The London School of Economics and Political Science

Conspiracy Theory Beliefs and Worldviews: A Mixed-methods Approach Exploring the Psychology of Monologicality, Dialogicality and Belief Development.

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A thesis submitted to the Department of Psychological and Behavioural Science of the London School of Economics and Political Science for the degree of Doctor of Philosophy, London, March 2020.

Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

I declare that my thesis consists of 64017 words.

Statement of co-authored work

I confirm that Chapter 2 was jointly co-authored with Professor Bradley Franks, Professor Adrian Bangerter, Professor Martin Bauer and Mr Mark Noort. My primary supervisor, Professor Bradley Franks, was the primary author. I contributed 85% of the data collection and 25% of the analysis.

I confirm that Chapter 3 was jointly co-authored with Professor Bradley Franks and Professor Martin Bauer. I was the primary author and contributed 90% of the work.

I confirm that I was the sole author of Chapter 4.

I confirm that Chapter 5 was jointly co-authored with Professor Bradley Franks, Professor Martin Bauer and Professor Adrian Bangerter. I was the primary author and contributed 95% of the work.

Acknowledgements

Firstly, thank you to all the participants of the projects who generously offered their time to share their views and experiences with me. Without their contribution, this thesis would not have been possible.

Thank you to my primary supervisor, Professor Bradley Franks, my secondary supervisor, Professor Martin Bauer, and also Professor Adrian Bangerter.

Also, thank you to colleagues at the Department of Psychological and Behavioural Science at LSE. The department has a rich history and an important place in social psychology.

Thank you to Associate Professor Ilka Gleibs who encouraged me to join the MSc programme at LSE.

Thank you to Matthew Brack and the PhD Academy, and also to Rebecca Lee, Terri-Ann Fairclough and Jacqueline Crane of the PBS Department.

Finally, thank you to Julie, my parents and brothers, and the Hall family.

Abstract

Conspiracy theories (CTs) appear to be an increasingly widespread aspect of everyday thought about social and political events. They call into question common understandings of people and institutions within society, and can have implications for political and policy relevant behaviours (e.g. voting, vaccine uptake). This thesis challenges a central finding in the limited literature covering belief in CTs – the proposition of 'monologicality' as proposed by Goertzel (1994), that belief in one CT is accompanied by wholescale endorsement of many others. The thesis takes a mixed-methods approach, triangulating qualitative and quantitative data, to revise our understanding of monologicality. Through qualitative analyses of interview data as presented in Chapters 2, 3 and 4, the central argument put forward is that not all belief in CTs is monological but there are various other ways of endorsing CTs. In Chapter 2, a thematic analysis reveals five types of conspiracist worldviews, proposing a gradient from non-monological worldviews, characterised by intrigue or limited endorsement, to fully monological worldviews premised upon generalised human agency (e.g. government conspiracy) or supernatural agency (e.g. extra-terrestrial cover up, spiritual entities). Chapter 3 advances the concept of 'dialogicality,' revealing that CT ideas are endorsed alongside commonplace ideas of science, religion and politics and society. Five dialogical relations are substantiated, including: integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance and analogical thinking. Chapter 4 provides a narrative insight into the development of CT belief for all five monological types – focussing on the perceived origins of CT belief and later development. Next, we turn to quantitative data gathered via online surveys. Chapter 5 establishes a new scale known as the Conspiracist Worldviews Scale; the first to measure different types of conspiracist worldviews from non-monological to fully

monological. Five subscales representing five types of conspiracist worldviews (Type 2, Type 3, Type 4, Type 5-Alien, Type 5-Spiritual) achieve construct, convergent, concurrent and diagnostic validity. The quantitative findings of Chapter 5 validate earlier qualitative findings of Chapters 2-4 and extend previous understandings of monologicality. The thesis concludes, bringing all these empirical findings together and by recognising the importance of looking beyond monologicality if we are to fully understand the phenomena characterising conspiracist belief.

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CHAPTER 1 | The Phenomenon of Conspiracy Theory Belief

Introduction

The research context and definition of conspiracy theories

Conspiracy theories (CTs) are popular. In the UK, it was found that 23% believed that the moon landing was staged and 31% believed that the government were covering up knowledge of aliens ('probably true' and 'definitely true,' *N = 1524*, data from Wellcome Trust, 2015). In the US, 30% of American students (*N* = 1,230) agreed that "Big events like wars, the current recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us" (see Uscinski & Parent, 2014, p. 78). A 'conspiracy theory' is defined here as: a narrative or set of propositions that explain a significant event, which advances the claim that two or more actors collude to carry out a hidden agenda (Douglas et al., 2019). 'CT belief' or 'conspiracist belief' are used interchangeably to represent the endorsement of a CT. A 'CT worldview' or 'conspiracist worldview' represents a generalised conspiracist perspective characterised by endorsement of multiple CT beliefs; and this is further defined in the section, 'Existing research and the limits to monologicality.' As is apparent from the examples above, CTs typically involve people in high positions, such as government, but can also include extra-terrestrials. CTs take many forms, stretching from issues of politics to science, from the natural world to the supernatural world.

It may be that the internet and declining dependence on traditional mediums (e.g., publishers, newspaper outlets) has facilitated the ease of access to CTs. Moreover, social media and other online sources provide information and entertainment in ways that often bypass the regular formalities associated with traditional media. As a consequence, many online sources

circulate quick and unmoderated stories for an audience dependent upon 'instant' information and updates (Barkun, 2003, 2016; Uscinski, Dewitt, & Atkinson, 2018). Not that the communication is one way; indeed, social media platforms also provide spaces for dialogue whereby CTs can be contested (Bessi et al., 2015; Klein, Clutton & Dunn, 2019; Klein, Clutton, & Polito, 2018; Wood & Douglas, 2015). On the one hand, social media provides new opportunities and exposure to a diverse range of resources; on the other, readers may only engage with media consistent with their worldviews and political beliefs (Stroud, 2008). CTs are a curious resource within this tension, since they may appeal to people seeking to learn something new or be used to consolidate existing beliefs and political opinion.

Research into CT belief as a social psychological phenomenon has been sparse and only recently gained traction in the past 10 years. In early psychology research into CTs, one important finding was that CT beliefs are 'monological,' as proposed by Goertzel (1994). That is, belief in one conspiracy will be accompanied by belief in many others. It is this hypothesis that is a central theme throughout this thesis. Before we progress with assessing monologicality on both empirical and theoretical grounds, a further historical comment is required to contextualise the research on the topic of CTs.

Goertzel's (1994) study was a needed step forward, staking CT belief as a social psychological phenomenon worthy of empirical enquiry. Before Goertzel's (1994) study, only limited research in social psychology had taken CTs seriously, with notable contributions in the book, "Changing conceptions of Conspiracy," edited by Graumann and Moscovici (1987). As Graumann (p. 245, 1987) highlighted and Goertzel (1994) later acknowledged, CTs are "a topic of intrinsic psychological interest that has been left to history and to other social sciences."

Specifically, it was in political science through the work of Hofstadter (1964a, 1964b), where CTs gained attention. Hoftstadter (1964a, p. 3) proposed that conspiracist thinking was a "paranoid style" of engaging with politics, involving "heated exaggeration, suspiciousness and conspiratorial fantasy." Hofstadter (1964a) proposed that to believe in CTs was to see the world in "apocalyptic terms," by the, "birth and death of whole worlds, whole political orders, whole systems of human values" (p.29). Furthermore, Hofstadter (1964a) offers a firm distinction between the engagement with the real world of "normal political processes" (p.39), and the "double suffering" of a conspiracy theorist who must confront both "the real world, with the rest of us, but by his fantasy as well" (p.40). The schism between 'normal politics' and conspiracy theory was for Hosftadter (1964a), "totally irreconcilable" (p.39).

Although commendable in taking the phenomenon of conspiracist thinking as a subject of study, it was unfortunate that, in rather explicit ways, the undertone to Hofstadter's (1964a, 1964b) essay was that engaging with CTs is wholly 'irrational.' Hofstadter (1964a) had a lasting impact on the social sciences and arguably framed the discourse around CTs for years to come (Husting & Orr, 2007). Although CT belief has a well-documented relationship with paranoia (Brotherton & Eser, 2015; Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013; Darwin, Neave, & Holmes, 2011), Hofstadter's (1964a) description of paranoia was stated in openly dismissive terms. For example, Hofstadter (1964, p.5) stated, "the term 'paranoid style' is pejorative, and it is meant to be (…)." An aftereffect of Hofstadter's work has been research (e.g. Pipes, 1997; Robin & Post, 1997) that has articulated the boundary between the 'rational vs irrational' or 'real vs imaginary,' placing the conspiracy theorist at the margins (Knight, 2000; Pelkmans & Machold, 2011). In this context, CTs are framed as peripheral to real politics and a serious engagement with the world. To be labelled a 'conspiracy theorist' is then to

relegate an individual or group to non-credible players within a political space involving serious players and processes. 'Conspiracy theory' had thus become a pejorative label used in dismissive terms by persons in positions of power, expertise or authority (Barkun, 2003; Byford, 2011; Coady, 2007; Husting & Orr, 2007; Pelkmans & Machold, 2011).

The implications of such an approach have been a barrier between science and the public, making the job of conducting thorough empirical and psychological research on the topic of CT belief wholly more difficult. People who believe in CTs are sceptical of science (Aupers, 2012; Harambam & Aupers, 2015), and thus gaining access to hear first-hand qualitative accounts of what it is to believe in CTs in the psychology discipline has not yet been achieved (for qualitative analyses of media content outside psychology, see: Lewis & Kahn, 2005; Popp, 2006). This thesis takes a different approach which recognises as its backdrop that 'politics' for the layperson takes form through the mundane day-to-day experiences and use of available resources. CTs represent one of many resources to understand the social and political world (Moscovici, 1961/2008, 1987). Their appeal and 'stickiness' may be in the way CTs recontextualise and reinterpret official accounts in attempting to gain an understanding of the unanswered questions or incomplete details that they regard to be important (Birchall, 2001; Franks et al., 2013).

Literature Review

Defining monologicality and dialogicality

The central focus of this thesis is to achieve a revised understanding of Goertzel's (1994) hypothesis of monological conspiracist belief. One key aspect of monologicality as proposed by Goertzel (1994), is the finding that believing in one CT is accompanied by belief

in many others. Since this early finding, empirical studies have repeatedly found that CTs do correlate with each other and that general conspiracist belief best predicts belief in specific CTs (e.g. belief in staged US moon landings; Swami et al. 2013) (Brotherton, French & Pickering, 2013; Bruder et al., 2013; Stieger, Gumhalter, Tran, Voracek, & Swami, 2013; Swami, 2012). These findings evidence a consistent pattern related to CT endorsement, demonstrating that conspiracist belief is a social phenomenon which through the appropriate empirical means and measures, can be identified and isolated for scientific enquiry.

Goertzel (1994) further proposed that the endorsement of multiple CTs, was based upon using one belief as a resource for another. Moreover, Goertzel (1994, p.740) states that,

> "Conspiratorial beliefs are useful in monological belief systems since they provide an easy, automatic explanation for any new phenomenon which might threaten the belief system. In a monological belief system, each of the beliefs serves as evidence for each of the other beliefs."

As Sutton and Douglas (2014) notes, Goertzel's (1994) approach might be referred to as a 'closed epistemology,' since novel CTs are endorsed based upon their congruence with existing beliefs. They further note that by Goertzel's (1994) account, we are led to believe that CT endorsement is 'nomothetical,' whereby attention is paid to general trends rather than specific details of a given CT event. This latter proposition has yet to receive empirical support (Sutton & Douglas, 2014).

Notably, Goertzel (1994) also contrasts "monologicality" with "dialogicality." These are opposed based upon the differences in their respective engagement with context and information relevant to the CT event. Monological engagement involves a "closed mind," attending to detail only in a relatively superficial way. For example, Goertzel (1994) states that,

"monological systems speak only to themselves, ignoring their context in all but the shallowest respects" (p.740). By contrast, dialogicality involves an "open" approach in dialogue with the context surrounding a CT. Moreover, Goertzel (1994, p.740) states, "Dialogical conspiracy theories, which include extensive factual evidence and details, are testable and may even be disconfirmed by new evidence." Introducing the standard of "factual evidence" complicates matters, particularly since CTs represent an endeavour of enquiry into aspects of the world which are less than readily accessible (i.e. secret plots) and available for 'fact' verification. Although some things are more obviously "factual" (i.e. perceiving physical objects in the natural world), the complexities of social events and attributions of cause and motive, make the "factual" standard a high bar to reach. Terms like 'fact,' if not used appropriately, can further the barrier between science and the layperson. This may be seen as science being the arbiter of truth and potentially excluding the perspective of the layperson (Harambam & Aupers, 2015; Husting & Orr, 2007). Most crucially, focussing on 'fact' overlooks the most definitive property of dialogicality; specifically, the dialogical relationship between CT and external non-CT beliefs. Birchall (2001) proposed that CT beliefs are "synthetic knowledge," whereby 'official' and 'unofficial' accounts are merged to capitalise on the lack of closure by mainstream media and academia, and reflect a wider issue of what counts as "accepted methods of interpretation" (p. 68). In recognising that dialogicality may be an integral element to CT belief, an important research goal would be to establish how sense is made through both CT belief and non-CT beliefs – specifying the variety of dialogical relationships and their symbolic content.

It could be further argued that monologicality and dialogicality are non-opposing concepts. This represents the position taken forward. Monologicality involves multiple and

generalised CT belief and a "closed" epistemology, as characterised by Goertzel (1994) (Sutton & Douglas, 2014). Dialogicality represents a dialogue beyond the conspiracist worldview, in using non-conspiracist ideas to potentially propagate the standing of CT beliefs. This thesis proposes that there is good reason to consider that not all engagement with CTs is monological (i.e. characterised by a worldview with multiple and generalised belief in CTs); and that implicit in existing literature on CT belief, are the grounds to consider dialogical forms of CT belief which draw upon non-conspiracist ideas. Finally, the lack of qualitative research available to understand CT beliefs impedes an understanding of pertinent issues, particularly regarding the appeal of CT belief and its development.

Existing research and the limits to monologicality

Existing research offers a profile of the CT believer and their ways of thinking. Specifically, belief in CTs is associated with anomie, alienation, feeling powerlessness, and lower trust (Abalakina-Paap, Stephan, Craig, & Gregory, 1999; Leman & Cinnirella, 2013). CT belief also correlates with political cynicism and less agreeableness (Swami & Furnham 2012), and right-wing authoritarianism (Bruder et al. 2013). Regarding cognitive findings, it has also been found that CT belief relates to attributions of intentionality and agency in situations where they are less likely to be found (i.e. inanimate objects) (see Douglas, Sutton, Callan, Dawtry & Harvey, 2015). Indeed, CT belief relates to an intuitive thinking style and negatively correlates with analytic thinking. Also reported, are positive relationships with anthropomorphism (Brotherton & French, 2015; Bruder et al., 2013) and boredom (Brotherton & Eser, 2015). CT belief links to thinking based upon the need for cognitive closure (Leman & Cinnirella, 2013; Marchlewska, Cichocka, Kossowska, 2018), the conjunction fallacy whereby a combination of events is perceived to be more probable than just a single event on

its own (Brotherton & French, 2015); and proportionality whereby bigger outcomes are assumed to have big causes (Leman & Cinnirella, 2007).

In the studies above and more broadly in research covering CT interest, CT belief is treated as a unidimensional construct (e.g. Bruder et al., 2013; Swami & Furnham 2012). A set of items featuring recognisable CTs (e.g. events of September 9/11) or general conspiracist statements are provided to the participant, followed by a response along a Likert scale to indicate degrees of agreement with a given CT belief. Other variables are also included in the questionnaire or experiment so that relationships between CT belief and other variables can be assessed. Through this approach, we gain great insight into the social and personality, and cognitive profile of the CT believer.

Empirical claims about monologicality are also based upon questionnaire methods. Correlational or predictive relationships found between general conspiracist belief or specific beliefs serve as evidence for monologicality. As already noted, this has emerged as a consistent finding and represents a foundation for the study of conspiracist belief. Despite this, little research has scrutinised the relationship between CTs endorsed. This is surprising given the extensive variety of CTs featured in these studies. Moreover, monologicality has been claimed based upon several specific CTs, including: events of September 9/11 (Swami, Chamorro-Premuzic, Furnham, 2010), US moon landing (Swami et al., 2013), disappearance of Amelia Earhart (Swami & Furnham, 2012), kidnapping of Natascha Kampusch (Stieger, Gumhalter, Tran, Voracek & Swami, 2013) Jewish conspiracies (Swami, 2012), London 7/7 bombings, and fictious CTs (e.g. Red Bull conspiracy, Swami et al., 2011). These specific CTs are used in conjunction with the Belief in Conspiracy Theories (BCTI, Swami et al., 2010, 2011) which claims to be a general measure of 'conspiracist ideation,' but is itself also made up of specific

CTs. The specific CTs comprising the BCTI are each famous and recognisable, including, for example, the assassination of President John F Kennedy, and the coverup of extra-terrestrials at Area 51 in the US. By contrast, other general measures of CTs, such as Conspiracy Mentality Questionnaire (CMQ, Bruder et al. 2013) or General Conspiracist Beliefs Scale (GCB, Brotherton et al., 2013), make no reference to specific CTs but rather use a series of general conspiratorial scenarios (e.g. "I think that there are secret organizations that greatly influence political decisions," Bruder et al. 2013). The GCB claims to directly evidence monologicality and both describe measuring 'conspiracist ideation' or 'conspiracist mentality' (Moscovici, 1987). These terms share the view that conspiracist belief is characterised by a stable conspiracy-orientated mindset or general worldview (Koltko-Rivera, 2004). As such, conspiracist belief goes beyond the endorsement of specific CT accounts, and is anchored around a generalised perception of conspiracy. Henceforth, the term 'monological worldview' is used to describe this perception of generalised conspiracist activity and the endorsement of multiple CT beliefs. Sutton and Douglas (2012) propose that the monological hypothesis lacks parsimony and the correlations between CTs may be explained by other latent variables such as the self (e.g. Machiavellianism; Douglas & Sutton, 2014) and beliefs about the world (e.g. perceived causal influences in the world). Bearing this in mind, the monological worldview (as with all other worldviews: Koltko-Rivera, 2004) also incorporates these wider elements, such as the self or beliefs about the world (i.e. ontological and epistemological assumptions), which serve to inform a generalised conspiracist perspective.

It is concerning that across all these studies, we gain little insight into any potential systematic variation in monologicality. Monologicality, by definition, suggests a diverse and wide scope of CTs believed. Indeed, the range of CTs used to claim monologicality extend

from human-based CTs in the natural world (e.g. government) to extra-terrestrial coverups predicated upon the supernatural world, from famous to fictitious CTs, and from general scenarios to specific details of CT events. Within this wide range of CTs endorsed, there may be systematic variations which represent general patterns of belief which have not yet been accounted for. For example, considering the distinction between the natural and supernatural world, does endorsement of government CTs and alien CTs share similar or divergent qualities? Should we assume, as is the trend in existing literature, that people who believe in government CTs, also endorse alien CTs? Moreover, it is possible that within the wide variety of CTs used to claim monologicality, that there are different patterns of belief which may reflect different assumptions about the world (e.g. natural and supernatural). It may be that 'monologicality' has become a 'catch-all' concept, whose wide diversity and scope masks underlying differences which have yet to be properly scrutinised for any systematic patterns that may lie therein.

This may be the outcome of all existing measures treating monologicality as a unidimensional construct and which are mainly anchored in natural world assumptions. Moreover, the CMQ (Bruder et al. 2013) includes no items featuring supernatural CT items. The BCTI (Swami et al., 2010, 2011) includes only two out of its fifteen items on extra-terrestrial CTs, and generates a conspiracist ideation score per participant based upon computing all fifteen items. The GCB (Brotherton et al., 2013) has one of its five subscales covering extra-terrestrial coverups, but is intended to be a unidimensional measure based upon monological theory. It is apparent that existing measures predominantly focus upon CTs occurring through natural world assumptions. Furthermore, the approach of all existing measures of CT belief is to use a set of CT items which are pre-determined and content-limited

so that responses can be constrained and a given CT belief isolated for variation along a quantitative scale. In terms of monologicality, this approach reveals when CT items correlate with each other and thus share a relationship, but it does not inform us about how that relationship may be meaningful to the CT believer in their interpretation of the world and understanding significant events. Therefore, in practice, there has been limited interest in the depth and appeal of CT beliefs which motivate interest.

The sole dependence upon quantitative measures means that we know little about how CT beliefs appeal to the layperson in a naturalistic setting (i.e. the real world) and are used to make sense of the world. CTs are symbolically rich and demonstrate a unique form of social sense-making premised upon the accusation of conspirators engaging in malign, secret agendas (Byford, 2011). By a qualitative approach, close attention could be paid to the belief content endorsed and how these beliefs relate to each other within a wider network of CTs that constitute a potential monological worldview. Qualitative data provides specific detail of the belief content as endorsed in the real world and are meaningful in two ways. First, one could consider the ontologies assumed in CT belief content, e.g. who are the proposed conspirators? Secondly, one could consider the epistemological basis to CT belief, e.g. how are certain CTs perceived to have happened? Any potential variation in monological worldviews can be gained by examining CT belief content and systematically comparing how people use CTs to make sense of the world (e.g. interpret significant events and suspect conspirators). These qualitative findings could then be used to develop a more accurate quantitative scale that has the advantage of being informed by qualitative analyses, representing the different ways in which people believe CTs in the real world.

Since limited research has focussed on how CTs are interpreted in the real world, it may be possible that there are non-monological forms of CT belief yet to be discovered. That is, it may be possible for people to be uncertain about CTs or believe in only one or two without a generalised perspective. Based on the measures described above (e.g. BCTI, CMQ, GCB), for someone who is uncertain about CTs, it would be expected that they would score around the mid-point or less along a Likert scale (e.g. 'neither agree nor disagree,' or less). This is hardly informative and reflects the limitations of using a unidimensional measure of CT belief, whereby it is assumed that all CT belief can be scaled in the same way. The possibility of non-monologicality may have been overlooked based on the predominant focus on monologicality, whereby all CT beliefs are assumed to sit within a network of mutually supportive beliefs. The possibility that a person is uncertain about CTs or endorses only one or two CT topics runs counter to the monological claim and therefore may not have been given its due attention. A 'non-monological worldview' is defined as a non-generalised CT perspective, whereby an individual is either uncertain about CTs or has a limited CT endorsement (e.g. believes in just one or two CTs). In the same way that a monological worldview can encompass more than just CT views about the outgroup with, for example, beliefs about the self and the world (Sutton & Douglas, 2014), the term 'non-monological worldview' also includes these wider elements (e.g. beliefs about self and reality) which come to propagate an uncertain or limited belief in CTs.

Going forward, there is a need to conduct qualitative research which assesses the patterns of multiple CT endorsement and considers the possibility that CT belief is multi-dimensional. This may include non-monological or uncertain forms of CT belief, to potentially different types of monological CT endorsement. This would provide an understanding of how

CT belief is not uniform and monologicality not merely an attribute, but is functional in social sense-making about the world and significant events, varying according to the set of CTs found to be meaningful to a given CT believer. It might also elucidate how CTs have a 'use value' for the layperson in providing a medium to both understand and contest those in positions of power (Pelkmans & Machold, 2011). Furthermore, these insights yielded from qualitative findings could inform quantitative research on monologicality. As noted, the existing CT belief measures are all unidimensional and predominantly assume a natural world perspective, with items mainly made up of human conspirators. If qualitative research was conducted and discovered non-monological or variations in monologicality (e.g. supernatural monologicality?), a new psychometric measure could be developed to include subscales that reflect these potential findings.

The prospect of dialogical CT belief

Goertzel's (1994) reasoning for why people tend to endorse multiple CTs in a monological way has not been backed by empirical studies. Firstly, the proposition that monological belief is 'closed-minded' conflicts with CT belief correlating with openness to experience (Swami et al., 2011; Swami & Furnham, 2012). Secondly, Wood and Douglas (2012) found that endorsement does not require the beliefs to be mutually compatible. The belief that Princess Dianna was assassinated correlated with the belief that she was still alive having staged her own death. Furthermore, the belief that Osama Bin Laden remains alive also correlated with another CT belief involving his death, and this relationship was explained by a broader belief that officials were involved in a cover-up. Wood and Douglas (2012) showed that since both the premise of being alive and dead cannot be logically true, these contradictory accounts mean that it is unlikely that CT belief endorsement is contingent upon one another.

Finally, Raab, Ortlieb, Auer, Guthmann and Carbon (2013) found that when asked to construct a plausible narrative of 9/11, individuals integrated information from disparate sources (official statements and conspiratorial statements) to explain this significant world event. Some were outright conspiratorial and others non-conspiratorial; but most importantly, the majority constructed a 'hybrid version' with a mixture of official and conspiracist statements. This shows that in constructing ideas around 9/11, people can use conspiracist and official statements representing non-conspiracist ideas. Together, these findings challenge the prospect that monological CT belief as proposed by Goertzel (1994) is 'closed-minded' with each belief being a resource for and serving to confirm another.

Latent in existing CT research is the phenomenon of dialogical CT belief. Social and personality research reports correlations between CT belief with a range of non-CT belief that constitute their own views and assumptions about the world. Firstly, CT belief correlates with religious belief (Darwin et al., 2011; Douglas et al., 2015), new age belief (Newheiser, Farias, & Tausch, 2011) and belief in the paranormal (Brotherton & French, 2013; Bruder et al., 2013; Darwin et al., 2011; Stieger et al. 2013; Swami et al. 2011). New age beliefs positively predicted the specific belief in the Da Vinci Code conspiracy but the inverse relationship was found with religiosity and Biblical knowledge. The negative relationship with religious endorsement can be explained by these CT and non-CT beliefs being in direct competition with each other, since the Da Vinci Code conspiracy offers an alternative interpretation of the events surrounding Jesus Christ (Newheiser et al. 2011). Nevertheless, across all these variables are shared assumptions about the nature of reality which involve belief in a supernatural world, characterised by unique ontologies (i.e. what constitutes the world that exists) and epistemologies (i.e. how sense is made of the perceived world). For example, religious belief

might involve an ontology of God, angels and demons. The epistemology would be apparent through how sense is made of the world on this basis (e.g. events occur by the perceived influence of God). Based on these correlations, it may be that those endorsing supernatural CTs, such as the existence of alien coverups, may also score highly on non-CT measures involving religious belief, new age belief and endorsing the paranormal.

Secondly, science offers another perspective on the world outside of CT belief, with its own distinct set of practices, rationales and knowledge base (Kuhn, 1996). Science therefore provides another area of potential dialogicality. The contest between science and CTs has been documented outside of psychology. In the limited qualitative research on CTs, Harambam & Aupers (2015) found that science was seen to be "dogmatic," being financed by vested interests (e.g. pharmaceutical companies), and excluding alternative knowledge sources outside of science and the views of the layperson. Individuals contested science's hierarchical position as an 'epistemic authority,' and criticised science by reference to scientific concepts and ideal standards (e.g. "objectivity"). Likewise, competition has been documented in online platforms and social media, as found in disparate and polarized communities concerning mainstream scientific news and conspiracy news (Bessi et al., 2015). In psychology, CTs correlate with pseudo-science endorsement, with items measuring a range of alternative ideas about scientific phenomena (e.g. "Most human beings only use approximately 10% of their brain," p.621, Lobato et al., 2014). Indeed, people who believe in CTs are less likely to follow scientific guidance on health issues like vaccinations (Jolley & Douglas, 2014a), and reject findings concerning genetically-modified foods, vaccinations and climate change (Lewandowsky et al., 2013, van der Linden, 2015). Evidently, endorsing CTs has a potential impact upon one's

engagement with science and this may be the grounds to explore dialogicality between science and CTs.

Thirdly, politics is another potential area of dialogicality. Although CTs typically involve governments and officials, CT believers may use CTs as a means to express their political points of view. Therefore, CTs may not be limited to a specific event involving the government or an official, but rather reflect a dialogical relationship, whereby CTs and political beliefs mutually inform one another. Indeed, the relationship between CTs and politics is complicated. On the one hand, CT belief has a positive relationship with political cynicism (Swami & Furnham 2012), alienation and anomie (Abalakina-Paap et al., 1999; Leman & Cinnirella, 2013). On the other, CT belief correlates with support for democratic principles (Swami & Furnham, 2012). Other findings link CTs to political extremism (van Prooijen, Krouwel, & Pollet, 2015) and right-wing authoritarianism (Bruder et al., 2013). However, CT belief varies across the political spectrum: for conservatives, high knowledge and low trust result in stronger CT belief; but with liberals, trust and knowledge are independent, negative predictors of CT belief (Miller, Saunders, & Farhart, 2015). An informational cue, such as a statement suggesting that some event related to the media is a conspiracy, is likely to increase endorsement amongst people with a high predisposition towards CTs. However, when accounting for political partisanship and CT predisposition, conspiratorial cues are no longer important influences of CT belief (Uscinski, Klofstad, Atkinson, 2016). The culture around CTs may vary according to asymmetries of political power, with CT content appealing to supporters of the opposing political party (e.g. more Republican relevant CTs when Democrats are in power, and vice versa) (Uscinski, 2014). Regarding political behaviours, higher CTs led to decreased voting attention (Jolley & Douglas, 2014b). CTs thus span the political spectrum

and have relevance beyond the purported accusation of government coverups. That is, the literature indicates that CTs are not isolated to specific events but link to the social context and a person's partisan views.

These findings suggest that a dialogical relationship exists between CT belief and non-CT beliefs about science, religion and politics. These areas are defined by their own set of assumptions in making sense of the world. As documented above, science, religion and politics, each in different ways compete with CT beliefs, and the potential dialogical relationship is shown by how endorsing CTs leads to a unique outcome in these other non-CT areas (e.g. endorsing CTs leads to rejection of science). However, these findings provide limited information about the nature of these relationships. For example, although negative or positive correlations have been found, they do not tell us whether these beliefs sit in parallel or are in some way fused together. A CT belief may lead to the rejection of climate change, but we do not get a sense of why CTs are meaningful in predicting that outcome. In order to understand the dialogical relationship, we draw upon research by Legare, Evans, Rosengren and Harris (2012) from developmental and cognitive psychology. They offer three distinct types of dialogical relations: integrative thinking, synthetic thinking and target dependent thinking. First, it may be that these dialogical beliefs represent integrative thinking, whereby one causes the other. For example, CTs can be closely integrated with science, through for example a depopulation agenda by administration of pharmaceutical drugs. Secondly, by contrast, synthetic thinking involves a loose combination of two disparate beliefs without any great reflection on how they relate. Thirdly, there may be target dependent thinking whereby beliefs remain apart and do not interact. For example, since there is social stigma attached to the label of 'conspiracy theory' (Barkun, 2003, 2016; Husting & Orr, 2007; Lantian et al., 2018;

Pelkmans & Machold, 2011), it may be advantageous to keep CT and non-CT beliefs apart when interacting with someone who does not share an interest in CTs. In addition, attempting to bring these beliefs together may result in cognitive dissonance, since participants may be frustrated by the way others do not value CTs in the same way as them (Aronson, 1969, 1992; Festinger, 1957). Finally, since CTs involve secret activities which may be somewhat removed from day-to-day life, it may be that CTs are communicated in analogical ways, likening a CT to a non-CT idea, to make the CT more comprehensible and rhetorically more plausible. There are five possible dialogical relations worth considering in pursuing an understanding of the dialogical relationship between CT and non-CT ideas.

In summary, Goertzel's (1994) proposition that CTs are 'closed-minded' and disengaged from other non-CT beliefs does not seem to hold ground. Moreover, latent in existing literature are findings which show that CT belief is dialogical and engaged with non-CT ideas about science, politics, religion, new age and the paranormal. Dialogicality is an important concept, deserving greater empirical attention. It suggests that CT belief is not an isolated phenomenon but negotiates with other social representations and non-CT ideas (Moscovici, 1961/2008). A systematic enquiry of dialogicality is required to further document how other non-CT beliefs are understood in light of their CT endorsement. In research on Social Representations Theory (SRT), dialogicality is termed 'cognitive polyphasia' (Moscovici, 1961/2008; Provencher, 2011). This term represents the polyphasic state of endorsing multiple beliefs which emerge from different social representations (e.g. representations of science, or representations of religion). The added insight of drawing upon SRT is the understanding that cognitive polyphasia—or dialogicality—are inherently social mental forms first and foremost (Kalampalikis & Haas, 2008). That is, dialogicality is not an isolated cognition, but emerges

out of competing ideas and representations of the world. Cognitive polyphasia has been documented in local, traditional representations of illness and health as they compete with Western psychiatry in India (Wagner, Duveen, Verma, & Themel, 2000), or Western biomedical knowledge in Chinese communities in England (Jovchelovitch & Gervais, 1999). Cognitive polyphasia has also facilitated an understanding of coexisting beliefs about religion and science in Nigeria (Falade & Bauer, 2017), and more broadly, SRT has enabled insight into the different ways climate science is represented in media through the use of religious metaphors (German media) or war metaphors (French media) (Caillaud, Kalampalikis & Flick, 2012). It is apparent that CTs, as marginalised representations (Husting & Orr, 2007; Pelkmans & Machold, 2011), compete with more common representations of science, religion and politics. Do these beliefs coexist in parallel or are they arranged hierarchically as shown in research on cognitive polyphasia (Falade & Bauer, 2017; Moscovici, 1961/2008)? Is it the case that these beliefs remain oppositional or are they in some way integrated (e.g. CT believers 'borrowing' scientific ideas to criticise science) (Harambam and Aupers, 2015; Legare et al., 2012)? Goertzel's (1994) proposition of the 'closed-minded' CT believer lacks empirical support and therefore a greater understanding of dialogicality is needed. Henceforth, the terms of 'dialogicality' and 'belief coexistence' are used interchangeably, to refer to dialogue between CT and non-CT beliefs. 'Dialogical relation' and 'dialogical form' are also used interchangeably. They specify the way that a CT and non-CT belief are configured in relation to each other (i.e. integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance and analogical thinking).

