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The Gödel Conspiracy

F.E. Guerra-Pujol

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THE GÖDEL CONSPIRACY

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[†] Since I am not citing any law cases in this Article, I am using the simpler Modern Language Association (2021) citation rules in place of the convoluted and overly complicated *Bluebook* rules that are commonly used in most law journals.

I. INTRODUCTION

Why are conspiracy theories so popular? Above and beyond “the Gödel Conspiracy,”¹ the focus of this paper, there are conspiracy theories on just about every conceivable topic or controversy. Whether it be JFK or 9/11, chemtrails or the origins of the crack cocaine epidemic, the integrity of the NBA draft lottery or Ronaldo’s poor performance in the 1998 World Cup, no anomaly is too small or too big to merit its own conspiracy theory.²

At it happens, even a mind as logical and rigorous as Kurt Gödel’s was not immune to conspiracy thinking. Gödel, the greatest logician since Aristotle,³ posited the existence of a centuries-long conspiracy to conceal the work of German polymath Gottfried Leibniz. Among other things, Leibniz is known for his co-discovery—Independently of Sir Isaac Newton—of the calculus,⁴ for his metaphysical theory of monads,⁵ and for his “best of all possible worlds” doctrine,⁶ but according to Gödel, the target of this secret plot was Leibniz’s single-most revolutionary idea, one that may have inspired Gödel’s own landmark contributions to mathematics and logic—Leibniz’s proposed universal language or *characteristica universalis*.⁷ So, did a small circle of sinister scholars try to suppress Leibniz’s most important idea?

The remainder of this Article will be organized as follows: Part II, by way of background, retells the story of Gödel’s conspiracy theory. By all accounts,⁸ Gödel had invented this obscure but intriguing conspiracy after

¹ See especially Parts II & III, *infra*.

² For a two-volume encyclopedia of conspiracy theories in North American history, see Knight (2003). For a more up-to-date collection of conspiracy theories, see the popular Reddit thread r/Conspiracy. Similarly, the crowd-sourced editors of Wikipedia have also compiled an inventory of hundreds of contemporary conspiracy theories. See *List of Conspiracy Theories* and *List of Political Conspiracies* in Wikipedia.

³ Wang (2001), p. 7.

⁴ See Pappas (1997), pp. 115-120. Today, Leibniz’s system of notation is generally preferred over Newton’s when the calculus is taught to students.

⁵ In Leibniz’s system of metaphysics, monads are basic substances that make up the universe but lack spatial extension and hence are immaterial. See Rescher (1991); Cover & O’Leary-Hawthorne (1999).

⁶ See Rutherford (1998). Leibniz’s “best of all possible worlds” doctrine was famously criticized by the French Enlightenment philosopher Voltaire in his satirical novella *Candide*.

⁷ See Wang (1990), pp. 310-311; Dawson (1997), p. 263.

⁸ See generally Menger (1994), pp. 222-224. See also Dawson (1997), p. 107; Rescher (2011), Ch. 13; Various (2017).

spending countless hours researching the works of Leibniz and discovering significant gaps in Leibniz's published works. Next, using Franz Neumann's classic work on "Anxiety and Politics" as a point of departure, Part III explores the internal logic of Gödel's conspiracy theory.

Part IV then surveys a wide variety of "conspiracy theory theories" to see how such a logical and rigorous thinker as Kurt Gödel could have fallen for a conspiracy theory himself, while Part V reviews some recent proposals for combatting conspiracy theories or mitigating their negative effects. Part V also explains why these proposed solutions are either ineffectual or dangerous to democracy. Alternatively, Part VI will propose a novel solution: the creation of a *retrodiction market*. In brief, instead of trying to censor or suppress conspiracy theories, why not allow people to bet on them? A betting market would aggregate all available information about the truth-values of various conspiracy theories by allowing bettors to bet on their beliefs about past events. The Article will then conclude with an observation from the late Milton Friedman.

II. THE LEIBNIZ CONSPIRACY

Kurt Gödel (1906–1978) is best known for his landmark contributions to logic and mathematics, especially his first and second incompleteness theorems,⁹ as well as for reportedly discovering a logical contradiction in the U.S. Constitution.¹⁰ In addition, during his years at the Institute for Advanced Studies (IAS) in Princeton, New Jersey, Gödel's interests also turned to philosophy and physics. Among other things, Gödel admired the works of Gottfried Leibniz and studied them closely, "devoting endless hours to the study of Leibniz."¹¹ At some point during his studies, Gödel postulated the existence of a hostile conspiracy that had caused some of Leibniz's works to be concealed or destroyed.¹² In the words of one of Gödel's biographers, Rebecca Goldstein, Gödel "came to believe that there

⁹ See generally Kreisel (1980).

¹⁰ See generally Guerra-Pujol (2013), which surveys the various accounts of Gödel's alleged discovery of a contradiction or loophole in the Constitution.

¹¹ Yourgrau (2005), p. 182. Also, for a brief summary of Leibniz's contributions to logic and mathematics, see Dawson (1997), p. 39. In addition, Dawson (1997, p. 237) explains the relevance of Leibniz's ideas to Gödel's First Incompleteness Theorem. The First Incompleteness Theorem first appeared as "Theorem VI" in Gödel's 1931 paper "On Formally Undecidable Propositions of Principia Mathematica and Related Systems I." See Gödel (1931), translated in Heijenoort (1967).

¹² See Menger (1994), pp. 222-223.

was a vast conspiracy, apparently in place for centuries, to suppress the truth [about Leibniz's writings] and make men stupid."¹³

That Gödel, one of the most logical and rigorous thinkers of all time, was himself a proponent of such a far-fetched conspiracy theory shows us how compelling and pervasive conspiracy thinking can be. Gödel's biographers, however, have generally dismissed Gödel's conspiracy theory out of hand, attributing this episode to Gödel's "paranoia" or to his many mental delusions.¹⁴ By way of example, one scholar states: "He [Gödel] suffered delusions and personality disturbances. He became excessively paranoid, the paranoia deriving, some have conjectured, from his super-logicality and overly intense introspection. He tended to believe in secret intrigues and conspiracies."¹⁵ Another scholar speculates that it was Gödel's intellectual isolation, especially after the death in 1955 of his best friend Albert Einstein, that "provided fertile soil for that rationality run amuck which is paranoia."¹⁶

While it is tempting to dismiss this conspiracy theory as the product of a paranoid mind, such an *ad hominem* psychological explanation is too easy. After all, Gödel was not only a world-renowned logician; he had also devoted "endless hours" of study to Leibniz's works.¹⁷ In fact, Gödel may have first encountered the works of Leibniz as early as 1926, while he was still a student at the University of Vienna.¹⁸ According to Karl Menger, a credible source who knew Kurt Gödel personally from their days together in Vienna, Gödel "had been most intensely interested in Leibniz"¹⁹ and "he keenly desired to inspect Leibniz' unpublished manuscripts and not only out

¹³ Goldstein (2005), p. 48, internal quotation marks omitted.

