

Uncertain Knowledge. Studying "Truth" and "Conspiracies" in the Digital Age (introduction)

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Uncertain Knowledge. Studying "Truth" and "Conspiracies" in the Digital Age

Introduction

Henri Boullier, Baptiste Kotras and Ignacio Siles

- It is nowadays commonplace to find statements about how the web has increased the 1 circulation and reach of "conspiracy theories" ¹. In France, the attack on the Capitol by QAnon activists in January 2021, and before that the attacks of 2015, or the surveys commissioned by the Jean Jaurès Foundation, have fueled many alarming discourses about the spread of "fake news" on the internet. The pandemic context in which we have been living since March 2020, which is marked by a high level of uncertainty and the complex intertwining of scientific, political, and geostrategic controversies, has strengthened the grip of the notion that the internet and social media now massively contribute to the disinformation of the public. It is true that in reducing the gatekeeping power of journalists and in easing access to publication for many people, the massification of the social web endowed a certain number of narratives, positions, and ideologies with more visibility in the public space than they previously had (Cardon, 2010). At the same time, the logics that shape the algorithmic hierarchization of online information on many platforms (Beer, 2017; Gillespie, 2014) have contributed to the formation of "filter bubbles," which are relatively hermetic and ideologically homogeneous spaces that tend to reinforce the beliefs of individuals rather than exposing them to other discourses.
- ² If these findings are now well documented in the scholarly literature, understanding what is commonly known as "conspiracism", "conspiracy", or "fake news" remains--at least in France--incomplete: it lacks both a rigorous and shared conceptual framework, capable of accounting for the complexity of ongoing reconfigurations and empirical investigations focused on the materiality of the varying phenomena that these terms refer to. To achieve this goal, we propose to bring together three bodies of literature that are rarely in dialogue with one another on these research objects: pragmatic

sociology, which is well equipped to think about the social conditions of elaboration and circulation of critique; the sociology of the digital, and the great variety of studies on web cultures, the political effect of algorithms, or the social uses of information, largely ignored by the dominant discourses on conspiracism; and finally, science and technology studies, a field that is attentive to the materiality of knowledge, to controversies, and is anchored in a requirement for symmetry, which is more than ever necessary to think about these phenomena. Based on the investigations gathered in this dossier on "uncertain knowledge", this thematic issue intends to offer both empirical and theoretical contributions to the study of the new tensions that characterize the social production of truth on the web and beyond.

³ Having examined the main strands of literature in the social sciences that have addressed the issue of "conspiracy theories," in the remainder of this paper we discuss choices of terminology and develop some theoretical ideas for analyzing the phenomena usually included as part of this label. We conclude by presenting the five contributions to this issue of RESET.

The Ups and Downs of the Conspiracy Category in the Social Sciences

Biases, Shortcomings, Craziness: The "pathologizing paradigm" of Conspiracism

- 4 It is a challenge to produce a synthesis of the research on "conspiracy theories"², given the number of essays that have been produced about this issue over the last thirty years, both in France and in the countries of the Global North. Without any attempt at exhaustivity, in what follows we summarize a certain number of salient features of and trends in this growing body of work. We also refer to the very impressive--and very complete--work of synthesis carried out by Pierre France (2019). He mapped out the growing interest of the French humanities and social sciences on the question of conspiracy theories, from the 1980s onwards, under the impetus of liberal historians such as Léon Poliakov (1980) or Pierre Nora (1981), who specialized in the historiography of anti-Semitism and are concerned with its contemporary resurgence³. These studies, precursors to a series of more recent books (Taguieff, 2004, 2006), are part of a strongly functionalist approach that envisions conspiracy as the reaction of a social body affected by "modernity". They strive to uncover the many avatars of a "rhetoric" that remains unchanged over the course of various (troubled) eras, despite its reformulations⁴. This research thus tends to make "conspiracy theories" a readymade object, a transparent and ahistorical category. By so doing, this body of work often ignores the effects of labeling, cross-accusations, and the dynamics of inclusion and exclusion involved in these processes.
- ⁵ In addition to this body of work, rooted in the French intellectual landscape, France (2019) identified a second strand of research of U.S. origin and more recently imported into the French debate, which stems primarily from social psychology. Following Richard Hofstadter's pioneering work, *The Paranoid Style in American Politics* (2008), first published in 1964, this approach is originally characterized by its reliance on the lexical field of mental pathology (obsession, paranoia), and seeks to objectivate (often through quantitative surveys or social experiments) the factors that lead individuals to

"adhere" to a conspiracy statement--a category that is not questioned as such either. Rather, the ambition is to shed light on the psychosocial profile of the "conspiracist" and the cognitive mechanisms of their belief, always conceived as a "strong, unconditional and pathological adhesion" (France, 2019, pp. 10, our translation).