Understanding CT belief change over time and the quasi-religious hypothesis

A major area that has been overlooked is the development of CT beliefs, and monologicality provides only a limited understanding for why people become interested in CTs. Goertzel's (1994) proposition that endorsement occurs by one CT being assessed and accepted on the grounds of existing CTs, would suggest that CT development is relatively unilinear. Unfortunately, there is relatively little empirical evidence on CT belief development which would represent how CT beliefs change over time, particularly regarding changes towards monological belief. The most ideal standard would be a longitudinal study which could assess a person before they endorsed CTs, a period close to their early interest in CTs and followed up at later points. Unfortunately, nearly all existing literature employs questionnaires or experiments with cross-sectional samples. The closest resemblance to a longitudinal approach was by Stieger et al. (2013), who measured the kidnapping of Natascha Kampusch with two independent cross-sectional samples at two different time points over a two-year period. Measures of conspiracist ideation, paranormal belief and media engagement, were significant predictors of CTs about Natascha Kampusch's disappearance. Books and articles were important at Time-point 1 but not later; and the internet was a significant predictor at Time-point 2 alone. Despite not being longitudinal because two different samples were used, the same specific conspiracy was considered at two time-points. In an experimental setting, Newheiser et al. (2011) monitored belief in the Da Vinci Code CT measured at Time-point 1 and Time-point 2 with the same participants over a 12-week period. Less socially desirable responding, biblical knowledge and religiosity, accompanied by higher endorsement of new age beliefs, resulted in higher Da Vinci Code conspiracy endorsement. Both of these studies have the advantage of recognising that there are temporal qualities to CT belief which can

change over time but they only focussed on one specific CT. Our interest is in on worldviews and thus temporal changes in generalised CT belief. Longitudinal data is resource- and time-intensive. It is also difficult to know who is going to develop CTs in advance and therefore design an appropriate longitudinal study that targets the correct population. These complications related to longitudinal methodology may explain its absence in the CT literature (Menard, 2002).

In the absence of longitudinal data, narrative research may provide the necessary methodological tool to gain insight into CT belief development. Narratives do not provide data at different time points but through a qualitative interview, they can cover a range of past events as perceived by the CT believer. In narrative psychology, the aim is to encourage accurate recall of significant experiences and to gain an understanding of the perceived causes and consequences of events. One advantage of narratives is that they foreground the self and agency. That is, how a person interprets and makes meaning out of their experiences. Narratives have been important in the sociology of religion in understanding religious conversion and identifying the various changes associated with developing religious belief. Conversion experiences are not regarded as sudden instances of dramatic transformation as proposed in early literature (e.g. Lofland, 1965). Instead, religious belief change occurs through a wide variety of experiences, for example: interaction and affective social relations (Austin, 1977, Greil & Rudy, 1984), degrees of ideological change and commitment (Richardson, 1980; Snow, 1984); organisational characteristics and social groups (Gordon, 1974; Greil & Rudy, 1984), and actively seeking transformation (Richardson, 1980, 1985; Straus, 1979). In the context of CTs, narratives may help identify the significant experiences which draw people towards CTs. Based on the above, we would expect recall of a wide variety of experiences, that

the person exercised agency (i.e. actively seeking transformation), and the possibility that social groups, whether online or in vivo, are important factors.

Drawing upon other literatures outside CT research is necessary to gain insight into CT belief development. Franks et al. (2013) proposed that CT belief has quasi-religious properties, particularly by the use of 'counter-intuitive' beliefs. That is, religious representations involve a reinterpretation of commonsense, drawing upon objects within the natural world to make more comprehensible the abstracts ideas which characterise supernatural belief. For example, a person in the natural world and a "spirit" both denote personhood and agency; however, in order to understand the idea of "spirit," one denies the qualities of a physical and biological body but retains the idea of personhood (Boyer, 2001; Boyer & Ramble, 2001; Franks, 2003, 2004). The similarities between religion and CT belief may not be restricted to cognition alone. Moreover, using existing literature on religious change and narratives offers the advantage of being able to learn from a wide body of research. For example, the role of self, agency and social groups in changes of religious belief is an important insight to be taken forward in investigating CT belief development. It may be that CT interest begins with experiences of low agency. Religion can provide positive coping strategies in response to setbacks and perceived negative events (Pargament et al. 1990; Pargament, Koenig, Tarakeshwar, & Hahn, 2004). In CTs, uncertainty or threatening personal control have been shown to predict CT belief (Sullivan, Landau & Rothschild, 2010; van Prooijen & Jostmann, 2013; Whitson, Galinsky, & Kay, 2015. These findings show a relationship between the self and low agency which spur religious or CT belief. In the case of narrative research, questions could be directed towards the significant experiences with relevant attention paid to the role of self and agency.

In summary, the absence of longitudinal data means that the phenomenon of CT belief development has not been addressed. The resources required for longitudinal studies may explain their absence in empirical literature on CTs. Looking for alternatives, the thesis turns to narrative data and research on religious conversion. These suggest that the reasons people turn towards religion are multifaceted and involve the self, agency and social groups (e.g. Gordon, 1974; Greil & Rudy, 1984; Richardson, 1980, 1985; Straus, 1979). Using literature on religious belief change is consonant with the quasi-religious approach, which proposes that CT belief shares some similarities with religious belief (Franks et al., 2013). Narratives about CT belief development would enable insight into the significant experiences and events which are perceived to have influenced an interest in CTs. It would also contribute to an understanding of how individual's come to develop monological worldviews.

Aims

The thesis aims to further an understanding of monologicality, dialogicality and CT belief development:

Monologicality (Chapter 2), concerns a generalised conspiracist worldview and endorsement of multiple CT beliefs. The research aim is to examine the monological worldview according to the symbolic resources which characterise CT belief content and understand how CTs are used to make sense of the world. Attention will be paid to any possible variations in monological worldviews (e.g. CT beliefs and generalised outlook predicated upon natural or supernatural world) and the possibility of non-monological CT worldview (e.g. uncertainty about CTs).

Dialogicality (Chapter 3), concerns the relationship between CT and non-CT beliefs (e.g. correlation between CTs and religious belief). Specific attention will be paid to potential

types of dialogical relations (i.e. the way non-CT beliefs are represented in CT beliefs) in considering various non-CT beliefs about science, religion and politics.

CT belief development (Chapter 4), considers the change in CT belief over time, from early to later CT interest. The thesis will draw on narrative research and literature on religious belief change to gain insight into CT belief development. The aim is to identify any significant experiences and events which are perceived to have influenced CT belief and the development of monological worldviews.

Scale development (Chapter 5), the aim is to develop a psychometric measure of conspiracist worldviews, using the insights gathered from the qualitative analysis of Chapter 2. Developing a psychometric measure could move the quantitative investigation of CT belief beyond a single dimension, to exploring CT belief as a multi-dimensional construct – made up of several subscales representing different ways of endorsing CTs (e.g. non-monological or monological CT worldviews). Furthermore, founding a psychometric measure has the potential to validate earlier qualitative findings of Chapter 2, which in turn would give us confidence that the psychometric measure has some basis in the real world in representing the different ways people use CTs for social sense-making.

Mixed-methods approach

The approach taken forward is mixed-methods. The empirical work of Chapters 2, 3 and 4 use qualitative methods to address their respective research aims described above. As noted earlier, existing research has mainly used questionnaires to measure general or specific CT belief. This may reflect that people who hold CT beliefs could be sceptical of science and thus reluctant to engage with scientific research (Aupers, 2012; Harambam & Aupers, 2015),

making them a difficult-to-reach population. Consequently, we know little about the symbolic resources of CTs and their uses in sense-making. Qualitative methods could allow for a more nuanced understanding of CT belief by using interviews to generate first-hand verbatim accounts from people who claim to have an active interest in CTs (Clandinin & Connelly, 2000; Hopf, 2004; Kvale & Brinkman, 2009). Past qualitative research in other disciplines outside psychology has indicated the richness of conspiracist beliefs (e.g. Harambam & Aupers, 2015; Lewis & Kahn; Popp, 2006). However, empirical research in psychology has yet to examine the phenomenon of CT belief with interview-based methods and qualitative data analysis. On the issue of monologicality, a qualitative approach may also reveal qualitatively distinct types of CT belief. The worldview construct could be more thoroughly researched by attending to its constituent themes (i.e. self, ingroup, outgroup, reality, future, action). Indeed, the flexibility of a semi-structured interview method can cater for individual variation in worldviews through follow-up questions about a given CT (Kvale & Brinkman, 2009). Regarding dialogicality, a qualitative analysis could unpack the relationship of CT and non-CT belief, in considering how two ideas from disparate sources (e.g. conspiracy vs science) interact with each other. Finally, narratives are based upon memory, and through recall, a person can share personal experiences relevant to perceived changes in their endorsement of CTs (Clandinin & Connelly, 2000; Jovchelovitch & Bauer, 2000; Rosenthal, 2004).

Finally, in going full-circle, based on the qualitative insights of Chapter 2, Chapter 5 aims to develop a psychometric measure which captures a range of CT beliefs, ranging from non-monological (uncertain CT interest or firm belief in one or two CTs) to fully monological worldviews. Approaching a phenomenon with two different methodological approaches is termed triangulation (Denzin, 1978). This has the advantage of providing different types of

data (qualitative and quantitative) which corroborate or contrast with each other. Moreover, if findings overlap and show consistency through different methodological approaches, we gain greater confidence in the validity of our findings (Caillaud, Doumergue, Préau, Haas, & Kalampalikis, 2019).

Research Questions

The research questions motivating Chapter 2-5 are presented in Table 1 below:

Table 1. *Research questions by Chapter.*

Chapter	Research Question(s)
Chapter 2	What are the symbolic resources of CT belief? How might variations in these beliefs relate to a possible CT worldview(s)? Specifically, are there non-monological worldviews (non-generalised and limited CT endorsement) or is all CT belief characterised by monological worldview(s) (generalised and multiple CT endorsement)?
Chapter 3	Are there dialogical forms of belief coexistence showing a relationship between CT and non-CT beliefs (e.g. beliefs about science, religion and politics)? Are there different types of dialogical relations between CT and non-CT beliefs?
Chapter 4	What are the significant experiences related to CT belief development as perceived by people who have an interest in CTs? Can these perceived experiences be mapped according to pre-CT belief development, early-CT belief development and later-CT belief development?
Chapter 5	Can a psychometric measure (Conspiracist Worldview Scale) be developed and validated, which captures the various non-monological and monological CT worldviews, as found in Chapter 2?

Links between chapters

The development of the thesis and links between the Chapters are summarised below.

Chapter 2 aimed to establish the symbolic resources informing a potential conspiracist worldview and explore the different ways in which CT beliefs were endorsed beyond a sole focus on monologicality which had been the focus of past empirical literature. Chapter 2 was co-authored by Professor Bradley Franks, Professor Adrian Bangerter, Professor Martin Bauer, Mr Matthew Hall and Mr Mark Noort. Professor Bradley Franks was the primary author. My contribution to this project involved collecting 85% of the data and conducting 25% of the analysis. Chapter 2 overcame a recognised issue of CT believers being a difficult-to-reach population. A thematic analysis triangulated data from interviews, blogs and media sources. The final outcome was a worldview construct based upon six themes: the self, ingroup, outgroup, reality, future, and action. Importantly, the study reported an ascending typology from non-monological to monological CT worldviews based upon qualitative differences according to these six themes. There were two types of monological worldview which differed according to human-based generalised conspiracism with multiple CT endorsement (Type 4), and supernatural generalised conspiracism with multiple CT endorsement (Type 5). There were also three types of non-monologicality, ranging from: zero CT interest and being politically active (Type 1), openness to CTs without strong conviction (Type 2, and strong belief in a limited range of one or two CTs (Type 3). None of these findings had been reported elsewhere in the literature on CT belief. Together, these findings showed that CT belief was more complex and beyond the scope of the monological hypothesis initially proposed by Goertzel (1994). Since publication in Frontiers in Psychology, this paper has been recognised for insights into

CT worldviews, as well as self and social groups as important elements of CT belief (e.g. Douglas, Sutton, & Cichocka, 2019; Klein et al., 2019).

The lack of qualitative data in the literature on CT belief was readily apparent and motivated the continued use of this methodology. Having gathered participants for Stage 2 of Chapter 2, the decision was made to continue recruiting participants by continued communication with the social clubs discussing CTs and their alternative worldviews. Both Chapter 3 focussing on dialogicality and Chapter 4 focussing on perceived CT belief development drew upon the same sample. The datasets were split. Chapter 3 focussed on dialogicality and analysis based upon coding: self-view (personal and atemporal data), ingroup, outgroup, reality, future and action. All comments relevant to self-development which had the characteristics of biographical self-narrative data were put aside for analysis in Chapter 4.

For Chapter 3, I was the primary author, and the paper was co-authored with Professor Bradley Franks and Professor Martin Bauer. Chapter 3 aimed to establish the dialogical relations between CT belief and non-CT beliefs. Chapter 2 previously demonstrated that Goertzel's (1994) monologicality hypothesis provided only a limited scope to examine CT belief and that there were many other types of non-monological to monological CT worldviews. Informed by this and the dialogicality as a latent finding in the literature, there was good reason to question Goertzel's (1994) monological claim that CT belief is 'closed-minded.' To challenge this claim, Chapter 3 investigated dialogicality based upon an interest in how people with CT views negotiate the world, particularly with regards to external beliefs about science, religion, and politics and society. A recent finding in developmental and cognitive psychology by Legare et al. (2012) reported three types of belief coexistence – integrative thinking, synthetic thinking and target dependent thinking. These ideas very closely

resembled cognitive polyphasia of Social Representations Theory (SRT) (Moscovici, 1961/2008; Provencher, 2011). The decision was made to see whether the ways in which CT and non-CT ideas coexist could be established using the framework proposed by Legare et al. (2012) and informed by SRT. It would later transpire that cognitive dissonance and use of analogies were needed additions to make sense of the dialogical comments of CT believers. Five dialogical relations were identified: integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance and analogical relations. It was found that Goertzel's (1994) monological proposition that CT belief was 'closed-minded,' lacked an empirical basis in light of these findings. This was particularly the case since Type 5, which represented supernatural monological CT worldviews, expressed the most integrated ideas using CT and non-CT beliefs. In summary, dialogicality is a central element to CT belief.

Chapter 4 was sole authored and built upon the insights of Chapter 2 which had foregrounded the importance of self-development through endorsing CTs. Chapter 4 aimed to document the perceived development of CT belief according to the narratives of people who had pursued an interest in CTs. Chapter 4 also aimed to understand whether the perceived CT belief development was different according to the monological typology developed in Chapter 2. Based upon the quasi-religious hypothesis (Franks et al., 2013), Chapter 4 began with the view that research on religious conversion could inform the investigation of CT belief development. The empirical literature from the sociology of religion and religious psychology showed that religious conversion was multifaceted and foregrounded the roles of self and agency. These insights were important since it suggested that there would be great variances in people's experiences. Rather than attempting to follow every idiosyncrasy of a person's perceived changes in CT belief, an empirical framework was uniformly applied of pre-CT

belief development, early-CT belief development and later-CT belief development. This made empirical sense since nearly all participants shared experiences relevant to each of these three periods. The final outcome were insights into the perceived origins and trajectories of CT belief. Importantly, Chapter 4 also found a lessened engagement with CT belief. Chapter 4, therefore provided a much more thorough investigation into self-development than initially reported in Chapter 2.

For Chapter 5, I was the primary author, and the paper was co-authored with Professor Bradley Franks, Professor Martin Bauer, and Professor Adrian Bangerter. Chapter 5 aimed to develop a psychometric scale based upon the monological CT typology revealed in Chapter 2. Study 1 conducted an exploratory factor analysis and revealed five subscales, representing five types of CT worldview. This scale is called the Conspiracist Worldview Scale (CWS) and is made up of five subscales: Type 2, Type 3, Type 4, Type 5-Alien, and Type 5-Spiritual. In later studies, the CWS achieved construct (Study 2A), convergent (Study 2B), concurrent (Study 2C) and diagnostic (Study 3) validity. Importantly, Types 2-4 emerged as hypothesised, and Type 5 was split into Type 5-Alien and Type 5-Spiritual. Type 1 did not emerge because it featured no CT belief. To establish the diagnostic validity of Study 3, a latent class analysis showed three distinct categories of people. One group was fully monological, scoring high across all Type subscales. Interestingly though, the majority of participants were non-monological, falling in either a class made up of Type 2 alone, or a class made up of Type 2 and Type 3. These findings triangulate the empirical work of Chapter 2, and confirm the importance of looking beyond monologicality to consider less developed CT worldviews (i.e. Type 2, Type 3). Chapter 5 also supports the findings of Chapter 3 which focussed on self-development. Moreover, many of the items feature content not only focussed upon the

outgroup, but consider self, ingroup, reality, future and action. These elements demonstrate that CTs encompass a broader worldview and make the CWS stand out amongst other measures which only focus on the outgroup.

Chapter 6 presents the conclusion of the thesis. It presents a summary of key findings, as well as empirical, theoretical and methodological contributions. The thesis implication that CT endorsement represents a prefigurative social movement is considered (Yates, 2015), and limitations and future research are discussed.

CHAPTER 2 | Monologicality and a Typology of Conspiracist Worldviews

Article Title

Beyond "monologicality": Exploring conspiracist worldviews.

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Original Citation

Franks, Bradley and Bangerter, Adrian and Bauer, Martin W. and Hall, Matthew and Noort, Mark C. (2017) Beyond "monologicality"? Exploring conspiracist worldviews. *Frontiers in Psychology, 8 (861).* ISSN 1664-1078

Notes

1. The primary author is Dr Bradley Franks.

Abstract

Conspiracy theories (CTs) are widespread ways by which people make sense of unsettling or disturbing cultural events. Belief in CTs is often connected to problematic consequences, such as decreased engagement with conventional political action or even political extremism, so understanding the psychological and social qualities of CT belief is important. CTs have often been understood to be "monological," displaying the tendency for belief in one conspiracy theory to be correlated with belief in (many) others. Explanations of monologicality invoke a nomothetical or "closed" mindset whereby mutually supporting beliefs based on mistrust of official explanations are used to interpret public events as conspiracies, independent of the facts about those events (which they may ignore or deny). But research on monologicality offers little discussion of the content of monological beliefs and reasoning from the standpoint of the CT believers. This is due in part to the "access problem": CT believers are averse to being researched because they often distrust researchers and what they appear to represent. Using several strategies to address the access problem we were able to engage CT believers in semi-structured interviews, combining their results with analysis of media documents and field observations to reconstruct a conspiracy worldview – a set of symbolic resources drawn on by CT believers about important dimensions of ontology, epistemology, and human agency. The worldview is structured around six main dimensions: the nature of reality, the self, the outgroup, the ingroup, relevant social and political action, and possible future change. We also describe an ascending typology of five types of CT believers, which vary according to their positions on each of these dimensions. Our findings converge with prior explorations of CT beliefs but also revealed novel aspects: A sense of community among CT believers, a highly differentiated representation of the outgroup, a personal journey of conversion, variegated

kinds of political action, and optimistic belief in future change. These findings are at odds with the typical image of monological CT believers as paranoid, cynical, anomic and irrational. For many, the CT worldview may rather constitute the ideological underpinning of a nascent pre-figurative social movement.

Keywords

conspiracy theories, monological belief system, worldviews, quasi-religion, interviews

Introduction

Explaining complex societal events is itself complex. The use of conspiracy theories (CTs) to make sense of destabilizing events (like the assassination of major public figures, the unpredicted destruction of major public buildings, sudden infectious disease outbreaks) is a widespread response to world complexity (e.g., van Prooijen, 2011). CTs involve symbolic coping which transmutes the diffuse anxiety arising from such events into specific threats caused by the purportedly malevolent action of powerful actors (e.g., Harrison and Thomas, 1997; Wagner-Egger and Bangerter, 2007; Byford, 2011). Since societal complexity and uncertainty appear to be increasing, conspiratorial thinking may increase as a response (e.g., Aupers, 2012).

A range of practical consequences of belief in CTs has been documented. For example, exposure to anti-vaccine CTs decreases people's intentions to vaccinate (Jolley and Douglas, 2014a). Similar society-wide public health implications arose for polio vaccination in Nigeria (Falade & Bauer, 2017), where the vaccine was seen as the instrument of a Western birth-control plot. In the United States, belief that birth control and HIV/AIDS are forms of genocide against African Americans is associated with negative attitudes toward contraception (Bogart and Thorburn, 2006). In broader terms, CT belief and exposure is associated with feelings of

powerlessness (Abalakina-Paap et al., 1999; Jolley and Douglas, 2014b), which, for specific anti-government and climate change CTs decreases conventional political engagement and pro-environmental intentions. Moreover, CT belief correlates with political extremism (van Prooijen et al., 2015), and generalized CT beliefs have been argued to be precursors of terrorism endorsing beliefs (Bartlett and Miller, 2010).

Since belief in CTs has significant practical consequences, it is important to understand their associated psychological and social factors. Psychological qualities associated with CT belief include Machiavellianism (Douglas and Sutton, 2011), schizotypy (Darwin et al., 2011), anomie, political cynicism, distrust in authority, (Goertzel, 1994; Abalakina-Paap et al., 1999; Swami et al., 2011). Specific aspects of cognitive processing associated with CT belief include higher tendency to detect agency where there may be none (e.g., Brotherton and French, 2015), which is reduced by higher levels of education (Douglas et al., 2016), an effect that may be explained by the general negative correlation between belief in CTs and analytic processing style (Swami et al., 2014). CT belief is also associated with processing errors and biases – such as the conjunction fallacy (tendency to overestimate the probability of co-occurring events: Brotherton and French, 2015), and the proportionality bias (attributing larger-scale causes to more significant events: Leman and Cinnirella, 2007).

However, belief in CTs has also been found to be somewhat responsive to circumstances: van Prooijen and Jostmann (2013) found that inducing uncertainty increased conspiracy belief, whilst exposure to specific CTs (e.g., concerning Princess Diana: Douglas and Sutton, 2008; and John F Kennedy: Butler et al., 1995) also increased it.

This paper offers two contributions to the study of CTs – one theoretical, based on empirical data; and another methodological.

The theoretical contribution concerns the contention that CTs are 'monological' (e.g., Swami et al., 2011; Wood et al., 2012; Sutton and Douglas, 2014): belief in one CT predicts belief in more CTs, providing the foundation of generalized conspiratorial perspective. We suggest that assessing the nature and degree of monologicality requires understanding the detailed contents of a *conspiratorial worldview*. The methodological contribution flows from the theoretical contribution; it concerns how researchers can access such contents given that CT believers are a "hard to access" population (Wood and Douglas, 2015). Sustained theoretical development and empirical assessment of monologicality requires addressing the methodological access problem.

Monologicality suggests that CT thinking is a stable cognitive style, disposition or trait. This possibility was outlined by Goertzel's (1994) suggestion that conspiratorial thinking offers a general set of assumptions about authority "cover ups" which are portable across specific topics or events. Social psychology findings also suggest a "monological" tendency, whereby belief in one conspiracy predicts belief in others. CTs may thus comprise a network of mutually supporting beliefs about the functioning of the social world (Swami et al., 2011; Wood et al., 2012; Sutton and Douglas, 2014). Belief in CTs, on this account, is driven less by the specific contents of each CT and more by a general conspiratorial mentality (Moscovici, 1987) or worldview (Koltko-Rivera, 2004), whose main tenet involves rejection of official explanations. This suggests that CT belief does not arise from inferences drawn from a set of observations, but rather from applying a conspiratorial worldview to those observations. Indeed, Goertzel's (1994, p. 739) original suggestion was that monological CTs expressed a "closed" mind, unlike "dialogical" belief systems, which "engage in a dialog with their

context." He also suggested that CTs need not be monological – some may be dialogical, if they are open to facts and disconfirming evidence.

Similarly, Sutton and Douglas (2014) pointed out several related problems with monologicality. The idea that CT belief indicates closed-mindedness is contradicted by its correlating with openness to experience (Swami et al., 2010). The idea that CT believers are politically cynical is contradicted by the finding that CT belief sometimes correlates with support for democratic principles (Swami et al., 2011). Moreover, people can hold mutually contradictory CT beliefs, suggesting that monologicality is less driven by the CT accounts *per se* than by a more general belief in the deceptive nature of official explanations. Monological explanation also lacks parsimony, since third variables (e.g., personality traits) may affect belief in various conspiracies, creating spurious correlations between them.

Pursuing these issues, we contend that previous discussions of monologicality have had little to say about the *contents* of a putative conspiratorial worldview. They typically sample members of student and general populations using questionnaires to investigate their degree of belief in CTs formulated as vignettes by the researchers: monologicality is defined as the degree of correlation between belief in multiple CTs. Such correlations are then correlated with other psychological variables, offering an important picture of the structural landscape of CTs and those variables, as noted above. However, it is a landscape that is only sparsely populated by people's concerns and the contents of their beliefs. Most social psychology research on monologicality in CTs is thus deliberately content-free, offering little account of the symbolic resources – worldviews – people draw on in constructing CTs and their use in everyday sensemaking [exceptions include Byford's (2011) critical account of CTs, and Lewis and Kahn's (2005) description of the cosmogony of CT guru David Icke]. This inattention to

symbolic content is surprising given that one key function of CTs is precisely to make symbolic sense of destabilizing events, which can allow individuals and groups to cope with them.

Such past findings hint that individuals may adhere to a conspiratorial worldview to varying degrees. This might explain some of the conflicting findings indicated by Sutton and Douglas (2014). However, it remains unclear how individuals use elements of a conspiratorial worldview in sensemaking. More open-ended methods (such as semi-structured interviews) would allow participants to frame the content and degree of commitment to CTs on their own terms and out of their concrete life situations. They thereby allow finer-grained assessments of the content of conspiratorial mentality and degree of monologicality. The extent of their monologicality would emerge from their own descriptions of their beliefs rather than from interpreting their endorsement of a series of pre-determined items. And further insight would be gained into the symbolic foundations of a conspiratorial worldview. For example, epistemically, does a person believe all of the CTs they believe in the same way – the same level of conviction, responding to the same kinds of doubts about societal events and threats, offering similar degrees of uncertainty management? And ontologically, do the CTs all draw on the same everyday commonsense ontology, or do they posit entities or properties that go beyond the everyday, perhaps positing a role for the supernatural?

However, any such research project is confronted by the "access problem": Wood and Douglas (2015, p. 6) note, people "with a high degree of conspiracist ideation" are likely to be averse to social science research, which is often associated with universities that are "part of the problem": distrust of authority applies to universities as much as to governments and corporations. The London School of Economics, for example, takes a prominent role in David Icke's conspiracist worldview (Vice, 2012).

The possibility that not all CT believers are monological, and that those who are may ground their monologicality in contents that are not confined to distrust of authority, flows from the quasi-religious approach to CTs (Franks et al., 2013). This suggests that CTs may be analogous to religious representations, involving explanations which use representations of conspiratorial actors with supernatural or super-human degrees of agency that reflect minimally counterintuitive departures from commonsense explanations. These representations are communicated and reconstructed as part of the social sensemaking process, as in social representations theory (Bauer and Gaskell, 1999).

Our Study

Against this backdrop, we aimed to document contents of CTs and link them to their use in sensemaking and symbolic coping by different individuals. These contents constitute materials for reconstructing a conspiracy worldview, as well as the potentially different ways in which individuals might subscribe to or engage with it. According to Koltko-Rivera (2004, p. 3), a worldview is a set of "beliefs and assumptions that describe reality. A given worldview encompasses assumptions about a heterogeneous variety of topics, including human nature, the meaning and nature of life, and the composition of the universe itself, to name but a few issues." Therefore, a *conspiracy worldview* should involve positionings on issues of ontology (the nature of reality), epistemology (the nature of knowledge, what can be known), and agency (human action and free will) (Koltko-Rivera, 2004). Moreover, a specifically *conspiracy* worldview might also offer resources for self-definition, enabling believers to make sense of their life situation by positioning themselves relative to society and reality, suggesting (following Moscovici, 1987) that it involves representations of *society*, featuring distinctions between groups, especially (pure, good) ingroups and (malevolent) outgroups. Byford (2011)

has analyzed the "anatomy" of CTs as narratives and identified elements including conspiratorial groups, conspiratorial plans and motifs like "manipulation of the many by the few." Additionally, a conspiratorial worldview might function as a "meta-narrative" (Lyotard, 1979) that grounds individual CT stories.

We pursued this goal in a research project featuring open-ended collection and triangulation of qualitative data (most prominently discursive productions) from multiple sources (cultural products, participant observation, and semi-structured interviews) supported by thematic analysis over the course of two and a half years (May 2013 to December 2015). Like many qualitative endeavors (Golden-Biddle and Locke, 2007), our findings emerged progressively out of this process. The main implication of our study is a tentative typology along a spectrum of conspiracy worldviews and the thematic dimensions that constitute them. This typology is informed by our empirical data as well as by theoretical insights from relevant domains of social psychology, sociology, and anthropology.

Method

Data Collection

To investigate the detailed contents of the CT worldview, we sought to engage CT believers in interviews, and had to address the access problem, unlike past research which, in using student or general population samples, or written and on-line media, has thereby sought to circumvent it.

Recruitment of participants took place in two stages. These stages were not prospectively planned: Stage 2 emerged from the challenges arising in Stage 1. Stage 1 corresponds to a more informal, explorative moment, whereas in Stage 2, we conducted more

formal data collection (interviews according to a specific sampling strategy). In Stage 1, we aimed to approach CT believers to understand the contents of their beliefs, and document some of the cultural products that circulate in their milieu (in websites, podcasts and their transcripts, books and mass media). As might be expected (Wood and Douglas, 2015), accessing participants was not straightforward: Several direct attempts failed. Individuals contacted via website chat-rooms dedicated to CTs[1] were unwilling to be interviewed by university researchers, and one of us (MN) was subsequently excluded from those chat-rooms. Similarly, MB attempted to make contact with a CT source via a personal contact acting as middleman; contact was refused because the London School of Economics was deemed "part of the conspiratorial world." Again, MH's invitation for an interview was rejected on the grounds that the team of which he was a part were co-authors of a paper the respondent had read and considered to misrepresent those with conspiracy beliefs (Franks et al., 2013). A final example arose at a protest gathering outside the Bilderberg Group meeting in Watford, United Kingdom (June 8–9, 2013). After speaking with a participant, MN asked them to take part in an interview on CTs; this resulted in his being threatened and physically assaulted. These altercations echo the "recursive fury" over scientific analysis of conspiracist ideation (Lewandowsky et al., 2013).

We nevertheless managed to recruit one respondent for an interview via the Icke website as well as two other respondents via a personal relation of MB. All three respondents attended a presentation by David Icke at Wembley Stadium, United Kingdom. The couple was subsequently interviewed at their home abroad. We also engaged in participant observation at two conspiracy theory-related events – the protest meeting outside the Bilderberg Group

[1] www.davidicke.com

meeting and a protest outside the Royal Courts of Justice in London regarding the death of Dr David Kelly (July 18, 2013).

In Stage 2 we learned lessons from Stage 1, approaching access more indirectly. We addressed two aspects of our recruitment attempts which appeared to compound the access problem. One concerned participants' perceptions of how they and their beliefs would be characterized by the research. Another concerned the participants' overall perception of the research and the researchers – their broader sense of our trustworthiness. These are often cited as key issues in accessing hard-to-reach samples in ethnography or other fieldwork (e.g., Norman, 2009; O'Reilly, 2009; Bengry-Howell and Griffin, 2012; Browne and McBride, 2015). While we did not engage in ethnography, our approach used methods frequent in such research.

Regarding the first, our experience in Stage 1 confirmed Wood and Douglas's (2015) finding that CT believers resist the label "conspiracy theory," which they take to stigmatize them and their attempts to understand the world – excluding them from "the imagined community of reasonable interlocutors" (Husting and Orr, 2007, p. 127). They instead preferred self-descriptions as being involved in "research" about how to explain unsettling events, seeking the truth about them, and thereby having an interest in "alternative explanations" or "alternative worldviews." The use of non-stigmatizing labeling during recruitment was thus essential to communicate our aim of understanding CT beliefs from the perspectives of the participants, rather than imposing a particular perspective on them or seeking to debunk them. We thus were careful to avoid the term "conspiracy theory" during recruitment and the interviews (except when participants were themselves invited to qualify or debate its meaning and application). Additionally, to enhance trust we used descriptions CT

believers employed to describe themselves. Hence, our invitation described people who were "truth seekers" or "change seekers," who "have alternative worldviews and beliefs, and may be critical of mainstream media, politics, economics, religion, or society."

Regarding the second aspect, our Stage 1 experience suggested that direct contact with potential participants would be difficult, since LSE is often seen as 'part of the problem.' We thus adopted an indirect approach, via a trusted intermediary or gatekeeper, whom the participants themselves would accept as indicating our credibility. This was achieved via the webmasters of several on-line communities in the South East of England. MH asked the webmasters to place a request for participants on their community websites. Interested members then contacted MH directly to ask any questions before committing themselves to involvement and to arrange timing and locations of interviews. This ensured that the research project was first framed within a non-judgmental context which supported the free expression of participants' beliefs. Although indirect, the approach did not conceal MH's academic affiliation; to withhold this information until later would likely have suggested deception and undermined the development of trust.

Participants

We interviewed participants between July 2013 and May 2015. In Stage 1, we recruited three participants who were interviewed on July 19, 2013, in London (a 43-year-old man, hereafter R1.1), and August 4–5, 2013, and in a location outside the United Kingdom hereafter R1.2 (man, 57 years) and R1.3 (woman, in her late 40s). In Stage 2, 36 interviews took place with each of 18 participants being interviewed twice. We only report findings here from the first interview with each participant (hereafter, R1–R18), as the second interview focused on political participation in general and less on CTs. Initial interviews took place between 9 and

23 March, 2015, in Kent (*n* = 2), Central London (*n* = 9), Greater London (*n* = 1), Suffolk (*n* = 2), and via remote communication, e.g., Skype (*n* = 4). Follow-up interviews took place in the same locations in late May 2015. There were 10 men and 8 women, ages ranging from 23 to 70.

Interviews

In both stages, we used semi-structured interviews, which outlined the research purpose, after which participants gave consent to take part; interviews were conducted in English and audiorecorded. The Stage 1 interview protocol focused on respondents' personal backgrounds, on the ideas of David Icke, on religion and spirituality, and on contacts with like-minded others or non-believers. The Stage 2 interview protocol developed from Stage 1 and asked participants to describe how they came to be interested in alternative explanations, to indicate the kinds and range of CTs (if any) they believed, to reflect on the content of those beliefs and their connections with "new age" and other beliefs, and to indicate the kinds of social and political actions and relations they typically engaged in. Interviews typically lasted 60–90 min.

Data Preparation and Thematic Analysis

All interviews were transcribed verbatim, but without detailed transcription of backchannel utterances, disfluencies, or other paralinguistic information. We employed thematic analysis to discover the range of contents produced by participants. Thematic analysis is widely used in the analysis of texts and transcripts, well-suited to exploring worldviews and social representations (e.g., Braun and Clarke, 2006; Joffe, 2012). It assesses and categorizes the kinds of meanings that are expressed, in a way that stays close to the texts themselves. Our thematic analysis combined both bottom-up, data-driven and theory-driven, top-down

elements. Our method was abductive, the simultaneous ordering of data and emergence of a conceptual framework into a coherent logic that offers a productive guide for research.