¹⁴ See *ibid.*, p. 48; see also Pappas (1997), pp. 115-120; Dawson (1997), p. 107 & p. 137; Yourgrau (2005), p. 15.

¹⁵ Davis (1997).

¹⁶ Goldstein (2005), p. 48. It is worth noting, however, that Gödel postulated this worldwide anti-Leibniz conspiracy as early as 1939, when Gödel was at the height of his mental powers. See Menger (1994), pp. 222-223.

¹⁷ Yourgrau (2005), p. 182. In addition, Karl Menger has attested that Gödel had become deeply involved in the study of Leibniz. See Dawson (1997), p. 107. See also *ibid.*, p. 166: "That the study of Leibniz was the primary focus of Gödel's attention during the years 1944-45 is attested both by *IAS Bulletin* nos. 11 and 12 and by entries in Morgenstern's diary." (Oskar Morgenstern and Gödel were both faculty members at the Institute of Advanced Studies in Princeton, New Jersey, and by all accounts, they were close friends for many decades.)

¹⁸ Dawson (1997), p. 39.

¹⁹ Menger (1994), p. 71.

of historical interest”²⁰

But to fully appreciate and assess the plausibility of this alleged conspiracy, we must revisit one of Leibniz’s most ambitious and revolutionary ideas and the supposed target of this secret cover-up—the *characteristica universalis*—an idea that must have captured Gödel’s imagination, for in the words of one scholar:

Gödel was fascinated by Leibniz’s ideas, to the point that others felt he was obsessed: he checked out every book on Leibniz from his university library. He believed (correctly, I would say) that Leibniz’s most important ideas (the *characteristica universalis*) had been nearly forgotten by society; but he also believed that this was due to a shadowy conspiracy meant to prevent the intellectual advancement of mankind.²¹

Gottfried Wilhelm Leibniz (1646–1716) was one of the most important logicians, mathematicians, and natural philosophers of his time. Although his most well-known contributions to the world of ideas include his discovery of differential and integral calculus, he also attempted to develop a universal logic of science and human reasoning. Specifically, Leibniz wanted to “reduce everything from imagination to analysis,”²² or in the words of one Leibniz scholar: “Leibniz dreamt all his life of developing a ‘characteristica universalis’—a kind of ‘algebra of thought’ that would mechanize any form of factual reasoning as algebra had mechanized geometrical thought.”²³

To the point, Leibniz was convinced that all human ideas could be reduced to a few primitive thoughts, or in the words of another Leibniz scholar, “If it were possible to map these primitive thoughts unambiguously to a list of characters, then either no one using these characters in reasoning and writing would ever err, or he or she would recognize these errors with the help of [the] most simple checks.”²⁴ To accomplish this ambitious project, Leibniz developed the concept of a *characteristica universalis*, the foundation of his general model for logical reasoning.²⁵ Or in the immortal

²⁰ *Ibid.*, p. 210.

²¹ Summers Stay (2012).

²² Leibniz (1690e), quoted in Blåsjö (2017), p. 14 & p. 218, n.17.

²³ Blåsjö (2017), p. 14.

²⁴ Peckhaus (2004), p. 6.

²⁵ Leibniz’s work draws a distinction between a *lingua characterica* (or *characteristica universalis*), a universal language of thought, and a *calculus ratiocinator*, a calculus of reasoning. See generally Peckhaus, *ibid.*

words of Leibniz himself:

We will present here, thus, a new and marvelous calculus, which occurs in all our reasonings and which is not less rigorous than arithmetic or algebra. Through this calculus, it is always possible to terminate that part of a controversy that can be determined from the data, by simply taking a pen, so that it will suffice for two debaters (leaving aside issues of agreement about words) to say to each other: Let us calculate!²⁶

Alas, Leibniz never described the *characteristica universalis* in operational detail; as a result, many scholars have dismissed Leibniz's project as an absurd fantasy.²⁷ Gödel, however, believed that Leibniz's project was feasible. In systematic and methodical fashion, Gödel had assembled all the relevant works of Leibniz and then noticed a striking anomaly: a detailed treatment of the *characteristica universalis* was conspicuously absent from Leibniz's surviving works.

III. THE INTERNAL LOGIC OF GÖDEL'S CONSPIRACY THEORY

This Article will now explore the inner logic of the Gödel Conspiracy using Franz Neumann's essay "Anxiety and Politics" as a point of departure. In his classic essay, Neumann identifies three features that all conspiracy theories or alternate realities have in common: "intensification of anxiety through manipulation, identification, [and] false concreteness."²⁸ The first of these elements—*anxiety*—refers to the psychological aspect of alternate realities: who is most likely to fall for a conspiracy theory? The last two elements—*identification* and *false concreteness*—refer to the content or

²⁶ Leibniz (1875–1890), vol. 7, pp. 64-65; translation from Dascal (2008), p. 41, quoted in Blåsjö (2017), p. 14 & p. 218, n.18. The original reads as follows: "*Itaque profertur hic calculus quidam novus et mirificus, qui in omnibus nostris ratiocinationibus locum habet, et qui non minus accurate procedit quam Arithmetica aut Algebra. Quo adhibito semper terminari possint controversiae quantum ex datis eas determinari possibile est, manu tantum ad calamum admota, ut sufficiat duos disputantes omissis verborum concertationibus sibi invicem dicere: calculemus.*" See Blåsjö (2017), 218, n.18.

²⁷ Compare Parkinson (1973), p. ix: "Leibniz's views about the systematic character of all knowledge are linked with his plans for a universal symbolism, a *Characteristica Universalis*. This was to be a calculus which would cover all thought, and replace controversy by calculation. The ideal now seems absurdly optimistic."

²⁸ Neumann (1957), p. 283.

internal logic of any given conspiracy theory: the identity of the conspirators and their nefarious goals. By way of example, let us return to Gödel to illustrate the internal logic of his conspiracy theory.

Consider the element of *false concreteness* first. According to Franz Neumann, there must be an element of truth to some aspect of the conspiracy; i.e., the conspiracy must be plausible.²⁹ In Gödel's case, his conspiracy theory, although unlikely, was not entirely far-fetched, for some of Leibniz's writings—specific passages that Leibniz himself had referred to in some of his works—had apparently gone missing. Karl Menger, for example, reports at length the following conversation between Oskar Morgenstern and Gödel:

Later, I once discussed Gödel's ideas on Leibniz with a common friend, the economist Oskar Morgenstern. He described to me how Gödel one day took him into the Princeton University Library and piled up two stacks of publications: on one side, books and articles that appeared during or shortly after Leibniz' lifetime and contained exact references to writings of the philosopher published in collections or series (with places and years of publication, volume and page numbers, etc.); on the other side, those very collections or series. But in some cases, neither on the cited page nor elsewhere was there any writing by Leibniz; in other cases, the series broke off just before the cited volume or the volume ended before the cited page; in still other cases, the volumes containing the cited writings never appeared. "The material was really highly astonishing," Morgenstern said.³⁰

Although Menger's statement is hearsay, since he is reporting on what a third party (Morgenstern) told him, his hearsay testimony, if true, presents a genuine mystery about some of Leibniz's writings. After all, it was not just one obscure reference or a few isolated passages of Leibniz's that went missing; it was a large collection of them consisting of "two stacks"! Moreover, Gödel did not simply imagine or conjure up the existence of some long-lost Leibnizian manuscript, a mythical Holy Grail of philosophical legend. Instead, Gödel had done a meticulous amount of research, assembling two stacks' worth of seventeenth- and eighteenth-century materials with "exact references" to specific writings and passages of Leibniz—passages that had disappeared completely, despite the existence of

²⁹ *Ibid.*, pp. 283-287.