- These approaches have gained renewed interest in recent years in some areas of French 6 research, as illustrated by the translation of Hofstadter's work in 2012. Gérald Bronner is undoubtedly the most obvious representative of this perspective, which also resonates strongly with the typical framing of this phenomenon in the media (Kreis, 2015). Bronner's approach, ostensibly focused on the individual "biases" of belief and inspired by the behavioral and neurological sciences, shares with the above-mentioned literature an uncompromising positivism, which presupposes the evident boundary between the "true" and the "false." This approach also reflects an overtly normative conception of "conspiracy" as the result of the "cognitive demagogy" of narratives "based on an unveiling effect that appeals to the less honorable and yet more intuitive slopes of our minds" (Bronner, 2015, pp. 11, our translation). It reactivates an aristocratic conception of the public space where the general public, easily fooled, must in good logic step aside to the benefit of the learned. Where do these narratives come from? What exactly do they contain? How are they put into circulation, appropriated, invested by various publics? These questions remain, for the most part, unanswered. Most importantly, even though the diffusion of the internet is still considered a crucial factor in the success of conspiracy theories, this approach often lacks the support of empirical research and largely ignores the findings of research from social scientists on the significance of the internet (Beuscart, Dagiral, & Parasie, 2016; Martin & Dagiral, 2016)5.
- 7 At the international level, the social psychology approach has materialized over the last few decades into a large number of works, particularly in political science. Hofstadter's seminal work profoundly influenced a large number of researchers who tend to disqualify "conspiracy theories" as examples of "bad science," or as unreasonable, irrational, and even delusional beliefs. Butter and Knight (2018, pp. 34) refer to research derived from this approach as the "pathologizing paradigm," which envisions conspiracy theorists primarily as groups of "radicals" or "paranoids" operating on the margins of society. This is the implicit approach of Sunstein and Vermeule (2009), for whom conspiracy theories are "crippled epistemologies" (p. 211) that result from lack of information or individual logical flaws.
- Starting in the 1990s, work in social psychology has been devoted to discovering the motivations and psychological factors that lead people to believe in certain ideas (Uscinski, 2020). In essence, van Prooijen and colleagues (2020) note, psychological explanations have been operationalized as a mix of two main groups of factors: individual (such as trust, openness to experience, agreeableness, education level, narcissism, and authoritarianism, among others) and environmental (such as distressing societal events, group conflicts, and power issues, etc.). Douglas and colleagues (Douglas, Sutton, & Cichocka, 2017, pp. 538) thus classified the "psychological factors [that] drive the popularity of conspiracy theories" into three groups: epistemic (a search for understanding of people's environment), existential (the sense of security and control in people's environment), and social (the construction of a positive image of oneself and of social groups). Methodologically, this research has generally approached the psychology of conspiracism through

quantitative studies and, more recently, through experiments, which test hypotheses at a micro level. The role of individual and environmental factors is typically measured by scales (Martin, 2020) through which researchers have constructed psychological profiles of those who believe in "conspiracy theories" (Douglas et al., 2019).

- 9 Finally, the links between political affiliations and belief in conspiracy theories have also been of interest to researchers in psychology and political science. These studies have stressed that espousing these theories can exert significant political consequences for democracies (Uscinski, 2018). Van Prooijen and colleagues (2015), for example, posit a statistical association between political "extremism" and belief in conspiracy theories. Uscinski and Parent (2014) maintained that "conspiracy theories are for losers" (p. 130), by which they meant that social groups that feel powerless are more prone to believe in "conspiracy theories."
- 10 Although these quantitative studies help to measure the significance of certain demographic and cultural variables in the adoption of certain ideas, they are limited when it comes to understanding diffuse and interactive collective phenomena, linked to a variety of online and offline sociabilities. These studies impose a powerful framing effect by positing finite lists of belief items that are naturalized as a "classic" in surveys (J.F. Kennedy's assassination, 9/11, vaccines, etc.). They also run the risk of selffulfillment through acquiescence bias, as shown by a recent survey from Allcott and Gentzkow (2017) in which respondents stated that they "remembered" false information that had circulated significantly during an election in similar proportions to the false "placebo" information made up by the interviewers. As Butter and Knight aptly summarize,

"Looking to produce axiologically neutral, empirical research on 'conspiracy theories' is a fallacy, for the concept in itself is not axiologically neutral. Quantitative research about the psychological traits, cognitive routines and demographics of conspirative thinking is progressing on slippery ground, for it lacks the historical and sociological comprehension of their object of study" (Butter & Knight, 2015, pp. 30-31, our translation).

11 To overcome these theoretical and methodological shortcomings, other researchers have preferred to conceptualize "conspiracy theories" as collective cultural constructions. We examine this body of work in the next section.

Culturalist Approaches to "Conspiracy Theories"

- 12 Other approaches have sought to challenge the "pathologizing paradigm" in conspiracy research by privileging issues of meaning. One way has been to understand what makes theories themselves appealing to people, thus investigating the particularities of "conspiracy theories" themselves rather than the cognitive traits of those who espouse and share them. Barkun (2003) thus concluded that "conspiracy theories" share three principles: "nothing happens by accident," "nothing is as it seems," and "everything is connected." Harambam (2020a) identified six themes that tend to recur in conspiracy theories: finance, the media, corporations, science, governments, and supernatural powers.
- ¹³ For Wood and Douglas (2018), the content of "conspiracy theories" is ultimately "about power" (p. 251). In this view, "conspiracy theories" are a political issue in itself (Fenster, 1999). By analyzing both scholarly research and media discourses on conspiracy over time, Thalmann (2019) traced a historical shift in the issues that

characterize "conspiracy theories": rather than focusing on an "enemy without," a foreign or outside power or organization plotting the demise of the community," they center on the "enemy within': these encompass subversives or spies, as in the anticommunist conspiracy theories, as well as corrupted politicians, presidents, and institutions that are perceived and portrayed as vague and diffuse threats" (p. 12).