Given the prior research on worldviews and CT rhetoric described above, we started from an initial list of theoretically relevant themes like "the nature of reality", "the ingroup," "the outgroup," "the self," or "sense of agency." In Stage 1, we triangulated data from several sources: interview transcripts (with R1.1, R1.2, and R1.3), blogs and materials produced by CT entrepreneurs (most prominently David Icke, e.g., a DVD recording of his Wembley event, books and web discussions) and participant observations. Subsequently, the original themes were modified (and developed into more specific subthemes) in discussions amongst the authors. The outcome was an initial, informal mapping of key themes of a conspiratorial worldview. In Stage 2, the 18 interview transcripts (R1-18) were distributed amongst AB, MB, BF, and MH, who coded the interviews individually according to the themes generated in Stage 1. This procedure suggested that while Stage 1 themes also arose in Stage 2 interviews, they could not fully accommodate the range and details of contents in Stage 2. As a consequence, over a series of meetings, we refined the Stage 1 themes to accommodate new variations that emerged. This resulted in a final list of six themes:

(A) *Reality*: Participants' views of reality – the causal forces in society that might sustain any CTs to which they subscribed, and whether appearances can be taken at face value or not.

(B) *Self*: Participants' views of themselves – their biography and any significant events by which they became interested in CTs, and their subsequent personal development.

(C) *The outgroup(s)*: Participants' views of any outgroups defined relative to CTs – e.g., conspiratorial group(s), other non-conspiring members of society.

(D) *The ingroup*: Participants' views of any community or ingroup to which they belonged – e.g., other CT believers, prominent individuals who act as leaders or 'heroes' in those communities or in the promulgation of those beliefs.

(E) *Action*: Participants' CT-related actions – e.g., political engagement, social meetings.

(F) *The Future*: Participants' views of how the world will be in future – based on continuation of conspiracies or on successful challenges to those conspiracies.

In analyzing the Stage 2 interviews, the variations in the way participants talked about these themes suggested potentially different depths of engagement with the contents of the CT worldview: starting from an inkling that "things are not what they seem to be" and moving toward full endorsement of a conspiracy worldview via various stages. This observation was the basis for our typology.

Results: An Ordered Typology of the Conspiratorial Mentalities

We present results as follows. In section "The Conspiracy Worldview Reconstructed", we describe our reconstruction of the conspiratorial worldview in its fully fledged form, as an overview of our findings. In section "Typology of Individual Variations on the Conspiracy Worldview", we describe our typology of individual variations on the conspiratorial worldview, according to the themes identified. In section "Thematic Variations", we describe variations on each of the themes. Wherever appropriate, we reference individual interviews or include verbatim quotations from the interviews as illustrations.

The Conspiracy Worldview Reconstructed

A graphical summary of the reconstructed conspiracy worldview is given in **Figure 1**: this features the five main themes – the outgroup, the self, the ingroup, action, and the future, as below.

The outgroup is structured around the official narratives of events, which are illusions that hide the reality that is depicted in CTs. There are three hierarchically ordered subgroups in the outgroup. The first group is the "sheep," the masses of anonymous people who believe in official narratives. They are dormant, being sedated by fast food, popular culture and entertainment, religion, chemtrails, vaccines, and the pursuit of normative goals like money, family and the like. They are also monitored via invasive surveillance techniques. The second group is the "middle management," individuals and groups who occupy visible positions of expertise and power in society, including politicians, police, the military, business consultants, or scientists. They are responsible for maintaining the sheep in thrall, and they answer to the third group, the "evil elites" (Campion-Vincent, 2005). These latter are the actors who have true power: secret cabals acting in the shadows, controlling middle management to achieve and maintain world domination to further their own ends. Evil elites can be government organizations like the CIA or MI6, multinational corporations or conglomerates (e.g., Big Pharma), networks (e.g., the Bilderberg group), royalty, particular ethnic groups (the Jews) or even reptilian aliens.

The self is seen as on an epistemic and/or spiritual journey of discovery that can involve several stages. We distinguish five types of CT belief which correspond to those stages, with qualitatively different ways of being conspiratorially minded based on different degrees of elaboration of CT ideation; the process along them may indicate a path of conversion. Type 0

comprises individuals who subscribe to the official version of events, the sheep in the outgroup. The CT journey begins with unease with the way the world is, or a sense of being different or not fitting in. Interactions or altercations with sheep lead to the self being ridiculed or criticized, pushing him/her further out of the system and toward initial belief in specific CTs (this corresponds to Types 1–3). At some point, a conversion experience or spiritual awakening occurs, sometimes triggered by a traumatic personal experience (illness, loss of a loved one) or a public event like 9/11. It is at this point that the self subscribes to a fully fledged conspiratorial worldview, either postulating a conventional ontology of evil elites (Type 4) like "Big Pharma" or MI6 or a supernatural ontology (Type 5) like reptilian shapeshifting aliens. Types 4 and 5 are thus not differentiated by the extent of their conspiratorial belief but by the content of that belief.

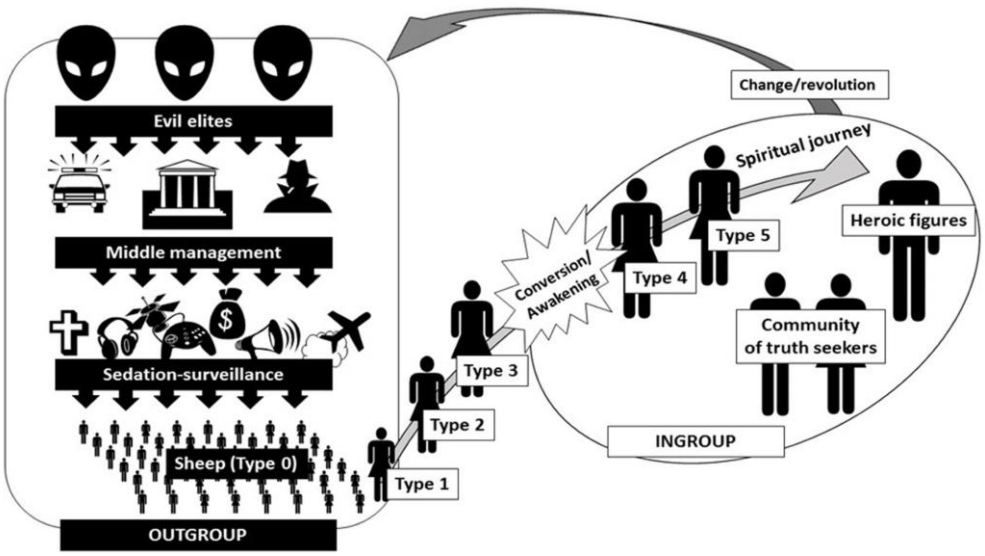

FIGURE 1 | The conspiracist worldview: an elaborate hierarchy of deception and progressive degrees of insight.

Figure 1. The Conspiracist worldview: an elaborate hierarchy of deception and progressive degrees of insight.

The ingroup comprises individuals who have awakened to the reality behind CTs: like-minded truth seekers on similar research or spiritual journeys, sometimes acquiring an almost mystical sense of collective agency. Related to this community are leader figures or "CT heroes," varying types of individual to whom participants may have different forms of allegiance – e.g., maverick intellectuals or scientists with contra-establishment views (e.g., Chomsky), gurus like David Icke, or historical figures like Christ or Buddha. This ingroup has porous boundaries interviews typically lasted 60–90 min, with other communities (e.g., hackers or the Occupy movement). Ingroup members communicate with each other *in vivo* and on-line and sometimes engage in coordinated political action (e.g., organizing protests, joining a commune).

The fully elaborated conspiratorial worldview involves a vision of the future where change will come, overthrowing the evil elites. This may arise "naturally" from increasing public awareness of cover-ups, or from additional direct actions. So the sensemaking function of conspiratorial mentality is connected to mobilizing or demobilizing political action. The personal future of the self is entwined with this macrodestiny in that it is the culmination and vindication of the journey.

Typology of Individual Variations on the Conspiracy Worldview.

The data revealed substantial variation between participants' beliefs, which forms a typology (see **Table [2]**).

Type 1: Something Is Not in Order

One participant (R6) expressed this dissatisfaction with the status quo and mainstream problem solutions, a sense that the world is out of joint, and a desire to proffer solutions within

commonsense ontology and conventional values. R6 explicitly disavows the relevance of CTs, not considering their potential truth or falsity: “I don’t mean to make that sound like there’s a conspiracy such as the Illuminati conspiracy. I am not, I don’t delve into that. Just, is there an over-influence? I don’t mean, I don’t believe that our politicians are evil people.” R6 saw themself as an “issue entrepreneur,” offering a website and criteria for developing societal solutions like “regulated capitalism” with a “greater happiness index.” So Type 1’s unease is an entirely conventional questioning of political orthodoxies, which does not see the relevance or potential truth of CTs. No particularly high degree of epistemic uncertainty attaches to this position.

Type 2: There Is More to Reality Than Meets the Eye

Two participants (R4 and R15) expressed this dissatisfaction with the status quo and a sense that there is really more at play in the world than appears to be the case to ordinary observers. This is broadly skeptical, aiming not to make “false negative” assumptions about reality, suspending (dis)belief pending further evidence. By contrast with Type 1, Type 2 sees CTs as relevant and possibly believable: R15 says (re 9/11): “In my opinion, the mainstream story is a load of crap but at the same time, I can’t say with any certainty what really happened. I just don’t think it is as it appears ... I can’t say what has happened but I don’t believe with certainty.” And R4 suggests that the decision about whether to follow CTs is an active one: “We have the choice of what we will buy into,” and chooses not to do so because “belief in this is pretty damned sinister,” and leads “people [to] give their energy to negativity.” This uses commonsense ontology and expresses uncertainty about official explanations. R15 says, “I really hate it when people shoot down ... ‘CTs’ and I’m like, ‘why, why, why did you shoot this down? Because BBC News told you that Al Qaeda flew a plane into a building.’ That to

me is the definition of narrow-mindedness. I mean I don't know what happened, I have no idea what happened ... I can't say with any certainty this did happen and this didn't happen." R15 explicitly juxtaposes a potentially believable specific CT with unbelievable general CTs: "Like 9/11, I think it is perfectly reasonable and not crazy to say that one is suspicious of the mainstream story and that's fine most people can get on board with that. The minute you put David Icke into the mix with his Reptilian nonsense, you are then devaluing a whole field." R4 also expressed open-mindedness about CT and non-CT explanations: "that middle zone of 'I believe it and I don't believe it.' I don't have to come down to one side or the other." Type 2's unease thus runs deeper than Type 1, accepting the relevance and the possible truth of specific CTs.

Table 2. *Typology of Conspiracy theories (CT) believers leading to conspiracist worldview as a function of key themes.*

Theme		Type 1	Type 2	Type 3	Type 4	Type 5
Reality		Something is not in order	There is more to reality than meets the eye	Some official narratives are not real	All official narratives are illusions	All of reality is an illusion; to understand real reality requires an unusual ontology
Self	Self-view	Outsider keeping an open mind	Outsider keeping an open mind	Outsider committed to a specific CT	Outsider relative to wider society, member of enlightened community	Outsider relative to wider society, member of enlightened community
	Self-development	Questioning process	Questioning process	Questioning process	Truth seeking Conversion	Truth seeking Conversion
Ingroup	Leaders	Identification/admiration General epistemic followership – role model researchers	Acknowledgment Interest in privileged source concerning specific topic(s)	Acknowledgment Interest in privileged source concerning specific topic(s)	Identification/admiration General epistemic followership – role model researchers	Identification/admiration General epistemic followership – role model researchers
	Community			Sense of community based on questioning	Sense of community based on shared CT perspective	Mystical sense of connectedness; a sense of having been initiated and awaken by an existential experience
Outgroup	Conspirators			Isolated outgroups	Outgroups linked in network, ordinary ontology	Outgroups linked in network, supernatural ontology
	Sheep			Do not see through specific cover-ups	"Asleep", unware of being controlled by external forces	"Asleep," unware of being controlled by external forces
Action				CT-based political action	CT-based political action; engaging with CT community	CT-based political action; engaging with CT community
The Future					Optimism conditional on revealing conspiracies: universal awakening	Optimism conditional on understanding one's relation to the supernatural: awakening for the selected few

Type 3: Some Official Narratives Are Not True

One participant (R10) expressed this view, advancing a CT to address one specific issue, but disavowing generalized CTs. This CT used commonsense ontology and assumptions to explain the behavior of specific conspiratorial agents. R10 suggested that "chemtrails" produced by aeroplanes have not been satisfactorily explained; following investigation, R10 suggests it may connect to weather manipulation, but believes there is a cover-up. For R10 this CT belief has no monological extrapolation: for example, of the Illuminati, and New World Order, they say: "I don't know. I'm not too familiar with that. I don't really know what I believe about that." However, the general uncertainty is not ameliorated – other conspiracies could be possible, though there is no clear evidence either way. For R10 this is because of a lack of accurate information: "If you are going to have a society where a lot of truth isn't told and if there are outlets for truth-tellers why would you allow that? It would be so easy to create a misinformation site to discredit that," created by "people who are currently in control of society." This lack of trust in authority and its explanations does not generate monologicality: CTs apply to specific cases but are not the default frame of reference In Type 3, but even more in Type 4, participants indicate increasing concern with the deceptive nature of official narratives (Sutton and Douglas, 2014).

Type 4: All Official Narratives Are Illusions: The Mainstream versus Reality

Several participants (R2, R8, R11, R12, R13, R14, and R16) expressed this monological conspiratorial worldview as a default frame of reference. This uses commonsense ontology of conspiring agents with, as the quasi-religious account of CTs (Franks et al., 2013) suggests, a minimally counter-intuitive understanding of their actions and agency; ordinary people and

groups able to control things which are usually seen as outside human control, e.g., financial markets, climate change and variation. Supernormal agency in specific areas is ascribed to normal actors. Analogous religious representations (e.g., Sperber, 1996; Boyer, 2001) involve uncertainty because their implications are not fully processed – for example, in the Roman Catholic Mass the wine is simultaneously wine and the blood of Christ (Franks, 2003). The uncertain but potentially malign qualities of authority agents supports a mistrust of authority. For example, R2 aims to develop a "unifying theory of political economy," to explain financial crises and governments' complicitness in them, and explain 9/11, where "what can't be true is an official story"; this lack of trust extends to official 'false flags' regarding other CTs by R2 (e.g., the murder of JFK on November 22, 1963, or the Charlie Hebdo attacks of January 7, 2015). R11 mirrors this pattern: one CT – the legal issues surrounding the United Kingdom's decision to go to war in Iraq in 2002 – is used as the paradigm case for generalizing to others (e.g., 9/11/2001, 7/7/2005), so that ultimately, "we can no longer trust our government." Hence, a monological lack of trust in official sources generates widespread CTs.

Type 5: All of Reality Is an Illusion: The Ontological-Symbolic Turn

Several participants (R1.1, R1.2, R1.3, R1, R3, R5, R7, R9, R17, and R18) expressed this fully fledged conspiratorial worldview. However, unlike Type 4, at least some of the key agents hypothesized go beyond commonsense ontologies to supernatural explanations incorporating non-human agents or human agents with non-human lineages. R1, following David Icke, speaks of alien reptilian entities which "feed on fear and lower energies which is why there is again a certain control because they are manipulating the planet." R5 refers to contacts with UFOs, and a controlling human "cabal" originating in non-human aliens. R7 also refers to controlling aliens, but does not suggest these are reptilian nor any human contact with

them. Such entities are able to demonstrate control via capacities that go beyond the human – an ontology of supernatural entities possessing supernatural agency. Whereas for Type 4 there appears an essential connection between the espoused CTs and their monological generalization, for Type 5 there is no such connection; instead, what guarantees monologicality is the appeal to an ontology populated with supernatural agency which permeates all important areas of life. Here we hear of the lizards and shapeshifters who control things behind the scenes. The distrust of authority may be a consequence rather than a cause of monologicality. The all-embracing explanation renders the CTs immune from doubt. Nor do they answer to publicly available empirical data in the way that Type 4 at least has the scope to do. As R1 comments, "It doesn't matter if you think, 'oh this guy that everybody is talking about is absolutely nuts,' because it is part of my journey of understanding my existence."

Summary of Typology

Several key points arise from this typology. First, not all CT belief is monological – it is possible to entertain or believe in single CTs (Types 2 and 3) but reject others and not subscribe to a full-blown conspiratorial worldview (Types 4 and 5). Second, some monologicality may derive from a lack of trust in official explanations (Type 4), but other cases derive from an all-encompassing supernatural explanation of reality (Type 5). Third, overlaying this typology appears to be a curvilinear pattern of degree of epistemic certainty. The endpoints of the typology express epistemic "closure" or certainty. Types 0 and 1 involve an acceptance of the commonsense ontology of agents and causes that frame official narratives. Type 2 uses the same ontology but adds doubt in questioning whether all official narratives are true. Type 3 offers more doubt in explicitly distrusting specific official narratives, but expresses closure in adhering to single CTs. Type 4 involves generalized distrust of official narratives,

introducing doubt as part of an overarching conspiracy worldview. Type 5 involves a supernatural ontology that reframes official narratives in its own terms – here, distrust of authority is framed by a lack of doubt about how to explain its untrustworthiness (i.e., the supernatural ontology). Such a general curvilinear pattern of epistemic certainty suggests that CTs are likely to succeed most clearly in symbolic coping or anxiety reduction when they are part of a monological worldview – single CTs seem likely rather to exacerbate anxiety. Fourth, Types 4 and 5 participants expressed complex sets of interconnected beliefs in which there was no blanket rejection of authority or embracing of all CT-supporting evidence – they were suspicious not only of authority but also (though to a lesser degree) alternative explanations; moreover, beyond merely denying authorized explanations, they advanced complex narratives about the interconnections between specific conspiracies (e.g., using the differentiation of the outgroup in **Figure 1**). The worldview that underpins monologicality, for our participants, goes beyond the denialism or "closed" mind (Goertzel, 1994) often expressed in the literature. Our observations thus suggest that monologicality is not a defining feature of belief in conspiracy, but a variable end-point on an escalating spectrum of conspiracy-mindedness.

Thematic Variations

Reality and Ontology

Sutton and Douglas (2014) suggested that a potential underlying feature of monologicality is the deceptive nature of official narratives. This corresponds in our interviews to different positions on the nature of reality. Broadly, the nature of reality is unproblematic for Types 0–3 participants, even though uncertainty is expressed as to some anomalies. Some Types 4 and 5 participants expressed variations on the theme that the fabric of everyday reality is an illusion which is intelligible only to the selected few, similar to the Platonic cave allegory

(R16) or films like "The Matrix" (R16). Some (Type 5) opined that "real" reality is beyond the three-dimensional world of the five senses, to be sensed by engaging in practices like meditation or reiki (R10 and R16). Such engagement involves mystical experiences like feeling energy flows or developing a collective consciousness: "in what the Vedics call the-[Akashic] record, the cloud hard drive in the sky that we all share, so each of us has a folder in that hard drive that we record our memories, thoughts and feelings and emotions and whatnot. And as long as you're in this life form and you're held with the five senses in the three dimensions in the time-based worldview, then all you can ever recall is anything you've written in your own folder. But at some point you become capable of receiving information from the whole cloud" (R17).

Self-view and Self-development

Many participants explicitly rejected the label "conspiracy theory," corroborating findings of Wood and Douglas (2015). This rejection was independent of participants' positioning in the typology. Some suggested the label is used to deliberately undermine alternative explanations, since it categorizes together both "reasonable" alternative explanations using everyday ontologies for single events and more complex conspiratorial narratives using more novel ontologies (e.g., R1.1, R5, and R11). The evident oddity of novel ontologies is used by association to undermine reasonable explanations (see Husting and Orr, 2007). The CT label may also diminish the force of the argument by shifting the focus onto the credibility of the CT believer (R10, R11, and R7). R15 suggests, "I think unfortunately, these things do get lumped together, these alternative viewpoints or CTs, everything gets lumped together. And when you have got some crazy man like David Icke spouting nonsense all the people who are then saying quite sensible things, all get lumped together as loony, tin-foil

crazies." One suggested the label 'conspiracy theory' was coined by the CIA in the 1950s to discredit people inquiring into governmental "black ops" activities (R2). Another suggested the label was a way to shut down a potentially illuminating conversation: "It's become ... a weapon to close down the conversation. "Oh, so you believe in CTs, do you?" Where can you go with that? Quite often it's a putdown" (R1.1). As a consequence, participants preferred to describe themselves as researchers who are "seeking after the truth" or knowledge, or developing alternative explanations (R8, R1, R15, R9, R13, and R11). As R11 says, "I am always after the truth. It's probably why I am considered a conspiracy theorist."

When asked how their interest in alternative explanations began, many cited a gradual progression based on a combination of personal issues and "projects," which had been expedited by their experiences of major public events. Types 4 and 5 participants referred to early experiences of being different (R1.3), traumatic personal experiences such as severe illness of self or a close other, or bankruptcy and homelessness (R3, R12, R13, R9, R18, and R11); some reported specific exceptional episodes such as out of body experiences, experience of UFOs and aliens (R9 and R16). Against this backdrop of general questioning of reality, specific public events were often referred to by Types 4 and 5 participants as catalysts for their interest in CTs – e.g., 9/11/2001 (R2: "9/11 did it for me"; R17, R12, R7, and R11), the financial crash of 2008 or the Iraq War (R2 and R7).

Some participants (independently of type) referred to family problems and enmeshing social relationships (R7 and R4), and others to an interest in meditation and psychological processes (R5, R10, R1, and R3). These appear to have progressively triggered questioning of received explanations. For some, this generated an intensive interest in philosophical questions

or ‘mysteries’ (R7, R16, R4, and R10) – e.g., R16 wanted “to be part of the 1% that understands Plato’s cave.”

These findings are striking: to understand why CT thinking is “sticky” (i.e., an attractive and persuasive way of thinking, which resists change), we may need to consider not only its content and role in individual and social anxiety reduction. We also need to consider how CTs emerge from the personal-development, epistemic and social-political “projects” that first led people to consider alternative explanations. Some such projects suggest a gradual process punctuated by “conversion” episodes leading to Types 4 or 5 monological outcomes, consonant with the quasi-religious approach (Franks et al., 2013).

The Outgroup: The Conspirators and the Majority

Participants described a structured outgroup. Types 2 and 3 participants typically referred to only two subgroups: the conspirators and the controlled majority. They also expressed uncertainty about whether the conspirators really performed all of the alleged actions. Thus, R15 (Type 2) suggested a role for United States governmental and military organizations in covering up their own deliberate engineering of major events (such as Pearl Harbor, 9/11) to deflect attention away from their real activities and to legitimize attempts to further extend their reach. R10 (Type 3) mentioned that some people have beliefs about the Illuminati aiming to establish a New World Order, but “I’m not really sure.”

Greatest differentiation of the outgroup was offered by Types 4 and 5 participants, who differentiated three subgroups: the wider controlled, non-agentic class who believe in conventional explanations (“sheep” in **Figure 1**), plus two parts of the “ruling class.” The “evil elites” (**Figure 1**) are hidden agents who define the ends and nature of the conspiracies, and

the mid-level proximal agents ("middle management" in **Figure 1**) are observable actors that provide the means for the elite groups' ends and promulgate the authorized explanations.

This results, for some (R1, R3, and R12), in a society managed by fear. Middle management (e.g., governments, armed forces, police and the "Big Four" accounting firms) engage in conspiracies that are understood by ordinary conventional explanations, using everyday ontology and possessing commonsense qualities (Type 4). But these are merely the agents of the real elite. R3 suggests that governments are "puppets," the police are "minions" and the real rulers are in the shadows. Others gave examples of conspiracies – e.g., in dealing with pedophilia in establishment circles, the United Kingdom Prime Minister was sidestepped (R14), and one or two figureheads from middle management were "sacrificed," allowing allow the evil elite to maintain its conspiracies whilst giving the appearance to the sheep of rooting out the culprits (R1). Middle management is thus a buffer against real change, even when apparently held to account.

The true evil elites are hidden from view, possessing qualities that depart from ordinary ontology to varying degrees, often viewed as shadowy entities with mythical histories. Most are understood in terms of powerful families with associated bloodlines or religious dynasties with associated forms of initiation and membership, such as the United Kingdom Royal Family, the Rothschilds, Rockefellers, Bushes, Clintons, all of whom are interconnected with the Holy Roman Empire, Saudi Arabia (R16, R2, R9, R13, and R12), or the Illuminati (R1 and R5). Together they form a "structural power elite, with interlocking structures" (R2), closed to all outsiders. They share an aim for self-replication in the pursuit of power and the maintenance of control – at any cost to human life.

As R17 comments, “fish rots from the head downward”: evil elites control the establishment, setting up educational, industrial, financial, and governmental institutions to serve their malign aims in controlling what the sheep do and believe. In Type 5, the account of evil elites appeals to non-commonsense ontological assumptions about agents – e.g., the elite really are “reptilians” (R1), directly expressing Icke’s “alien lizard” iconography (Lewis and Kahn, 2005); or they have a lineage in other alien life forms and UFOs (R5, R7, and R17). For some, this issues in the sweeping metaphor that “earth is a slave ship” (R5) or a “prison planet” (R1) controlled by those aliens or their descendants.

When talking about the sheep, Types 4 and 5 participants in particular referred to middle management’s “sedation” of the populace – e.g., via alcohol, entertainment (football, TV, the royal family, fast food), and having to work hard and be self-interested in order to make a living (R1.1, R12, R9, R3, and R7). As R7 put it, “Yeah, you know the ‘normies’ is what I call them, people going to work, doing their job, not questioning anything, but all they’re doing is spending money on the system and keep it circulating so that banks are corporating the money.” The sheep are thereby happy to be part of a passive, ignorant “herd” or “hive” (R9, R13, R14, and R12), leading to a state of “collective unconsciousness” (R9). Interactions with sheep about CT-related topics often led to conflict or ostracism (R1: “try to ridicule you and try to convince you that you have lost the plot”), requiring them to be circumspect in raising such topics (R1.1: “Most of the time, people don’t want to listen, you have to get people into a certain mental space for them to listen properly”) or even to progressively avoid them.

All participants referred to the mass media as a significant part of the control process: filtering information, leaving out important issues and presenting infantile, sound-bite journalism and entertainment (R1, R3, R4, R5, and R10). The media sets the agenda for what

can and cannot be discussed; as R15 put it, the "dog doesn't bark, the journalistic machine doesn't work, politics is broken", perhaps because as R5 notes, the mass media worldwide are "controlled by the same three or four organizations." However, alternative media may be no more reliable: "I would say for every conspiracy theory 'theory,' there's an equal number of misinformation sites" (R10).

The ingroup: Truth Seekers, Awake and Connected

Regarding ingroups, participants reported a mixed picture, independent of CT type. Developing CT interests, for some, created difficulties in their relational ingroups: family, friends, or colleagues mocked or discredited their views (R1, R7, R14, R18, R3, and R15), leading them to be reluctant to discuss the issues with them. This led some to seek social contacts with other people interested in CTs. Their on-line and *in vivo* contacts generally involved developing alternative explanations (R3: "helping you connect the dots by talking together"), by talking with likeminded people who are critical, open-minded, anti-establishment and well-read (R2, R10, R14, and R15). The social connections are key to reinforcing, rehearsing and maintaining CTs, with some noting that group membership had made them "more convinced" of CTs (R7), perhaps because it "keeps you knowing" (R14).

What connects the CT ingroup is that they are all truth seekers, and "It's wanting a fair and just society, and what wakes people up? I don't know, you are either asleep or awake because once you are awake, you can't ignore it" (R12). The metaphor of truth-seekers being "awake" (a recurrent motif in Icke's writings) compared to the "sleeping" sheep, was widespread (R1, R2, R4, R9, R10, R12, and R14). Other expressions also differentiated the ingroup from the controlled class – "we" have greater "awareness" (R3, R5, R8, R13, R14, and R17), or "our" eyes are "open" and theirs are closed (R3, R7, R9, R15, and R18). As with all

in-group communication, the informational and the affiliational overlap (Enfield, 2006). There were two significant aspects to this. First, participants refer to the groups as offering a "community" (R17, R3, R4, and R8), a "spiritual side" (R8) which supports collaboration and connections that "express humanity," helping people to "wake up, get back to connecting rather than atomized" (R4). Second, for some, the group offers a sense of positive, collective agency, which could substitute for the failed or inappropriate agency of governments and media. In the groups, they "realize that we are more than we think we are collectively" (R17), and "collectively there's a quickening, raising of awareness, things ain't right" (R17), so that the group identity has the common denominator of a positive outlook in the battle for social change (R4). In the groups, R14 suggests, "you feel like you could make a change because everyone felt like that, we could make a change because we have the power because we are the consumers. We could break down the 1% if we all agreed". More succinctly, R5 expressed this as "we are a supreme minority, but growing."

Although our Types 4 and 5 participants all saw themselves as connected to communities or groups affiliated around a general CT stance, Type 5 added a pan-human dimension based on their spiritual beliefs: "We are an organism collectively" (R17), or 'I believe that somehow we are all connected universally." Some saw this as the origin of their beliefs (e.g., R5: "I get these knowings. I know things is all I can say and I guess it comes from some sort of universal collective wisdom"), or as a basis for understanding themselves (e.g., R1: "It's like everybody is on the same journey, same path, but people are at different stages").

But group membership also brings the possibility of schism, and two participants expressed unhappiness at the restrictions of previous groups. One indicated disenchantment with the Occupy Movement, which led them to be less active in meet up groups, and to limit

interaction to only "talking" to national and international groups, principally on the internet: (R2). Another (R9) was frustrated that the meet up group's committee structure "paralyzed" discussions, effectively censoring the range of CTs and issues canvassed.

One key aspect of reinforcing beliefs and norms, and supporting ingroup coherence, is the relation between a group and a leader (Haslam et al., 2011): more successful (and more positively evaluated) leaders are often seen as highly prototypical or ideal members of the ingroup. Our participants had a highly developed sense of who were the prototypical – leading – truth seekers, and often deferred to their knowledge and referred to them in discussion. Some were domain-specific – "maverick" scientists with expertise in areas like chemistry, physics and archaeology (R2, R9, R10, and R18), or economics and politics (R1, R2, R13, R6, and R14); such references often used rhetorical devices indicating the arcane knowledge at stake and positioning the CT believer relative to the interviewer: for example, "have you heard of ...?" (R2). Others – particularly Types 4 and 5 – were more general, identifying with or admiring a key figure as a prototypical truth seeker or CT researcher; many cited David Icke as an inspiration in uncovering conspiracies long before other people (R1.1, R1.2, R1.3, R1, R2, R3, R5, R8, R16, and R17). For example, R3 suggested that David Icke "caused me to expand my way of thinking and join dots and put this and that together." However, some acknowledged mixed feelings about the respectability of some of his material (R9 and R17), even though "not one of his books has ever been challenged or faced with a law suit" (R5). Others also cited figures from popular culture (e.g., Russell Brand: R10, R12, and R14) or those who run CT-focused internet sites (e.g., Alex Jones: R1, R6, and R9). Some also referred to historically "great figures" who revealed hidden wisdom – marking the lineage of the ingroup as part of a long history of being critical of and vilified by the mainstream: the Buddha

(R1 and R3), Jesus (R3), Gandhi (R1 and R14). Others cited major intellectual figures, again indicating the apparent reasonableness of their own stance: Orwell (R1 and R17), Marx or Chomsky (R13). Participants typically cited individuals who have accepted the threat to worldly status associated with challenging the status quo, making what Henrich (2009) calls CREDs (credibility enhancing displays) in which CT declarations gain extra force by their declarers' paying the costs of exposure to public opprobrium. Public vilification amounts to proof of concept. Such people are therefore respected for epistemic reasons but also admirable for personal and moral reasons. This is another aspect of the conspiracist worldview consonant with quasi-religiosity. Interestingly, whilst most of our participants expressed admiration for fearless researchers and respect for their empirical work, the strategy of placing *oneself* in such an illustrious lineage (epistemic and personal identification) was used only by participants of Types 4 and 5 and Type 1 (R6) – evidently, for quite different rhetorical and epistemic reasons.

We note three implications of deference to CT leaders: first, it is selective – CT believers employ many information sources, and few accept everything the leaders promulgate (they retain a degree of criticality even about their heroes); second, they are conscious of those leaders' public credibility and of the need to persuade others of the reasonableness of their own stance. Third, such deference varies according to CT type.

The connection with other believers in CTs (whether in promoting ingroup identity or developing ingroup schisms) challenges the notion that CT belief is inherently socially disengaged: rather, there is a sense of wanting to re-make society and the inchoate hope that being involved with other CT believers may contribute to this.

Political Action

Our follow-up interviews in Stage 2 took place just after the time of a United Kingdom General Election in 2015. When asked, 13 participants reported having voted in the election (and voting/not voting was not connected to particular CT type). Participation in other forms of political activity was varied and unconnected to the typology. Some talked of general, sweeping political aims. For example, R7 asserted, "Political systems in every country need to be abolished and redone," whilst R4 mentioned the aim to "transform representative politics into enactment politics" – direct action replacing voting. Others engaged in more specific activities – for example, attending meet ups (R3 and R17), setting up websites (R6) or writing books on relevant topics (R3 and R 6). Whereas some were involved in organizing demonstrations and meetups (R12 and R17), others expressed a sense of powerlessness concerning political action (R11, R16, and R15) – for example, taking part in demonstrations is the least effective form of political action, and so is encouraged by governments: "if you can get people marching, demonstrating, protesting, it keeps them focussed on ineffective action. And the real effective action is financial action, legal action or political action, but none of that happens if they go on a demonstration" (R11). Others suggest that the potential for successful political action is vitiated by the very nature of the ingroup (R2, R9). For example, R2 stated, "my main frustrations with Occupy and all these other activist organizations that we could quite easily win if we addressed and stuck to the main causes. In other words we presented a coherent narrative but you have all these demonstrations talking about symptoms and they never come together and so they are ineffectual in that sense." Taken together, this theme suggests that embracing CTs does not necessarily entail political cynicism or disengagement from all democratic processes; rather, CT believers appear potentially engaged in politics and

citizenship but skeptical about the available means in conventional politics. Thus, the conspiratorial worldview might relate to *prefigurative* political or social mobilization, in particular the imaginary construction of "alternatives," with little account of detailed means for achieving that goal (see Yates, 2015).