³⁰ Menger (1994), pp. 223-224.

such precise references to those writings. Perhaps one or two lost references would be just a coincidence, works lost to the ceaseless march of time, but how do we explain the disappearance of such a large collection of Leibniz's writings?

The second feature of conspiracy theories is what Neumann refers to as *identification*. In other words, the alleged conspirators must belong to a specific and identifiable target or enemy group. Neumann himself identifies five such common targets or enemy groups: Jesuits, Freemasons, Communists, Capitalists, and Jews.³¹ But regardless of whether the conspirators are Jesuits or Jews, Neumann's point is that the conspiracy in question must be orchestrated by members of an identifiable group.

In Gödel's case, who were the members of his alleged conspiracy? Once again, Karl Menger provides a possible clue as to the identity of Gödel's conspirators: the House of Hapsburg in Austria. And this time, Menger's report does not consist of second-hand hearsay; it is a first-hand account of a personal conversation with Gödel himself:

Meanwhile, Gödel was more and more preoccupied with Leibniz. He was now completely convinced that important writings of this philosopher had not only failed to be published, but were destroyed in manuscript. Once I said to him teasingly, "You have a vicarious persecution complex on Leibniz' behalf." Soon afterwards he said, "There is something I have wanted to ask you for quite a while. When was the Viennese (now Austrian) Academy of Sciences founded?" I immediately suspected what Gödel was after. It is a historical fact that Leibniz negotiated for a time with the Emperor and his government about the founding of an Academy in Vienna, but that the negotiations came to nothing.³²

According to Menger's account, Gödel believed as a matter of "historical fact" that Leibniz was negotiating directly with the House of Habsburg for the creation of a special academic institution to be located in the imperial city of Vienna, the implication being that Leibniz's works would have been stored in this place. Apparently, however, Gödel had further reason to believe that these talks between Leibniz and the Habsburgs became acrimonious and that—when these contentious negotiations fell through—someone, perhaps acting under the direct orders of the Emperor of Austria-

³¹ Neumann (1957), p. 283.

³² Menger (1994), pp. 222-223.

Hungary himself, must have acted in retaliation by destroying some of Leibniz's writings.

Lastly, Neumann refers to "anxiety" or to the psychological aspect of conspiracy theories. But is it helpful to think of conspiracy theories as a kind of disease or mental disorder? If not, how can one explain the popularity and power of conspiracy thinking generally?

IV. A BRIEF SURVEY OF CONSPIRACY THEORY THEORIES

Why are some people more likely than others to fall for conspiracy theories in the first place? A wide variety of possible explanations are explored below.

A. Social and Psychological Explanations

Franz Neumann's classic work on conspiracy theories,³³ with its focus on anxiety and politics, has opened up a veritable Pandora's box of competing psychological and social explanations.³⁴ A recent comprehensive survey of the literature, for example, concludes that conspiracy beliefs are due to "a range of psychological, political, and social factors."³⁵ Similarly, another study examines the link between "societal crisis situations" and "belief in conspiracy theories" and blames "fear, uncertainty, and the feeling of being out of control" for "increasing the likelihood of perceiving conspiracies in social situations."³⁶ Yet another study highlights the role the epistemic, existential, and social motives play in driving the popularity of conspiracy theories.³⁷

The problem with such explanations, however, aside from the fact that sometimes conspiracies are true,³⁸ is that they are *ad hoc*. Simply put, by blaming conspiracy thinking on such a wide variety of social and

³³ Neumann (1957). See Part III, *supra*.

³⁴ By way of example, one early study (Goertzel, 1994; $n = 348$) concludes that "belief in conspiracies [is] correlated with anomia." By contrast, another study (Oliver & Wood, 2014; $n = 1935$) blames "a Manichean worldview," concluding that "the likelihood of supporting conspiracy theories is strongly predicted by a willingness to believe in other unseen, intentional forces and an attraction to Manichean narratives."

³⁵ Douglas, *et al.* (2020).

³⁶ See van Prooijen & Douglas (2017).

³⁷ Douglas, *et al.* (2017).

³⁸ For an in-depth example of a far-fetched but real conspiracy, see Holiday (2018), describing an "unbelievable conspiracy" led by billionaire tech investor Peter Thiel against the popular Internet media outlet Gawker. See also Kolbert (2019).

psychological factors and motives, these explanations are too comprehensive to be of much value. Worse yet, some commentators, in their zeal to blame conspiracy theories on “bad thinking”³⁹ or “cognitive quirks,”⁴⁰ come perilously close to committing the *ad hominem* fallacy.⁴¹ In any case, the argument that “only bad thinkers believe in conspiracies” is not only tautological; it is also false, as the Gödel Conspiracy itself demonstrates.

Before proceeding, it is worth asking: *Why do so many conspiracy-theory researchers resort to such ad hoc explanations or to questioning the intelligence or rationality of conspiracy believers?* Perhaps it is the result of our general inability to cast aside our own personal or normative views about conspiracy theories, or in the words of one scholar, “the academic treatment of [conspiracy theories] has frequently been characterized by the preconceived notion of conspiracy theories as morally ‘wrong’”^{42 43} Accordingly, the remainder of this Article will present some alternative and more promising “conspiracy theory theories” before turning to possible solutions.

B. Foucault and the Archeology of Conspiracies

What if we were to extend Foucauldian discourse analysis to conspiracy theories?⁴⁴ The original focus of discourse theory—an influential research agenda and qualitative method of social analysis developed by such pioneers as Michel Foucault, Jacques Derrida, and many others—was on the

³⁹ Compare, for example, Cassam (2015), who blames “bad thinking” for the rise of conspiracy thinking.

⁴⁰ Compare Rogers & Mithani (2021), who identify various “cognitive quirks,” along with social media exposure, as the cause of conspiracy theories.

⁴¹ The *ad hominem* fallacy occurs when, instead of addressing someone’s argument or position, one mounts an attack on his appearance, on his moral character, or on some other irrelevant personal attribute. See, e.g., Tindale (2007), p. 82. That is, instead of addressing the merits of popular conspiracy theories, contemporary researchers often end up dismissing or rejecting such theories out of hand, finding some psychological fault or mental defect as the underlying source of conspiracy thinking.