- Another important way to examine issues of meaning have been empirical studies of 14 "conspiracy theories" as culture (Harambam, 2020a). This represents an important departure from the "pathologizing paradigm." By considering a set of cases throughout the history of the United States, Barkun (2003) traced the shift of "conspiracy theories" from the fringes to the core of American culture. In a similar vein, Katharina Thalmann (2019) argues that, contrary to common assumptions, conspiracy theories have been present "throughout all American history" (p. 4). According to her, these theories counted as legitimate knowledge and were widely circulated among members of political, intellectual, and spiritual elites. Thalmann shows how prominent figures in the history of the United States (from the country's founders to prominent figures to elected politicians) thus held "conspiracy theories" about issues such as a British plot against the American colonies or a Catholic plot to menace religious freedom in 19th century America. According to her, what changed in the mid-20th century was the symbolic status of conspiracy theories: "Throughout much of American history, it had been considered foolish not to believe in the existence of conspiracies or not to heed warnings about perfidious plots, but starting in the mid-1950s, it was increasingly considered foolish and ridiculous to believe in or spread conspiracy theories" (p. 8). This stigmatization affected the style, form, and forum of these theories.
- 15 Alternatively, works that are closer to the cultural studies tradition have preferred to understand "conspiracy theories" as situated expressions of cultural concerns (Dean, 1998; Goldberg, 2001; Knight, 2000) or, as Aupers (2012) puts it, "a radical and generalized manifestation of distrust that is embedded in the cultural logic of modernity" (p. 22). Following the example of the historical studies mentioned above (Nora, Taguieff), such research seeks to link this type of discourse to broader social motives while espousing an empirical and comprehensive approach to the publics involved. One example of works that analyze "conspiracy theories" as culture comes from Harambam's (2020a) two-year ethnographic study in the Netherlands. The author posits a "sociological and cultural approach" that emphasizes three dimensions: meaning (to study conspiracy theorists without comparing them to any standard of normality), diversity (to recognize that conspiracy theorists are characterized by a multiplicity of traits rather than unidimensional factors), and relationality (to consider them as deeply related rather than isolated groups). For Harambam, conspiracy theories are a culture in that they represent "a broader societal conflict over knowledge and truth in contemporary societies, forcing a reconsideration of what counts as legitimate knowledge, and why" (p. 213). He followed participants in various counter-narratives as they engage in a "hermeneutics of suspicion" through which they seek to find out "the real truth" about the world. In doing so, he shows that conspiracy theories are linked to wider disputes about the authority and legitimacy of institutions (scientific institutions in this case) in the production of knowledge and truth (Harambam & Aupers, 2015).

Skepticism, Ignorance, and the Contestations of Science

- The production of scientific claims, as well as their reception by certain critical or "skeptical" audiences, have long been central issues in the field of Science and Technology Studies (STS). Although they have rarely addressed the issue of "conspiracy theories" (see Baskin, 2019; Harambam, 2020b, 2021; Prasad, 2021 for a few exceptions), these studies focus instead on the social fabrication of truth. They have, for example, studied the modes of production of objectivity in the scientific field (Daston & Galison, 2007) and the power relations at work in the production of knowledge and forms of ignorance (Gross & McGoey, 2015). In this way, they provide a particularly useful toolbox for studying the mechanisms, instruments, and types of evidence mobilized to support or challenge dominant narratives as well as counter-narratives, particularly in relation to complex scientific, technical, and health concerns. More specifically, STS work has documented cases in which the challenge to science does not stem from lay or even marginal populations but rather from economically dominant actors such as multinational corporations.
- In recent years, a growing number of studies have focused on the issue of ignorance by focusing on the influence of economic actors on the production of knowledge. This research invite to revisit the sociology of science through studies of the controversies surrounding the toxicity of chemicals (Henry, 2017; Markowitz & Rosner, 2002), cigarettes (Michaels, 2008), or the existence of climate change (Oreskes & Conway, 2010) as consequences of the production of ignorance that is sometimes intentional (Proctor & Schiebinger, 2008), sometimes systemic (Frickel et al., 2010; Gross & McGoey, 2015).
- In *Merchants of Doubt*, a landmark work in the field, Oreskes and Conway (2010) draw parallels between the strategies deployed by the tobacco industry and big oil companies to cast doubt on the deleterious effects of their activities. In the 1970s, tobacco companies launched major campaigns to showcase the shortcomings of research on the dangers of tobacco. According to Oreskes and Conway, the same tricks were used thirty years later by large fossil fuel industry conglomerates, such as Exxon and British Petroleum, when they worked to spread doubt about climate change: showcasing scientists who argued that there was no absolute consensus about this matter and that available data could be interpreted in multiple ways, and mobilizing prominent conservative media in order to buy time and maintain the status quo.
- ¹⁹ These investigations thus detail the concrete mechanisms through which knowledge is produced but, mostly, how ignorance is maintained: preventing the implementation or funding of studies in areas of research ("undone science") (Hess, 2015), sidelining potentially inconvenient data (Dedieu & Jouzel, 2015; Rayner, 2012), using of forms of knowledge that are likely to maintain the *status quo* (Boullier & Henry, 2020; Kleinman & Suryanarayanan, 2013), establishing supposedly independent institutions or recruiting scientists through industry funds (Oreskes & Conway, 2010). Although these analyses have sometimes been taken up in a monolithic way to denounce "industrial capture" and have shown little interest in the role of journalists or activists in this work of accusation, they also offer a major benefit: they help identify the strategies deployed by dominant actors to defend their interests and allow a better understanding of "real" conspiracies.