The Future

The question of the future concerned the degree of optimism about possible personal and collective change. The broad pattern was intuitively paradoxical: the more monological our participants were, the more optimistic they seemed to be, though that optimism was contingent. For Type 4, a non-conspiratorial future was contingent on the discovery and public knowledge of the conspiracies in the political world: when everyone wakes up, the political world would be transformed into a non-conspiratorial world [paralleling Byford's (2011) "naïve optimism"]. For Type 5, the positive future was more contingent on individuals coming to understand their relation to the supernatural forces that govern the universe: self-discovery allows coming to terms with those forces, though not thereby removing the supernaturally based conspiracies. Monologicality thus leads to the possibility of major future change. By contrast, those with a less monological worldview tended to be less optimistic about the future, because each conspiracy must be assessed and challenged on its own terms. Type 3 participants, for example, see the likelihood of change as restricted by the reality of specific, concrete conspiracies and their entanglement with power relations.

Discussion

Monologicality and the Spectrum of Conspiratorial Worldviews

Monologicality designates the empirical tendency for belief in one CT to be correlated with belief in others. Explanations of monologicality often invoke a nomothetical or "closed" mindset (Goertzel, 1994) whereby mutually supporting beliefs about the nature of the world are used to interpret public events as conspiracies. But research on monologicality typically has little discussion of the content of beliefs and reasoning from the standpoint of the CT believers. This in part arises from the access problem (Wood and Douglas, 2015): CT believers are averse to being researched because they often distrust researchers as "part of the problem."

Our study investigated the symbolic resources underlying monologicality by reconstructing a conspiracy worldview – an escalating set of beliefs held by CT believers about important dimensions of ontology, epistemology, and human agency (Koltko-Rivera, 2004). To do this, we analyzed media documents, conducted field observation, and engaged in semi-structured interviews, using a variety of strategies to overcome the access problem. We described six main dimensions of such a putative worldview: The nature of reality and its ontology, the description of self, the outgroup, the ingroup, action, and the future. Patterns of positions on these dimensions led us to construct a typology of five types of escalating CT believers. Our findings converge with prior explorations of the content of CT beliefs: Some are similar to Byford's (2011) generic "anatomy" of CTs, derived from the analysis of documents, cultural artifact and mass media sources. However, we also discovered novel aspects of the conspiracy worldview. Perhaps most surprising concerned the ingroup, which was structured and subtle, embracing both epistemic and affiliative dimensions. Byford does suggest that from the 1960s onward, "conspiracy theory became a call to mobilization, inspiring readers to gather

'evidence,' share it with others and become part of a community" (p.67), but there is little detailed analysis of such community. This is perhaps unsurprising, since his data sources (written outputs expressing CTs) do not offer straightforward means of assessing relations to group membership and identity. Moreover, we find evidence of a leader-follower relation, with experts viewed as "hero" researchers, fearless in their critical inquiry and uncovering of unpalatable truths. Another novel finding is the trajectory toward becoming a CT believer – a personal journey of conversion or development. For our participants, this was key to why they believed in CTs, and the type of CT to which they subscribed. Final novel aspects of our findings concerned the connection between participants' beliefs in CTs and their tendency to engage in political action (as opposed to being disengaged from the political process), and their belief in the possibility that such action could lead to a positive future (as opposed to being cynically resigned to there being no possibility of a non-conspiratorial world).

All of these novel aspects – the sense of community, the pantheon of leaders, the personal conversion journey, the link to political action, and the optimistic future – are at odds with the typical image of monological CT believers as paranoid, cynical, anomic, irrational individuals (Douglas et al., 2016). Instead, the CT worldview may be the underpinning of a nascent social movement, prefigurative political mobilization, or at the very least an inchoate, but distributed community of engaged citizens, albeit with alternative beliefs. In this respect, our findings echo Waters's (1997) finding that African American CT believers were better educated, more politically active, and more socially engaged that non-believers. Our findings can also explain the otherwise incongruous results (Swami et al., 2010, 2011, 2014) that CT believers may be more open to experience and more strongly support democratic principles than non-believers.

Limitations

Our study has some limitations. First, the sample of interviews is rather limited in size, geographical location and political-ideological bent – all of which limit generalizability of our findings. We interviewed only a small number of people and mostly in the South East of the United Kingdom. Perhaps the most serious is the political bent: the majority of our participants were on the left of the political spectrum, self-identifying as interested in "alternative" explanations. It is unclear to what degree the elements of the conspiratorial worldview would hold equally for a similar sample of the milieu on the political right. Is the CT worldview of right-wing CT believers fundamentally different? There is little research on this issue, but some data suggest that it may not be. A report on the right-wing milieu in Germany commissioned by the Amadeu Antonio Foundation (Rathe et al., 2015) suggests that many elements may be similar; other analyses also suggest that right-wing conspiracy worldviews are analogous in their ingredients to what we have documented, although they may focus more systematically on Zionism in their characterization of evil elites (Byford, 2011; Imhoff, 2015).

The small sample suggests caution in a specific aspect of our interpretation: most of our participants cluster in Types 4 and 5, and fewer in Types 1–3. As noted above, our data coding combined both bottom-up, data-driven elements (hence all of the novel findings above), and top-down, theory-driven (or past findings-driven) elements. The latter grounds our postulation of Types 1–3: they are internally consistent patterns of response to destabilizing issues, which reflect different degrees of dissatisfaction with official stories. They also allow us to make coherent the idea of a conversion-related trajectory from skeptical conventional thinking (Type 1) through specific CT beliefs (Type 3) to monologicality (Types 4 and 5).

Notwithstanding this, our findings broadly converge with Byford's (2011) analyses based on a broad set of political documents and commentary, with perhaps those concerning the sense of community afforded by CT believers and the nature and role of Type 3 requiring further empirical substantiation.

Accessing CT Believers and other Methodological Issues

Our research approached the problem of gaining access to CT believers using methods from ethnography in two ways, both of which are time-consuming and painstaking. One was to gain trust of participants during recruitment by avoiding stigmatization through terms like "conspiracy theory" and adopting an openminded attitude to their beliefs. The second was to increase the credibility of the research team by recruiting participants via gatekeepers who were themselves already in a position of trust.

Our results suggest that findings of quantitative, questionnaire-based studies of CTs may benefit from being supplemented by qualitative studies that seek to uncover nuances of the contents and social implications of CT belief. In this way, a rounded view of conspiratorial worldviews may be achieved. Content-wise, the kinds of CTs offered for assent or dissent in questionnaire studies typically fall under our Type 3 or Type 4, which deploy everyday ontology often with specific claims of supernormal agency on the part of the conspirators. The result is a classic, negative monologicality. There is, interestingly, little quantitative investigation of possible CTs *based on* supernatural ontologies, though CT belief itself has been found to correlate with non-conspiratorial supernatural beliefs (Darwin et al., 2011; Swami et al., 2011).

Conspiracist Worldviews and the Quasi-Religious Approach to CTs: Research Directions

The quasi-religious approach to CTs (Franks et al., 2013) suggests that CTs can – to differing degrees – function in a manner analogous to religious beliefs, which may suggest that some CT belief should correlate with actual religious or supernatural beliefs (as for Type 5 participants). Belief in CTs might more generally be based on the form of religiosity called "quest" (Batson, Schoenrade & Ventis, 1993). This reflects a search after meaning that poses existential questions, regards doubting and skepticism as positive forces, and allows that answers to those questions may be tentative and partial – perhaps connecting to agnosticism (e.g., Donahue, 1985), or a cognitive style expressing symbolic doubt, rather than a specifically religious motivation (e.g., Neyrinck et al., 2010). For many of our participants, this is apt: CTs and alternative explanations are a secular "quest," which may or may not end in belief in supernatural ontology (Type 5) or in ascribing exceptional agency to conspiring groups (Type 4).

So in our view, monologicality may be less a defining feature of believing in CTs, but rather a variable consequence of the set of CTs believed. To the extent that the set of espoused CTs grows, a degree of monologicality may emerge – but built on two foundations. One is a negative claim (rejection of official explanations, as in many past findings), and the other is a positive claim (Type 5 imputing of supernatural agents with exceptional agency, or Type 4 imputing of exceptional control or power to the conspiratorial group (Franks et al., 2013; Douglas et al., 2016).

Together they express a clear conviction of our participants – that CTs may not merely express cynicism and disengagement from the status quo, but also involve positive attempts to understand and explain events leading to prescriptions for political action.

Secondly, the approach also offers a substantive view of how people can represent apparently contradictory CTs (see Wood et al., 2012). As for many religious representations, the element of uncertainty means that the content of CTs may not be fully explicated by believers: Types 4 and 5 CTs represent conspiring groups with greater-than-natural agency, but precisely what those qualities are and how those agents actually operate may remain unclear. Contradictions between CTs may not be detected or experienced as contradictions by believers, because the representations of the CTs do not have precise interpretations, and so do not support a sharp sense of conflict. They may thus permit coexistence of apparently contradictory knowledge systems (Legare and Gelman, 2008) or cognitive polyphasia (Jovchelovitch, 2006; Falade & Bauer, 2017), in which aspects of conventional and conspiratorial worldviews offer complementary, rather than competing explanations of destabilizing events.

Thirdly, our findings and the quasi-religious approach suggest further investigation of the active social cognitive processes of 'bricolage' of CT beliefs (e.g., how far they follow the heuristics suggested by Sunstein and Vermeule, 2009) – since CT believers are not only choosy with the contents that they draw from official sources, but also with content from alternative sources.

Fourthly, as noted our typology requires further investigation: how robust is it across participants with different demographic and political profiles? And, delving inside it, are there quasi-religious conversion processes from Type 1 where the world seems out of joint to Type 5 where reality is perceived as an illusion and an alternative ontology is invoked? What

psychological processes lead from domain-specific distrust of authority (Type 3) to domain-general distrust (Type 4): when and why does the request for positive reasons to trust official explanations transition into an assumption that no reasons can be provided? It seems likely that group membership plays an important role here; this is a core feature of our Types 4 and 5, but is absent from the others. When and why does dissatisfaction with ordinary explanations (or with general CTs using ordinary ontologies – Type 4) transmute into the positive espousal of alternative ontologies in monological CTs – Type 5? This may have its root in the specific type of inquiry that characterizes the person's quest – for example, a more political issue of control versus a more personal issue of identity. Answering such questions may require longitudinal studies focusing on the personal developmental trajectories – in biographical– idiographical terms – of CT believers.

Fifthly, the social and inter-group relations also warrant further investigation. The role of the internet in sharing and discussing CTs has been emphasized recently (e.g., Wood and Douglas, 2013, 2015). Our research demonstrates that the internet is also important in developing and supporting *in vivo* social relations and social group and social identity formation. CTs are not static, but rather dynamic beliefs that relate to individual life projects and to social behavior of various kinds. We found communicating about CTs can underpin definition and critique of outgroups, as in past research, but also formation of coherent ingroups with implications for social identity (Jovchelovitch, 2006). This suggests a further potentially fruitful area of research – how do such groupings form on-line and offline? How do individuals move from blogging on-line to meeting *in vivo*? What are the social functions of CTs, as well as their social consequences? What role do on-line and off-line group leaders perform in

curating CT beliefs, and how do they relate to the ideas publicized by more widely known "CT heroes"?

Sixth, our findings suggest broadening the canvas of political actions relevant to CTs. Our participants held nuanced views of political action and – whilst some were cynical about its effect – most saw a requirement of their self-representation as "truth seekers" as putting forward concrete positive explanations and proposals for change.

Seventh – practically, our findings may have implications regarding addressing the consequences of CT belief. They suggest the need to consider not only the degree or strength of CT belief but also its content, in entertaining any practical measures to address problematic consequences of a CT worldview. Location of CT believers in our typology might, for example, moderate the impact of educational measures to combat potential effects of negative CTs (Douglas et al., 2016), or the engagement with CT social groups and leaders to ameliorate CT-related political extremism (Bartlett and Miller, 2010).

Eighth – methodologically, our typology might be the basis of an alternative quantitative measurement of CT mentality, one which involves the detailed symbolic resources of CTs rather than (as in more typical, Likert-like survey methods) sketches of those resources to measure their connection to other variables. Our typology is based on specific configurations of values of the key features of reality, self, ingroup, outgroup, action and the future. One construal of our Types 1 and 5 CT beliefs is that they combine the least elaborated and most highly elaborated conspiracist ideation, respectively, and between them there is a continuum of elaboration. Such a relation between a hierarchy of specific beliefs and an emergent continuum is typically discussed as a Guttman-type approach to developing a unidimensional

scale for beliefs. This approach has been taken by researchers in the sociology of religion (Michelat, 1991), and might find some utility in quasi-religious conspiracy beliefs.

A final question that arises is: if at least some CT belief is not monological, how should it be described? What is the alternative to monologicality? Returning again to Goertzel (1994: p. 740), he claims, "Dialogical belief systems engage in a dialog with their context, while monological systems speak only to themselves, ignoring their context in all but the shallowest respects." We used the subsequent empirical operationalisation of monologicality as the idea that belief in one CT is predictive of belief in (many) more, and found that even our most monological participants (Types 4 and 5) were still dialogical in Goertzel's terms; that is, they utilized non-conspiratorial symbolic contents in the framing of their CTs and drew selectively and critically on both conspiratorial and non-conspiratorial evidence in their justification. Future work might investigate the possible connections with the contrast between monological and dialogical approaches to communication (Linell, 2009), which is likely to be important to the social sense-making function of CTs, as part of understanding how CT believers manage the coexistence of conspiratorial and conventional beliefs in explaining events.

Conclusion

Conspiracy theories are widespread and important cultural forms of mind that enable symbolic sense making about threatening events or situations. Past quantitative research has suggested that CT belief may be monological, such that belief in one CT is predictive of belief in others. We sought to investigate the symbolic resources that form the contents of such beliefs by carrying out qualitative interviews with people who espouse them; in doing so, we developed an approach to address the difficulty of accessing the population of CT believers. Our results confirm, augment and to some degree challenge past findings, suggesting that

different elements of CT beliefs coalesce to form a distinctive conspiratorial worldview, within which particular patterns form an escalating typology of CT mentality, only some of which are monological.

Monologicality is thus not a defining feature of conspiratorial mentality, but only a special case. This finding and our concept of CT as quasi-religious lead to new directions for future research and possible methodological and practical implications.

Ethics Statement

This study was carried out in accordance with the ethical guidelines of the British Psychological Society. The design and protocol were approved by the Ethics Committee of the Department of Psychological and Behavioral Science at the London School of Economics. All participants gave their written informed consent. All participants gave written informed consent in accordance with the Declaration of Helsinki.

Author Contributions

BF, AB, and MB developed main conceptual framework. BF, AB, MB, and MH analyzed the data. MH collected 85% of the data, and MN collected 15% of the data. BF wrote first draft and produced final draft. AB edited first draft. MB edited final draft.

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Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

CHAPTER 3 | Dialogicality and Conspiracy Theory Beliefs

Article Title

Dialogicality: The Coexistence of Conspiracy Theory and Non-conspiracy Theory Beliefs

Authors

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Abstract

This study is an empirical investigation into the dialogicality of conspiracy theory (CT) belief. Dialogicality contrasts with the view that belief in conspiracy theories are solely monological. Dialogicality involves the coexistence of conspiracist and non-conspiracist beliefs in advancing CT claims. Based on a thematic analysis of 41 semi-structured interviews, five dialogical relations were revealed, including: *integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance,* and *analogical thinking*. Belief coexistence spanned beliefs about the self, ingroup, outgroup, reality, action and the future, on topics concerning: science, religion and human origins, and politics and society. All participants expressed dialogical forms of belief coexistence. Integrative thinking, explicitly connecting conspiracist beliefs with non-conspiracist beliefs, was found for participants with more elaborated monological CT worldviews. These findings challenge the view of CTs as 'closed,' monological belief systems existing in isolation from non-conspiracist beliefs.

Introduction

A ‘conspiracy theory’ (CT) is an interpretation of an event proposing that two or more actors colluded to enact a hidden agenda (Douglas et al., 2019). ‘CT belief’ or ‘conspiracist belief’ refers to the endorsement of a CT. CTs are important since their endorsement can impact upon science and social policy, such as the rejection of scientific findings concerning climate change or genetically-modified foods (Lewandowsky, Gignac & Oberauer, 2013). Belief in CTs is recognised as involving a ‘closed mind,’ which has roots in Goertzel’s (1994) monological hypothesis. However, limited research has examined whether this claim actually has any empirical basis, particularly in people’s first-hand accounts expressing their CT belief (Sutton & Douglas, 2014). This study proposes that CT beliefs do not solely exist in isolation but can draw upon otherwise common or non-conspiracist ideas to inform and propagate their standing. The terms, ‘conspiracist worldview’ and ‘CT worldview’ are used interchangeably, and refer to the CT worldviews proposed by Franks, Bangerter, Bauer, Hall & Noort (2017 [Chapter 2]) and discussed in greater detail below. ‘Non-CT belief’ or ‘non-conspiracist belief’ refer to any ideas external to CTs, although we focus mainly on the non-CT belief about science, religion, and politics and society. Each of these non-CT areas, have recognisable worldviews with their own set of assumptions on ontology (i.e. what is the nature of reality?), epistemology (how to understand the world?), and agency (i.e. the causal forces in the world) (Koltko-Rivera, 2004).

Specifically, this study is an empirical investigation into the *dialogicality* of CT belief: that is, how conspiracist beliefs relate to non-conspiracist beliefs through a set of semantic and pragmatic relations for those endorsing CTs. The terms, ‘dialogicality’ and ‘belief coexistence’ are used interchangeably to represent this phenomenon. The term, ‘dialogical relation’ and ‘dialogical form’ are also used interchangeably. These terms specify the ways in which CT and

non-CT beliefs relate, by: *integrative thinking*, *synthetic thinking*, *target dependent thinking*, *cognitive dissonance* and *analogical thinking*. Our approach contrasts with the view of CT belief as 'irrational' and solely involving 'closed,' monological belief systems, existing in isolation from non-conspiracist beliefs. CT beliefs, like other worldviews, use belief coexistence as functional and adaptive ways of thinking to make sense of the world.

The limits of monologicality

Goertzel's (1994) hypothesis of CT beliefs as 'monological belief systems' has been influential. Monologicality is usually claimed when belief in one CT correlates with or predicts belief in another, and empirical evidence shows this to be a consistent finding (e.g. Brotherton French & Pickering, 2013; Stieger, Gumhalter, Tran, Voracek & Swami, 2013; Swami, 2012; Swami & Furnham, 2012; Swami, Coles, Stieger, Pietschnig, Furnham, Rehim & Voracek, 2011). However, closer attention to Goertzel (1994) reveals that the proposed reasoning for why multiple CTs have a close relationship with each other may not stand up empirically (see Sutton & Wood, 2014). According to Goertzel (1994, p. 740), novel events are easily and "automatically" explained by existing conspiracist beliefs, since "each of the beliefs serves as evidence for each of the other beliefs." Goertzel (1994) further proposes that the monological approach only "shallowly" engages with the details and context surrounding a given CT. This is in contrast to forms of dialogical thinking which attend to, "factual evidence and details, are testable and may even be disconfirmed by new evidence" (p. 740). The contrast between monological and dialogical thinking for Goertzel (1994), articulates around the "distinction between the 'open' and 'closed' mind" (p. 740).

There is little evidence to indicate that CT endorsement involves a "closed" epistemology (Sutton & Douglas, 2014). Rather, CT endorsement has been shown to correlate with openness to experience (Swami et al., 2011; Swami & Furnham, 2012). Indeed, Goertzel's (1994) proposition that CTs are resources for and serve to confirm each other has been called

into question. Wood, Douglas and Sutton (2012) found that the belief that Princess Diana is still alive significantly correlated with another CT belief that she was dead by assassination. Furthermore, the positive relationship between believing that Osama bin Laden is still alive and was already dead, was explained by the broader belief in a cover-up. Since both being dead and alive cannot be true, it is unlikely that each CT belief served as evidence for one another.

Importantly, qualitative research also indicates that not all CT belief is monological. Franks et al. (2017 [Chapter 2]) reported five types of CT belief endorsement of which only two types (i.e. Type 4, Type 5) displayed monological belief. Their approach differentiated worldviews according to matters of ontology (i.e. what is there?), epistemology (i.e. how do we understand what is?), and agency (i.e. the particular actions deemed possible). The Type 4 monological worldview endorsed a natural ontology involving human conspirators and agency (e.g. government officials, media), connecting to a general distrust of official sources and authority. The Type 5 monological worldview endorsed a supernatural ontology and sense of agency, where non-human entities (e.g. aliens, Reptilian shapeshifters) and energetic forces manipulated human events in the material world. Importantly, the other three types were non-monological. They either did not believe in CTs but identified with having an 'alternative worldview' (Type 1), were open to CTs being possibly true (Type 2) or endorsed one or two CTs (Type 3). The monological hypothesis, as proposed by Goertzel (1994), fails to factor in those for whom CTs are a fringe belief or selectively endorsed. At the other end, Franks et al. (2017 [Chapter 2]) also indicate that for some, CT belief is complex beyond the monological quality of endorsing multiple CT beliefs, and can be differentiated according to their natural or supernatural belief content and social sensemaking.

The prospect that CT belief draws upon both CT material and non-conspiracist resources should be given greater attention. Using a narrative construction task, Raab, Ortlieb, Auer, Guthmann and Carbon (2013) found that in addition to official and outright

conspiratorial accounts, people constructed 'hybrid' accounts of the events of September 9/11 using a combination of official and conspiratorial statements. In social and personality research, positive correlations have been reported between belief in CTs and a range of non-conspiracist beliefs, including: paranormal beliefs (Brotherton et al., 2013; Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013; Darwin, Neave & Holmes, 2011; Swami et al. 2011; Stieger et al., 2013), new age beliefs (Newheiser, Farias, & Tausch, 2011), religious beliefs (Darwin et al., 2011; Douglas, Sutton, Callan, Dawtry & Harvey, 2015), and endorsement of pseudoscience (Lobato et al., 2014). Other studies indicate that conspiracist beliefs compete with other beliefs, particularly with regards to religious beliefs (Newheiser et al., 2011) and the acceptance of science (Lewandowsky et al., 2013; van der Linden, 2015). Given that dialogical relations between conspiracist and non-conspiracist belief are implicit in these findings, it seems reasonable to suggest that CT beliefs may not affect their sense-making functions in isolation from other beliefs, but rather by depending on those other beliefs in particular ways.

In this paper, we seek to further examine how CTs are not endorsed as closed, monological belief systems. The focus is on how CT beliefs might be dialogical, representing a relationship between CT and non-CT beliefs of the world in constructing conspiracist explanations of a given event or phenomena. Indeed, the possibility that CTs are dialogical in this sense is latent in the quantitative social psychology and personality psychology literature, which shows that CTs beliefs are correlated with beliefs whose semantic content is not overtly connected to a CT. This relation between conspiracist and non-conspiracist belief has not received extensive empirical attention. How then do conspiracist and non-conspiracist beliefs relate to each other?

Belief Co-existence and Conspiracy Theory

In pursuing the possibility of dialogicality, we draw on literature examining the coexistence of beliefs from developmental and cognitive psychology. Rather than development

occurring via a strict process of belief competition and displacement of less accurate beliefs, Legare, Evans, Rosengren and Harris (2012) show that contradictory explanations can coexist over time in children and adults. Such coexistence has been demonstrated for contradictory explanations of human origins, illness and health, and death (Evans et al., 2010; Harris & Giménez, 2005; Legare & Gelman, 2008). According to Legare et al. (2012), co-existence can involve three different dialogical relations between beliefs.

Firstly, *target dependent thinking* is where, "two different explanations remain alternative views of the world, recruited to explain distinct aspects of a given phenomenon, depending on the target or context" (p. 783). That is, two beliefs coexist, yet do not interact. For example, target dependent thinking is evident in this statement about death, ''Because if she is with God I guess she could see and hear. Her soul is alive even if her body is buried" (Harris & Giménez, 2005 cited in Legare et al. 2012, p. 783). Here, beliefs about the natural world are held alongside religious beliefs explaining two different objects (e.g., soul, body). In terms of dialogical CT belief, given the social stigma around CTs (Husting & Orr, 2007; Lantian et al., 2018), target dependent thinking may be pragmatic in keeping conspiracist and non-conspiracist beliefs apart to avoid disclosure and disagreement with others.

Legare et al. (2012) suggest that hybrid beliefs can arise in either integrative or synthetic forms of thinking. *Integrative thinking* arises when, "two different explanations are integrated into a single explanation" (p. 783). Integrative thinking explicates a causal relationship between two different worldviews. For example, in considering religious and biological beliefs, integrative thinking is evident in explanatory accounts describing 'God's hand' in the evolutionary changes of a species. In CT terms, integrative thinking may be apparent in the way a CT explanation features non-conspiracist accounts and commonplace details as the outcome of a secret conspiracist plot. *Synthetic thinking*, by contrast, is where "two different explanations are combined into a single explanation without explicit integration*"* (p. 783). It is

possible that a single explanation might bring together conspiracist and non-conspiracist beliefs but with a less explicit link than in integrative thinking. Synthetic thinking arises when the combination of two beliefs is less coherent, indicating a less reflective engagement regarding how those two beliefs link together. These forms of coexistence likely arise since official accounts often leave unanswered questions and details, which CTs can fulfil (see Birchall, 2001, on 'synthetic knowledge').

However, the possibility that two beliefs are brought together without explicit integration can also lead to other dialogical relations. *Cognitive dissonance* is a well-documented psychological phenomenon (Aronson, 1969; 1992; Festinger, 1957). Inconsistencies between two beliefs may bring about a sense of conflict and discomfort. Maintaining non-conspiracist and conspiracist beliefs could be challenging and lead to dissonant dialogical relations, particularly considering that CTs often are related to anomie, alienation and low trust (Abalakina-Paap, Stephan, Craig & Gregory, 1999; Bruder et al. 2013; Leman & Cinnirella, 2013, Swami, 2012), and more broadly express an ambivalence towards modern society and politics (Aupers, 2012; Fenster, 1999).

A final possible dialogical relation between CTs and non-CT belief is *analogical thinking*. As noted, CTs are contentious and often voiced from positions outside the set of "reasonable interlocutors" (see Husting and Orr, 2007), and academics may be regarded as epistemic authorities (Harambam & Aupers, 2015). Therefore, CT believers may utilise more pragmatic and rhetorical strategies in interviews to communicate their belief in CTs. A key possibility is the use of analogies bridging conspiracist and non-conspiracist ideas (Holyoak & Thagard, 1989; Leary, 1990). By drawing analogies between apparently contentious CT ideas and less contentious common-sense ones, the apparent reasonableness of the former may be enhanced. We will use the term 'belief coexistence' for all of these five possible ways that conspiracist beliefs may relate to non-conspiracist beliefs.

Lastly, in pursuing the possibility of dialogical CT belief, belief coexistence in developmental and cognitive psychology should be considered together with literature on Social Representations Theory (SRT). Coexistence in SRT is termed 'cognitive polyphasia' (Moscovici, 1961/2008; Jovchelovitch, 2007). Cognitive polyphasia represents coexisting beliefs, whereby different modalities of knowledge (e.g. science, religion, politics) are held within the same group or person (Provencher, 2011). Cognitive polyphasia is primarily a social mental form (Kalampalikis & Haas, 2008), since these modalities of knowledge—or otherwise termed, beliefs—occur within contested social contexts, particularly when they come to represent the same object (e.g. religious beliefs compete with scientific beliefs in representing the origins of the universe). Cognitive polyphasia has been documented in representations of health and illness, with local, traditional knowledge and practices coexisting with: Western psychiatry in India (Wagner, Duveen, Verma & Themel, 2000), or biomedical knowledge in Chinese communities in the UK (Jovchelovitch & Gervais, 1999). Furthermore, cognitive polyphasia has also documented competing beliefs about religion and science which can impact upon the trust of key figures and authorities, such as scientists, religious leaders, and politicians (Falade & Bauer, 2017). In our context, CTs appeal to laypeople, yet must compete with rival accounts provided by other knowledge authorities (e.g. government, or science, see Harambam & Aupers, 2015; Bricker, 2013). With this in mind, any enquiry into dialogicality should consider how belief coexistence occurs through competing knowledges and social representations (e.g. CT beliefs compete with science, religion and politics).

Our Study

We propose that CT belief is not endorsed in isolation but draws upon non-conspiracist beliefs. Questionnaire measures have shown that conspiracist beliefs correlate with other non-conspiracist beliefs. Such findings provide the landscape for how these beliefs may interact, but they do not uncover the semantic and pragmatic relations that underpin those correlations.

Research into belief coexistence and cognitive polyphasia has triangulated quantitative measures with qualitative methods to investigate these relations (e.g. Evans et al. 2010; Falade & Bauer, 2017). Qualitative semi-structured interview methods could allow for a more nuanced understanding of the symbolic belief content comprising CT worldviews (Byford, 2011), and of the possible semantic and pragmatic relations between CT and non-CT content – based on first-hand accounts of people who actively pursue CT explanations. Symbolic content refers to the representation of meaning in a worldview, as found within the themes of: reality, self, in-group, outgroup, action and future (Franks et al., 2017 [Chapter 2]; Moscovici, 1987). For any worldview, the symbolic content of these themes can reveal a person's standpoint on issues of epistemology (i.e. how is sense made of the world?), ontology (i.e. what is the world and who are the conspirators?) and agency (i.e. the actions and forces driving conspiracy) (Koltko-Rivera, 2004). The CT typology (Type 1-5) specified in Franks et al. (2017 [Chapter 2]) was taken forward as a basis to reconstruct the participants' conspiracist worldviews, before examining the dialogical relations of CT belief.

Method

Data Collection and Participants

A previous project had overcome the sampling issue of CT believers being a hard-to-access population. The same strategy of contacting gatekeepers and having an open-minded attitude informed our approach in this study (see Franks et al., 2017 [Chapter 2], for greater detail on this issue). Forty-one participants were recruited (male = 26, female = 15; age, *M* = 48.75 years, *SD* = 15.61 years, range = 25–81 years). Three organisers of groups where CTs featured prominently in discussions were informed of a research project investigating "how individuals are developing an interest in either mainstream, non-mainstream, conspiratorial or alternative beliefs." After sharing the research objectives, organisers posted a notice regarding

the project and 31 members voluntarily contacted the lead researcher to arrange an interview. Additionally, two participants were recruited at a David Icke event and another eight by snowball sampling. Being aware of the stigma associated with the 'conspiracy theory' label (Husting & Orr, 2007; Lantian et al., 2018; Pelkmans & Machold, 2011), the project requested individuals "who have alternative worldviews and beliefs, and may be critical of mainstream media, politics, economics, religion or society." Academic affiliations were fully disclosed and the interest in CTs was made clear in discussions and information sheets before seeking consent (see **Appendix 1**). Semi-structured interviews were arranged during May to August 2016 in South England: Central London (n = 23), Kent (n = 9), Suffolk (n = 3), Sussex (n = 3), Buckingham (n = 1) and through Skype (n = 2, UK based participants). Ethical approval was granted by Research Ethics at LSE before gathering data.

Interviews

All participants received an information sheet and had the opportunity to ask questions and discuss the research objectives before completing consent forms (**see Appendix 1**). Semi-structured interviews were conducted one-to-one and audio-recorded, using a topic guide with the sections: personal background, specific CTs of interest, research approach and truth, new age and spiritual beliefs, interactions and groups, and media use (**Appendix 2**.). All interviews (by minutes, M = 113.23, SD = 28.76, range = 75.21–184.21) were transcribed verbatim.

Data Analysis

Using NVivo 11 (2015), which is a software for conducting qualitative analysis, interview transcripts were analysed using thematic analysis. This involves identifying meaningful units of text. Multiple text units sharing a common idea formed a theme, which related to a single aspect of the phenomenon under investigation (Boyatzis, 1998; Braun &

Clarke, 2006). Text was coded in two stages: the first order and second order. These are outlined below.

First order

The First order explored whether the data was consistent with the typology of CT belief as proposed by Franks et al. (2017 [Chapter 2]) according to six worldview themes: self (biographical detail and research process), outgroup (conspirators and complicit public), ingroup (community and significant figures) (Haslam, Reicher & Platow, 2011; Tajfel, 1981), reality (nature of the world and causal agents inhabiting and sustaining CTs), future (anticipated future based on CT beliefs), and action (political behaviours and social meetings). Based upon the belief content according to those themes, a participant could then be potentially allocated to a worldview type:

(A) *Type 1*: expressed dissatisfaction with the status quo but no CT interest.

(B) *Type 2*: were epistemically uncertain, with an openness to CTs being possibly believable but without expressing conviction.

(C) *Type 3*: believed in one or two CT topics without a generalised CT worldview. Self-viewed 'outsider' and truth seeker, with ingroup providing privileged resources for specific CT topic(s) of interest.

(D) *Type 4*: had a monological CT worldview, endorsing multiple CTs, with generalised conspiracist outlook – involving human-based CTs within a natural ontology (e.g. government). Self-viewed 'outsider' and truth seeker, with ingroup sense of community and leader figures.

(E) *Type 5*: had a monological CT worldview, endorsing multiple CTs and generalised conspiracist outlook, additionally drawing upon non-human agents (e.g. aliens, entities and energy) and a supernatural ontology and sense of agency. Self-viewed 'outsider' and truth

seeker, with ingroup sense of community based upon new age beliefs about spiritual connectedness.

Notably, all self-development data, representing personal narratives, was partitioned and analysed separately for a paper on CT belief development (see Hall, 2020 [Chapter 4]).

Second order

The Second order coded for belief coexistence and the focus was twofold: to establish an understanding of the symbolic resources characterising dialogical beliefs and to specify the nature of that dialogical relationship (i.e. the way in which conspiracist and non-conspiracist relate to each other). Second order coding involved reviewing all six of the First order CT themes and then coding where the meaning in a single text unit clearly involved a CT and non-CT idea. This text unit would then be allocated to one of the five dialogical themes: *integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance* and *analogical thinking*.

Results

In order to determine whether the monological worldview typology was applicable, we developed a coding frame consistent with Franks et al. (2017 [Chapter 2]) which captured the main characteristics of the dataset. The First order results confirmed the monological typology from Franks et al. (2017 [Chapter 2]), demonstrating its robustness: each of the participants fell into one of the five types. For greater detail of the coding frame of the first order, please see **Appendix 3** (and also data excerpt example provided in **Appendix 4**). The remainder of the analysis focusses on the dialogical relations between conspiracist and non-conspiracist beliefs.

Second Order: Dialogicality of CT and non-CT beliefs

The main research focus was on dialogicality in the Second order of the analysis. In order to determine the dialogical relations between conspiracist and non-conspiracist beliefs, a

coding frame based upon five dialogical relations was applied (see **Appendix 5**). The most striking finding was that all participants held dialogical CT beliefs, with each of the five dialogical relations of belief coexistence emerging. Definitions and qualitative examples of each are featured in **Table 3** and a schematic representation is presented in **Figure 2**.