⁴² Streicher (2020), p. 281. Or perhaps our falling into this fallacious trap is due to simple sociological factors. After all, most scholars have doctoral or other advanced academic degrees, so how can anyone blame us for looking down on conspiracy theorists from our Ivory Towers, for seeing them as gullible dupes or irrational ignorami?

⁴³ As a further aside, I self-consciously use the pronouns *our* and *us* as I, too, am a member of this research community.

⁴⁴ Compare Steicher (2020), who does just that.

non-linear relationships between language, knowledge, and power.⁴⁵ For Foucault and his post-modern followers, the term *discourse* refers to the different ways in which we express knowledge and embody power relationships. On this view, conspiracy theories are just a special type of socially constructed discourse: a subversive form of social knowledge existing alongside many other competing forms of knowledge.⁴⁶

Thus, from a Foucauldian perspective, the shadowy and subversive nature of most conspiracy theories is a feature, not a bug. Moreover, this post-modern or Foucauldian view of conspiracy theories contains an epistemologically novel and revolutionary insight, one that is especially relevant to the murky and shadowy world of secret plots and concealed cabals: *truth* is a subjective and contested concept. That is, the truth is rarely, if ever, an absolute value; it is always up for grabs.⁴⁷ The focus of Foucauldian discourse theory is thus on who is doing the speaking because a given truth—my truth or yours?—will depend on who the speaker is, not just on what he is saying.

Put another way, given the subjective and contested nature of truth, the probability or truth-value of any given conspiracy theory is beside the point. What really matters is the identity of the people or social groups who happen to believe in that theory as well as the reasons for their subjective beliefs, however fanciful or far-fetched those beliefs might be.⁴⁸ So, instead of asking whether *X* conspiracy theory is true, we should be asking an entirely different set of questions, such as:

- *Which individuals or groups believe in X conspiracy theory?*
- *How are these subjective beliefs about X conspiracy theory socially constructed?*
- *And, most importantly, what power relationships do these beliefs embody?*

Although these research questions are fruitful ones, discourse analysis has a fatal flaw. In a word, its Achilles' heel is that it is self-refuting. After all, if truth and reality are socially constructed power constructs, then so too are the results of discourse analysis and discourse theory itself.

⁴⁵ See generally Kendall & Wickham (1999). See also Wooffitt (2005), pp. 146-147; Given (2008), p. 249.

⁴⁶ See generally Steicher (2020).

⁴⁷ Compare the notion, which is popular today, of “my truth.” See, e.g., Meyers (2009).

⁴⁸ See Arribas-Ayllon & Walkerdine (2008), pp. 91-108.

C. Conspiracy Theory Language Games

One possible escape route from this self-refuting Foucauldian predicament is Ludwig Wittgenstein's idea of a *language game*.⁴⁹ In his treatise *Philosophical Investigations*, Wittgenstein repeatedly compares human languages to games and concludes that languages are like games in that both are rule-governed activities.⁵⁰ Moreover, for Wittgenstein, the meaning of words, concepts, sentences, etc. depends on the particular game or rule-bound activity in which such words are being used.⁵¹ To illustrate this “multiplicity of language-games,”⁵² Wittgenstein presents a comprehensive laundry list of such games, a compilation of diverse rule-bound activities from daily life:

- Giving orders, and obeying them –
- Describing the appearance of an object, or giving its measurements –
- Constructing an object from a description (a drawing) –
- Reporting an event –
- Speculating about an event –
- Forming and testing a hypothesis –
- Presenting the results of an experiment in tables and diagrams –
- Making up a story; and reading it –
- Play-acting –
- Singing catches –
- Guessing riddles –
- Making a joke; telling it –
- Solving a problem in practical arithmetic –
- Translating from one language into another –
- Asking, thinking, cursing, greeting, praying.⁵³

So, why not add “conspiracy theories” or “alternate realities” to Wittgenstein's laundry list? Although one can only wonder what Wittgenstein himself would have thought of this possibility, it turns out that conspiracy theories do resemble many of the specific language games in Wittgenstein's list, such as speculating about an event, making up a story, or

⁴⁹ Wittgenstein (1958).

⁵⁰ *Ibid.*, § 3. That is, whether one is speaking a language or playing a game, in both cases one is engaged in an activity that is governed by general rules and social conventions.

⁵¹ See generally Biletzki & Matar (2021).

⁵² Wittgenstein (1958), § 23.

⁵³ *Ibid.*

reporting an event, depending on the use or uses that a particular conspiracy theory is being put to.

This Wittgensteinian lens is intriguing for two additional reasons. First off, we don't need to diagnose or otherwise impugn the mental health of conspiracy theorists. Instead, we ask a completely different question: *What are the rules of the conspiracy theory language game?* Secondly, although the rules of such language-games might be socially constructed, the Wittgensteinian approach is not self-refuting because we are not bound by the rules of a given language game when we are studying that game as an observer.⁵⁴

But what, if anything, is gained by comparing conspiracy theories to language games? Alas, this Wittgensteinian lens poses more questions than it answers. After all, if a conspiracy theory is like a game, a game with its own internal logic and its own set of rules, then what are the rules of the conspiracy theory game? However we answer this question, why do some conspiracy theories assume a life of their own and spread like wildfire?

D. Conspiracy Theories as Memes

Instead of comparing conspiracy theories to language games, what if we compared them to cultural replicators or evolutionary *memes*?⁵⁵ Richard Dawkins, an evolutionary biologist who was the first to propose a memetic theory of cultural evolution in his book *The Selfish Gene*, coined the term *meme* to describe the smallest unit of cultural transmission.⁵⁶ Textbook examples of cultural memes include “tunes, ideas, catch-phrases, clothes fashions, ways of making pots or building arches.”⁵⁷ Using this evolutionary lens, one could argue that a conspiracy theory is just another type of cultural meme, one that propagates itself in the meme pool of human culture by leaping from brain to brain via a process of imitation.

Dawkins identifies three essential features of all successful replicators, including memes: longevity, fecundity, and copying-fidelity.⁵⁸ Whether we are describing biological replicators like genes or cultural

⁵⁴ But see Sellers (1954), p. 204.

⁵⁵ Compare Dawkins (1989), p. 192: “Just as genes propagate themselves in the gene pool by leaping from body to body via sperms or eggs, so memes propagate themselves in the meme pool by leaping from brain to brain via a process which, in the broad sense, can be called imitation.”

⁵⁶ Dawkins (1989), pp. 192-201.

⁵⁷ *Ibid.*, p. 192.

⁵⁸ *Ibid.*, p. 194.

replicators like memes, for evolution to occur the replicator must live long enough to make sufficient copies of itself, and these copies must be high-quality ones. Moreover, from a meme’s perspective—i.e., not the perspective the person who falls for a particular conspiracy theory, but rather the perspective of the individual meme itself—the successful propagation of any given meme or conspiracy theory does not depend on its underlying truth value; instead, successful propagation of a meme depends on its ability to replicate or make copies of itself.