- 20 More broadly, a number of studies show the significance of a sociology inspired by STS for understanding how the general public criticizes science. Mede and Schäfer (2020) thus theorized a "science-related populism" that takes various forms: the reaffirmation of "common sense" and individual experience as a source of truth (van Zoonen, 2012) or, on the contrary, the claim of a positivist grammar that aims to "re-establish" the project of authentically disinterested scientific knowledge (Harambam & Aupers, 2015; Ylä-Anttila, 2018).
- On this emerging front of research, vaccine policies constitute an ideal case to observe 21 contemporary tensions regarding the reception of science. In contrast to analyses that denounce the role of the "anti-vaccination" ("antivax") movement (Kata, 2012; Tafuri et al., 2014), studies such as those conducted by Blume (2006) and Ward et al. (2019) have questioned this label. These authors argue that this work of labeling is often used to discredit and delegitimize people or groups supporting certain narratives, and to present them as ideologists who oppose vaccination all together. They show that these actors are of various kinds and articulate a diversity of critiques, which often focus on a particular vaccine and not on the principle of vaccination, or on an ingredient or adjuvant that is incriminated for its toxicity. These authors also deal with how labeling a certain group of people as "anti-vaccine" is a public issue. Based on surveys conducted among journalists and content analysis, Ward (Jeremy Ward, 2019; Jeremy K. Ward, 2017) showed that labeling people as "antivaxers" was the result of a boundary work in which journalists drew a line between "good science" and its opponents. This boundary work was also performed by "pro-science" activists, as illustrated by emerging work on the resurgence of rationalism (Laurens, 2020), particularly on social media (Foucart, Horel, & Laurens, 2020).

The Absence of Digital Worlds

- In general, the work on "conspiracy theories" we have discussed thus far tends to ignore insights from scholarly research on digital media, their cultures and usages. Digital media are often given a marginal role, are hardly problematized, or are considered an obvious factor in the dissemination of conspiracy narratives and ideas because of the pulsional liberation enabled by "anonymity," the proliferation of "trolls," the astroturfing of bots, and the importance of other deviant subcultures. Comments on participation on the internet shares some characteristics with the complaint against "downgraded and frustrated intellectuals," which emerged at the beginning of the twentieth century (Boltanski, 2014, pp. 198), as well as the panic of literate elites against the massification of the press in the nineteenth century (Lemieux, 2000).
- 23 Beyond these anathemas, findings in the social sciences on the uses of digital media open up an immense field of research, which could shed light on the tensions surrounding the production of truth on the web. As an example, when we searched the archives of the journal Réseaux, a key reference in the study of digital in Frenchspeaking contexts, we only found approximately twenty articles that included the terms "conspiracy" or "conspi*" (full text), and less than fifteen about "disinformation." However, there are a few notable exceptions: a special issue of the French journal Quaderni (2017/3), with articles by Julien Giry (2017) and Pierre France

and Alessio Motta (2017) on the participants of the ReOpen 9/11 forums, devoted to the search for alternative explanations of the attacks of September 11, 2001.

- ²⁴ Others, such as Franck Rebillard (2017), have focused on the "document supports" of so-called conspiracy discourses on social media. Although he does not fundamentally question the content of this category, Rebillard offers elements for assessing the argumentative patterns that are specific to these discourses, and thus paves the way for a better understanding of the "chains of reference" (Martine & De Maeyer, 2019) that characterize the stabilization of a counter-narrative. Another set of studies has also focused on certain actors located at the intersection between "conspiracy theories" and far-right militancy, such as Jammet and Guidi's (2017) article on Swiss "reinformers," or Harsin's (2018) on groups close to "Manif pour Tous." Finally, several recent articles, based on the massive collection of digital corpuses (via Twitter in particular), have shed light on the varying motives and intensities of online criticism of lock-down measures related to the COVID-19 pandemic (Berriche, Do, & Tainturier, 2020), or of the controversy over the therapeutic value of hydroxychloroquine and the figure of Didier Raoult (Smyrnaios, Tsimboukis, & Loubère, 2020).
- There are many more studies in the English-speaking world, particularly in the field of computational social sciences, which focuses on the intersections of digital media and "conspiracy theories." Although it is not possible to develop an exhaustive list here, we would like to mention the quantitative analyses carried out by Allgaier (2019) and Faddoul et al. (2020), concerning the deviant informational offer on YouTube, as well as the work of Erviti et al. (2020) on Google Videos, and Shahsavari et al. (2020) on the labeling of rumors concerning the new coronavirus, assisted by machine learning. From a more qualitative perspective, Tuuka Ylä-Anttila's (2018) article is also noteworthy in that it crosses qualitative and quantitative analyses to document how participants in Finnish far-right forums challenge traditional epistemic authorities and how they produce "counter-knowledge." The author shows the importance of statistics and an ultra-positivist mentality in the establishment of this "alternative" knowledge, an argument that stands in contrast to the notion of a fluctuating "post-truth" and epistemologies based on personal experience (I-pistemologies) theorized by van Zoonen (2012).
- ²⁶ This issue is therefore also a contribution to the reflexive questioning of "conspiracies" in the digital terrain by articulating situated investigations of online spaces and a theoretical conceptualization of the contemporary social production of truth.

For a Comprehensive Sociology of "Conspiracy Theories" on the Web

Putting it Into Words: "Conspiracy" and Epistemic Tensions

27 The first issue that arises in the rigorous study of these tensions, from a social science perspective, is that of naming them. This is because of two main reasons. First, the phenomena that are usually labeled as conspiracies in scholarly work varies greatly. Second, this label has important normative implications. The accusations regarding the alleged harmful effects of chemtrails, the politics of mandatory vaccination, the participation of various governments in terrorist attacks (9/11, the Charlie Hebdo attacks, etc.), the lobbying of industries, not to mention a large number of criticisms stemming from political ecology: all these critical operations have been publicly designated at one time or another as pertaining to the domain of "conspiracy theories." The variety of actors, ideologies, and arguments to which this term is applied testifies to the weak heuristic quality of the "conspiracy theories" category. By masking the diversity and complexity of the situations in which it is mobilized, this category runs the risk of becoming a mere accumulation of discourses that are taken out of their social contexts of production (France, 2019).