Table 3. *Definitions and qualitative examples of five dialogical relations*.

Dialogical relation	*Definition*	*Example*
Integrative thinking	CT belief and non-CT ideas about science, religion, politics and society are integrated to explain a phenomenon. A causal link between the two beliefs can be identified, whereby one influences the other.	"When you start investigating it, you can see the conditioning on every level everywhere. If you're firing on a certain part of the brain and say it is on the left side, you are going to be stuck in the limitations on the masculine side of the brain. When you open up the brain and tap into the left side of the brain—which is the creative, feeling-side, spiritual intuition—you see beyond the limitations." *[integrative, science belief]*
Synthetic thinking	CT belief and non-CT ideas about science, religion, politics and society are loosely brought together to explain a phenomenon. No causal link can be identified.	"I suppose evil people have no problem committing evil and living with themselves. But yeah, I think people will have to answer for it in one way or another, on this plane or another." *[synthetic, religious belief]*
Target dependent thinking	CT belief and non-CT belief are kept separate and used to account for different elements of a phenomenon. This explanation expresses a sense of consonance in two beliefs remaining distinct.	"The reality of what is actually occurring, conspiracy aside, I can separate my opinions on one from another. My opinions about politics or this and that, might not necessarily have any direct overlap with opinions on conspiracy theories and secret societies."
Cognitive dissonance	Expresses a sense of conflict in holding CT and non-CT beliefs. Difficultly in reconciling these beliefs, and expresses dissonance or discomfort due to their interaction.	"It's looking at the mainstream news and there's a constant lingering sense that everything's a lie. I don't know what is and what isn't, and you're definitely left with that. That's what leads to the more crazy side of conspiracy and the people who believe everything's a lie because you do get a sense of stuff that's so big and so instrumental and so world-changing and you realise it's a lie."
Analogical thinking	Likening a CT belief to a non-CT belief about science, religion or politics and society; or vice versa.	"But if we don't say anything, then it might keep things the way they are. Like Martin Luther said, 'It's not the ones that do evil. It's the ones that stand back and do nothing that are the problem.'" *[analogical, politics and society]*

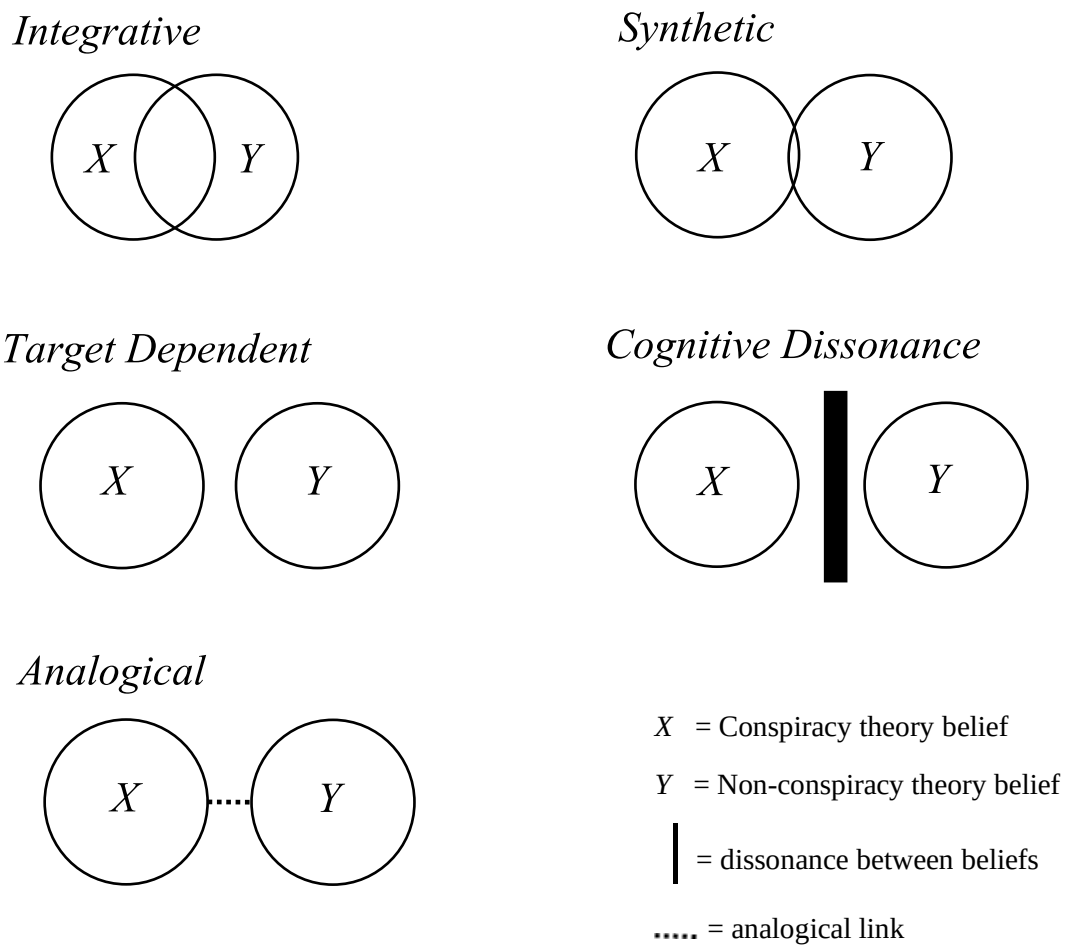

Figure 2. This figure shows a schematic representation of the dialogical relationship between conspiratorial and non-conspiratorial beliefs according to cognitive style or state.

Integrative thinking

Conspiracist beliefs were explicitly integrated with non-conspiracist beliefs about: science, religion, and politics and society. To demonstrate integrative thinking, the dialogical relation specified a causal influence, with one belief influencing another.

Science

CT beliefs were integrated with science through various conspiracist agendas. Participants proposed that science was directly involved in population control through, for example: administering harmful vaccines (e.g. Zika virus, Ebola virus, R2; R5), prescription

drugs (e.g. statins, R8, R29), and microwave and cell phone technology (R25). Practicing alternative therapies was recognised as "scientific heresy" to mainstream science (R29) and unsupported by "dogmatic scientific experiments" (R22), with participants noting alternative practitioners and "whistle-blowers" who had been assassinated (R15, R29).

Type 5 dialogical explanations additionally integrated supernatural CTs with science. For example, significant inventions such as Artificial Intelligence (A.I.) and aeroplanes were the outcome of "satanic forces" (R5). Dialogical comments involved intuitive understandings of science. Participants made references to chemical compounds such as chlorofluorocarbons (R25) or fluorides (R20) involved in conspiracist agendas. For example, R20 proposed that,

> "… like toothpaste, mouth washes that have fluoride etc., their consequences are that they tend to close off your pineal gland. Now the pineal gland is here at the back of our scull and it's shaped like a little pinecone. It's minute but it is the spark of divine light that we carry in us."

Science was also used to justify conspiracist claims. Firstly, references were made to perceived scientific consensuses. For example, "peer reviewed journals" evidenced that poisonous chemicals are being sprayed in the sky (R22) and "prominent medical doctors" showed that processed foods cause cancer (R7, R15). Moreover, R15 commented that, "It's a conspiracy that people knew like decades and decades ago about the impact of sugar and that a carbohydrate diet, about the impact on the cardiovascular health, the impact on inflammation and the effect of cancer." Secondly, participants' views were also formed on the basis of historic assessments of science. For example, scientific achievements such as the US lunar landings were falsified based on the limitations of available technology at the time (R18, R38).

Notably, science was also used to propagate Type 5 beliefs about supernatural CTs. Regarding physics-based CT beliefs, Creator Gods formed the solar system and "would spin the space-dust in a vortex in such a way that you would create big lumps here and there and

they turn out to be planets and then you've got a big sun" (R29). Illustrating biologically-based CTs, recent advances in cloning demonstrated that alien hybrids exist among us (R8). Moreover, R29 offers a neurological explanation for the control and "conditioning" of the masses,

> "When you start investigating it, you can see the conditioning on every level everywhere. If you're firing on a certain part of the brain and say it is on the left side, you are going to be stuck in the limitations on the masculine side of the brain. When you open up the brain and tap into the left side of the brain—which is the creative, feeling-side, spiritual intuition—you see beyond the limitations."

Science also had the potential to liberate humanity towards a better future based upon free energy technology and Artificial Intelligence (R20, R29, R36). Climate change was regarded as part of a species-wide change towards achieving a "higher vibrational frequency" (R20), and rearranging the "DNA configuration" to enable supernatural abilities of the masses (e.g. telepathy, R29).

In summary, the dialogical relationship with science was mixed. As evidenced above, science was involved in CT agendas but in other instances could also justify CT claims.

Religion

Exclusively for Type 5, religion was integrated with conspiracist and new age beliefs. These integrative explanations referenced religious texts and narratives to bolster alternative histories which had been suppressed from common knowledge.

Participants proposed that religion had been used to "control the masses" (R23), create division through religious wars (R38), and lead people away from their true spiritual potential (R23, R38). In these extracts, the 'evil elites' representing the top conspirators (see Franks et al., 2017 [Chapter 2]) were human groups, such as monarchies, the Christian church and Pope,

Imams, and governments (R23, R38). For example, R23 proposed a secret bloodline stemming from Jesus and commented that, "they wanted the idea of Jesus to be greater than the human." This was ultimately for purposes of control, "because I think religion particularly has become full of dogma and control and so has government. I think there's lots of organisations and institutions that are only here to control the masses. They're not really here to enlighten us."

Others integrated religious accounts with esoteric CTs. Secrets groups (e.g. "Illuminati," R5) and ancient cults (e.g. Saturn cults, Satanic cults, R5, R25) exercised power by religious symbols (e.g. 666, R29; R25), harnessing the energy of sacred sites (e.g. pre-medieval churches falling on leylines, R30), and having people worship false gods, "whether it's from Hindu or Buddhism or Catholic, Christian, Jewish, Muslim – the whole lot" (R25). For example, regarding religious symbols, R29 commented that, "Like 666 is meant to be the number for the devil. Well 666 is actually very powerful, good number. So, what they do is that they keep it away from you. They hide things in plain sight."

Many further proposed that religious texts (e.g. Bible, Quran) had been falsely interpreted, missing the point that the evil elites were actually alien conspirators intimately linked to human origins and history (e.g. "The Anunnaki are the Elohim, the global Zionist bankers," R9). For example, R38 noted, "Bible says, there were giants that used to walk around, so these giant people were the people who amassed the power and they ruled the countries ...". R1 proposed that aliens exist since, "religious treaties and religious scripture within paintings which quite clearly show strange beasts, which quite clearly show objects that fly in the sky, manned spacecraft."

Individuals endorsed variations on religious scripture ("Know yourself and the truth will set you free," R1; R9) or revered religious figures, like Jesus (e.g. "human consciousness which goes from 0 to 1000 and 1000 is Christ-consciousness" R29; R32). Additionally, religion

could also be used as a resource to interpret the future, in being wary of false prophets (R38; R9). For example, R38 noted that,

> "Both the Quran and the Bible talk about these false prophets that are going to come and try to trick everyone, so they're talking about things that could happen in the future, which will probably happen in the future if aliens come down."

In summary, religion was integrated with conspiracist accounts about human conspirators, esoteric cults, and aliens. It could also be used as a resource for the future.

Politics and Society

Types 3, 4 and 5 integrated conspiracist agendas with politics and social issues, proposing that the public were being manipulated and controlled through: work-life routines (R12, R33, R35, R38), "educational system" (R3, R8, R20, R27 R29, R32), and debt and mortgages (R8, R18, R30). Many comments were directed towards the status quo and the public, who were being "brainwashed" (R18) to behave and think in specific ways (see 'Outgroup: Sheep,' Franks et al. 2017 [Chapter 2]). For example, R32 commenting on education stated,

> "The whole aspect of how schools are run with the cameras and political correctness, that's all a part of the shadow governing and as I see it—the social engineering of people—and I believe and I know people are socially engineered. I know there is very little thinking involved because if you are stupid, you can be manipulated in any way."

Participants referred to 'middle management,' reflecting mid-level conspirators complicit with the evil elites' agendas (see Franks et al., 2017 [Chapter 2]). Namely, this included firstly, mainstream media who "control the narrative" (R36); and secondly, compromised political representatives who were "puppets" (R5, R8, R18). For example, R8 commented that, "ultimately, they're probably all puppets, but you know, the ones at the top are also toeing the line. You can meet local MPs who genuinely are interested in their

communities. I think they must have a very hard time!" The distinctions between political parties were meaningless and in name only (R28). For example, R5 commented,

> "They both have the same agenda if you look what the Labour Party under Brown did for years, it's no different from what Cameron wants to put through now. They are just carrying on from one another and that's because they are puppets."

For Type 3, the conspiracist motives were relatively straight forward, involving "just rich people who want power" (R40), or collusion whereby "business controls government" (R41). Top conspirators included the richest 1% of the world (R40), "the Establishment" (R27) and media moguls (e.g. Murdoch, R40). For Type 4 and Type 5, the evil elites additionally included: wealthy families, like the Rockefellers (R2, R5, R8, R33) and the Rothschilds (R2, R8, R14, R29), political institutions such as the European Union (R5, R8, R16, R19, R32, R33), and secret groups and "shadow organisations" (e.g. Illuminati, R28, R32, R35). The conspiracist agendas were on a bigger scale, happening through several moves as participants referenced various historical periods (e.g. colonialism, World War 2; R5, R29, R38), and political treaties (e.g. Lisbon treaty, R33), initiatives (e.g. Earth Summit, R2) and proposed events (e.g. "NGOs in Syria… training these terrorists groups," R5). For example, discussing the European Union as progress towards a New World Order, R33 stated,

> "It's not something that is going to be announced on television saying 'well, next we are going to start.' It will be something that is built around you steadily and suddenly you realise, 'oh we have this global governance thing and there's nothing we can do about it now.' That's certainly what is happening in Europe."

Notably, Type 5 could integrate politics and social issues with supernatural conspiracies. Social issues, such as racial discrimination, reflected essentialised differences based upon the evil elites being a "different race" (e.g. Reptilians, R28, R32). Human hardship fostered negative energies for entities to feed (R3, R7, R30). For example, R30 stated, "the

population are entrained within this complete myth and fallacy that is peddled and perpetuated. We are being parasitized. We are just a body or battery-heads of which there is a feeding."

Synthetic thinking

Synthetic thinking featured a loose integration between CT and non-CT beliefs, with a less developed link regarding how those two beliefs relate. Each integrative category above (i.e. Science, Religion, Politics and Society) also featured as synthetic dialogical relations. Type 2, Type 3 and Type 5 drew upon synthetic relations, although to a lesser frequency when compared with integrative thinking. Synthetic thinking functioned to present developing ideas and uncertain connections between conspiracist and non-conspiracist beliefs. For example, R15 demonstrated synthetic thinking which related to religious and conspiracist beliefs. On the topic of "Karma," R15 stated, "I suppose evil people have no problem committing evil and living with themselves. But yeah, I think people will have to answer for it in one way or another, on this plane or another." In synthetic thinking, the degree of explication was low without an explicit causal link. In synthetic extracts, any possible sequences of events or actions linking conspiracist and non-conspiracist belief was unspecified. In the example above by R15, this was represented by the ambiguity and absence of a cause in stating, "in one way or another, on this plane or another."

Participants could use synthetic thinking to share dialogical ideas in a cursory way (e.g. "Kind of in physics, kind of energetically" R3). In some cases, this involved participants drawing upon ideas and representations of science with conspiracist thinking. For example, R30 proposed that, "It's survival of the fittest at the expense of the weakest isn't it, but the weakest just don't know how weak they are." Synthetic thinking was characterised by suspicion and could take the form of open-ended questions. For example, in loosely combining politics and society with conspiracist beliefs, R39 proposed that, "Have we been deliberately set up to divide communities as we become more mobile? Is that deliberate that jobs were

pushed here, there and everywhere so people had to move? … I don't know." Synthetic thinking functioned to share developing dialogical ideas and suspicion.

Target dependent thinking

Target dependent thinking (TDT) involved partitioned endorsement of CT and non-CT beliefs, where both beliefs were maintained but without interaction. Specifically, views on CTs could be distinguished from other non-conspiracist views on politics and social issues. For example, R16 stated that,

> "The reality of what is actually occurring, conspiracy aside, I can separate my opinions on one from another. My opinions about politics or this and that, might not necessarily have any direct overlap with opinions on conspiracy theories and secret societies."

Partitioning beliefs in this way enabled a cognitively consonant approach to holding both CT-relevant and non-conspiracist beliefs. For example, R36 proposed having "one foot in, one foot out," in balancing between mainstream and alternative media. R36 stated that, "One foot out? By not watching the news or at least not emotionally being affected by the news I hear."

This dialogical relation was pragmatic in maintaining the possibility of certain CTs being true or false. Participants regarded their 'research' as a "constant work in progress" (R30) and for some, being "more of a hobby" (R38); and could suspend CT beliefs until further evidence later emerged (e.g. "I might bring it out again in light of new evidence or information," R30). For example, R4 commented that,

> "I think it's possible to have a twilight holding area of, 'I believe and I don't believe; it could be, it could not be,' but that's OK. There's many incomplete meanings in life that I think it's excusable to have a void where you put all that stuff."

Furthermore, some maintained that their CT beliefs did not impact upon their daily living (e.g. "So really living in both worlds is the only way," R36). For example, R1 stated,

"I'd like to believe it [extra-terrestrials] exists but if it didn't exist, would it really alter who I am and what I am doing?" Partitioning beliefs in this way benefited social lives and work relationships (R7, R18, R40). For example, R33 proposed that,

> "Our lives aren't activism and we have fulltime jobs, we have friends that aren't conspiracy theorists, and we tend to do normal things and don't mind watching telly and watching films, and don't see everything as some kind of big conspiracy."

Some used TDT thinking to refer to other members of the CT ingroup who shared differing views, inasmuch as they could consider their views without necessarily having to believe in them (R3, R4, R14, R39). For example, R39 proposed that, "I do question some of the things they're saying are conspiracies now cause I'm thinking, 'really?' How did they manage that in today's society? Somebody would have said something." In sum, TDT thinking was a cognitively consonant approach in separately maintaining conspiracist and non-conspiracist beliefs.

Cognitive dissonance

Types 2, 3, 4 and 5 expressed cognitive dissonance in holding both conspiracist and non-conspiracist beliefs. This was based on experiencing a sense of conflict between having two different viewpoints about the world. Participants proposed that their CT research brought them away from "conventional views" (R7) and that they could not express themselves freely. For example, R16 commented, "We haven't got free-speech, not truly free-speech, so the only thing that is really mine is my thoughts, my beliefs." Participants identified as being marginalised and "on the fringes of society" (R40). Frustration was directed towards an outgroup uninterested in CTs. For example, R15 commented that, "what annoys me on a personal level is people who have beliefs that they can't substantiate" (R15).

Participants had to negotiate a conspiracist reality which impeded upon their "conventional" experiences in everyday life (R7). Moreover, R40 commented that,

> "It's looking at the mainstream news and there's a constant lingering sense that everything's a lie. I don't know what is and what isn't, and you're definitely left with that. That's what leads to the more crazy side of conspiracy and the people who believe everything's a lie because you do get a sense of stuff that's so big and so instrumental and so world-changing and you realise it's a lie."

Participants felt that they were a "slave to the system" (R15) in referring to work and financial debt (R7, R15), voting (R12) and consumerism (R13, R18). In so doing, participants felt that through their own conduct, they were "part of the problem" (R18). For example, R7 commented, "I've got to be contributing to the system. I've got to work to have money, so yes, I'm part of the system. Do I believe in it? No." In another example, R2 commented that, "I'm definitely part of the problem. We're all part of the problem because I still work in financial services, so I'm still perpetuating that system."

Participants also reported dissonance which related to experiencing paranoia. For example, R30 noted that,

> "It's very easy to go down rabbit holes like Alice in Wonderland that don't facilitate getting the shopping done, or getting a job or any of those practical things. Also, you could scare yourself silly, you could get completely paranoid."

There were some qualities of dissonance which were type specific. For Type 2, dissonance could arise where a CT that they did not believe became more probable in light of new evidence. For example, R4 had come to terms with a point of discussion about the chemtrail conspiracy at, "a committee of the United Nations." R4 commented that, "Bloody Hell, that's really centre stage, that is, that somebody is bringing up chemtrails. I just can't see the logic: why would you poison everybody?" For Type 5, the dissonance emerging in their everyday life experiences was attributed to supernatural forces which had a negative impact upon their wellbeing. These included the psychic abilities of others. For example, R32

commented that, “especially with Reptilians, other people have psychic abilities which they place on you.” In other Type 5 examples, dissonance was related to viewing the world as an illusion (e.g. “I’m not interested in participating in that illusion,” R21); or being frustrated with this reincarnated life (e.g. “I never want to repeat this life-stream ever again” R5). Participants experienced dissonance in negotiating between conspiracist and non-conspiracist beliefs.

Analogical thinking

Most participants of Types 2-5 drew analogical connections, bridging CT ideas with non-conspiracist references. Analogies communicated complex CT ideas by drawing comparisons to a common non-CT reference point. An understanding of several aspects of CTs — outgroup, self, ingroup, reality — could be conveyed through analogies. Analogies were made by references to science, religion, politics and society, as well as by drawing connections to the real world and popular media.

Regarding the outgroup, the evil elites and oppression of the masses were better understood, for example, by reference to feudal society. R18 commented, “They kept the peasants in their place and we’re still peasants and they’re still kings and queens out there so to speak.” In another example, R1 proposed that the evil elite were, “distracting the audience like the magician who’s doing the trick, who’s deceiving you. There’s the deceit” (R1). The failure for others to accept CT truth and conformity to the status quo was regarded as the “sheep effect” (R34). R13 commented, “Most people are sheep. Sheep they need a shepherd to herd them” (see Franks et al., 2017 [Chapter 2]). Media played a prominent role in analogical relations, with consumerism, work-life and other aspects of society being compared to, for example: living within a simulated programme as featured in the Hollywood film, “The Matrix” (R4, R5, R22, R23, R28), or surveillance in George Orwell’s book, “1984” (R29).

Analogies also facilitated understandings of the self. Participants contended that their belief in CTs was similar to a “conviction” in God (R1, R12, R13, R41). Referring to CT

interest, R12 commented that, “So, it’s a belief and your believing makes it reality. I mean that can be for anything like people think God is real. It’s just a belief.” Moreover, R41 explaining his CT belief stated, “I say, ‘why do you believe in God?’ Cause you’ve got conviction.” Participants also likened their CT research to scientific endeavours, focussing on “causes rather than the symptoms” (R24), and supporting evidence to establish theory (R2, R9, R13, R27, R33, R40, R41). For example, R18 proposed that, “they’ve got a load more facts on conspiracies than Darwin does have on the Theory of Evolution.” Participants conveyed a sense of expanded awareness through researching CTs by a multitude of analogical statements, for example: “thinking outside the box” (R20, R24, R41); “It made me step out of the life I was living” (R36); and, “like being given sight” (R18) or “having an accurate map” (R26).

Regarding the CT ingroup, analogies were made to previous social movements, for example: the punk movement (“… connecting to something bigger than themselves,” R31), or LGBTQ movement (comparing ‘queer’ label’ to identifying as ‘conspiracy theorist,’ R31). Participants illustrated the diversity of the “alternative community” by reference to different sports clubs where, “in fact there is tension and conflict and isolated groups” (e.g. anti-fracking, alternative health, reptilian believers, R15). Participants highlighted that they avoided labels like “conspiracy” to avoid the social stigma attached with label of “atheism” (R24), and that participating in social groups on CT topics was like bonding in a religious setting. For example, R41 commented that, “If you go a church or are more religious, you’re going to a place of worship, aren’t you? Everyone is together there and there is that bonding.”

Finally, analogies were commonly used to explain mystical ideas about reality. Spiritual intuition, feeling energy and collective consciousness were conveyed through relating to more mundane experiences, such as physical objects in the natural world (R1, R8, R10, R20, R28). For example, R1 in explaining collective consciousness, commented that,

> "We are all connected by the subtle energetic threads to the same source … In a way if you took a stain-glass window, that has all the different fragment of glass, you would have a slightly different perspective but they all belong to the same window."

Other ideas, such as energetic shifts in the earth, were likened to activities, such as pains in giving birth and this was apparent through natural events (e.g. volcanos, R20). In summary, analogies facilitated an understanding of conspiracist beliefs through connecting to non-conspiracist references.

Dialogicality and the monological typology

The monologicality typology is useful in understanding the different uses of the dialogical relations. Monologicality and dialogicality are regarded as non-opposing concepts. Types 3-5 displayed integrative thinking. However, for Type 4 and 5, integrative thinking was particularly prominent in its explanatory value, as CTs merged with external ideas of science, religion, politics and science. Type 2 did not use integrative thinking. Types 2-5 all expressed synthetic beliefs, by a loose coming together of CT and non-CT beliefs. This may represent a less reflective engagement regarding their interaction or the expression of developing dialogical ideas. Interestingly, Types 2-5 all expressed target dependent thinking and cognitive dissonance. With regards to target dependence, this meant that participants could comfortably use CT and non-CT beliefs based upon keeping these beliefs separate. This was helpful in dealing with situations where CTs were not valued by others in society. Types 2-5 expressed cognitive dissonance. Even with more developed CT worldviews (i.e. Type 4, Type 5), people still find CTs difficult to reconcile with non-CT beliefs and day-to-day living. Finally, all types used analogies, communicating CT beliefs by reference to common non-CT ideas about: science, religion, politics and society, as well as real world phenomenon and popular media. Such patterns are only tentative, since our interest was more in assessing the presence and qualitative nature of coexistence, rather than its quantitative distribution.

Discussion

Belief coexistence is important for the sense-making function of CTs. CTs are not endorsed in isolation, but achieve sensemaking through combining with other, non-conspiracist beliefs. Through belief coexistence, our participants' conspiracist worldviews were dialogical. Their beliefs about CTs related to non-conspiracist beliefs in five ways: integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance thinking, and analogical thinking. Each was defined by different dialogical combinations of symbolic content between conspiracist and non-conspiracist beliefs, with some offering a pragmatic advantage in communicating CTs. Dialogicality responds to Goertzel's (1994) monological hypothesis, and emerges out of existing literature latent in correlational research which report relationships between CTs and other non-CT beliefs (e.g. Darwin et al., 2011; Newheiser et al., 2011; Lewandowsky et al., 2013). Our approach was informed by research on belief coexistence as featured in cognitive and developmental psychology (Legare et al., 2012), and Social Representations Theory (Moscovici, 1961/2008; Provencher, 2011).

As noted, Goertzel's (1994) monologicality claim has two aspects – that belief in one CT predicts belief in many, and that they are closed ways of thinking. Franks et al. (2017 [Chapter 2]) offered evidence of a monological typology to suggest the first does not apply to all believers in CTs. Importantly, our results further confirmed the robustness of this typology of five kinds of CT worldview: all participants were discretely categorised as instances of these types. However, the results here also suggest that the second aspect of Goertzel's (1994) monologicality claim also does not apply. Contrary to the monological thesis: no participants evidenced a closed, non-dialogical form of thinking. Type 4 and Type 5 participants with more elaborated CT worldviews (monological in terms of believing multiple, all-embracing CTs) were no less dialogical (i.e., employing CT and non-CT belief coexistence) than Type 2 and Type 3 participants who have non-monological CT worldviews. As such, dialogicality between

conspiracist and non-conspiracist belief is likely a core quality of endorsing CTs, running counter to Goertzel's (1994) monological proposition of having a 'closed mind.'

However, there was a relation between CT type and prevalent forms of coexistence. *Prima facie*, the more monological, elaborated and complicated the conspiracist worldview, the more important integration was to their worldview: *integrative thinking* supports elaborated explanatory connections between conspiracist and non-conspiracist beliefs. We found such a pattern, with Types 5 displaying the highest levels of integration between beliefs about CTs with other non-CT beliefs about human origins and religion (alien interference in human development), politics and society, (e.g. manipulation of masses through work life) and science (e.g. depopulation through medical drugs). This finding directly contradicts the expectations arising from Goertzel's (1994) view, that the more monological in terms of the number of CTs adhered to and purported closed epistemology, the less dialogical those CTs would be. Instead, CTs are dialogical and gain substance for believers by being integrated with non-conspiracist beliefs.

It was also possible for belief coexistence to emerge in less elaborated ways. By *synthetic thinking*, CTs and non-CTs were related, but by a less established connection. Legare et al. (2012) in their research into natural and supernatural beliefs about biological thought (e.g. illness, human origins, death), have proposed that synthetic thinking represents less reflection about the nature of those dialogical beliefs. Our findings support this claim but further suggest that, in the context of CTs, synthetic coexistence may also function to test developing ideas in loosely connecting CTs and non-CT references.

Dialogical beliefs could also remain distinct through *target dependent thinking*, which meant that CT and non-CT beliefs could be endorsed without interaction, and thus kept separate (e.g., daily life and views on politics distinct from CT beliefs). In Social Representations Theory, belief coexistence—referred to as cognitive polyphasia—have shown that coexisting

beliefs about religion and science can have different arrangements, for example: they can be parallel and complementary or hierarchical (see Falade & Bauer, 2017). Our findings indicate that in the context of CT and non-CT beliefs, parallel beliefs can be endorsed in target dependent ways. Some participants sought to maintain a wider awareness of CTs without these ideas interfering with their daily life. This form of belief coexistence kept CT and non-CT beliefs apart; yet was sensitive to context, since some participants displayed cognitive barriers so that their CT endorsement would not impose upon their ability to work or maintain positive relationships with others who did not value CTs.

Some participants experienced *cognitive dissonance* by holding incompatible CT and non-CT beliefs. As such, cognitive dissonance showed that not all dialogical beliefs were positive. Cognitive dissonance emerged when participants identified with CT beliefs whilst still internalising other standards of society where CTs were perceived to be marginal. Dissonance shows that CTs are an 'affective knowledge': they are not just narratives, but have affective qualities, in expressing doubt and mistrust (Pelkmans, 2018). It was interesting that dissonance was present across Types 2-5, showing that regardless of the degree of monological CT worldview, dissonance remains. Given that dissonance is related to different political perceptions and behaviours (e.g. Acharya, Blackwell, & Sen, 2015; Bølstad, Dinas, Riera, 2013; McGregor, 2012), the role of dissonance in relation to CTs and its political consequences should be considered. CT belief has been shown to decrease voting intentions (Jolley & Douglas, 2014), is linked to support for democratic principles (Swami & Furnham, 2012), and also political action (e.g. participating in CT research groups and protests) showing some form of social mobilisation connected to CTs (i.e. prefigurative social movement, see Franks et al., 2017 [Chapter 2]; Yates, 2015). It may be that underlying these political behaviours is cognitive dissonance as participants look for alternative strategies to effect change beyond those available by conventional political channels.

The bridge between CT belief and non-CT belief also called for pragmatic strategies. CTs are propositions and narratives about collusion and secrecy which may not be readily apparent. Our participants drew on *analogical* relations, highlighting similarities between CT and non-CT ideas. In this regard, analogies facilitate conspiracist understanding by making an idea more comprehensible through linking to a familiar reference point. This was to be expected in the interview setting, not only to facilitate explication, but given that the 'conspiracy theorist' speaks from a socially stigmatised position outside the range of reasonable interlocutors and epistemic authorities (e.g. scientists) (Husting & Orr, 2007; Harambam & Aupers, 2015). Analogies reflect both the participant's sensemaking and rhetorical devices in communicating CT ideas, gaining warrant and credibility by relating to non-conspiracist beliefs.

These findings build directly upon other research, questioning the role of monologicality in CT endorsement. More specifically, belief coexistence with non-CTs allows CTs to handle apparently contradictory data or arguments, since there is no expectation that all different beliefs will be integrated into a seamless whole. Wood et al. (2012) demonstrated that CT believers can believe logically incompatible CTs of the same phenomenon (e.g. Princess Diana is still alive and was assassinated). They proposed that on these grounds it was unlikely that each CT belief served as evidence for each other, as proposed by Goertzel (1994). Our study extends this in demonstrating that CT believers can hold apparently contradictory CT and non-CT accounts of the same phenomenon. They can be acknowledged and sit together in synthetic, target dependent or analogical ways – without contradicting the CTs themselves. Since coexistence applies far beyond the sphere of CTs (e.g., Falade & Bauer, 2017; Legare et al., 2012), the implication is that resistance to change by holding beliefs in coexistence is not a distinctive CT-related form of 'irrationality,' but rather a more common, adaptive way of thinking.

The study also provides further support for the quasi-religious view of CTs (Franks et al., 2013). CT beliefs reinforce their plausibility in similar ways to how religious beliefs gain plausibility. That is, religious beliefs involve counter-intuitive beliefs which are not entirely closed ways of thinking. They depart only in specific ways from non-religious representations by negating certain ontological properties of the natural world. For example, a person acts in the natural world, so likewise the "spirit" can also act but without the ontological quality of a biological body (Boyer, 2001, Boyer & Ramble, 2001; Franks, 2003, 2004; Norenzayan, 2013). In the context of CT thinking, participants were able to utilise a range of non-conspiracist resources to depart from commonsense representations in ways that retained the semantic properties of non-CT ideas. This was evidenced in the various ways that content, traditionally associated with science, religion, and politics and society, were turned towards conspiratorial relevance, albeit through the five dialogical ways of thinking.

More broadly, CTs' connections to non-CT beliefs supports flexibility in the face of new data and challenges. By being connected to non-conspiracist beliefs, CTs can draw on those beliefs, inferences and explanations in generating CTs that apply to new events. Although many CTs take the classic form of authority cover-ups of misdemeanours, this plays out differently according to the specific topic: for example, cybersecurity, big pharma and credit crunches each require different plausible non-CT beliefs to substantiate the relevant CT. As documented here, by integrative thinking, beliefs about science, politics and religion, are all potential resources to propagate CT belief. Using non-CT ideas in this way provides greater impetus to revise our understanding of the apparently 'reified' or 'esoteric' status of science which come to feature in layperson thinking (see Bangerter, 1995; Fleck, 1935/1979).