This meme’s-eye view of conspiracy theories thus explains why far-fetched and fringe theories are more likely to propagate in the meme pool of human brains. Simply put, the more “crazy” or disturbing or far-fetched a given conspiracy theory is, the more likely it will grab the attention of a person’s mind and spread to other minds, since people are more likely to share memorable memes than run-of-the-mill ones. By the same token, this memetic explanation of conspiracy theories also explains why some conspiracy theories, like Gödel’s tedious and technical conspiracy theory, fail to spread and instead languish on the sidelines of human culture.

Nevertheless, aside from the question of their ontological status,⁵⁹ memes pose another vexing question. What makes far-fetched or fringe conspiracy theories more memorable or more likely to spread in the first place?⁶⁰ After all, just as more plausible scientific theories have generally replaced less plausible ones in the domain of the natural sciences—think of astronomy gradually replacing astrology or alchemy giving way to chemistry—why doesn’t this trend carry over into the world of conspiracy theories?⁶¹

V. WHAT IS THE REMEDY? SOME PROPOSED CURES

Regardless of which “conspiracy theory theory” one prefers—*ad hoc* social or psychological explanations, self-refuting Foucauldian discourse analysis, rule-bound Wittgenstenian language games, or Dawkins’ memetic lens—what is to be done? Here, the Article will survey several proposals that

⁵⁹ Compare Guerra-Pujol (2019), p. 15, n.39, who questions whether evolutionary memes really exist.

⁶⁰ In other words, it is not good enough to say that conspiracy theories and other memes have psychological appeal. What we really need to know is *why* conspiracy theories have such psychological appeal. Compare Dawkins (1989), p. 193, who poses this same question with regard to “the idea of a god.”

⁶¹ Another problem with the meme’s-eye view of conspiracy theories is that it reduces people’s agency and free will; it paints conspiracy believers as the passive receptacles of memes.

have recently been made to counteract conspiracy thinking. These proposed remedies, however, are either ineffectual or far worse than the conspiracy-thinking disease they are supposed to cure.

A. Reality Czars and Cognitive Infiltrators

A rising tide of voices, especially in academia, are calling for more vigorous measures to combat the spread of conspiracy theories and other dangerous ideas. Cass Sunstein and Adrian Vermuele, for example, have proposed the cognitive infiltration of pro-conspiracy extremist groups; in their own words: “Our main policy claim here is that government should engage in *cognitive infiltration of the groups that produce conspiracy theories . . .*”⁶² Others, by contrast, have highlighted the special dangers posed by the Internet. By way of example, Kevin Roose, a technology columnist for *The New York Times*, recently surveyed a group of experts about social media disinformation.⁶³ According to Roose, these unnamed experts recommend the Biden administration to appoint a cross-agency task force “to tackle disinformation and domestic extremism.”⁶⁴ This proposed task force would be led by a “reality czar,” who would coordinate the federal government’s response to conspiracy theories and other forms of disinformation.⁶⁵ For Roose, this extreme measure is necessary to avoid a civil war:

I’ve spent the past several years reporting on our national reality crisis, and I worry that unless the [federal government] treats conspiracy theories and disinformation as the urgent threats they are, our parallel universes will only drift further apart, and the potential for violent unrest and civic dysfunction will only grow.⁶⁶

Seriously? These sundry measures are likely to prove ineffectual at best or outright dangerous to our democratic ideals at worst. After all, who will police Sunstein and Vermuele’s cognitive infiltrators to keep them in check,⁶⁷ and who is to judge what constitutes disinformation in the first

⁶² Sunstein & Vermeule (2009), p. 218 (emphasis in the original).

⁶³ See Roose (2021).

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

⁶⁷ Compare Sunstein & Vermuele (2009), pp. 218-226, who fail to answer this all-important question.

place? Is the government well-suited to perform either of these tasks?⁶⁸ Simply put, reality czars and cognitive infiltrators run the risk of stifling free speech and suffocating the marketplace of ideas.⁶⁹ Is there a less dangerous way of combatting conspiracy theories?

B. Douthat's Razor: Taking Conspiracy Theories Seriously

Ross Douthat, a columnist for *The New York Times*, invites us to take conspiracy theories "a little more seriously" rather than rejecting them out of hand,⁷⁰ and he makes two additional points that are worth considering further: conspiracy theories are often "ineradicable" regardless of the medium in which they spread (Internet, word-of-mouth, etc.),⁷¹ and sometimes such theories are "a reasonable response to both elite failures and the fact that conspiracies and cover-ups often do exist."⁷²

Furthermore, Douthat formulates a sophisticated four-part test for deciding which alleged conspiracies to keep an open mind about, "a tool kit for discriminating among different fringe ideas."⁷³ In brief, Douthat's conspiracy-theory tool kit consists of the following four criteria: (1) "Prefer simple theories to baroque ones," (2) "Avoid theories that seem tailored to fit a predetermined conclusion," (3) "Take fringe theories more seriously when the mainstream narrative has holes," and (4) "Just because you start to believe in one fringe theory, you don't have to believe them all."^{74 75} Alas, the Gödel Conspiracy, as far-fetched and improbable as it was, would have passed Douthat's multi-part test with flying colors.

1. Simplicity

Douthat's first criterion can be restated in Occam's Razor terms as

⁶⁸ As a thought-experiment, ask yourself: *If Donald J. Trump were to win re-election in 2024, who would his cognitive infiltrators or reality czar be?*

⁶⁹ Compare Coase (1974), who analogizes markets in goods to markets in ideas. But see the theoretical objections to the marketplace of ideas metaphor in Part VI.D, *infra*.

⁷⁰ Douthat (2021).

⁷¹ *Ibid.* Or to paraphrase the immortal words of General Douglas MacArthur (1951): "Conspiracy theories never die; they just fade away."

⁷² Douthat (2021).

⁷³ *Ibid.*

⁷⁴ *Ibid.* These four quotations are from the subheadings in Douthat's op-ed essay.

⁷⁵ As a further aside, Douthat's criteria appear to be inspired by a branch of the philosophy of science called *theory choice*. The giants of this field are Karl Popper (2002) and Thomas Kuhn (1996). For other approaches to theory choice, See Thagard (1978) and Welch (2013).

follows: prefer simpler conspiracy theories to more complex ones.⁷⁶ In other words, when one is presented with competing explanations of the same event (e.g., the disappearance of some of Leibniz's writings, the assassination of President John F. Kennedy, Germany's defeat in World War I, etc.), one should select the simplest explanation or the explanation with the fewest assumptions.⁷⁷ Either way, whether we define simplicity in terms of the number of background assumptions or in terms of how nature or the world operates, we could also frame the simplicity criterion in probabilistic terms, since one of the rationales for this preference for parsimony is a probabilistic one: the idea that the simplest explanation is most likely to be the correct one.