- ²⁸ The second problem posed by this notion lies in the fact that it does not allow for the description of a substantial content but rather points to contradictory processes of disqualification, successively mobilized by antagonistic actors engaged in controversies (Lemieux, 2007). As Luc Boltanski (2014) writes, "no one claims the authorship of a conspiracy theory" (p.199). It is therefore urgent to abandon the normative and, as it turns out, pejorative dimension implied by this notion, as it is not compatible with the requirements of a comprehensive approach in the social sciences. Despite the reluctance that most so-called conspiratorial discourses has provoked among social scientists (who are often marked by their academic habitus), accounting for these phenomena implies not disqualifying them. While this observation is beginning to emerge in recent scholarship (France & Motta, 2017; Giry, 2017; Harambam, 2020a)⁶, drawing all the consequences of the pejorative, scientifically--and politically--unproductive dimension of the concept of conspiracy implies redefining the very same phenomena we are interested in.
- In the call for papers for this issue, we chose to speak of *informational deviances*, an expression inspired by interactionist sociology, which could be used to designate, with a minimum of preconceptions, a very heterogeneous set of critical operations, ideological adhesions of varying intensity, which support or relay various political or scientific counter-narratives, whose minimal common denominator lies in the processes of public disqualification they are subject to. Our intention was to encourage a variety of contributions while rejecting the tendency in the social sciences to separate *a priori* "truth" and "conspiracy theory", and thus take sides in the social processes of (dis)qualification that we wanted to analyze in their own right.
- At the time of writing this introduction, it seemed to us that the articles that are a part of this issue invited us to more broadly consider "conspiracy theories" as knowledge (*savoirs*) that can be studied by adopting a perspective similar to that of anthropologists. In his summary work, Nicolas Adell-Gombert reminds us that it is never up to the anthropologist to separate "knowledge" from "non-knowledge" or "true" from "false": "everything is knowledge, as long as this knowledge is inscribed in human life (even by signs as in astrology, even by a combination of circumstances [...], even by myths)" (Adell-Gombert, 2011, pp. 30). Just like Lévi-Strauss (1958) placed magic in the same footing with science in the world of knowledge, an anthropological perspective leads us to consider that knowledge includes magic, know-how, knowledge tools and, more to the point of this issue, the stories sometimes referred to as "conspiracies."
- 31 Approaching "conspiracy theories" as knowledge also has the advantage of inquiring 31 into their role in the construction of identity, their relationship to power, and issues of 31 their circulation (Adell-Gombert, 2011). There is obviously an important link between 31 knowledge and identity, as knowledge constitutes an "identity resource" that enables 32 the feeling of belonging to a particular community and sometimes is used to disqualify

those whose knowledge does not conform--a dynamic often documented in the case of scholarly communities with regards to parasciences (Delbos, 1993; Lagrange, 1993). Knowledge, in the sense of the ability to "put the world in order," is also an important form of power in many societies (Bowker & Star, 1999; Goody, 1979). For a scholarly community to exist, it is not enough for knowledge, such as medical knowledge, to be "mastered and made available": it must be institutionalized (Adell-Gombert, 2011, pp. 240). It is this work of institutionalization (which involves the establishment of standards, regulated practices between community members, practice sites, etc.) that provides epistemic authorities with power to enact true knowledge, and which helps to exclude communities with alternative understandings. A third important dimension of the study of knowledge is the issue of circulation: "there is no fixed knowledge, stuck in an individual who has not communicated it to someone and who has not received it from someone else" (Adell-Gombert, 2011, pp. 251). In contrast to work that focuses on the transmission of "real knowledge" and knowledge that is taught, the double displacement that we propose here consists of studying alternative knowledge circulating in less official spaces by analyzing the place and role of digital media in the deployment, circulation, and dispute of "conspiracy theories" on the internet.

- As a consequence, drawing on the work of Gary Alan Fine (2015), we argue more specifically for using the notion of "uncertain knowledge" to designate a heterogeneous set of representations of the world often disqualified under the term "conspiracy theories." Fine is interested in how knowledge's legitimacy is challenged. For him, "Knowledge involves a truth claim made by particular actors and judged by others. It is embedded within a social field, and it is connected to domains of power" (Fine, 2015, pp. 137). Uncertain knowledge thus refers to claims (rumors, opinions, beliefs, conspiracies...) that "lack direct access to secure and definite knowledge" (Fine & Difonzo, 2011, pp. 18). As such, these claims are disputed within communities or groups that operate as gatekeepers to truth or certainty. Consensus, or the lack of it, is essential here, in that antagonistic groups seek to disqualify each other by arguing that they are motivated by hidden ideologies and interests. To study uncertain knowledge is therefore to take the competing dynamics of affirmation and dispute of epistemic authority as the object of inquiry without judging beforehand neither the success nor the legitimacy of the groups that engage in these processes.
- ³³ Studying such uncertain knowledge thus amounts to taking as its very object the competing dynamics of affirmation and contestation of epistemic authority, without prejudging the success or legitimacy of these undertakings and the groups that pursue them. For this reason, we will also borrow from the sociology of deviance and the idea of "stigmatized knowledge" proposed in particular by Michael Barkun (2015), as well as from the work on parasciences (Campbell, 1972; Lagrange, 1993), which is already concerned with epistemic competition.
- ³⁴ Uncertain, stigmatized, parascientific: these representations of the social and natural worlds must be reintegrated into a coherent sociological program that is interested in the epistemologies they carry, their material foundations, and the conditions of their elaboration and circulation, both online and offline. In doing so, we wish to reinscribe these representations in the long and conflicting history of trust in epistemic authorities (Shapin, 2007), i.e. the institutions in charge of "saying what is of what is" (*dire ce qu'il en est de ce qui est*) (Boltanski, 2009, pp. 117). This choice in terminology allows us to elaborate a theoretical framework that can be broken down into several

movements that we describe hereafter: suspending normativity; studying a continuum of critiques; and finally, situating the digital at the core of the analysis.