Finally, our study vindicates the idea of using multiple methods to understand the content and functioning of CTs: quantitative methods can map the general patterns of relations between types of belief content, and investigate the causal chains between them; qualitative

methods can offer insight into the semantic and pragmatic foundations of those relations and causal chains (Caillaud, Doumergue, Préau, Haas, & Kalampalikis, 2019; Denzin, 1978). For example, CT believers have an ambivalent relationship with science. Past quantitative findings have shown that endorsing CTs relates to endorsing pseudoscience (Lobato et al., 2014), and rejecting climate and vaccination science (Lewandowsky et al., 2013). Past qualitative data shows a layperson view of science as an 'epistemic authority,' whereby power and financial interest obfuscate research and perceived standards of objectivity making it difficult to be informed about scientific issues, such as global warming and medication (Harambam and Aupers, 2015). Our findings on dialogicality add to this by a qualitative angle, documenting the rejection of science and also surprisingly, the selective endorsement of scientific content and standards to support CT belief.

Limitations and Future Research

We have drawn on qualitative data from semi-structured interviews to suggest that CT and non-CT belief coexistence may be a key part of conspiracist worldviews. Such qualitative data is important in offering insight into the symbolic resources used by CT believers, from their own perspective. It is, however, rare, in large measure because of the access problem noted above. As with other qualitative research, the generalisability of the results is uncertain given the small sample size (though see Franks et al, 2017 [Chapter 2], for some reasons why the results from other samples might not differ considerably). As a result, it is important that future research augments the corpus of qualitative data as well as integrating it further with quantitative research.

We have suggested that coexistence may explicate the foundations of observed correlations between CT and non-CT belief. Possible future qualitative research might target interviews towards the specific areas of non-CT beliefs found to have high positive correlations with CT beliefs: do these different contents of non-CT beliefs involve different forms of

coexistence? A further direction would be to consider whether the extent of such correlations is connected, not only to the degree of coexistence (i.e., the extent of use of non-CT beliefs in relation to the CT worldview), but also to the type of coexistence (e.g. does the extent of correlation relate to the extent of use of integration, for example?).

The insights yielded were limited to the data available from a small sample of people, and may not be transferable to all scenarios where CTs emerge (Guba & Lincoln, 1981). Although it is proposed that the five dialogical relations represent the main forms of CT belief coexistence, there may be variation in the dialogical belief content according to the demographic qualities or community sampled. For example, Newheiser et al. (2011) found that religious beliefs and Biblical knowledge negatively predicted the endorsement of specific CT beliefs concerning the Da Vinci Code; however, endorsement of new age beliefs increased endorsement. The Da Vinci Code conspiracy presents an alternative historical account of Jesus so therefore it would be expected that people who endorse religion would reject this specific CT. In our study, many of the sample endorsed new age beliefs, and displayed integrative thinking whereby religion could be both negatively (e.g. church to control the masses) and positively (e.g. revering religious leaders, Jesus) represented. This is an example of how a demographic quality (e.g. religious vs new age beliefs) can influence the content and framing of dialogical relations. In future studies, qualitative research should focus on different demographic qualities and communities—both in vivo and online—to examine their forms of dialogicality. People's views are influenced by the media they consume (Stroud, 2008), and thus it may be possible that media content is characterised by dialogical relations which facilitate certain forms of dialogical thinking. Furthermore, there is limited information about how dialogicality arises. An experimental approach is recommended, which could treat dialogicality as the dependent variable, to examine how it is influenced by, for example:

informational cues mirroring CT media (Uscinski, Klofstad, Atkinson, 2016), and social influence of ingroups or role model leaders (Haslam et al., 2011).

More broadly, how does belief coexistence relate to the development of CT beliefs? As shown here, people draw upon non-conspiracist ideas in their conspiracist thinking. Hall (2020 [Chapter 4]) found similar relationships in the perceived development of CT belief based on narratives of people who endorse CTs. Interestingly, early-CT experiences could emerge from non-conspiracist origins (e.g. following personal trauma), but could also emerge in more direct ways from an interest in CT events (e.g. events of September 9/11) and alternative histories and cosmogonies (e.g. aliens intervening in human history). It was also possible for people to transition away from CTs based on powerlessness and accepting a conspiracist reality to be the norm, which may show the potential developmental consequences of cognitive dissonance. Following on from this, more research should consider the role of belief coexistence in relation to CT belief development. For example, there would appear to be a close link between the transition away from CTs and cognitive dissonance (Hall, 2020 [Chapter 4]), however we should also not exclude the possibility that dissonance plays a role in inspiring CT interest (i.e. presenting dialogical problems and finding ways to resolve them through CT research) and political action (i.e. seeking change in the world based upon incongruent beliefs)? Future research should substantiate the role of dialogicality in CT belief development.

Conclusion

Semi-structured interviews with CT believers demonstrated that their worldviews maintained coexisting conspiracist and non-conspiracist beliefs even where they were conflicting. They used varying forms of belief coexistence by five dialogical relations: integrative thinking, synthetic thinking, target dependent thinking, cognitive dissonance and analogical thinking. Conspiracist thinking is not entirely unique: it shares this functional and

adaptive quality of coexistence with other ways of thinking about the social, scientific, natural and religious world. Nor do CTs embody a closed, monological way of thinking; rather, they have dialogical relations with non-conspiracist worldviews.

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CHAPTER 4 | Conspiracy Theory Belief Development

Article Title

Developing worldviews: Perceived origins and development of belief in conspiracy theories

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Abstract

Conspiracy theories (CTs) are widespread and have consequences for political behaviours. However, little research has examined how those beliefs develop. In the absence of longitudinal data, one way to gain insight into the development of CT worldviews is through narrative data. A thematic analysis was conducted of 41 semi-structured interviews with individuals who endorsed CT beliefs. Many participants recalled major transformative experiences, akin to religious conversion. Experiences linked to early CT-belief development included an initial interest based upon: (a) conspiracy event(s), (b) alternative histories and cosmogonies, (c) spiritual experiences, (d) social issues, and (e) personal trauma. Later-CT experiences were defined by: (a) research, (b) self-discovery, (c) conspiracist reality and outgroup, and (d) action. Surprisingly, results also revealed that some people could become less interested in CTs, and thus transition away from CT worldviews. This study suggests that developing CT worldviews involves the potential to become more engaged with political issues and action. The implications are discussed exploring the possibilities that CT endorsement represents a nascent, prefigurative social movement.

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Introduction

A conspiracy theory (CT) is an attempt to explain an event by describing how two or more actors collude to enact a secret agenda (Douglas et al., 2019). 'CT belief' and 'conspiracist belief' are used interchangeably to represent the endorsement of CTs. CTs offer alternative explanations to 'official' narratives and sources of information. These explanations can inform the beliefs that constitute a 'conspiracist worldview'– that is, the endorsement of conspiracist beliefs as they relate to beliefs about: the self, ingroup, outgroup, social and action, future and reality (see Franks, Bangerter, Bauer, Hall & Noort, 2017 [Chapter 2]; Hall, Franks, Bauer, & Bangerter, 2020 [Chapter 5]). This study is an empirical investigation into one aspect of the conspiracist worldview: the self. Specifically, the study explores the development of a conspiracist worldview as reconstructed by CT believers through interview accounts of their biography and perceived development. The approach contrasts with the view that CT belief is 'irrational;' but rather documents a set of experiences which characterise the development of an interest in CTs.

CTs are consequential, impacting on a person's willingness to engage with political processes and policy-relevant behaviours. Engaging with government CTs can decrease intentions to vote—an effect which is in turn mediated by powerlessness (Jolley & Douglas, 2014b). CT belief relates to the rejection of vaccination and climate science (Jolley & Douglas, 2014a; Lewandowsky, Gignac & Oberauer, 2013). CT belief also relates to forms of political action beyond the parameters of 'conventional' politics, such as CT communities online and in vivo (Bessi et al., 2015; Franks et al. 2017 [Chapter 2]). CT belief has political consequences, however limited research has explored how those conspiracist beliefs develop.

CTs are important for the self and linked to agency. Threatening personal control can increase belief in CTs (Whitson, Galinsky, & Kay, 2015), particularly when engaging with CTs concerning political opposition (Sullivan, Landau & Rothschild, 2010). Uncertainty and

perceiving a suspect politician as immoral can also increase CT belief (van Prooijen & Jostmann, 2013). These studies indicate that CT beliefs have a role in compensating for a lowered sense of agency.

Correlational research indicates that CT belief is linked to agency through social and personality attributes. For example, CT beliefs are associated with an external locus of control and lower trust (Abalakina-Paap et al., 1999), as well as anomia, powerlessness, and less socio-political control (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013). These different attributes show that the relationships between self, agency and CTs are complex. Developmentally, these variables may indicate the preconditions, present characteristics or consequences of endorsing CTs. Given that these studies were cross-sectional, we are unable to comment on how CT belief, self and agency change over time.

There is a need for longitudinal data on changes to CT belief over time. Although not longitudinal, Stieger et al. (2013) examined general conspiracist belief at two time points with two different cross-sectional datasets. Belief in a specific CT (disappearance of Natascha Kampusch) was predicted by general conspiracist ideation, paranormal beliefs, and media engagement. Notably, books and articles were important at Time-point 1 but not two years later at Time point 2; and internet was important only at Time-point 2. This study is unique in considering change in a specific CT belief over an extended period of time, but does not use the same participants and therefore cannot be classed as longitudinal. Furthermore, this study does not comment on the development of generalised CT worldviews but rather focusses on a specific CT. More broadly across the literature, the scarcity of longitudinal data is likely the outcome of resource constraints (Menard, 2002). Without longitudinal data, tracking change to CT belief over time, it is difficult to pinpoint triggers to engage with CTs in relation to self and agency.

In seeking an alternative to longitudinal data, research on narratives may facilitate an enquiry into the development of CT belief. Narrative psychology proposes that individuals construct narratives to make sense out of their life experiences and memories (Singer, 2004). By interpreting, attributing and (re)ordering experiences and events, a narrative offers an apparent continuity to causally related or unrelated happenings (Bruner, 1990). Narratives therefore inform one's sense of self and development. Agency may be recognised by this meaning-making process (i.e. actively seeking meaning through narrative construction) (Bauer & McAdams, 2004, McAdams, 2001; McLean, 2008). Narratives inform our enquiry, indicating that CTs may be endorsed with personal narrative beliefs about the self. This is consistent with Franks et al. (2017 [Chapter 2]), who reported that the self was a central aspect to conspiracist worldviews: CT interest was linked to biographical experiences connected to significant events (e.g. September of 9/11, Iraq War or 2008 financial crisis) or other personal issues (e.g. severe illness). Since this important finding, there has been no further qualitative research looking at the role of the self in relation to CT belief development. The question arises as to how personal narratives are linked to CTs, and what insight they might offer for understanding the development of CT belief?

One tradition of narrative research focusses on religious conversion and development of religious belief. The sociology of religion has yielded empirical and methodological insights that can inform our enquiry into the development of CT belief. Classic conceptions of conversion as a sudden and passive inner change towards a religious orientation (e.g. Lofland, 1965) received only partial empirical support (Austin, 1977; Greil & Rudy, 1984; Snow & Phillips, 1980). The ramifications of this were to recognise that individuals are agentic in their conversion experiences and that the data produced by interview accounts was not direct evidence of psychological change – but rather empirical data on the retrospective reconstruction of their conversion experience (Beckford 1985; Richardson, 1985; Taylor,

1976). Since then, focus has turned to changes in meaning-making and self-understanding (e.g. seeking transformation, Richardson, 1980; Straus, 1979). In psychology, religious belief has been linked to positive coping strategies in dealing with negative life events (Pargament et al., 1990; Pargament, Koenig, Tarakesh, & Hahn, 2004) and that conversion may be linked to personality changes (Paloutzian, Richardson & Rambo, 1999). Together, this indicates at least a self-perceived level of change through religious conversion experiences.

Looking at this more closely, we can appreciate that firstly, narratives relate to the self. Staples and Mauss (1987) propose that conversion narratives feature language use that facilitates self-transformation, whereby the symbolic resources of religious representations give meaning to life problems (Stromberg, 1990). Narratives feature life stories functioning to bridge changes in beliefs and disjointed experiences into a coherent sense of self (Cohler, 1982; McAdams, 1985, 2001). Secondly, norms influence narratives. Interviews about conversion narratives are communications at single timepoints and limited to then available resources (Beckford, 1978b). They involve sensemaking of experiences drawn upon common ideas and social representations shared between people (Bauer & Gaskell, 1999; Moscovici, 1961/2008), communicating their experiences in particular ways appropriate to others (Beckford 1978a). For example, individuals can explain their behaviour through confabulating towards cultural norms and ideal standards of agency (e.g. as an independent person) and therefore inaccurately explain their actions (Voyer & Franks, 2015; Wegner, 2002).

The analogous relationship between CT and religious beliefs has been previously proposed by the quasi-religious approach to CTs (Franks et al. 2013). CT belief may draw upon similar representations found in religious beliefs (e.g. counter-intuitive beliefs, see Boyer, 2001; Franks, 2003, 2004). Regarding CT belief development, Franks et al. (2017 [Chapter 2]) found that researching CTs involved a secular 'quest' whereby CTs helped deal with existential questions (Batson, Schoenrade & Ventis, 1993). People tied CTs to personal

experiences and issues (e.g. homelessness or bankruptcy). Indeed, monological CT believers—that is, people with a generalised belief in multiple conspiracy theories (Goertzel, 1994)—perceived significant destabilising events (e.g. September 9/11) as key moments, inspiring their interest in CTs. Furthermore, many rejected the social stigma attached to the label of 'conspiracy theory.' These findings are interesting, since they provide a scope of the way CTs link to the self. However, there remain several questions worth addressing regarding the development of CT belief. Religious conversion experiences are diverse (Paloutzian, Richardson & Rambo, 1999; Rambo; 1993), but little is known about how CT belief develops. Based on narrative data, what are the significant experiences related to CT belief development as perceived by people who have an interest in CTs? Is CT belief development characterised by pre-CT, early and later experiences?

Study Overview

To understand how people develop conspiracist worldviews, this study begins with the self – investigating narrative reconstructions of belief change with people who have varying interests in CTs. Research in religious conversion recognises that changes to the self over time may not occur across the same variable but rather that different variables can emerge and impact on conversion at different points in time (Dunlop & Walker, 2013; Rambo, 1993). The lack of qualitative research in CTs is a recognised issue and surprising given that the phenomenon is defined by its rich belief content and symbolic resources in sense-making about significant events (Byford, 2011; Franks et al., 2017 [Chapter 2]; Hall, Franks & Bauer, 2020 [Chapter 3]). Semi-structured interviews and qualitative methodology were employed, catering for the variety of experiences relevant to CT belief development. A thematic analysis of narrative data was then conducted revealing several themes related to narrative beliefs about

development during pre-CT, early-CT and later-CT belief periods. Participants ranged from the minor endorsement of CT beliefs to wholescale conspiracist worldviews.

Method

Data Collection and Participants

A previous research project had overcome the problem of CT believers being a difficult-to-access population. Taking this forward, contact was made with gatekeepers and the research approach was open-minded in taking their views and experiences seriously (see Franks et al., 2017 [Chapter 2], for further detail). In this study, we used purposive and snowball sampling from social groups who discussed CTs in London and South East of England. Three group organisers acting as gatekeepers were contacted about a research project studying, "how individuals are developing an interest in either mainstream, non-mainstream, conspiratorial or alternative beliefs." A notice was posted on the group's social media website and interested members responded voluntarily. Avoiding the social stigma of "conspiracy theorist" was important (Husting & Orr, 2007; Lantian et al., 2016; Pelkmans & Machold, 2011), and the study requested participation from individuals "who have alternative worldviews and beliefs, and may be critical of mainstream media, politics, economics, religion or society." The academic affiliation and interest in CTs were made clear in information sheets and interactions prior to requesting consent for the project (see **Appendix 1**). Forty-one participants (male = 26, female = 15; age, M = 48.75, SD = 15.61, range = 25–81) completed semi-structured interviews. Two participants took part through contact at a David Icke event. Another eight participants took part by snowball sampling. Interviews took place in May to August 2016 and were conducted in public places and private residences in the South England counties: Central London (n = 23), Kent (n = 9), Suffolk (n = 3), Sussex (n = 3), Buckingham (n = 1) and Skype (n = 2, UK). The research was approved by Research Ethics at LSE before conducting interviews.

Interviews

Participants received an information sheet and could raise questions before consenting for an audio-recorded interview. The semi-structured interview followed a topic guide (see **Appendix 2**) with open questions on: personal background, specific CTs of interest, research approach and truth, new age and spiritual beliefs, interactions and groups, and media use. For insight into narrative beliefs, open questions were directed towards biographical life phases (i.e. period of developing CT beliefs), situations and potentially contentious experiences (e.g. learning of 9/11, defending CTs). Questions and probes encouraged recall of concrete occurrences and actions but also personal insights and observations (Clandinin & Connelly, 2000; Hopf, 2004; Kvale & Brinkman, 2009; Jovchelovitch & Bauer, 2000; Rosenthal, Fischer-Rosenthal; 2004). A verbatim transcription was produced for the analysis. All interviews were transcribed verbatim (by minutes, M =113.23, SD = 28.76, range = 75.21–184.21).

Data Analysis

A thematic analysis of 41 interviews was conducted. Transcripts were read to find meaningful text units. Multiple text units with a common idea were classified under a theme: corresponding to an aspect of the phenomenon of narrative beliefs about developing an interest in CTs (Boyatzis, 1998; Braun & Clarke, 2006; Rosenthal, 2004a, 2006). To systematically conduct a thematic analysis and organise the data, this process was completed manually in NVivo 11 (2015), a software which facilitates qualitative analysis (see **Appendix 6**, for data excerpt example).

Conspiracist worldview development

Narrative beliefs on developing an interest in CTs were coded (see **Appendix 7** for coding frame). Coded text units had to feature either: personal stories, life history or temporal self-related comments, all on the subject of developing CT beliefs and an alternative

worldview. Alternative worldview catered for related phenomena connected to CT beliefs, such as new age beliefs and political views and behaviour. A coding frame distinguished between narratives relevant to three periods of belief development: pre-CT, early-CT and later-CT. Several themes emerged within each period. Patterns were established based on links between themes.

Conspiracist worldview type

The dataset was split according to personal narrative and non-narrative statements. Data relevant to personal narratives and CT belief development was partitioned for this analysis (whereas data on dialogicality was part of a separate analysis and not analysed here, see Hall et al., 2020). The analysis was partly anchored in a previously established typology of CT worldviews developed by Franks et al. (2017 [Chapter 2]). This typology is important because it marks qualitative differences in conspiracist worldviews concerning the symbolic resources of beliefs, about the: self, ingroup, outgroup, reality, future and action (Franks et al., 2017 [Chapter 2]; Moscovici, 1987). Each worldview type described below represents a stance on issues of epistemology (i.e. sense-making and beliefs), ontology (i.e. what constitutes the world and who are the conspirators?) and agency (i.e. action and attribution) (Koltko-Rivera, 2004).

(A) *Type 1*: critical of status quo (existing mainstream politics and economics) with commonsense ontology. Identification with 'alternative worldview' but no CT endorsement.

(B) *Type 2*: questioning and open-minded but uncertain about truth-status of CT beliefs.

(C) *Type 3*: self-viewed 'outsider,' interested in one or two CT topics and perceived sense of ingroup community.

(D) *Type 4*: monological conspiracist worldview, involving belief in multiple CTs with a generalised perspective, based upon natural ontology of human conspirators (e.g. government). Self-viewed 'outsider' and truth-seeker; and ingroup provides resources and sense of community with leader figures.

(E) *Type 5*: monological conspiracist worldview; belief in multiple CTs and generalised outlook, within supernatural ontology (e.g. spiritual energy and aliens). Self-viewed 'outsider' and truth-seeker with a spiritual perspective on the world. Ingroup provides a sense of community based upon spiritual connectedness and shared understanding of supernatural deception taking place.

Each participant was allocated to a type according to the profile of their CT beliefs. This was taken forward to better understand differences in the perceived development of CT beliefs. It remained open as to whether the typology was meaningful for exploring issues of belief development.

Results

Narratives of CT belief development revealed three sets of themes across three periods: pre-CT belief development, early-CT belief development and later-CT belief development.

Pre-CT belief development

Prior to developing an interest in CTs, participants spoke of a *self-discrepant* past-self or that their CT interest was *self-consistent* by emerging from existing self-attributes. These two themes revealed signs of a burgeoning alternative worldview and showed two ways that participants framed the self prior to developing an interest in CTs.

Self-discrepant

Self-discrepant narratives conveyed change from a former past-self, characterised by: religious and an authoritarian upbringing (R5, R7, R27, R34, R35, R39), over-working (R2, R36), blindly endorsing "mainstream" narratives about economics and politics (R6, R7, R27), or simply being youthful and "immature" (R14, R18). Participants began questioning: religion (R5, R7, R27), education (R34) and the 'status quo' (R18, R36). Others became more

introspective (R1, R14) or spiritual (R32, R35). Throughout all of these narratives was a sense that their past-self was somehow distant and different to who they have become.

Self-consistent

Self-consistent narratives emphasised that their 'alternative worldview' emerged from an existing self-attribute, regarding their: preference for independence (R5), ability to question (R9, R28), or spirituality and supernatural abilities (e.g. telepathy, R28; R26). For others, their alternative worldview emerged from political interests (R4, R26, R33, R35). For example, R33 stated, "It started from being a fairly slavish follower of mainstream political discourse." Self-consistent narratives foregrounded their own agency by highlighting a past positive self-attribute which was consistent with their later choice to engage with CTs.

Early-CT belief development

Narratives of early-CT development included perceived first experiences of developing CT belief. These were categorised into five themes: *conspiracy event, alternative histories and cosmogonies, spiritual experiences, personal trauma*, and *action*. Participants' early-CT belief experiences were diverse and distinct with participants mainly being allocated to a single theme during this period. Across all themes, participants described early changes in their thinking in beginning to pursue CTs and related issues.

Conspiracy event

Some participants described a significant conspiracy event as a turning point: first US lunar landing (R18, R38), President John F Kennedy assassination (R41), and events of September 9/11 (R2, R10, R13, R16, R26, R27, R31, R33, R40). Specific observations and 'research problems' took their attention as the event unfolded in the media or in retrospect post-event. Firstly, observations involved inconsistencies in official accounts, referring to seemingly illogical moves made by conspirators (R13, R38) or details contradicting their intuitive

understandings of reality (R22, R33, R38). For example, R38 commented about the first US lunar landing, “There’s no air. There’s no atmosphere. Why is the flag moving?” Secondly, some focussed on mainstream media’s collusion with the “government and higher powers” censoring information and obfuscating the truth about an event (R18; R16, R33, R31, R33). Thirdly, participants linked conspiracy events with later political developments as evidence of a plot (R7, R27, R33, R40). For example, R27 in referring to 9/11, “Of course, we know who or where that led, to the (…) War on Terror which is an undefined thing with no end in sight.” Some participants offered alternative accounts based on their research (e.g. “evidence seems consistent with a controlled demolition,” R2 commenting about 9/11; R26, R33).

Participants described an awakened perception of conspiracy and concern for truth (R2, R10, R13, R18, R22, R26), with some participants engaging with other CTs during this initial period (R2, R7, R10, R41). For example, R2 referring to 9/11, stated,

> “When you realise that this is connected to government and people who are elected by the people, supposedly for the people, then you think, ‘well, if that happened, what else is not true?’”

Some participants situated their early-CT exposure within mundane scenarios before a CT event captured their interest (see “Quantum change” by Miller & C’deBaca, 1994). These included first hearing of a particular CT at work (R33; R16, R22, R26, R40) and casually watching television or browsing the internet (R27, R33, R38). Alternative media (i.e. websites, books, documentaries) featured prominently in researching the CT event(s) (R10, R16, R22, R26, R31, R33, R38). Conspiracy events drew the attention of those with a limited CT interest (Type 3) to fully monological conspiracist worldviews (Type 4, Type 5). In sum, these narratives linked the self to the significance of a conspiracy event.

Alternative histories and cosmogonies

Some participants developed their early-CT beliefs through an interest in alternative histories and cosmogonies – recognised as alternative accounts of human origins (i.e. extra-terrestrial influence in human history, R25, R29, R39) and the universe (i.e. astrology and reincarnation, R23, R29). These accounts revealed a "bigger picture" (R29), revising ontological orders by calling into question humanity's history or place in the cosmos. Participants gained a meta-narrative in which they could situate a wider network of conspiracies throughout human history and understand the falsehoods of present-day reality (Lyotard, 1979). For example, R9 commented, "yeah, Chariots of the God, so that renewed that interest for me and so then that's when like really the floodgates opened and I was like, oh my god, everything we know is wrong." Specific books and authors by leading ingroup researchers disseminated hidden truths and suppressed knowledge (e.g. archaeological findings hidden away by institutions like the Smithsonian Institute, R25) and the role of extra-terrestrials in past history to the present day (e.g. 'Chariots of the Gods,' by Erik von Daniken, R9, R29, R39; David Icke, R29; Michael Tsarion, R9). This theme was exclusive to Type 5 participants.

Spiritual experiences

For several participants, their alternative worldview was broader than CTs. These individuals endorsed new age beliefs alongside CT beliefs. When asked about their development, these individuals focussed on key spiritual experiences that brought about changes in the self and their worldview. These spiritual transformations mostly arose before an engagement with CTs, and included experiences induced by: visions and clairvoyance (R20, R30, R37, R42), psychedelia (R21), transcendental meditation (R35), and psychic circles and readings (R8, R39). Participants gained agency through 'awakened' supernatural abilities, which involved: psychic "manifestation" (R5, R20), telepathy (R21), enhanced intuition and

"higher spiritual consciousness" (R8, R32, R35, R42), and attunement to energy and the universe (R20, R35, R39).

Regarding CT worldview development, CTs were perceived to unfold within a supernatural ontology and reality. R32 and R35 narrated an immediately burgeoning conspiracist worldview connected to their spiritual experiences. For example, R35 stated,

> "I felt that the connection—spiritual connection—that I was getting through meditation was at such a much higher level that it just made total sense for me. It was a complete reality and made utter sense and gave me something to be part of in a way in which I never felt I could be part of a corrupt self-interested political elite."

For others, CT worldviews developed later. These ranged from specific government CTs (e.g. mind control programmes, MK Ultra, R8) to control through supernatural realities (e.g. "I started to realise we are surrounded by illusion," R21). Only Type 5 participants described spiritual experiences. In sum, key spiritual experiences transformed their worldview, with some immediately, and others later, endorsing CTs.

Social issues

Some participants, when asked about their initial interest in CTs, turned to early experiences of social issues, which they had experienced first-hand and regarded as examples of conspiracy and corruption. These first-hand experiences included: fraud and losing a business (R11), lack of public funding for healthcare as a practitioner (R14), and quitting work not wishing to support the "establishment" and "socio-economic system" (R27, R37). Also included in this theme were people inspired to look into CTs by media and television programmes on political issues, economics and counter-culture (R24, R26, R33). Media sources were shared between friends and within groups, facilitating their curiosity and early interest in CTs. Given the broader nature of this theme, it was unsurprising that all types had early-CT experiences related to social issues.

Personal trauma

Personal trauma was the basis of early-CT belief for some participants. Individuals experienced ill-health (e.g. cancer, R3, R19; R20, R40, R42), redundancy (R2) and cared for a family member (R8, R36). During recovery, individuals became more engaged with CTs by a variety of means. For some, simply having the free time during convalescence meant that they could delve deeply into certain CT topics (e.g. 9/11, R40). For others, their traumatic experience was intimately connected to their 'research goal.' For example, using alternative therapies and having challenging experiences with medical doctors led to an interest in pharmaceutical CTs (R3, R8, R36). Personal trauma was primary for some and emerged as an isolated theme during this period (R3, R19, R36); and for others, personal trauma was peripheral to other early-CT belief themes (i.e. *conspiracy event*, R2, R40; *spiritual experience*, R8, R20; *social issues*, R27). Trauma had a role in the early-CT belief development of Type 3, Type 4 and Type 5.

Later-CT belief development

Narratives of later-CT belief development referred to any period after early-CT belief. Later-CT belief development included four themes: *research*, *self-discovery*, *conspiracist reality and outgroup*, and *action*. In contrast to the early-CT belief themes, participants were coded in at least two or more themes during the later-CT belief, indicating some degree of homogeneity.

Research

For many participants, they referred to periods of learning through conducting their own research. This was the case for all types. Type 4 and Type 5 pursued a range of CTs in ways consistent with the monological profile of endorsing multiple CTs (Goertzel, 1994). For some participants, their research continued on from their early-CT belief theme (*conspiracy*

event, R31; *spiritual experience*, R35; *personal trauma*, R3). For others, their research led them to several new CT topics, including for example: 9/11, the Illuminati, the Gulf wars, pharmaceutical industry CTs, deliberate cancer-causing toxins, media control, quantitative easing CTs, WW1 and WW2, and climate change (R2, R10, R18, R21, R22, R36, R37). For example, R22 stated,

> "And then from there, it just kind of snowballed into other stuff, into other things, the Bush dynasty, Al Qaida, and the CIA, fake drug-running and into the big families—the Rockefellers, Bilderberg's, Rothschilds—and then all the other stuff."

A previous paper distinguished between hierarchical outgroup of 'evil elites,' 'middle management,' and 'sheep' (Franks et al., 2017 [Chapter 2]). This is useful here in the sense that participants' research mainly focussed upon seeking explanations concerning the 'evil elites' who represented top conspirators that orchestrated conspiracist agendas. However, in certain topics such as medicine and media, conspiracies also featured 'middle management,' defined as co-conspirators in service of the top conspirators (e.g. doctors and vets administering drugs in service of the Federal Drug Administration, R3). Participants sometimes framed their CT research as a problem to be solved (e.g. "… who actually runs the country?" R18) and a contest over 'sacred values' (Franks et al. 2013). For example, regarding sacred values, R10 stated, "Because we're all here with equal rights like we're all here on this planet floating in space and why should some people have power over others." The *research* theme included participants who were coded with all other themes of the later-CT belief development, indicating that it was an important next step in developing a conspiracist worldview.

Self-discovery

Developing an alternative worldview was an experience of self-discovery for Type 2, Type 3, Type 4 and Type 5. Participants recognised changes in self-understanding and gains in agency through CT sensemaking. Participants regarded their interest in CTs as a quest for

knowledge and truth. For example, R13 states, “Knowing gives me personal satisfaction that I know, so that’s the motivation, to seek the truth.” A range of metaphors described their perceived development, referring to changes in the self as “growth,” “maturity,” and “evolving” (R1, R7, R11, R13, R14), as well as life as a “journey” or “path” (R1, R7, R8, R10, R13, R15, R20, R21, R22, R23, R27, R32, R37). For example, R32 stated, “Once you’ve had this awakening, you know it already, you see it. Those books are just validating. Even David Icke, what he’s saying, is validating what I already know.” The perceived impact of CTs stretched into daily life, since participants changed working roles and relationships based upon their alternative worldviews (R8, R10, R11, R13).

For some, it was apparent that they had stepped away from a self-discrepant past-self who unwittingly followed the status quo (e.g. “mainstream,” R8, R10, R23). Participants also contrasted themselves from an outgroup made up of the ‘evil elites’ (R11, R37) and an unawake public (i.e. ‘sheep,’ see Franks et al., 2017 [Chapter 2]) who were blindly subservient (R1, R2, R11, R13, R32). For example, R10 stated,

> “What are the characteristics of a really good person? And what are the characteristics of a truly evil person? And by comparing and contrasting the two, it’s given me a view of the sort of person that I need to try and become and the sort of person I need to avoid becoming.”

For Type 5 who endorsed supernatural CTs, their self-discovery was connected to spiritual growth and a redefined approach to life premised upon new age beliefs (R1, R8, R23, R29, R35, R37). For example, R1 stated, “Becoming conscious of the catalyst that exists in life, why it exists in life, what every moment is trying to show you and then movement towards a more conscious way of being.” Some Type 5 situated their perceived change within a wider network of spiritual awakenings happening to others through a great spiritual shift in humanity (R8, R21, R26). Self-discovery was a central part for Types 2-5 in their later CT experiences.

Conspiracist reality and outgroup

Types 2, 3, 4 and 5 all made comments about how CTs had changed their wider views on society. They remarked upon "cultures" and "systems" within education and work, which encouraged people to develop and think in specific ways (R2, R3, R7, R15, R27, R32). The focus upon money as a driver was a shared observation across Types 2-5 (R27; R2, R3, R13, R26, R27). Some participants, on this basis, expressed cynicism. For example, R15 as a Type 2 participant stated, "I'm very cynical about politics and the political system. It's probably added to my cynicism about the kind of societal systems that we're living in."

However, with the monological Types 4 and 5, these views on society centrally focussed upon control and exploitation of the masses (e.g. R3, R5, R18, R38). For example, R32 stated, "You've just been brought up and farmed as individuals to work as slaves in the economic environment." Type 4 and Type 5 came to perceive the world as a generalised conspiracist reality, where conspiracist activities were the norm (R5, R16, R18, R26, R38). For example, R26 commented, "I mean the idea that every politician, everyone in power, is completely honest and open and tells everyone everything, is just nonsense. To me, it makes more logical sense that the conspiracy stuff is true than it's not."

For all types, there was a tension between having developed a questioning mindset and being different from the outgroup public, but still also longing for the outgroup public to see through the conspiracies and change for their own good (e.g. "millions of people are suffering," R13). Their views on society raised feelings of being trapped (R18, R27, R38) but also heightened their sense of agency through the wider awareness of seeing the "whole picture" (R18, R31, R36). For example, R14 stated, "So I think that once you've got the knowledge where you are disappointed of power or feel suspicious of authority, you can't get back from that."

Action

For some participants, *action* stemmed from an early-CT belief. *Conspiracy event* as an early-CT belief, led to CT-specific activism in vivo and online (e.g. protesting against the Bilderberg Group or 9/11 social groups, R33, R40). Those early-CT experiences involving spirituality and trauma were later related to spiritual leadership, alternative healing and founding spiritual groups (R19, R20, R35). R29 following on from his early-CT interest in *alternative histories and cosmogonies* was engaged in 'spiritual action' by ushering in a new age. R29 stated, "so my job is to lead millions of people into the seventh golden age, the new age." Finally, activism and political action were also consistent with *social issues* (e.g. fraud, poverty, consumerism) highlighted in the early-CT belief period (R11, R14, R27). Notably, it was also possible for people to engage in action that was less related to their early-CT belief experiences during later stages (e.g. community or environmental activism, R22, R25; alternative medicine, R10).

Much of the action orientated around striving towards ideal alternatives, whether it be seeking the admission of responsibility by conspirators (e.g. government war crimes, R11) to wholescale changes to politics and economics (R4, R6) or supernatural orders (e.g. "age of Aquarius," R20, R29). Participants of all types had the propensity to engage with action, although its relevance to CTs characterised Type 3, Type 4 and Type 5.