But what does "simpler" mean in the domain of alternate realities or conspiracy theories? Does simplicity refer to the number of conspirators? The goal of the conspiracy? The number of steps necessary for the conspiracy to succeed? However we answer the foregoing questions, one of the supreme ironies of many conspiracy theories is that they pass this parsimony test with flying colors, for they are often far more simpler and parsimonious than the truth. By way of illustration, consider the Gödel Conspiracy. After devoting "endless hours" to the study of Leibniz,⁷⁸ Gödel discovered that many of Leibniz's works were missing. How can it be—in the absence of a concerted effort by a group of dedicated anti-Leibniz conspirators, perhaps at the orders of a powerful political figure—that *all* those copies of Leibniz's works disappeared? Gödel's conspiracy theory might have been the product of a paranoid mind, but its simplicity and parsimony cannot be denied.

2. Falsifiability

Douthat also tells us to avoid conspiracy theories with pre-determined conclusions, a criterion that appears to be inspired by Karl

⁷⁶ This preference for simplicity is often attributed to William of Ockham (c.1287–1347), a Franciscan theologian and scholastic philosopher. See Schaffer (2015), pp. 644-645. The phrase "Occam's Razor," however, did not appear until several centuries after Ockham's death in 1347.

⁷⁷ The "razor" in the principle of Occam's Razor thus refers to the "shaving away" of unnecessary assumptions. Similarly, another way of formulating Occam's Razor is the idea that "entities are not to be multiplied without necessity" or *non sunt multiplicanda entia sine necessitate*. This version of Occam's Razor was originally formulated by the Irish Franciscan philosopher John Punch in his 1639 commentary on the works of Duns Scotus. See Sorenson (2011); Gibbs (1996). Either way, this preference for simplicity may go as far back as Aristotle's *Physics*, which states, "Nature operates in the shortest way possible." See Book V of Aristotle's *Physics*, quoted in Sorenson (2011), p. 262.

⁷⁸ Yourgrau (2005), p. 182.

Popper's notion of *falsifiability*.⁷⁹ For Popper, falsifiability refers to “testability”—whether or not a particular proposition, statement, theory, or hypothesis can be tested and proven wrong, i.e., contradicted by evidence or falsified. As such, Popper's falsifiability test, which was originally formulated by Popper to distinguish science from *pseudo-science*,⁸⁰ would also appear to be a useful technique for distinguishing plausible conspiracy theories from imagined or invented ones.

Alas, to the extent most conspiracy theories are *self-sealing* or immune from logic,⁸¹ Douthat's second criterion is of limited use. To see why, consider, yet again, the Gödel Conspiracy. According to Karl Menger and Nicholas Rescher,⁸² Gödel refused to consider explanations of Leibniz's missing works that were perhaps more plausible than the existence of a secret, centuries-long conspiracy. In other words, Gödel's beliefs about this alleged cover-up could not be falsified—no amount of contrary evidence would have led Gödel to change his mind. Like Freudian psychoanalysts or Marxist critics of capitalism, conspiracy theorists will update their priors in favor of their pre-existing beliefs, especially when their priors are the product of deep-seated intuitions and implicit assumptions about the world.⁸³

3. Selectivity

Douthat's last two rules of thumb can be combined into a single criterion: *selectivity*. Specifically, Douthat tells us that just because one particular fringe theory or myth might be true doesn't mean all of them are, and that we should take such theories or myths more seriously only when “the mainstream narrative has holes.”⁸⁴

Alas, this selectivity criterion is woefully inadequate for two reasons. First off, all narratives, even mainstream or consensus ones, will always have

⁷⁹ Karl Popper introduced the concept of falsifiability in his 1935 book *Logik der Forschung*, which was further revised and translated into English in 1959 as *The Logic of Scientific Discovery*.

⁸⁰ See Resnik (2000).

⁸¹ See Sunstein & Vermuele (2009), pp. 204 & 207.

⁸² Menger (1994); Rescher (2011).

⁸³ On this note, consider religious beliefs. Douthat himself concedes that “to be a devout Christian or a believing Jew or Muslim is to be a bit like a conspiracy theorist, in the sense that you believe that there is an invisible reality that secular knowledge can't recognize . . .” Douthat (2021). In other words, religious beliefs, like many conspiracy theories, are usually the product of one's private intuitions, not rational deliberations, and these intuitions often reflect one's most deeply-held beliefs and thus cannot be tested or falsified in any meaningful sense.

⁸⁴ Douthat (2021).

gaps or holes in them. By definition, a narrative is a story, and all stories are necessarily incomplete.⁸⁵ More to the point, even a story with a single hole or gap might be called into question, depending on the size of that gap or its nature. The Gödel Conspiracy, for example, as far-fetched and implausible as it may appear at first glance, nevertheless fills a major gap in Gödel's extensive and meticulous studies of Leibniz's *characteristica universalis*: the large number of missing works authored by Leibniz.

Secondly, Douthat's selectivity criterion is unhelpful to the extent most conspiracies are stochastically independent.⁸⁶ That is, unless we are considering overlapping conspiracies—i.e., conspiracies with similar goals or with the same subset of members—the total number of conspiracy theories one accepts as true has absolutely no bearing on the truth values of those particular conspiracies.⁸⁷ As a result, even if one were to follow Douthat's guidance and reserve one's conspiracy thinking to belief in a single sinister plot or behind-the-scenes cabal, the probability of that particular plot or cabal being true would remain unaltered.

Again, the Gödel Conspiracy is instructive in this regard. Although Gödel somehow believed that the disappearance of some of Leibniz's works was due to a secret centuries-long conspiracy, no evidence exists that Gödel subscribed to any other conspiracy theory in his lifetime. Yet, this fact, standing alone, has no bearing whatsoever on whether the Gödel Conspiracy itself is true or not.

To sum up, Douthat's theory-choice criteria are ultimately unhelpful, while counter proposals ranging from reality czars to cognitive infiltrators are either ineffectual or dangerous. What if we just allowed people to bet on conspiracy theories instead?

VI. A CONSPIRACY THEORY RETRODICTION MARKET⁸⁸

This Article proposes the creation of a *retrodition market* to resolve

⁸⁵ See Aristotle's *Poetics*.

⁸⁶ Compare the principle of "independence" in probability theory: treat each conspiracy theory separately as an independent event. But what about overlapping conspiracies, i.e., conspiracies as dependent events? What other scholars' writings did the Leibniz conspirators destroy or hide from posterity?

⁸⁷ Stated formally, two events are said to be *independent* in the probabilistic sense if knowing that one event has occurred doesn't change the probability of the other event's occurrence. See Russell & Norvig (2021), p. 397.

⁸⁸ The Article will sketch a proof of concept or outline of my proposal. The author intends to publish a more detailed betting market manifesto in a separate

claims about conspiracy theories. Part VI.A makes some general observations about the information-aggregation function of betting markets. Next, Part VI.B sketches a proof of concept involving *conspiracy theory contracts*. Lastly, Parts VI.C and VI.D identify and respond to some practical and theoretical objections to retrodiction markets and to the marketplace of ideas metaphor.