Suspending Normativity

- ³⁵ Our first strategy is to suspend the implicit normativity regarding these objects, starting by emancipating ourselves from the vocabulary usually employed to describe these narratives and the actors who espouse them. As can be seen virtually every day in the debates surrounding the COVID-19 epidemic, the terms "conspiracy theories" and "conspiracism" are fundamentally generic labels, essentially used to discredit opposing statements and to disqualify actors perceived as "deviant" from a dominant norm. In keeping with interactionist approaches that sought to break away from the normative-and indeed, pejorative--approaches to their objects (Becker, 1991), the call for papers published in the context of this thematic issue used the expression "informational deviances." By speaking more generally of "uncertain knowledge," our aim is to adopt a posture in which the social scientist does not disqualify the statements under study and does not judge their veracity.
- 36 As with other studies on controversial objects such as religious cults (Esquerre, 2009; Ollion, 2017), this shift makes it possible to respond to a basic requirement of symmetry in the discussion of these phenomena, which are very often characterized by reciprocal accusations of conspiracy. If sociologists separate the true from the false (the "truthful" from the "conspiratorial"), they take sides in the disputes they describe. Just as the sociology of controversies has been doing for a long time, it seems crucial to simultaneously study "conspiracies" and the critique of conspiracy (France, 2019). This preference then authorizes--indeed, pushes--the researcher to study all kinds of epistemologies, including the most implausible ones for what they are, without comparing them to an implicit or explicit standard of scientificity (Harambam, 2017). In other words, this approach invites us to investigate eminently conflicting objects with a minimum of prejudice. Why, indeed, should it be less legitimate to analyze the claims expressed by vaccine critics than those expressed more generally about the pharmaceutical industry? The articles in this issue seek to account for alternative narratives, their material and cognitive support, the social conditions of their enunciation and circulation (Esquerre, 2012), their political content (Fine & Rosnow, 1976) and, finally, their claim to the truth.

Studying a Continuum of Critiques

37 Second, we propose to consider discourses labeled as conspiratorial not as a homogeneous and substantial category, but rather as a diverse set of contesting epistemologies, situated in a continuum that is critical of the institutions responsible for defining the truth. As Steve Shapin (2019) notes, our societies are experiencing not so much a "crisis of truth" but rather a crisis of confidence in the institutions traditionally responsible for defining that truth, particularly scientific institutions. Although it is not always targeted at "textbook science"⁷, public mistrust is expressed with increasing intensity in scientific domains where innovation and uncertainty are prevalent and have strong political consequences. As the cases of vaccines, electromagnetic waves, global warming, or endocrine disruptors suggest, criticism is all the more acute when the stakes are high; in other words, "disputed science is science that seems worth disputing" (Shapin, 2019).

- Moreover, it should be noted that these critiques do not take the form of an anti-38 science discourse: on the contrary, their proponents very often adopt a "hyperscientific" posture, characterized by a critical attitude that seeks to revive the historical project of true science as a systematic interrogation of reality, autonomous from powers and particular interests. In an enlightening qualitative investigation, Harambam and Aupers (2015) showed how skeptical discourses placed themselves on the terrain of true science by pointing out the specific training of scientists and their ways of seeing the world, which made them exclude certain interpretations a priori, as well as the links that unite science and industry, which obliterate the possibility of a truly independent and neutral science. Shapin (2019) concluded that the growing distrust towards scientific authorities must be understood in relation to the increasing entanglement, from the end of the 19th century onwards, between science and two great powers (Boltanski & Thévenot, 1991): "big business" and the State. Catching by contagion the suspicion towards these two new allies, science would have lost its moral authority, tied to its disinterested and independent representation.
- 39 Even when it is not about taking at face value the "scientific" professions of faith of groups considered to be deviant, it seems that the social sciences cannot afford the luxury of ignoring them: at a time when climate change seems to make the articulation between science, the market, and democracy less and less capable of ensuring the general interest, there is an urgent need for a sociological understanding of the critical discourses regarding this triptych, including those that are most often disqualified. This means reintegrating "conspiracist" epistemologies into the spectrum of critical operations aimed at describing reality (Boltanski, 2009). Rather than a simplistic duality in which conspiracy is a impervious and homogeneous category, identified as the antithesis of scientific discourse about the world, we propose to understand these objects as part of a continuum of critiques addressed to contemporary techno-scientific modernity, regardless whether they are labelled as conspiracies or not. From the established whistleblowers to the most unanimously discredited discourses, such as "Platists," we need to document the variety of discourses and epistemologies that place the fabrication of truth in tension, along with the types of evidence and groups they rely on. In short, the boundaries of science are at stake today: boundaries with private or political interests, whose porosity the "conspirators" denounce; and boundaries between legitimate and deviant science, which these actors would like to enforce. Rather than taking sides in these shifting and complex controversies, the social sciences would benefit from observing the boundary work deployed by both sides of these lines (Gieryn, 1983), a process that occurs increasingly in an expanded digital public space.