Contrasting narratives: Less CT engagement

Surprisingly, not all forms of perceived development were towards a further engagement with CTs. We expected a linear trajectory of belief development and unexpectedly discovered less CT engagement during later-CT belief. Several participants described becoming less interested in CTs.

Narratives featured negative experiences related to CT beliefs. Participants recognised periods of intense CT interest where it became an "obsession" (R33; R26, R36, R39). CT

interest could give rise to a sense of social stigma (R40) and feeling powerless (R10, R16 R36). For example, R36 stated, "I think it's quite depressing actually. I think you get to a point where you've learnt so much that you don't really need to keep reading, you know."

Some participants had reached a conclusion about CTs, accepting a generalised conspiracist reality as the norm and backdrop to their daily life, thus requiring less attention and research (R16, R33, R40). For example, R16 commented, "There isn't a democratic process, so I don't concern myself with it on a daily basis, I get on with my life." By contrast, it was also possible for participants to reach a non-CT conclusion as an outcome of their CT engagement (e.g. researching debt and banking, R34) or accept uncertainty and the limits of one's knowledge based on available information (R24, R26, R39, R41). For example, R24 commented, "I gained maturity in that sense and I think we've not got to be afraid of saying that we don't know something, when we truly don't know."

Lessened CT engagement could heighten agency. Participants sought a positive focus on life and balanced lifestyle (R10, R33, R39). For example, R33 commented, "What I am trying to do is trying to find a balance of learning about this stuff, be an advocate to explain to people how the world really works." Some mentioned engaging in spiritual practices (e.g. meditation and reiki, R10, R36, R39). Narratives of lessened CT engagement also referred to a comparative ingroup 'other' who disbelieved all mainstream media, exemplifying a lifestyle inhibited by a total engagement with CTs (R10, R33, R36, R40). All Types could describe experiencing a lessened engagement with CTs.

CT worldview monological typology and belief development

Participants' belief development varied according to their CT worldview type. For a schematic overview and the descriptive statistics, please see **Figure 3** and **Table 4.** Social issues were important early-CT experiences for all types. *Personal trauma* and *conspiracy event* characterised the early experiences of people with at least a firm belief in one or two CTs

(Type 3) to fully monological conspiracist worldviews (Type 4, Type 5). However, Type 5 with their interest in supernatural CTs, had an early CT interested related to *spiritual experiences*, and *alternative histories and cosmogonies*. During the later-CT belief, there was a less clear pattern. Some participants from each of the more developed CT worldviews (Type 3, Type 4, Type 5), described each of the later-CT belief experiences and lessened their engagement with CTs. Consistent with expectations, Type 1 did not regard CTs as a project of self-discovery nor perceive conspiracist realities. As presented in **Figure 3**, there appears to be an incremental criterion throughout belief the development. That is, the higher the type, the more diverse the experiences of CT belief development.

Political action was also different depending on the conspiracist worldview. Some endorsing human-based CTs (Type 3 or Type 4) were involved in CT specific activism (see above, R2, R11, R33, R40). Those with non-monological worldviews (Type 1, 2 & 3) could engage in non-CT related political behaviours (R14, R24, R27). Participants with supernatural CT worldviews (Type 5) also engaged in non-CT related activism (R22, R25) but, by contrast, they additionally orientated towards action related to new age beliefs (e.g. alternative healing; R19, R20, R35). Finally, as expected, some Type 1 and Type 2 participants did not offer an early-CT belief experience, but self-identified with having developed an alternative worldview, engaging in various non-CT political behaviours (e.g. writing manifestos, R6; R4, R34).

Table 4. *Descriptive statistics presenting belief development themes by the monological typology.*

	Pre-CT belief		Early-CT belief					Later-CT belief				Contrasting narratives
	Self-discrepant	Self-consistent	Conspiracy event	Alternative histories*[1]	Spiritual experiences	Social issues	Personal trauma	Research	Self-discovery	Conspiracist realities*[2]	Action	Less CT engagement
Type 1	8.47%	0	0	0	0	11.92%	0	3.57%	0	0	11.79%	13.64%
Type 2	9.39%	20.92%	0	0	0	6.28%	0	0	6.40%	16.06%	12.30%	20.63%
Type 3	10.29%	0	13.44%	0	0	26.00%	25.82%	16.15%	4.43%	13.32%	21.99%	36.67%
Type 4	3.93%	13.55%	45.66%	0	0	16.63%	4.71%	28.24%	9.03%	15.24%	19.28%	7.79%
Type 5	67.92%	65.53%	40.90%	100%	100%	39.17%	69.48%	52.03%	80.15%	55.38%	34.64%	21.27%
Frequency of text units	17	21	18	6	26	17	12	20	71	27	37	29
M word count	203.53	270.62	420.83	186.83	378.68	339.12	411.92	242.35	271.21	231.81	237.08	227.97
SD word count	189.12	145.01	410.27	126.97	257.12	240.97	315.79	116.48	327.67	147.14	183.32	125.03

CT = conspiracy theory,
*1 Alternative histories and cosmogonies,
*2 Conspiracist realities and outgroup.

	Pre-CT belief	Early-CT belief	Later-CT belief	Contrasting narratives
Type 1	Self-discrepant	Social issues	Research Action	Less CT engagement
Type 2	Self-discrepant Self-consistent	Social issues	Action Self-discovery Conspiracist realities*2	Less CT engagement
Type 3	Self-discrepant	Social issues Conspiracy event Personal trauma	Research Action Self-discovery Conspiracist realities*2	Less CT engagement
Type 4	Self-discrepant Self-consistent	Social issues Conspiracy event Personal trauma	Research Action Self-discovery Conspiracist realities*2	Less CT engagement
Type 5	Self-discrepant Self-consistent	Social issues Conspiracy event Personal trauma Alternative histories*1 Spiritual experiences	Research Action Self-discovery Conspiracist realities*2	Less CT engagement

CT = conspiracy theory,
*1 Alternative histories and cosmogonies,
*2 Conspiracist realities and outgroup.

Figure 3. Schematic presenting belief development trajectories across the conspiracist worldview monological typology proposed by Franks et al. (2017).

Discussion

Limited research has examined the development of CT beliefs and the field has mostly relied on quantitative analyses of cross-sectional datasets to explore CT belief. Longitudinal data tracking changes to CT belief would be the ideal method to understand how belief endorsement emerges and changes over time. Insight into CT belief development was gained by other means. A qualitative thematic analysis of personal narratives was conducted based on interview data. Although narratives do not directly measure change in belief development, retrospective accounts by CT believers do provide a good indication of possible findings that could be further supported by future longitudinal research. This sample included individuals who self-identify as having developed an 'alternative worldview.' They were interested in conspiracy and alternative explanations, with some endorsing new age beliefs. By reconstructing beliefs about perceived developments towards an alternative worldview, our study evidences that CTs are closely tied to perceived changes in the self and transformations in agency. These findings will benefit future research concerned with trajectories of perceived beginnings, early experiences and later development of CT belief endorsement.

Before considering this study's contributions, there are limitations to using narrative data to interpret CT belief development. Firstly, retrospective accounts based on autobiographical memories are prone to recall and self-appraisal biases. For example, individuals can adjust their subjective perception of time to maintain positive self-regard, with higher self-appraisals when internally attributing to past success (Haddock, 2004), and criticising their distant past-self more than their present-self (Wilson & Ross, 2001; Ross & Wilson, 2002). Secondly, some communication bias was also likely since the interview involved a communication between disparate communities – with science commonly regarded within the set of reasonable interlocutors, and the 'conspiracy theorist' generally considered a socially stigmatised position (Husting & Orr, 2007; Pelkmans & Machold, 2011). There are

various rhetorical strategies used to overcome this barrier (see Hall, Franks, & Bauer, 2020 [Chapter 3]).

The results make novel contributions to understanding the development of CT belief, reconstructing the perceived development across the periods of pre-CT, early-CT and later-CT belief development. Pre-CT belief narratives featured a *self-discrepant* past-self constrained by various past experiences (e.g. conforming to status quo, immaturity, religious upbringing). Mutlutürk & Tekcan (2016) has shown that self-discrepant memories lead to greater meaning-making from a past experience. By describing self-discrepancies of their perceived past-self, this may have afforded greater meaning-making in their narratives of developing CT beliefs. Others, however, emphasised that certain self-attributes (e.g. questioning) or interests (e.g. political affairs) already existed, which would be further developed in a *self-consistent* way by later endorsing CTs. For these participants, CT belief development was self-consistent and their narratives were framed as self-enhancement (Sedikides, 1993).

Our results importantly report on the range of early-CT belief experiences, including: *conspiracy event*, *alternative histories and cosmogonies*, *spiritual experiences*, *personal trauma*, and so*cial issues*. Each early-CT experience demonstrated positive agency in responding to setbacks such as personal trauma or close exposure to social issues (e.g. poverty), or re-establishing a sense of order and perspective on the world through researching alternative histories and cosmogonies. This is consistent with findings on compensatory control, whereby CT belief buffers against existential anxieties and uncertainties (Sullivan et al., 2010; van Prooijen & Jostmann, 2013; Whitson et al. 2015). However, beyond experimental approaches, this study reveals the real-life contexts that likely relate to the existential anxieties and uncertainty, which draw people towards CTs. The range of early-CT belief experiences offer potential ideas for causes of CT belief which may outline possibilities for future research interested in unpacking the causal status of CT belief.

A further unique contribution is the perceived developments that arise during later-CT belief, including: *research*, *self-discovery*, *conspiracist reality and outgroup*, and *action*. Since its initial introduction (Goertzel, 1994), monologicality has come to represent the belief in multiple CTs, empirically evidenced through CTs correlating or predicting one another (Brotherton, French & Pickering, 2013; Stieger, Gumhalter, Tran, Voracek, & Swami, 2013; Swami, Chamorro-Premuzic, & Furnham, 2010; Swami et al. 2011, Swami, 2012, Swami & Furnham, 2012, Swami et al. 2013; Wood, Douglas, & Sutton 2012). In this study, both non-monological (Type 2, Type 3) and monological (Type 4, Type 5) participants described periods of 'research,' exploring several new and unexpected CT topics, and thus demonstrating a continued 'rolling' interest in CTs beyond the early CT experiences. In the later CT belief development, participants from Type 2-5 came to endorse a revised view of reality. This was particularly pronounced for the monological Type 4 and 5, who regarded conspiracist activity and exploitation of the masses to be the norm. Political cynicism has been consistently found to positively relate to CT belief (Swami, 2012; Swami & Furnham, 2012; Swami et al., 2011). It may be that political cynicism is most intimately connected, not to the specific CT explanation per se (Wood et al., 2012), but to the implications of CTs in which corruption and conspiracy go unheeded. This may be close to what Aupers (2012, p. 27) terms, 'ontological insecurity,' contending that, "reality is always a staged reality that conceals the truth that unacknowledged, evil agents are de facto controlling our lives." Future research should consider the intimate link between political cynicism and generalised conspiracist realities.

It has been previously proposed that CT engagement represents a nascent prefigurative political movement (Franks et al., 2017 [Chapter 2]; Yates, 2015), involving engaged citizens challenging those in positions of power who are able to dictate dominant representations of what is 'true' and 'untrue' (Howarth, 2011; Howarth, Andreouli, & Kesi, 2014; Pelkmans & Machold, 2011). Past research shows that CT belief is related to powerlessness and decreased

intentions to vote (Bruder et al., 2013; Jolley & Douglas, 2014b; Swami & Furnham 2012), political cynicism (Swami, 2012; Swami & Furnham, 2012; Swami et al., 2011), political extremism (van Prooijen, Krouwel, & Pollet, 2015) and support for democratic principles (Swami & Furnham, 2012). Franks et al. (2017 [Chapter 2]) reported that CT believers voted and participated in groups and demonstrations and were sceptical of conventional politics. This study adds to this emerging picture, suggesting that the action arising from CTs are multifaceted during early and later development. Interpreting one's exposure to a social issue as the outcome of conspiracy and corruption can lead into CT belief development. In later periods, action could range from CT specific activism (e.g. protest, social groups) to 'spiritual action' premised upon new age and CT beliefs. The close relationship between CT belief and spiritual new age beliefs is consistent with the emergent trend of 'conspirituality' discussed by Ward & Voas (2011).

Most surprisingly, the analysis revealed a lessened engagement with CTs for some participants; a perceived outcome of powerlessness and accepting a conspiracist reality as the norm. These experiences are akin to cognitively dissonant ways of negotiating between conspiracist and non-conspiracist belief (see Hall, Franks, & Bauer, 2020 [Chapter 3]). At first glance, this seems in contrast with the other finding that CT was related to self-discovery and heightened agency. It reflects a similar schism in the literature, whereby some research relates CT belief to cynicism and powerlessness (Bruder et al., 2013; Swami & Furnham, 2012), while others indicate positive agency through openness to experience and need for uniqueness (Lantian, Muller, Nurra, & Douglas, 2017; Swami, Voracek, Stieger & Tran, 2014). These different findings may reflect differences in the timeline of CT belief development. Pulling these together, this study suggests that rather than only considering CTs cross-sectionally, it is important to address *when* individuals situate themselves in the course of their CT belief

development – particularly when responding to survey measures. This insight is important going forward in understanding the variation in CT belief.

Conspiracist worldview development and quasi-religious approach

The quasi-religious approach to CTs proposes that the phenomenon of CT belief may, to varying degrees, be analogous with religious beliefs (Franks et al., 2013). This study evidences similar forms of worldview transformation. During later-CT belief periods, the search for self-understanding through CT research was akin to 'questing' (Batson et al., 1993). Developing CT belief may in part be a secular quest, where the symbolic resources of CTs contribute towards personally motivated existential questions. Moreover, research on religious conversion recognises that change towards religious belief and behaviour involve agency and actively pursuing one's transformation (Richardson, 1985; Straus, 1979). Individuals test new beliefs, attempting to resolve personal and religious problems, developing towards and away from religious orientations (see 'conversion careers,' Richardson, 1980; &, 'alternation,' Gordon, 1974; Travisano, 1970). This study's approach and findings converge with the findings on religious changes. Similarly, the results found that belief change involved an active pursuit of CTs, with multiple changes occurring throughout developing an alternative worldview. These changes occurred—before, during and post—their early-CT belief, with evidence that individuals can, to differing extents, transition away from CT worldviews.

Limitations and Future research

Specifically, longitudinal data tracking changes in CT belief may substantiate the findings presented here. Longitudinal studies involve the same participants whose data is recorded periodically so variations can be tracked and accounted for. Based on this study's findings, we have a reasonable indication of how individuals come to engage with CTs and who we might expect to take on these beliefs. These findings could help design longitudinal

research, specifically in targeting populations, for example: experiencing personal trauma, being politically active or practicing new age beliefs. An effective sampling strategy within a longitudinal setting based on this study's findings would provide robust data on why some people transition into CT worldviews and also a developmental reasoning for why others do not.

Based on the sample size, the extent to which these findings are generalisable is difficult to ascertain. More broadly, other research topics external to CT belief, such as the development of partisan or independent political worldviews, may benefit from the findings presented here. There may be some experiences that are shared (e.g. social issues) and some which may be more idiographic (e.g. conspiracy event). The implications being that the findings presented here are not wholly exclusive nor reflecting an 'irrational' set of experiences, but rather a set of common experiences which for some lead into CT beliefs and for others do not. Future research should consider how the experiences of CT belief development in this study may inform research into how other worldviews or political perspectives develop.

Conclusion

Past quantitative studies have investigated the nature of CT belief and its consequences, however minimal attention has been paid to how those beliefs develop. Through qualitative interviews with people who have an interest in CT beliefs, the analysis reconstructed the perceived development from non-CT beliefs through to early- and later-CT beliefs. The results, based on narrative data, demonstrate the range of early-CT belief experiences, thus offering potential ideas for causes of CT belief. People further developed their CT worldview during later experiences, with the possibility for lessened CT endorsement. The research presented here contrasts with the typical view that CT believers are secluded and 'irrational.' In developing CT worldviews, CTs go beyond epistemic sense-making about the world to informing one's sense of self and agency.

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CHAPTER 5 | The Conspiracist Worldview Scale

Article Title

Is it really 'all or nothing?' The Conspiracist Worldview Scale, measuring non-monological and monological conspiracy theory belief.

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Abstract

The Conspiracist Worldview Scale (CWS) is a novel psychometric measure, capturing five types of conspiracist worldviews, ranging from non-monological to fully monological. Monologicality involves a generalised belief in CTs with multiple CT endorsement. The CWS is the first to distinguish worldviews according to variations in monologicality. There were three types of monological worldviews: Type 4, Type 5-Alien and Type 5-Spiritual. The Type 4 subscale measures monological CT worldviews predicated upon human-based conspiracy (e.g. government deception). The Type 5-Alien subscale measures a monological worldview involving extra-terrestrials, and the Type 5-Spiritual subscale measures monological worldviews involving spiritual entities and forces (e.g. Satanic forces). There were two types of non-monological worldviews: Type 2 subscale measures an openness to CTs being true and Type 3 subscale measures a limited CT endorsement of one or two CT topics. Study 1 founded the CWS based upon an exploratory factor analysis. Study 2A established construct validity through a confirmatory factor analysis, and Study 2B reported convergent validity. Study 2C showed concurrent validity, with the monological worldviews emerging as leading predictors of specific CT belief. Finally, Study 3 demonstrated the diagnostic validity of the CWS, with three classes emerging through a latent class analysis. Importantly, the two classes with highest

majority of the sample were both non-monological classes of CT belief. The CWS triangulates and builds upon past qualitative findings of Franks, Bangerter, Bauer, Hall & Noort (2017 [Chapter 2]), which first established the ascending monological typology. The CWS is therefore the first true measure of CT worldviews by incorporating other elements beyond the outgroup, including: the self, ingroup, outgroup, reality, future and action.

Introduction

This study puts forward a new scale called the Conspiracist Worldview Scale (CWS); the first to measure different types of conspiracy theory (CT) belief from minor endorsement to full conspiracist worldviews. The CWS captures burgeoning non-monological CT worldviews through two subscales: measuring an open-mindedness about the possibility of CTs being true (Type 2), and a subscale measuring a firm and limited belief in specific CTs (Type 3). The CWS also extends the empirical measurement of monologicality, being the first to provide different worldview subscales differentiating between full CT endorsement premised upon solely human-agency (Type 4 e.g. government CTs) and two subscales additionally measuring CTs of non-human agency (Type 5-Alien vs Type 5-Spiritual). The CWS uniquely emerges from qualitative interview data with CT believers (see Franks, Bangerter, Bauer, Hall, & Noort, 2017 [Chapter 2]), which takes an open-minded approach to CT endorsement and contrasts with the typical image that CTs are anomic, secluded and 'irrational.'

A 'conspiracy theory' is defined as the claim that two or more actors collude to execute a hidden agenda (Douglas et al., 2019). The terms 'CT belief' or 'conspiracist belief' represent the endorsement of a CT, and are used interchangeably. Notably, 'CT worldview' and 'conspiracist worldview' are also used interchangeably, and fall under two main types – monological or non-monological. A 'monological conspiracist worldview' represents a

generalised belief in CTs, involving the endorsement of multiple CT beliefs (Goertzel, 1994). A 'non-monological conspiracist worldview' refers to a non-generalised perspective, involving either uncertainty about CTs being possibly true, or limited endorsement of CT beliefs (e.g. just believing in one or two CT topics). The use of a worldview construct is not limited to outgroup beliefs about conspirators, but also includes beliefs about: reality, self, ingroup, future, and action (Koltko-Rivera, 2004). This is informed by past qualitative findings on CT worldviews by Franks et al. (2017 [Chapter 2]) and discussed in greater detail below.

Beyond monologicality

Belief in CTs is commonly regarded as an all-encompassing mindset whereby endorsement is either 'all or nothing.' This notion has roots in Goertzel's (1994) monological hypothesis. For Goertzel, monologicality is unconcerned with context but rather emerges through a "closed mind," where "each of the beliefs serves as evidence for each of the other beliefs" (p. 740). New observations are easily interpreted based upon the existing conspiracist mindset. Despite its complexities, monologicality in the empirical literature is claimed when belief in one CT correlates or predicts belief in others, and this has emerged as a consistent finding (e.g. Brotherton, French Pickering, 2013; Stieger, Gumhalter, Tran, Voracek, & Swami, 2013; Swami, Chamorro-Premuzic, & Furnham, 2010; Swami et al. 2011, Swami, 2012, Swami & Furnham, 2012, Swami et al. 2013).

Closer attention to monologicality has revealed issues. Firstly, the endorsement of multiple CTs does not necessitate logical coherence. For example, Wood, Douglas and Sutton (2012) found that CTs involving Princess Diana being alive correlated with endorsement of her death by assassination. The impossibility of both being logically true is at odds with Goertzel's (1994) 'closed-mind' where one belief is a resource for endorsing another. Instead, these mutually incompatible beliefs were predicted by belief in a cover-up by authorities, suggesting that multiple belief endorsement connects to a more general belief in deception by authorities.

Secondly, CT belief may be less closed than Goertzel (1994) initially proposed. For example, CT beliefs correlate with openness to experience and support for democratic principles (Swami et al. 2011, Swami & Furnham 2012**)**. Studies into the semantic content of CT beliefs have shown that when generating accounts of events around 9/11, individuals pull information from both official and conspiratorial statements to produce 'hybrid' versions (Raab, Ortlieb, Auer, Guthmann, & Carbon, 2013). Recently, a qualitative study found that common ideas of science, politics and religion featured in dialogical relations with conspiracist beliefs (see Hall, Franks, & Bauer, 2020 [Chapter 3]). These findings run contrary to the idea of a 'closed-minded' CT believer.

Thirdly, although CT beliefs are consistently correlated with each other, their connection may be explained by the influence of other variables. CT beliefs are predicted by a range of cognitive styles (e.g. intuitive thinking, attributing anthropomorphic agency, perceived intentionality; Brotherton & French, 2015; Douglas, Sutton, Callan, Dawtry & Harvey, 2015; Swami, Voracek, Stieger, Tran, & Furnham, 2014), and personality and social variables (e.g. anomie, low interpersonal trust; Abalakina-Paap, Stephan, Craig, & Gregory, 1999). These relations to other variables are important. They suggest that the monological thesis alone lacks parsimony without accounting for their influence and that endorsing CTs is characterised by a broad profile (Sutton & Douglas, 2014).

Conspiracist worldviews

The prospect that CT endorsement ties to a worldview construct is gaining recognition. In individual difference research, references to a 'conspiracist worldview' are used to describe monologicality (e.g. Swami, 2012; Stieger et al., 2013). Empirical claims about monologicality are at the root of several concepts, such as 'conspiracist ideation' (e.g. Brotherton & French, 2015; Brotherton, French & Pickering, 2013; Stieger et al. 2013; Swami et al. 2013, Swami et al. 2014), or 'conspiratorial mentality' (Bruder, Haffke, Neave, Nouripanah & Imhoff, 2013;

Imhoff & Bruder, 2014). These share the view that endorsing multiple CTs represent an observable pattern of accommodated conspiratorial beliefs or ideas (Imhoff & Bruder, 2014; Swami et al. 2010), and thus reflect a stable conspiracist mindset.

In broadening our understanding of monologicality, one important study by Franks et al. (2017 [Chapter 2]) involved a qualitative analysis of the belief content of a range of CT believers. This study defined 'worldview' as a set of beliefs and assumptions about reality according to matters of ontology ('the objects and subjects that exist'), epistemology ('how the world is understood') and agency ('the actions and influence of agents') (Koltko-Rivera, 2004). CTs were regarded as a form of sense-making and symbolic resources, and it was hypothesised that not all worldviews would necessarily use CTs in the same way. It was found that CT belief was not only concerned with an outgroup of secret actors and agendas as featured in most questionnaire-measures of CT belief, but also involved the self as a researcher on a journey of development, an ingroup of "truth-seekers" with leader figures (Haslam, Reicher, & Platow, 2011), and various political forms of action (e.g. sceptical engagement with conventional politics, idealised political alternatives). Participants' CT worldviews were also characterised by distinct views on reality (supernormal natural vs supernatural) and the future (e.g. conditional optimism based on CT truths emerging in public discourse).

Notably, Franks et al. (2017 [Chapter 2]) found that there were two different types of monological CT worldview – one involving human agents (known as Type 4, e.g. government), and another involving supernatural agents and forces (Type 5, e.g. aliens and spiritual energy). The latter is consistent with previously reported associations between CTs and paranormal and new age beliefs (Darwin, Neave, & Holmes, 2011; Newheiser et al. 2011; Swami et al. 2013), but little research had at that point considered how natural and supernatural beliefs could be the foundations of differing conspiracist worldviews. Furthermore, Franks et al. (2017 [Chapter 2]) also found that some types of CT worldview were non-monological. These involve non-

generalised conspiracist perspectives, either characterised by: an openness to CTs being true without conviction (Type 2) or firm belief in one or two CTs (Type 3). Overall, their findings suggest varying degrees and qualities of monological belief understood in terms of a worldview construct.

Measuring conspiracy theory belief

Amongst discussions of monologicality, is a more fundamental issue about how best to measure CTs. Empirical claims are based on two styles of measurement: one featuring specific CTs, such as Belief in Conspiracy Theories Inventory, (Swami et al., 2010; 2011), with each item a response to one prolific CT (e.g. "The Apollo moon landings never happened and were staged in a Hollywood film studio"). Other measures, such as the Conspiracy Mentality Questionnaire (CMQ, Bruder et al., 2013) and General Conspiracist Beliefs (GCB, Brotherton et al., 2013) scale, quantify a general tendency to endorse CTs and are worded without reference to specific CTs. At this point, no existing measure is dominant and each have their pros and cons. The general measures include content-limited items adaptable to different scenarios, yet do not attend to the narrative properties and symbolic content which likely characterises the attractiveness or 'stickiness' of some CTs (Franks, Bangerter, & Bauer, 2013). Other measures, while featuring specific CTs more familiar to the layperson, may be temporally and contextually bound (Wood, 2017). Existing measures (e.g. BCTI, CMQ, & Single-Item Scale) treat CT belief as a unidimensional construct and do not consider how CT beliefs are potentially multidimensional in the sense that they involve many different types of conspiracist worldviews as shown by Franks et al. (2017 [Chapter 2]). Moreover, none of the existing measures have been developed towards non-monological worldviews (e.g. limited endorsement of CTs). Also, many of the other elements that constitute CT worldview as highlighted by Franks et al. (2017 [Chapter 2]) have been overlooked. Indeed, the central focus

of existing measures has been on designing items focussed only on the outgroup, and not considering the importance of self, ingroup, reality, future and action.

There is a need to develop a measure of conspiracist belief that recognises the different ways people endorse CTs. Qualitative research by Franks et al. (2017 [Chapter 2]) revealed variations in CT worldviews where only some types of CT endorsement are monological. This is important because it shows that for some, they are either open to the possibility of CTs being true (Type 2) or believe in one or two CTs (Type 3). However, for others, endorsement is total and generalised (Type 4, human agency; Type 5, alien and supernatural agency). Existing measures do not capture these differences and are constrained by focussing solely on the outgroup. Franks et al.'s (2017 [Chapter 2]) worldview typology emerged through a detailed analysis of interviews with CT believers in the real world, examining the views and symbolic resources characterising their belief content, and thus provides an excellent starting point in developing a more comprehensive measure. This study takes forward the CT worldview typology and its thematic dimensions (self, ingroup, outgroup, political action, reality and future), as reported by Franks et al. (2017 [Chapter 2]). The aim was to design a survey measure that was driven by theory and past qualitative work which was based on interview data and the real-world views of people who endorse CTs.

Overview of empirical studies

Ethical approval was granted by Research Ethics at LSE before proceeding with data collection. In Study 1 (N = 600, US sample), an exploratory factor analysis was conducted using 88 CT belief items. The Conspiracist Worldview (CWS) scale was founded, based on 22 of the CT items with a five-factor structure. Type 2, Type 3 and Type 4 emerged as predicted based upon Franks et al. (2017 [Chapter 2]). Firstly, two of these factors were non-monological types of conspiracist worldview. The Type 2 subscale displayed an open-mindedness to CTs being possibly true; and the Type 3 subscale captured a limited interest in CTs. Secondly, three

of the factors were monological. The Type 4 subscale expressed a generalised belief in human-based conspiracies. Unexpectedly, Type 5 of Franks et al. (2017 [Chapter 2]) was further distinguished in this study by two meaningful factors of non-human conspiracy: Type 5-Alien subscale and Type 5-Spiritual subscale.

In Study 2A (N = 379, US Sample), a confirmatory factor analysis established construct validity, demonstrating adequate fit of the CWS measure. A five-factor structure representing the five types of conspiracist worldviews was confirmed to be the best fitting model, with high internal consistency reliability.

In Study 2B (N = 379), the CWS achieved convergent validation, correlating highly with existing measures of conspiracist belief and related individual difference variables. As expected, Type 2 with openness to CTs being possibly believable produced weaker correlations, and correlations increased in strength to the full conspiracist worldviews of Type 4 and Type 5-Alien. Individual difference variables of paranoia, political cynicism and paranormal belief correlated with the CWS.

Study 2C (N = 159) established concurrent validity, with multiple regressions examining the relations between the five types with measures of specific CT topics and events: September 9/11, health, government, science and technology, extra-terrestrials and spiritual CTs. Monological conspiracist worldviews of Type 4, Type 5-Alien and Type 5-Spiritual were the leading predictors in all specific CT topics. Type 3 explained the last remaining variance in three of the specific CT topics.

Study 3 (N = 979) established the diagnostic validity of the CWS, using the five types of conspiracist worldview to meaningfully distinguish groups according to their use of conspiracist beliefs (N = 979). A latent class analysis revealed 3 classes. The typology emerged incrementally across the classes. There were two non-monological categories, the Type 2 factor emerged as an isolated class. The second class featured high agreement for Type 2 and Type 3

and low agreement with the other types. The remaining class was fully monological, with high agreement across the typology. Together, these studies validate the CWS and its capacity to measure non-monological and monological conspiracist worldviews.

Study 1

An exploratory factor analysis was conducted with 88 CT belief items exploring the suitability of the five types of conspiracist worldview proposed by Franks et al. (2017 [Chapter 2]).

Method

Participants

Participants were 600 adults (female = 264, male = 330, transgender male = 2, gender-variant = 3) based in the US and sampled via Amazon MTurk to complete an online survey in Qualtrics. Participants' age ranged from 19-73 years (M = 37.61, SD = 11.15, median = 35). Forty-nine percent had completed Higher Education, whereas 49.9% had completed High School Diploma or an Associate Degree or Certificate. Participants were employed (90%), unemployed (5.5%), students (1.5%) and retired (1.8%). Political party identifications were: Democrat (52%), Independent (27.3%), Republican (17.3%), other (1.3%), and no preference (2%). The majority voted in the most recent election at 80.8%, compared with 19.2% who did not vote. Most participants identified with a religious group (43.3%), compared with atheist (23%), agnostic (26%) and other (5.3%). There were just three missing datapoints from three participants which were estimated using multiple imputation (automatic method) via IBM SPSS (Version 24).

Procedure

An online survey was run from August to September 2019. The survey was set up in Qualtrics and accessed via Amazon Mechanical Turk (MTurk) as a Human Intelligence Task (HIT) with a reward of $2.20. Participant qualifications included: 'Location is US,' 'Number of HITs Approved greater than 1000,' 'HIT Approval Rate (%) for all Requesters' HITs greater than 98' and 'No repeats.' After reading the Information Sheet and consent form (see **Appendix 8**) on MTurk, participants who voluntarily agreed to complete the HIT were redirected to the Qualtrics survey webpage. Participants were informed that they could skip any question without answering, withdraw by closing their browser and send any queries to the lead researcher or Ethics officer at LSE. Participants completed a 126-item survey, made up of 88 domain general CT items (Study 1), 25 domain specific items (Study 2C), two bogus items to check attention, and the 11 demographic items.

Measures

Conspiracist Worldview Scale. The questionnaire was developed in two stages. The aim was to design a measure that was consistent with monological CT worldviews proposed by Franks et al. (2017 [Chapter 2]):

(A) *Type 1*: No CT belief, but dissatisfaction with the status quo and questions mainstream issues and politics.

(B) *Type 2*: Non-committal approach to CT belief (i.e. open to CTs being possibly true but without conviction), accompanied by sense that there is more going on behind the scenes than is known to the common observer.

(C) *Type 3*: Limited CT belief, endorsing one or two CT topics without a generalised perspective.

(D) *Type 4*: Endorsement of multiple CT beliefs, generalised perception of conspiracist activity, characterised by human agents (e.g. government, hidden elite). Self-viewed truth seeker and ingroup provides sense of community based on shared CT beliefs.

(E) *Type 5*: Endorsement of multiple CT beliefs, generalised perspective, characterised by non-human, supernatural agency (e.g. alien, spiritual entities). Self-viewed truth seeker and ingroup provides sense of community based on shared CT and spiritual beliefs.

This was achieved by conducting a review of the literature for general items (e.g. Brotherton et al. 2013; Bruder et al., 2013) and comparing them with the typology. Some novel CT items were also generated based upon source material and academic literature. A focus group (N = 6, South-East England) with CT believers was conducted in April 2018 to understand how existing CT measures and novel CT items were interpreted (see **Appendix 9**). The feedback indicated that the existing measures focussed heavily on the outgroup, with other aspects of their CT worldview (e.g. self, ingroup) being overlooked. Consequently, we decided to make each item consistent with one of the six themes proposed by Franks et al. (2017 [Chapter 2]), including: *self*, *ingroup*, *outgroup*, *reality*, *future*, and *action*. In total, there were 88 domain general CT items. Some had slightly modified wording to existing measures but the majority were original given that the existing measures were limited to a focus on the outgroup. Each item was phrased with reference to general conspirators (e.g. "politicians," "elite," "extra-terrestrials") and courses of action (e.g. "agenda," "control," "motives"), rather than specific nomenclature or events. A domain general approach could tap into general conspiracist beliefs, and was chosen for its adaptability to various populations and conspiracist contexts which may change over time. All items requested the respondent's agreement along a 7-point Likert scale: 1. Strongly disagree, 2. Disagree, 3. Somewhat disagree, 4. Neither agree nor disagree, 5. Somewhat agree, 6. Agree, 7. Strongly agree.

Results

Exploratory factor analysis

An exploratory factor analysis (EFA) was conducted, beginning with 88 domain general CT items. The data was deemed suitable for EFA. Items were examined for significant correlations and linear relationships as indicated by scatterplots, and multicollinearity by examining Squared Multiple Correlations. Anti-image matrix correlations showed that all diagonal values were above 0.5. Communalities were above 0.3 and five items with values less than 0.3 were excluded **(**Hair, Black, Babin, & Anderson, 2014; Tabachnick & Fidell, 2007; Williams, Brown & Onsman, 2010).