A. Betting on Conspiracies: General Observations

Why frame conspiracy theories as wagers or bets? Betting markets or prediction markets already exist in many domains,⁸⁹ and extending this model to conspiracy theories would have a major advantage over reality czars, social media censors, or cognitive infiltrators.⁹⁰ Broadly speaking, markets and prices aggregate disparate sources of information more efficiently and accurately than most other institutions can because collective decisions made by a group of people are generally more accurate than any individual decision,⁹¹ or in the words of one proponent of prediction markets:

... when dealing with complex issues involving many variables or moving parts, no one can claim to have a complete model or theory from which to make fail-safe predictions. More likely everyone has a partial understanding of the situation, further clouded by his own biases. But when all these partial, biased models are put together ... knowledge accumulates, gaps get filled, while the various biases cancel each other.⁹²

Furthermore, in addition to its information-aggregation function, a retrodiction market in conspiracy theories would have several other significant advantages. Specifically, such a market would provide financial

paper. See Guerra-Pujol (forthcoming). Although the details and design of the proposed retrodiction market are still open for discussion, the author respectfully asks the reader to keep an open mind, especially since markets often evolve by trial and error. See generally McMillan (2002).

⁸⁹ See Mann (2016), for an example of a betting market in the movie industry. See Hanson (2006) for an example of a terrorism futures market. Unlike most prediction markets, however, the retrodiction market proposed here would involve only past events, like 9/11 or the JFK assassination, not future events.

⁹⁰ See Part V.A, *supra*.

⁹¹ In addition to Hayek (1945), see Landemore & Elster (2012); Page (2007); Surowiecki (2005).

⁹² Hypermind (n.d.). I thank my colleague and friend Paras Chopra for bringing this source to my attention via Twitter. See Chopra (2018).

and reputational incentives to place winning bets,⁹³ scale well with the number of bettors and opinions,⁹⁴ and generate unambiguous outputs that are easy to measure, since the overall success of the retrodiction market could be measured in terms of the number of participants in the market and the volume of trades.

B. Conspiracy Theory Contracts

A conspiracy theory retrodiction market would enable bettors to buy or sell *conspiracy theory contracts*. Each contract could be structured as a simple statement with two possible outcomes: *true* (*T*) or *false* (*F*). Bettors would then be able to buy such *T* or *F* contracts depending on whether they believed the betting market's aggregate answer to the specific conspiracy theory being bet on—i.e., whether the conspiracy will turn out to be more likely *true* or *false*. Anyone who disagrees with the current consensus about a disputed conspiracy theory contract would have a profit motive to participate in the market.

By way of illustration, if some bettors believe that Lee Harvey Oswald was part of a conspiracy or that 9/11 was an inside job,⁹⁵ they could buy *T* contracts on these topics, and conversely, if other bettors think that Oswald indeed acted alone or that 9/11 was not an inside job, bettors could buy *F* contracts. The prices of these bets would then be based on supply on demand, depending on how many bettors buy *T* or *F* contracts. If more bettors believe Oswald was part of a conspiracy, the price of the *T* contract will rise, while if more bettors believe Oswald acted alone, the price of the *F* contract will rise. Furthermore, the more participants or bets there are, the more likely that prices will reflect the true probabilities of the various conspiracy theories being bet on.⁹⁶

Moreover, other creative design possibilities are also possible. Instead of funding another *ad hoc* study, a university or grant institution might consider sponsoring its own retrodiction market by allocating fully-transferable cash-value tokens to a select group of academics, pundits, and other experts to encourage them to place conspiracy-theory bets.⁹⁷ However

⁹³ See generally Teall (2018), ch. 11.

⁹⁴ See generally Roche (2017); see also Sztorc (2015a).

⁹⁵ See, e.g., Fetzer (2007).

⁹⁶ See Wolfers & Zitzewitz (2006).

⁹⁷ One could further imagine the collection of statistics (say, via a scoreboard) on how well the participants in this market played. See, e.g., Tetlock & Gardner

the retrodiction market is designed, it is possible to imagine people placing bets on any number of disputed conspiracy theories, with the going odds or prices of the bets based on the current academic or popular consensus. Either way, bettors—laymen and experts alike—would have to either “put up or shut up” by supporting their claims with real money.⁹⁸

C. Practical Objections

One practical objection to this proposed market is that conspiracy theories generally refer to *past events*, like the JFK assassination, 9/11, or the election of 2020. The objection here is that one cannot use a prediction market to predict the past. This objection, however, is irrelevant. Betting markets are versatile and can be used for a wide variety of purposes beyond forecasting.⁹⁹ But the most serious practical objection to my proposal is, *Who Decides?* Who will be the arbiter of the truth or falsity of the conspiracy theory contracts being bet on? Who will decide whether a particular conspiracy theory is true or whether a particular claim or allegation is “fake news”? Also, in commenting on a previous draft of this paper, Professor Steven J. Brams identified another serious problem with retrodiction markets: the problem of timing.¹⁰⁰ Specifically, when would a decision, either for or against a given conspiracy theory, be made?

So, why not just keep the conspiracy theory market open indefinitely?¹⁰¹ This simple and elegant solution solves both the decision problem—*who decides whether a given conspiracy theory is true?*—and the timing problem—*when is this decision to be made?*—or in the words of Professor Brams, “Any bettor could opt out at any time, pocketing his winnings if the current price is above what he paid for his bet (either for or against the conspiracy) or taking a loss at the current price.”¹⁰²

(2016). Also, following Hanson (2008), one could also imagine that, instead of funding their research exclusively through cumbersome and slow National Science Foundation or Ford Foundation grants, academics could fund their research with the winnings from their conspiracy theory bets.

⁹⁸ Or in the more memorable words of my colleague and friend Alex Tabarrok (2012), “A bet is a tax on bullshit.”

⁹⁹ See generally Sztorc (2015b). Among other things, betting markets can be used to financial services, such as risk-management and the funding of public goods; in addition, betting markets can be used to detect lies, encourage whistleblowers, and provide decision makers with honest advice. *Ibid.*

¹⁰⁰ Brams (2021).

¹⁰¹ The author owes this simple and elegant solution to Professor Brams. *Ibid.*

¹⁰² *Ibid.*

By keeping the betting market open indefinitely, the price of any given conspiracy theory contract will track belief or non-belief in the conspiracy, with no necessary final resolution. A bettor will stay in the market if he thinks the price of his conspiracy theory contract will increase, or he will opt out if he thinks it will fall. Additionally, bettors would have an incentive to seek new information that not only supports their choices but is also likely to persuade other bettors, thereby advancing the search for truth. As long as there is yet-to-be-discovered evidence that may be convincing to some bettors, some conspiracy theories should move toward resolution without the need for an omniscient arbiter.