Situating the Digital at the Core of the Analysis

40 Finally, it seems crucial to make room for the social-technical conditions of the emergence and circulation of "conspiracies" in the analysis. It has become almost a truism to argue that the Internet changed the conditions for the spread and circulation of "conspiracy theories." As France (2019) aptly notes, recurrent invocations of the "Internet effect" in the spread of "conspiracy theories" need to be carefully

interrogated to transcend simplistic and ahistorical interpretations. We argue for transforming this premise into an empirical project. How does the blurring of the social certification of truth interact with the social and technical structures that characterize the various spaces of the social web? What sociotechnical features offer favorable conditions—or not—for the spread of so-called conspiracy narratives in these spaces? Why do certain spaces or communities have enabled the proliferation of such discourses? What makes them ideal supports for accelerating the spread of "conspiracy theories," controversies or accusations? How do algorithms favor the visibility of certain theories at the expense of others (Vosoughi, Roy, & Aral, 2018)? What role do algorithmic platforms play in the production of these contents, in their circulation, and in the construction of "facts" as robust and obvious (Wyatt, Harris, & Kelly, 2016)? Asking these questions could help evaluate how technical objects, such as algorithms, software platforms, communication devices or computer codes, enable the formation and circulation of this type of content.

- 41 Some studies have begun to explore these issues. For example, Romain Badouard examines the dynamics of discussions around fake news about French politics in this issue. He concludes that this form of political discussion is no different from conversations about "real" political news (cf. Bastard, 2019; Siles & Tristán-Jiménez, 2021). Similarly, Le Caroff and Foulot (2019) have studied adherence to "conspiracy theories" in comments on selected Facebook pages. In a study mentioned above, Harambam (2020a) investigated the self-perception of members of conspiracy groups through the circulation of online texts. These types of studies show how online and offline dimensions are intertwined in the production and circulation of "conspiracy theories" (Cicchelli & Octobre, 2018; France & Motta, 2017).
- 42 This type of study shows the need to build on the numerous insights of digital sociology to study conspiracy theories and their circulation (Beuscart et al., 2016). It is necessary to privilege empirical approaches that help going beyond general assertions about the importance of the internet in their diffusion. Taking these insights one step further might require using computational methods associated with data science or network analysis (Jacomy, Girard, Ooghe-Tabanou, & Venturini, 2016), in order to identify practices and patterns of information flow that are not always visible otherwise. A comparative approach could also help document the successes and failures of particular narratives within diverse communities (Smyrnaios et al., 2020). The circulation of contestatory epistemologies would thus be usefully reinscribed in the context of a broad ecology of media and platforms.

Overview of Issue Contributions

In the first article of this issue, Elsa Jaubert and Vassili Rivron report on the investigation they conducted among fact-checking journalists, who are in permanent contact with statements that could be qualified as "conspiracies." Located in several French newsrooms since the end of the 2000s, these fact-checking services aim to "decide what is true" (Graves, 2016). The study's originality lies in explaining how fact-checking journalists establish a relationship with the category of "conspiracy theories," drawing on observations and interviews conducted in three of the seven fact-checking units of the French press: "CheckNews" at *Libération*, "Factuel" at AFP and "Fake Off" at 20 *Minutes*. Even if the label "conspiracy" is used in various ways in these three units, it

only appears in a minority of the published articles (about 1% of the articles published by "CheckNews"). Instead of using this generalizing label, journalists seek to test the veracity of the statements they verify. Only those statements that pass the double filter of being "checkable" (ideally via supporting scientific and institutional sources) and "viral" (based on the number of shares on social media) are considered by journalists, who tend to exclude statements for which sources are lacking and that have not become viral. Finally, the article shows that rather than being a showcase for newsrooms, this new form of journalism aims to regain public trust through greater transparency of sources and verification methods. To achieve this goal, fact-checkers nevertheless assume that they must systematically rely on institutional sources, thus participating de facto in the maintenance of existing epistemic authorities.

- Drawing on a database created by journalists from the fact-checking unit of Le Monde ΔΔ ("Les Décodeurs"), Romain Badouard is interested in how readers appropriate false information in daily discussions on social media. The investigation is based on a corpus of 234 articles identified as false information by "Les Décodeurs" and a second corpus of 350 comments associated with posts on Facebook where these articles were shared. The author's aim is not so much to investigate the "conspiracy" dimension of these statements but rather to examine the specificities of discussing "fake news." By considering both a set of political "fake news" and their respective comments on Facebook, Badouard thus sought to characterize their reception. A first result suggests that fact-checking comments do not seem to have any major impact on the nature of the comments or the dynamics of exchanges between commentators. The analysis of politicization issues in these comments and their contradictory character allows the author to conclude that discussing false information and traditional news are in fact remarkably similar. The more the Facebook pages are politically inclined, the less the debate is contradictory, and vice versa. In contrast to common assumptions, the study shows that "fake news" are less tools of influence than a support for individuals who are already convinced by the statements they are discussing, as is also the case for news discussions more broadly (Bastard, 2019; Siles & Tristán-Jiménez, 2021).
- Gaël Stephan and Ysé Vauchez investigated "reinformation" media activists, an 45 identitarian movement at the origin of information sites that oppose the mainstream media. More precisely, the authors were interested in the "Golden Lies" ("Bobards d'Or"), an annual parody ceremony that rewards "[journalists] who do not hesitate to deliberately lie in order to serve political correctness," and which constitutes an important moment of sociability for the reinformation movement. The authors draw on a rich and original fieldwork, both online and offline, which includes an analysis of a corpus of 111 bobards available on the event's website, observations of three ceremonies, and interviews with leaders of reinformation sites. From the outset, the results show how media activists stage (literally, at the Théâtre du Gymnase in Paris) their radical critique of the system and its "political correctness," while also arguing for their own subjective and militant approach. The originality of the analysis lies in the authors' account of how these media activists balance out a critique of traditional journalism that also appropriates its main codes and norms. The press card, hated as a symbol of conformism, is at the same time used as a mark of legitimacy to introduce speakers during the ceremony. Fact-checking practices are turned against traditional media: by fact-checking information published by big media groups, reinformation "mediactivists" denounce their incapacity to uphold the professional and ethical

