rymes. Palgrave MacMillan.

Kremer, Michael. (2017). "Ryle's "Intellectualist Legend" in Historical Context." *Journal for the History of Analytic Philosophy*, 5 (5): 16-39.

Lawson, Tony. 1993. "Keynes and Conventions." *Review of Social Economy*, 51 (2): 174-200.

Marouzi, Soroush. 2022. "Frank Plumpton Ramsey and the Politics of Motherhood." *Journal of the History of Economic Thought* 44 (4): 489-508.

Marouzi, Soroush. 2023. "The Early John Maynard Keynes: An Intellectualist Becomes Disappointed" CHOPE Working Paper, No. 2023-05, Duke University.

Marouzi, Soroush. 2024. "Frank Ramsey's Anti-Intellectualism." *Journal for the History of Analytical Philosophy* 12 (2): 1-31.

McDougall, William. 1908 [1919]. *An Introduction to Social Psychology*. Methuen & Co LTD.

Misak, Cheryl. 2020. *Frank Ramsey: A Sheer Excess of Powers*. Oxford University Press.

Moggridge, Donald. 1992. *Maynard Keynes: An Economist's Biography*. Routledge.

Moore. G.E. 1903. *Principia Ethica*. Cambridge University Press.

O'Donnell, Rod. 1990. "The Epistemology of J.M. Keynes." *The British Journal for the Philosophy of Science*, 41 (3): 333-350.

Parsons, Talcott. 1935. "Sociological Elements in Economic Thought – I: Historical" *Quarterly Journal of Economics*, 49 (3): 414-453.

Ramsey, Frank. 1922 [1989]. "Mr Keynes on Probability." *The British Journal for the Philosophy of Science*, 40 (2), 219-222.

Ramsey, Frank. 1922 [1991]. "Paper to the Society – Autumn 1922." In Frank P. Ramsey, *On Truth*, edited by Nicholas Rescher and Ulrich Majer. Springer Science & Business Media, pp. 120-123.

Ramsey, Frank. 1924 [1991]. "An Imaginary Conversation with John Stuart Mill." In Frank P. Ramsey, *Notes on Philosophy, Probability and Mathematics*, edited by Maria C. Galavotti. Naples, Italy: Bibliopolis-Edizioni di filosofia e scienze, pp. 302-312.

Ramsey, Frank. 1925 [1991]. “Civilization and Happiness.” In Frank P. Ramsey, *Notes on Philosophy, Probability, and Mathematics*, edited by Maria C. Galavotti. Naples, Italy: Bibliopolis-Edizioni di filosofia e scienze, pp. 320-324.

Ramsey, Frank. 1926 [1990]. “Truth and Probability.” In Frank Ramsey, *F.P. Ramsey: Philosophical Papers*, edited by D. H. Mellor. Cambridge University Press, pp. 52-94.

Ramsey, Frank. 1928 [1990]. “Reasonable Degree of Belief.” In Frank Ramsey, *F.P. Ramsey: Philosophical Papers*, edited by D. H. Mellor. Cambridge University Press, pp. 97-101.

Ramsey, Frank. 1929 [1990]. “General Propositions and Causality.” In Frank Ramsey, *F.P. Ramsey: Philosophical Papers*, edited by D. H. Mellor. Cambridge University Press, pp. 145-163.

Ramsey, Frank. 1991. *Notes on Philosophy, Probability and Mathematics*, edited by Maria Carla Galavotti. Naples: Bibliopolis.

Rosenbaum, S.P. 2003. *Georgian Bloomsbury: The Early Literary History of the Bloomsbury Group (Volume III: 1910-1914)*. Palgrave Macmillan.

Russell, Bertrand. 1915. *Principles of Social Construction*. London: George Allen & Unwin LTD.

Russell, Bertrand. 1922. *History of Western Philosophy*. London: George Allen & Unwin LTD.

Russell, Bertrand. 1927. *An Outline of Philosophy*. London: George Allen & Unwin LTD.

Russell, Bertrand. 1935. “The Revolt Against Reason.” *The Political Quarterly*, 6 (1): 1-19.

Russell, Bertrand. 1954. *Human Society in Ethics and Politics*. London: George Allen & Unwin LTD.

Russell, Bertrand. 1968. *The Autobiography of Bertrand Russell (1914-1944)*. An Atlantic Monthly Press Book.

Stout, G.F. 1899. *A Manual of Psychology*. University Correspondence College Press.

Venn, John. 1888. *The Logic of Chance*. MacMillan and Co.

Verburgt, Lukas M. 2022. *John Venn: A Life in Logic*. University of Chicago Press.

Wallas, Graham. 1908. *Human Nature in Politics*. London: Archibald Constable and Co.

Weintraub, E . Roy. 1991. *Stabilizing Dynamics: Constructing Economic Knowledge*. Cambridge: Cambridge University Press.

Winslow, Ted. 2017. “Keynes on the Role of the ‘Insane and Irrational Springs of Wickedness’ in War.” In *Economists and War*, edited by Fabrizio Bientinesi and Rosario Patalano. Routledge, pp. 189-206.

Woolf, Leonard. 1940 [1972]. *The War for Peace*. Garland Publishing, Inc.

Woolf, Leonard. 1964. *Beginning Again: An Autobiography of the Years 1911-1918*. The Hogarth Press.

Woolf, Leonard. 1967. *Downhill All the Way: An Autobiography of the Years 1919 to 1939*. Harcourt, Brace & World, Inc.