D. Theoretical Objections

Although the political economist Ronald Coase famously concluded that no fundamental difference exists between the *market for goods* and the *market for ideas*,¹⁰³ many legal scholars and other intellectuals have rejected this analogy. After all, if truth is supposed to prevail when ideas are shared freely and openly, why are bogus conspiracy theories so popular? Alvin Goldman and James Cox, for example, conclude that the marketplace analogy is inapt in the domain of speech because “it is really questionable whether messages are goods or products at all,”¹⁰⁴ while Robert Sparrow and Robert Gooding concur that “ideas are not commodities of the sort ordinarily bought and sold in markets”¹⁰⁵ and propose an alternative metaphor: “the garden of ideas.”¹⁰⁶ Similarly, Gregory Brazeal emphasizes “structural dissimilarities between a market in more traditional goods and a market in ideas.”¹⁰⁷

Others, however, have rejected the marketplace of ideas metaphor with respect to specific types of speech, such as hate speech and racist speech—an objection that could be extended to conspiracy theories. David Shih, for example, citing the landmark work of Richard Delgado and Jane Stefancic,¹⁰⁸ focuses on hate speech and racist speech and concludes that the marketplace of ideas fails in these domains because “we cannot make objective choices about racism.”¹⁰⁹ Why not? Because, according to the

¹⁰³ Coase (1974).

¹⁰⁴ Goldman & Cox (1996), p. 26.

¹⁰⁵ Sparrow & Gooding (2001), p. 48.

¹⁰⁶ *Ibid.*, pp. 54-55.

¹⁰⁷ Brazeal (2011), p. 2.

¹⁰⁸ See Delgado & Stefancic (1992).

¹⁰⁹ Shih (2017).

aforementioned Delgado and Stefancic, “racism is woven into the warp and woof of the way we see and organize the world . . .”¹¹⁰ Likewise, to the extent conspiracy theories are such a pervasive feature of life that not even the great logician Kurt Gödel was immune to them, the same logic might apply to conspiracy thinking as well.

Yet others have rejected the market metaphor with respect to specific types of information environments, such as social media. Claudio Lombardi, for example, explains how the marketplace of ideas is distorted by the advertising revenue models of social media platforms like Twitter and Facebook.¹¹¹ In brief, these Internet platforms treat news as a “product” and potential readers as “consumers” and thus distort the marketplace of ideas by lumping reliable sources of news together with fake news.¹¹² In Lombardi’s words: “Algorithms such as those used by Facebook and Twitter are crafted . . . to show online content without selecting for the credibility of the source. The watchword is instead the ‘effectiveness’ of a post in generating traffic—a loophole that populist movements have used very effectively.”¹¹³

But how persuasive are these criticisms of the marketplace of ideas? After all, conspiracy theories have flourished even before the rise of social media platforms,¹¹⁴ and in any case, Lombardi’s analysis is already

¹¹⁰ Delgado & Stefancic (1992), p. 1278.

¹¹¹ See Lombardi (2019).

¹¹² For additional analyses of the role of social media in promoting conspiracy thinking, see Rogers & Mithani (2021), who identify social media exposure, along with various “cognitive quirks,” as a cause of conspiracy theories, and Bak-Coleman, *et al.* (2021), who use a “global collective behavior” framework to identify new dangers posed by social media to “scientific progress, democracy, and actions to address global crises.” See also Ghaffary (2021).

¹¹³ *Ibid.*, p. 201. Lombardi, however, falls into the *ad hominem* trap when he states: “But just as in any other market, trade in ideas may be subject to distortion due to . . . bounded rationality and cognitive limitations.” *Ibid.*, pp. 202-203.

¹¹⁴ According to Joseph E. Uscinski and Joseph M. Parent, the amount of “conspiracy talk” does not correlate with advances in technology or with changing economic conditions; to the contrary, conspiracy theorizing overall has, in fact, declined since the 1980s, in spite of the rise of social media platforms. See generally Uscinski & Parent (2014). See also van Prooijen & Douglas (2017), pp. 324-325.

outdated.¹¹⁵ By contrast, Shih's analysis is pessimistic,¹¹⁶ and more importantly, it misses an even larger point: a retrodiction market in conspiracy theories could effectively help counter our inability to make objective information choices by promoting cognitive diversity.¹¹⁷ If there were a retrodiction market, anyone who disagrees with the current consensus about a particular conspiracy theory would have a profit motive to place a bet.

VII. CONCLUSION

To sum up the central questions posed by this Article, *How could a thinker as logical and rigorous as Kurt Gödel engage in conspiracy thinking, and what is the least dangerous way of responding to conspiracy believers, a solution that doesn't stifle the marketplace of ideas or democratic values?* In place of another *ad hoc* study, this Article proposed a conspiracy theory retrodiction market. Simply put, such a betting market is more likely to succeed in countering the negative effects of conspiracy thinking than other proposed methods—e.g., appointment of a reality czar; cognitive infiltration of groups that promote conspiracy theories; or further tweaking of secret social media algorithms—because betting markets aggregate information

¹¹⁵ As of this writing (January of 2022), several social media platforms and Big Tech firms have already announced voluntary measures to combat fake news and the spread of conspiracy theories. Google Search, for example, has announced that it will be attaching warning labels to search results involving topics that are “rapidly evolving” and in which “a range of sources hasn't yet weighed in” (see Sullivan, 2021), while Twitter has already been attaching warnings to Tweets containing “synthetic and manipulated media” and “misleading information” about COVID-19. See Roth & Achutan (2020); Roth & Pickles (2020). See also Ortutay (2021). For its part, Facebook has undertaken efforts to “reduce the distribution of fake news” by deleting misleading posts altogether and through stricter enforcement of its content-moderation policies. See Lyons (2018); see also Meta (2021). (As an aside, according to Bloch-Webha (forthcoming), Facebook has taken these aggressive actions at the behest of law enforcement agencies.) In any case, one problem with these various voluntary measures is the lack of consistency in the enforcement of these policies as well as the complete lack of transparency regarding the *Who Decides?* question. Specifically, who decides the truth-values of social media posts or search results? See Part VI.C, *supra*.

¹¹⁶ Also, if Shih were correct about our inability to make objective information choices, then everyone must be irredeemably racist or susceptible to conspiracy narratives, and no amount of public policy reforms would alter this sad state of affairs.

¹¹⁷ See Hypermind (n.d.). See generally Page (2007); see also Surowiecki (2005).

more effectively, efficiently, and ethically than these other top-down methods can.

To conclude, consider the following observation by the late Milton Friedman on the general topic of governance: “The important thing is to ... make it politically profitable for the wrong people to do the right thing.”¹¹⁸ This logic applies to retrodiction markets as well. Although we cannot always know the truth about past events, perhaps we can make it profitable for people to believe in those conspiracy claims that are more likely than not to be true. By allowing people to place bets on disputed conspiracy theories, the truth-value of any given conspiracy claim will be aggregated and reflected in the price of a bet, so bettors as whole could better distinguish between real conspiracies and imagined ones, between truth and lies.

* * *

¹¹⁸ See Friedman (n.d.); see also Kim (2013).

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