standards of journalism. As with other articles in this issue, this example illustrates the diversity of realities covered by the category of "fact-checking" by putting into perspective the promise of truth that it embodies: verification practices that are meant to be pedagogical in traditional newsrooms, debates fueled by rationalist influencers on Twitter and, in this case, public accusations regarding the "lies of the mainstream media" made by extreme right-wing media in France.

- 46 Antonin Segault's article follows the longitudinal circulation of a rumor on Twitter. Using the example of a controversy concerning the radioactive contamination of drinking water with tritium during the summer of 2019 in France, he looks at the mechanisms of production, circulation, and articulation of rumors on social media. The investigation is based on a corpus of nearly 5,000 tweets produced during the controversy fueled by this rumor in July 2019. The author adopts the interactionist approach espoused by this special issue, which aims to distance itself from the question of veracity in order to focus on the work of qualification, and thus of labeling, that statements are subjected to. This approach allows Segault to produce a narrative in two phases. In the first phase, the rumor essentially involves two groups of traditionally opposing actors, the "anti-" and the "pro-nuclear." Their disagreements, apparently irreconcilable, center on technical subjects such as the issue of toxicity thresholds or the effects of low doses of radiation. However, both actors end up joining forces against a common enemy: journalists from the "traditional" media, who are accused of poor professionalism and sensationalism, especially in their coverage of scientific issues. Actors who claim to be rationalists and zetetics use the tritium affair as a support for articulating a more general critique of the media and the theories that they label as "pseudo-scientific." This investigation thus strongly resonates with recent work on the "guardians of reason," that is, teachers, engineers, and popularizers turned into defenders of "good science" on social media (Foucart et al., 2020). Segault shows in turn how the criticism of the media on Twitter is accompanied by the emergence of socalled "influencers," local authority figures who have positioned themselves as new guarantors of science against what they consider as forms of obscurantism.
- 47 Finally, Mélissa Roy is interested in the rhetorical work deployed by groups that make contradictory statements in the context of health controversies, particularly those that lead to accusations of "conspiracy." At the time of the Ebola epidemic in West Africa (2013-2016), traditional funerals (during which the bodies are washed, made up, and caressed before being buried) were "secured" in order to contain the spread of the disease, thus provoking important controversies between health authorities and those who challenged these measures. Considering the Ebola case, the author proposes to specifically analyze the accusatory discourses that emerge "in the opposition between a biosecurity policy and culturally significant socializations and routines." The research is based on a corpus of 3,469 tweets and 2,774 Facebook comments that are grouped in five main types of arguments (called "accusatory frames") mobilized during this controversy. In addition to identifying these main accusatory rhetorics, one of the main contributions of this study lies in its examination of how these frames were used. The author shows that several actors were regularly targeted as those responsible for the spread of the epidemic: religious and community leaders, who are accused of sharing "non-medical" knowledge; regional governments, blamed for their immobility and irresponsibility; and, more generally, "irrational" individuals who refused to comply with the prescriptions of biosecurity policies. The case studied by Mélissa Roy thus strongly resonates with the present situation with COVID-19 and the controversies that

can arise from the deprivation of social ties in pandemic management policies. This offers a particularly rich terrain for thinking about dynamics of accusation at work in the context of major crises where the media and health institutions seem to occupy the role of epistemic authorities that are difficult to challenge.

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NOTES

1. See the IFOP-Jean Jaurès Foundation-Conspiracy Watch study, which states that eight people out of ten in France believe in at least one conspiracy theory: http://www.conspiracywatch.info/une-grande-enquete-sur-le-complotisme-dans-lopinion-publique-francaise-revele-une-realite-alarmante.html

2. We do not distinguish here between "conspiracy theories" and "conspiracism", categories often used interchangeably in the literature and in public debate.

3. The previous work of Edgar Morin about the "Rumor of Orléans" (1969), often cited on this subject, also show an early interest for conspiratory schemes fraught with antisemitism; its sociological and empirical dimensions constitute nonetheless an important difference with the previously quoted studies.

4. This goes along with a tendency to focus strongly on texts, and much less on their contexts of circulation and reception, from the classics of conspiratory literature like *The Protocols of the Elders of Zion* to today's websites and social media.

5. For example, it seems difficult to understand "what the Internet does to the diffusion of beliefs" (Bronner, 2011) only by observing the first results of a handful of Google queries about aspartame or the Loch Ness monster, thus simulating how would act an hypothetical "average Internet user" (p.43).

6. See also Quaderni (2017, vol.94) and Etudes de communication (2019, vol.53).

7. With the notable exception of Darwin's theory of evolution and of copernican cosmology, essentially in the United States and often on a christian fundamentalist ideological background.

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