The data was suited for factor analysis since the Kaiser-Meyer-Olkin value was above 0.6 (*KMO* = 0.970); and Bartlett's test sphericity achieved significance (χ^2 = 37214.36, *df* = 3916, $p < 0.000$), rejecting the null hypothesis that the observed correlation matched the identity matrix. These results indicated sampling adequacy and sufficient correlations within the dataset for factors (Hair et al., 2014).

Principal axis factoring (PAF) was conducted because the items as observed variables were hypothesised to account for a set of common factors or latent constructs representing conspiracist worldviews (Fabrigar, Wegener, MacCallum, & Strahan, 1999). A five-factor structure of 22 items was identified, accounting for 73% total variance. Each initial eigenvalue was greater than 1. The first factor explained 44.6% of total variance, decreasing by each factor: factor 2 (12.5%), factor 3 (6.6%), factor 4 (4.7%) and factor 5 (4.6%). A scree plot showed a dramatic decline with a point of inflection after factor 5. A parallel analysis confirmed that the five-factor structure did not retain trivial variance by comparing the number of factors with a random dataset containing the same number of variables, cases and parallel factors (Hayton, Allen & Scarpello, 2004; SPSS syntax by O'Connor, 2000; Montanelli & Humphreys, 1976). Specifically, all five eigenvalues were higher than their comparative parallel factor.

Inter-factor correlations were expected because all intended factors were measures of conspiracist worldviews. Since the factors were correlated (see **Table 5**), the five-factor structure was rotated using an oblique extraction method of Promax (Brown, 2009). The common variance was 65.21%. The extracted communalities were above 0.3 with average r = 0.65 (see **Table 6**). All factors exceeded the minimum advised number of three items per factor, each having at least four items and above (Fabrigar et al., 1999). All primary factor loadings were above 0.5, except for one item (item 93. with respectable .457), as shown in **Table 7**. None of the items had a factor cross-loading above 0.3. The average primary factor loading was high, as shown in **Table 8**.

Importantly, the five-factors were both consistent with and extended prior theory on the types of conspiracist worldviews proposed by Franks et al. (2017 [Chapter 2]). Factors were theoretically meaningful and conceptually coherent and distinct (Kim & Mueller, 1978). Factor 1 corresponded with a specific aspect of Type 5 (5 items, α = .91) and was called Type 5-Alien. As such, it measured generalised belief in alien CTs, with items using terms like "extra-terrestrial" or "alien" in the context of concealed knowledge (e.g. "Evidence of extra-terrestrial contact is being concealed from the public"). Factor 2 was consistent with Type 2 (4 items, α = .828). Based upon human agency (e.g. "politicians" and "authorities"), this factor captures belief in the possibility of conspiracies happening (e.g. "I keep an open mind that some official accounts released by authorities did not happen as they described"). Factor 3 was consistent with Type 4 (5 items, α = .90), showing a generalised belief in human-based conspiracy. This factor was concerned with "control" and "being deceived," whilst endorsing an outgroup hierarchy involving: 'evil elite' (i.e. top conspirators), 'middle management' (i.e. mid-level conspirators working for top conspirators), and the public as 'sheep' (i.e. blindly unaware of CTs). Factor 4 corresponded with another aspect of Type 5 (4 items, α = .88), and was called Type 5-Spiritual. Items in this subscale, referred to a generalised belief in spiritual conspiracy

and “evil energies” (e.g. “I am interested in people who speak out against the satanic plans of the evil elites”). Factor 5 was consistent with Type 3 (4 items, α = .84), representing a limited endorsement of CTs, referring to “certain” or “particular conspiracies” (e.g. “There is a clear evidence to indicate that certain conspiracies have actually happened”). Each subscale had Cronbach’s alphas of at least 0.8, and the overall CWS had a Cronbach’s alpha of .94, indicating that the CWS had high internal-consistency reliability.

Table 5. *Factor Correlation Matrix of Conspiracist Worldview Scale by Principal Axis Factoring with Oblique Promax rotation*.

		Type 3	Type 4	Type 5-Alien	Type 5-Spiritual
		Factor 5	*Factor 3*	*Factor 1*	*Factor 4*
Type 2	*Factor 2*	.55	.43	.28	.13
Type 3	*Factor 5*		.66	.63	.46
Type 4	*Factor 3*			.69	.64
Type 5-Alien	*Factor 1*				.57

N = 600, all significant at $p < 0.005$.

Table 6. *Communalities of Conspiracist Worldview Scale by Principal Axis Factoring, with Oblique Promax rotation.*

Type / Factor	Items	Extraction
Type 2	54	.62
Factor 2	10	.38
	40	.64
	49	.63
Type 3	114	.65
Factor 5	106	.61
	111	.61
	93	.60
Type 4	63	.66
Factor 3	18	.69
	56	.76
	51	.57
	78	.71
Type 5-Alien	34	.62
Factor 4	26	.80
	101	.67
	55	.69
	67	.66
Type 5-Spiritual	14	.76
Factor 1	9	.70
	22	.68
	64	.64

N = 600.

Table 7. *Factor loadings of Conspiracist Worldview Scale by Principal Axis Factoring with Oblique Promax rotation.*

			Factor				
Type	Items		1	2	3	4	5
Type 2	54.	I think that politicians sometimes do not tell us the true motives for their decisions. *[1]		.84			
	40.	Important things happen in the world which the public is never informed about.		.71			
	49.	I keep an open mind that some official accounts released by authorities did not happen as they described. *[1]		.70			
	10.	Questioning is the first step to uncovering the truth.		.64			
Type 3	114.	I have discussed with others my views on particular conspiracies.					.81
	106.	I have raised awareness about at least one conspiracy.					.76
	111.	There were periods in my life when I have been interested in particular conspiracies.					.65
	93.	There is clear evidence to indicate that certain conspiracies have actually happened.					.46
Type 4	63.	I changed how I view the world when I learned who was really in control.			.83		
	18.	A small, secret group of people is actually in control of the world economy. *[2a]			.82		
	56.	Elected politicians are just puppets to a secret shadow government.			.80		
	78.	I identify with others who recognise that the public is being deceived by hidden elites.			.71		
	51.	People are too busy focusing on daily living and work to see that they are being controlled.			.63		
Type 5-Alien	26.	Evidence of extra-terrestrial contact is being concealed from the public. *[2b]	.93				
	34.	One day the truth about extra-terrestrial contact with humans will be common knowledge.	.85				
	101.	I am interested in understanding the hidden truths about alien contact.	.81				
	55.	Extra-terrestrials have shaped human history.	.75				
	67.	My interest in the hidden truths about extra-terrestrials sets me apart from most others.	.62				
Type 5-Spiritual	14.	My spirituality helps me make sense of the malevolent agendas at work in the world.				.99	
	9.	Through our spiritual existence, we can challenge the dark energies at work in the world.				.83	
	22.	I identify with others who are aware of the evil energies in the world.				.62	
	64.	I am interested in people who speak out against the satanic plans of the evil elites.				.50	

N = 600, presenting rotated factor loadings above .30,
*1 Modified item, originally designed by: Bruder, Haffke, Neave, Nouripanah, and Imhoff (2013),

*2a Originally designed by: Brotherton, French, and French (2013),
*2b Modified item, originally designed by: Brotherton, French, and French (2013).

Table 8. *Descriptive statistics and Factor Loadings of Conspiracist Worldview Scale and Type subscales for Study 1.*

	Factor	Average Factor Loading	*M*	*SD*	*α*
CWS			4.05	1.19	.94
Type 2	*Factor 2*	.72	5.69	1.08	.83
Type 3	*Factor 5*	.67	4.27	1.52	.84
Type 4	*Factor 3*	.76	3.89	1.60	.90
Type 5-Alien	*Factor 1*	.79	3.35	1.58	.91
Type 5-Spiritual	*Factor 4*	.74	3.26	0.21	.88

N = 600, CWS = Conspiracist Worldview Scale, participant's score computed for means across 22 items of CWS and for each type.

Study 1 Discussion

The CWS was founded through an EFA, demonstrating high internal consistency. Consistent with Franks et al. (2017 [Chapter 2]), Types 2-5 conspiracist worldviews emerged by five subscales. These subscales measured either non-monological CT worldviews (Type 2 and Type 3) or generalised monological conspiracist worldviews (Type 4, Type 5-Alien, Type 5-Spiritual). Extending prior theory, the factor analysis bifurcated Type 5 into two factors of Type 5-Aliens and Type 5-Spiritual. This distinction is logically justified since it is possible to believe in Alien conspiracy without necessarily subscribing to spiritual conspiracy involving spiritual entities (e.g. "Satan," "dark energy"). Type 1 did not emerge and this was unsurprising since Type 1 was characterised by no CT belief.

Study 2A

Study 1 revealed a five-factor structure evidencing Types 2-5 conspiracist worldviews as proposed by Franks et al. (2017 [Chapter 2]) and further distinguishing Type 5 worldviews

according to Type 5-Alien and Type 5-Spiritual conspiracies. Study 2A sought to confirm the five-factor structure through a Confirmatory Factor Analysis (CFA).

Method

Participants

Participants included 379 US based adults (female = 184, male = 191, transgender female = 1, transgender male = 1) recruited via Amazon MTurk. Participants' age ranged between 20-82 years (M = 40.17, SD = 11.56). The majority were employed (92.3%), compared with unemployed (3.2%), retired (2.1%) and students (1.1%). Political views included Democrat (43.8%), Republican (28.2%), Independent (23.7%) and Other (1.3%). Voting in the previous election was 84.2%. Many identified with a religious group (48.8%), and being atheist (22.9%), agnostic (21.1%) or other (5.6%). Two participants were excluded for having more than five percent data missing. There were three missing datapoints which were estimated via multiple imputation (automatic method) using SPSS Version 24 IBM.

Procedure

The procedure was identical to Study 1, although was completed during December 2019. An online survey administered via Qualtrics and participants recruited via MTurk and rewarded $2.20 (please see Study 1 for further detail).

Measures

Conspiracist Worldview Scale. Participants completed the CWS, a 22-item scale comprised of five subscales: Type 2, Type 3, Type 4, Type 5-Alien and Type 5-Spiritual. These five types represent a five-factor structure founded through an EFA, as reported in Study 1. This measure was brought forward unchanged for further testing.

Results

Descriptive statistics

Mean values were computed for each participant across all 22 items of CWS and across each subscale representing each type (see **Table 9**). The CWS was normally distributed (M = 4.28, SD = 1.03, *Shapiro-Wilk* = .153). Types were non-normally distributed. As expected and consistent with Study 2B, mean scores indicated higher agreement for non-monological worldviews, which progressively decreased across the typology until the monological worldviews.

Table 9. *Descriptive statistics of Conspiracist Worldview Scale and Type subscales for Study 2A.*

	Mean	*SD*	α
CWS	4.28	1.03	.92
Type 2	5.95	.82	.77
Type 3	4.69	1.40	.85
Type 4	4.06	1.52	.91
Type 5-Alien	3.57	1.53	.91
Type 5-Spiritual	3.40	1.76	.90

N = 379, CWS = Conspiracist Worldview Scale, participant's score computed for means across 22 items of CWS and for each type.

Confirmatory factor analysis: Model fit

In order to establish construct validity of the CWS, a confirmatory factor analysis (CFA) was conducted to see whether the five-factor structure reported in Study 1 could be replicated. CFA enables testing of factor structures, examining the relationship between question items as observed variables and their hypothesised groupings as latent variables (Brown, 2006; Harrington, 2009; Suhr, 2006). Since each scale was a type of conspiracist worldview and as factors they previously correlated in Study 1, the CFA model specified permitted intercorrelations between all factors. Each indicator (i.e. question item) was allowed only to load on to one factor.

Several indices are offered to assess the closeness of fit of the specified model. A non-significant chi-square traditionally indicated good fit, but is no longer prioritised because of its extreme sensitivity to large sample sizes and any deviations within the dataset (Bentler & Bonnett, 1980; Bollen, 1989; Vandenberg, 2006). Hu and Bentler (1999) in their evaluation proposed a recommended fit based upon values of Comparative Fit Index (*CFI*) and Tucker Lewis Index (*TLI*) being close to 0.95 or higher, with Standardised Root Mean Residuals (*SRMR*) close to 0.8 or less, and Root Mean Square Error Approximation (*RMSEA*) approaching 0.6 or less. These cutoff values represent a stringent criterion; since they may be unsuitable for larger samples and can be over-generalised at the expense of theoretical justification and alternative validation approaches (Marsh, Hau, & Wen, 2004; Hopwood & Donnellan, 2010; Lance, Butts, & Michels, 2006). Nevertheless, based upon Hu and Bentler's (1999) conservative recommendations, our model produced adequate fit, with χ^2 = 532.92, *CFI* = .94, *TLI* = .93, *SRMR* = 0.06, and *RMSEA* = .067.

Table 10 presents comparisons with other models across nine iterations, varying in factor number from 1-5 and combination of types. The table showed that all CFA statistics mentioned above improved the higher the number of factors. Most importantly, the best model was the proposed five-factor model (see *Iteration 1*).

Confirmatory factor analysis: Factor loadings and internal reliability

The CWS (α = .92) and its subscales demonstrated good internal-reliability consistency: Type 5-Alien (α = .91), Type 5-Spiritual (α = .90), Type 4 (α = .91), Type 3 (α = .85), and Type 2 (α = .77). All Cronbach's alpha values were above 0.7 and comparable to Study 1. As can be seen from the schematic of **Figure 4**, all factor loadings were above 0.7, except for one factor loading. Item 10. of Type 2 was .44 (i.e. "Questioning is the first step to uncovering the truth."). The inclusion of this item is theoretically justified, representing the importance of questioning to ascertain the truth. However, perhaps rewording towards a more general statement whilst

retaining emphasis on ‘questioning,’ may yield higher loadings. In particular, the suggested wording is, “Questioning is important to uncover the truth.” This advised course of action would likely improve internal reliability in future studies.

Cross-loadings between factors were consistent with expectations. The greater the distance between types, the lower the factor loading (e.g. Type 2 with Type 5-Spiritual = 0.06). These cross-loadings were higher, the closer the distance between factor loadings (e.g. Type 2 with Type 3 = 0.52). Unexpectedly, the cross-loading between the two Type 5 (Alien vs Spiritual) was less than expected, at .36. This low cross-loading highlights the distinctiveness of each Type 5, reinforcing the bifurcation presented by the EFA in Study 1.

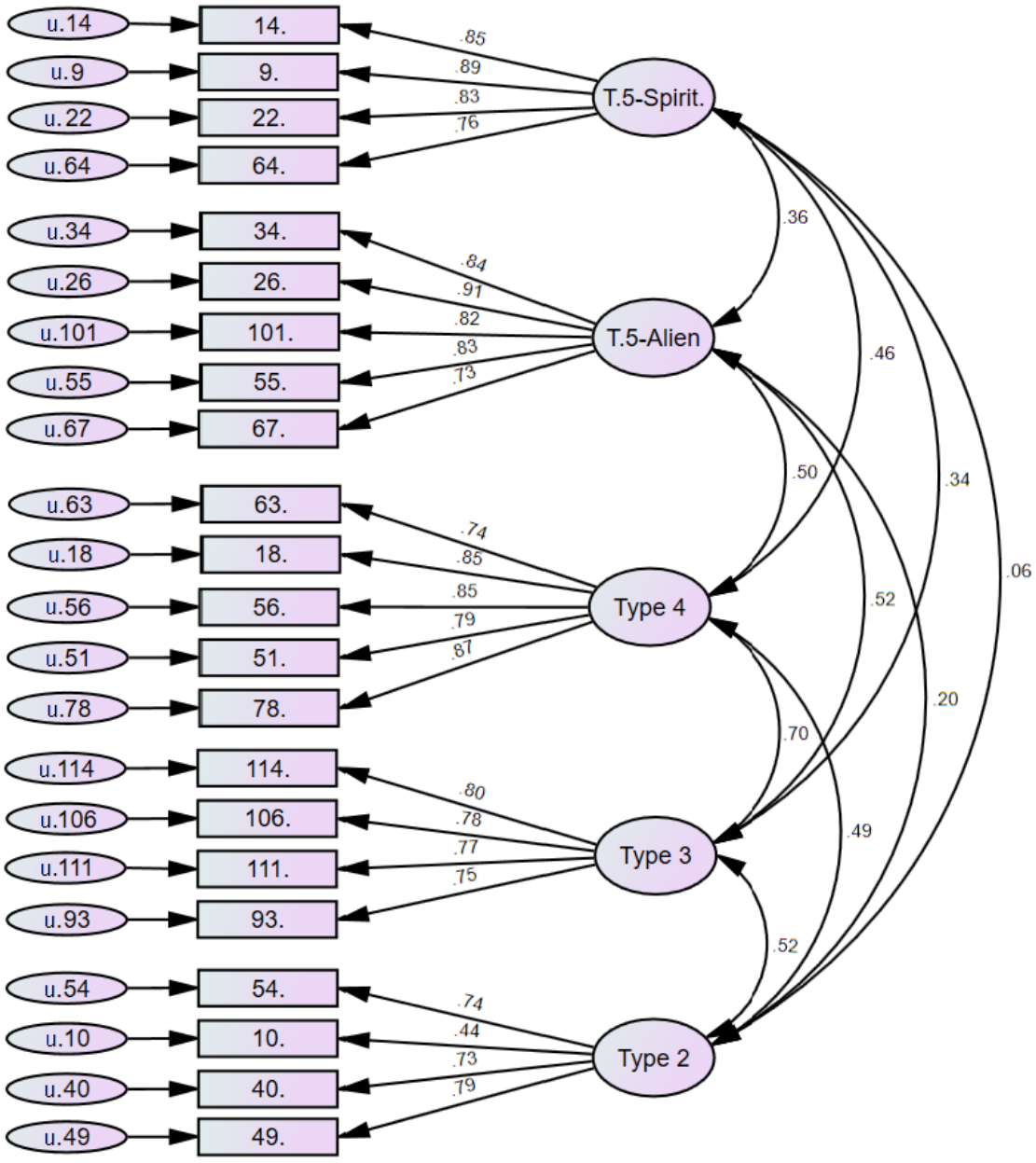

Figure 4. Standardised factor loadings for confirmatory factor analysis.

Note: one indicator per factor has a regression weight fixed to 1, and ‘u.’ represents unique variance of observed variable.

Table 10. *Indices assessing closeness of fit, with iterations varying according to number of factors and types.*

		Factor combinations											
Iteration	*Number of Factors*	*Type 2*	*Type 3*	*Type 4*	*Type 5-Alien*	*Type 5-Spirit*	χ^2	*df*	χ^2/df	*RMSEA*	*SRMR*	*TLI*	*CFI*
1	5	*Factor 1*	*Factor 2*	*Factor 3*	*Factor 4*	*Factor 5*	532.92	199.00	2.68	.07	.06	.93	.94
2	4	*Factor 1*	*Factor 1*	*Factor 2*	*Factor 3*	*Factor 4*	798.65	203.00	3.93	.09	.08	.87	.89
3	4	*Factor 1*	*Factor 2*	*Factor 2*	*Factor 3*	*Factor 4*	811.87	203.00	4.00	.09	.07	.87	.89
4	4	*Factor 1*	*Factor 2*	*Factor 3*	*Factor 4*	*Factor 4*	1373.76	203.00	6.77	.12	.11	.75	.78
5	3	*Factor 1*	*Factor 1*	*Factor 2*	*Factor 3*	*Factor 3*	1635.03	206.00	7.94	.14	.12	.70	.73
6	3	*Factor 1*	*Factor 2*	*Factor 2*	*Factor 3*	*Factor 3*	1651.73	206.00	8.02	.14	.12	.70	.73
7	2	*Factor 1*	*Factor 1*	*Factor 1*	*Factor 2*	*Factor 2*	1920.23	208.00	9.23	.15	.13	.64	.68
8	2	*Factor 1*	*Factor 1*	*Factor 2*	*Factor 2*	*Factor 2*	2398.16	208.00	11.53	.17	.13	.54	.59
9	1	*Factor 1*	*Factor 1*	*Factor 1*	*Factor 1*	*Factor 1*	2699.77	209.00	12.92	12.92	.14	.48	.53

N = 379, χ^2 = chi-square, df = degree of freedom, *RMSEA* = Root Mean Square Error Approximation, *SRMR* = Standardised Root Mean Residuals, *CFI* = Comparative Fit Index, *TLI* = Tucker Lewis Index. All χ^2 were $p < .001$.

Study 2A Discussion

Study 2A demonstrates the construct validity of the CWS and the Type subscales. The CFA produced adequate fit, with good internal reliability for the subscales, consolidating the 22 items. Descriptive statistics indicated that again the CWS was normally distributed. One factor loading was less than 0.5, so future studies may consider rewording item 10. as discussed, "Questioning is important to uncover the truth." This course of action was not taken forward in the subsequent study since the data was gathered in a single data collection period. Together, the CWS is a valid measure of different contents of conspiracist worldview with sound psychometric properties.

Study 2B

Study 2B aimed to establish the convergent validity of the CWS. This was achieved by assessing correlations with other existing measures of CT belief, including Conspiracy Mentality Questionnaire (CMQ, Bruder, Haffke, Neave, Nouripanah & Imhoff, 2013), General Conspiracist Beliefs Scale (GCB; Brotherton, French & Pickering, 2013), Belief in Conspiracy Theories Inventory (BCTI; Swami, Chamorro-Premuzic, & Furnham, 2010; Swami et al., 2011) and Single-Item Scale (Lantian et al., 2016). Also, CWS was correlated with other measures of related phenomena, including paranoia (Fenigstein & Vanable, 1992), paranormal belief (Tobacyk, 2004), alien visitation coverups (Swami, Furnham, Haubner, Stieger, & Voracek, 2009), and political cynicism (Citrin & Elkins, 1975).

It was hypothesised that:

Hypothesis 1. CWS will highly positively correlate with all existing measures of CT belief, including CMQ, GCB, BCTI, Single-item Scale.

Hypothesis 2. The CWS type subscales will correlate differently with the existing CT measures of CMQ, GCB, BCTI and Single-Item Scale.

Hypothesis 2.a. Since most measures focus on monologicality featuring general statements about human-based CTs, it was hypothesised that Type 4 will produce the highest correlations with existing CT belief measures.

Hypothesis 2.b. Since Type 2 expressed the least conviction in CTs and existing measures are concerned with strong endorsement, it was hypothesised that Type 2 would produce the lowest correlations with existing CT belief measures.

Hypothesis 3. The types will correlate differently with the related phenomena of political cynicism, paranoia, paranormal belief, and alien coverup conspiracy.

Hypothesis 3.a. Since political cynicism concerns human political agents, political cynicism will significantly correlate with human-based CT worldviews of Type 2, Type 3 and Type 4, but not non-human based CT worldviews (Type 5-Alien, and Type 5-Spiritual).

Hypothesis 3.b. Paranoia will produce low to moderate significant correlations with the type subscales, and this will increase from Types 2-5.

Hypothesis 3.c. Paranormal belief will highly correlate with Type 5-Spiritual conspiracist worldviews, based on shared supernatural assumptions.

Hypothesis 3.d. Alien visitation cover-up scale will highly correlate with Type 5-Alien conspiracist worldviews, based upon shared content of extra-terrestrials.

Method

Participants

The data for this study involved the same participants as Study 1. Please see Study 1 for participant details.

Procedure

Data for Study 2B was collected at the same time as Study 2A, and involved the same procedure, but an administration of different measures. Please see Study 2A for procedure details.

Measures

Conspiracist Worldview Scale (CWS). The CWS of Study 1 and Study 2A was used unchanged (α = .92; see Study 2A for subscale Cronbach's α, all above 0.77).

Conspiracy Mentality Questionnaire (CMQ) (Bruder, et al., 2013). A five-item scale measuring 'conspiracy mentality.' This 11-point scale ranges between (0%, 'certainly not') to ('100%,' certain), with labels for each response-point (e.g. '80%', very likely). Items feature human-based conspiracism (e.g. "politicians," "government" and "secret organizations") using generally phrased statements. A CMQ example-item is, "I think that there are secret organizations that greatly influence political decisions." The CMQ shared two overlapping items with CWS (see **Appendix 10**). Cronbach's α was .88.

General Conspiracist Beliefs Scale (GCB) (Brotherton et al., 2013). This measure focusses on 'generic conspiracist ideation' through a 15-item scale. GCB is made up of five 3-item subscales, including: Government malfeasance, Malevolent global conspiracy, Extra-terrestrial cover-up, Personal wellbeing, Control of information (GCB example, "Technology with mind-control capacities is used on people without their knowledge"). GCB is a 5-item response scale: "Definitely not true; Probably not true; Not sure/cannot decide; Probably true; Definitely true." The GCB shares two overlapping item with CWS (see **Appendix 10**) (α = .95).

Belief in Conspiracy Theories Inventory (BCTI) (Swami et al., 2010, 2011). BCTI measures 'general conspiracist ideation' by a 15-item scale, using famous CT events as item-stimuli. Example item is, "The Apollo moon landings never happened and were staged in a

Hollywood film studio." It uses a 9-point response scale, with agreement from ('1. Completely false' to '9. Completely true'). This scale includes 13 human-based CTs, although with two items based upon alien conspiracies (α = .94).

Single-Item Scale (Lantian et al., 2016). The Single-Item scale features one item measuring the 'general tendency' to endorse CTs (example item: "I think that the official version of the events given by the authorities very often hides the truth). This is a 9-point response scale from ('1. Completely false' to '9. Completely true').

Political Cynicism (Citrin & Elkins, 1975). This scale measures cynicism through items focussed on idealism, representation, transparency and character in politics. An example item is: "No man can hope to stay honest once he enters politics." Initially developed to examine changing political attitudes. Respondents answered 13-items, expressing Agreement or Disagreement.

Paranoia Scale (Fenigstein & Vanable, 1992). This 20-item scale examines paranoid ideation (example item: "It is safer to trust no one"). Agreement is given along a five-point scale ('1. Not at all applicable to me,' to '5. Extremely applicable to me') (α = .93).

Revised Paranormal Belief Scale (R-PBS) (Tobacyk, 2004). This is a 26-item scale measuring paranormal belief, covering the topics of: Religious belief, Psi (i.e. telepathy and telekinesis), Witchcraft, Superstition, Spiritualism, Extraordinary Life Forms, Precognition (e.g. "Reincarnation does occur"). Agreement is given along a 7-point labelled Likert scale ('1. Strongly Disagree' to '7. Strongly Agree') (α = .95).

Alien visitation and cover-up, subscale of Extra-terrestrial Belief Scale (EBS-AVC) (Swami et al., 2009). This 11-item subscale examines existence and coverup of extra-terrestrial beings (e.g. "Intelligent extra-terrestrial life has visited Earth"). Agreement is given along a 7-point Likert scale ('1. Strongly agree' to '7. Strongly disagree') (α = .97).

Results

Descriptive data

The descriptive data is presented in **Table 11**. All scales were non-normally distributed, except for the overall CWS.

Table 11. *Descriptive statistics of Conspiracist Worldview Scale and Type subscales for Study 2B.*

	Mean	*SD*	*α*
CWS	4.28	1.03	.92
Type 2	5.95	.82	.77
Type 3	4.69	1.40	.85
Type 4	4.06	1.52	.91
Type 5-Alien	3.57	1.53	.91
Type 5-Spiritual	3.40	1.76	.90
CMQ	5.94	2.27	.88
GCB	2.90	.95	.95
BCTI	3.89	1.83	.94
Single-Item Scale	5.87	2.01	
Political Cynicism	1.70	.28	.88
Paranoia Scale	2.18	.75	.93
R-PBS	2.85	1.31	.95
EBS-AVC	3.23	1.67	.97

N = 379, CWS = Conspiracist Worldview Scale, CMQ = Conspiracy Mentality Questionnaire, GCB = General Conspiracist Beliefs Scale, BCTI = Belief in Conspiracy Theory Inventory, RPBS = Revised Paranormal Belief Scale, EBS-AVC = Alien visitation and coverup of Extra-terrestrial Belief Scale. Participant's score computed for means across 22 items of CWS and for each type.

Correlations with existing conspiracist belief measures

In order to assess convergent validity, Spearman's Rho correlations were conducted between the CWS and the type subscales, with four similar measures of CT belief (CMQ, GCB, BCTI, Single-Item conspiracy scale) and related phenomena (political cynicism, paranoia, paranormal, alien visitation-coverup) (please see **Table 12**).

Consistent with *hypothesis 1.*, the CWS was highly positively correlated with existing measures of CT belief, including CMQ (r = 0.74), GCB (r = .86) and BCTI (r = .75). The Single-Item Scale was moderately correlated (r = 3.93). As proposed by *hypothesis 2.*, the types

of conspiracist worldview correlated differently with existing conspiracist belief measures. Notably, Type 4 represents the most prototypical monological worldview since it focusses on generalised CT belief by human agency which is the predominant focus of other existing measures. As expected, Type 4 produced consistently high correlations with these measures of general CT belief (average r = .69, *hypothesis 2a.*). Type 5-Alien (average r = .46) and Type 5-Spiritual (average r = .32) produced low to moderate significant and positive correlations with existing CT belief measures. These findings are unsurprising. Across all other CT measures (CMQ, GCB, BCTI, Single-Item Scale), only 4 of 37 items focus on extra-terrestrial coverup beliefs. Closer examination of GCB subscales, showed that Extra-terrestrial Coverup correlated highly with our Type 5-Alien belief (r = .087).

Regarding non-monological conspiracist worldviews, Type 2 represents the lowest engagement with CTs (i.e. an openness to the possibility of CTs being true without conviction). Type 2 produced positive and moderate correlations with existing conspiracist measures (average r = - .46, *hypothesis 2b*). Type 3 represents limited belief in CTs and produced high positive correlations with other CT measures (average r = .53). These correlations show shared variance between types and conspiracist measures, demonstrating convergent validity of the non-monological CT belief scales.

Consistent with *hypothesis 3.*, types of conspiracist worldviews significantly and positively correlated with the related phenomena of political cynicism, paranoia, paranormal belief, and EBS-AVC. These relationships converged upon content. Indeed, political cynicism only significantly correlated with worldviews concerning human-based conspiracy of Type 2 (r = 0.44), Type 3 (r = .25) and Type 4 (r = .40) (*hypothesis 3.a.*). This may be explained by the shared concern with human political agents characterising these CT types and political cynicism. The CWS moderately and positively correlated with paranoia. Type 2 (r = .19) produced the lowest positive correlations, followed by Type 3 (r = .25), up to the moderate

significant correlations with the monological worldviews of Type 4 (r = .39) and 5-Alien (r = .37) (*hypothesis 3.b.*). Unexpectedly, paranoia was weakly correlated with Type 5-Spiritual (r = .25), in contrast to the other monological worldviews. Finally, Type 5-Spiritual was most highly correlated with paranormal belief (r = .67) consistent with expectations since both scales share assumptions about supernatural ontologies (*hypothesis 3.c.).* Likewise, Type 5-Alien most highly correlated with the EBS-AVC (r = .86), sharing assumptions about the existence of extra-terrestrials being hidden from the public (*hypothesis 3.d.*).

Table 12. *Spearman's rho bivariate correlations between CWS and subscale types with existing measures of Study 2B.*

	CWS	*Type 2*	*Type 3*	*Type 4*	*Type 5-Alien*	*Type 5-Spiritual*	*GCB*	*CMQ*	*BCTI*	*Single-item conspiracy belief*	*Political cynicism*	*Paranoia scale*	*Paranormal belief scale*	*Alien visitation cover-up*
CWS	1	.43**	.75**	.84**	.72**	.66**	.86**	.74**	.75**	.39**	.28**	.43**	.54**	.66**
Type 2			.44**	.43**	.12*	.04	.44**	.59**	.31**	.52**	.44**	.19**	.00	.17**
Type 3				.61**	.44**	.30**	.62**	.58**	.54**	.37**	.25**	.25**	.24**	.39**
Type 4					.45**	.43**	.83**	.78**	.71**	.45**	.39**	.39**	.34**	.47**
Type 5-Alien						.36**	.63**	.43**	.63**	.15**	.08	.37**	.46**	.86**
Type 5-Spiritual							.45**	.32**	.39**	.12*	-.02	.25**	.67**	.30**
Mean	4.29	5.95	4.69	4.06	3.57	3.39	2.90	5.94	3.89	5.87	1.70	2.18	2.85	3.23
SD	1.03	.82	1.39	1.52	1.53	1.76	0.95	2.27	1.83	2.01	.28	.75	1.31	1.67

N = 379, *$p < .01$, ** $p < 0.001$.

Study 2B Discussion

Study 2B demonstrated convergent validity, showing significant positive correlations between the CWS and other existing measures of CT belief. Type 4 produced the highest average correlation with other conspiracist measures. This was expected since Type 4 represents the most prototypical form of monological belief and other existing measures claim to measure monologicality (GCB, BCTI) or generic belief in CTs (CMQ & Single Items). All other types, when examining the average correlations between types and conspiracist measures, correlated at least moderately or above, thus demonstrating positive convergence. CWS and types also converged with related phenomena including: political cynicism, paranoia, EBS-AVC and paranormal beliefs. The strength of relationships reflected convergence of belief content, with more similarities resulting in high correlations (e.g. Type 5-Spiritual with paranormal belief).

Study 2C

Study 2C aimed to establish concurrent validity. Correlations and multiple regressions explore how each conspiracist worldview type related to a range of specific CT topics and events. The following hypotheses were advanced:

Hypothesis 4. Types will significantly correlate with each other.

Hypothesis 4.a. There will be high correlations between non-monological conspiracist worldviews of Type 2 and Type 3.

Hypothesis 4.b. There will be high correlations between the monological worldviews of Type 4, Type 5-Alien, and Type 5-Spiritual.

Hypothesis 4.c. Non-monological (Type 2, Type 3) and monological (Type 4, Type 5-Alien, Type 5-Spiritual) conspiracist worldviews will be weakly correlated.

Hypothesis 5. It was expected that correlations between types with specific topics, will be lowest for non-monological worldviews (Type 2, Type 3). Type 2 will be lowest, increasing in strength from Type 3, until the monological worldviews of Type 4, Type 5-Alien and Type 5-Spiritual.

Hypothesis 6. The content of specific CTs will relate to the strength of correlation.

Hypothesis 6.a. Specific Government CTs will correlate highest with Type 4 due to monological CT worldview based on human activity.

Hypothesis 6.b. Type 5-Alien will most highly correlate with Specific Extra-terrestrial CTs.

Hypothesis 6.c. Spiritual CTs will most highly correlate with Specific Spiritual CTs.

Hypothesis 7. In multiple regressions with specific CTs as criterion variables, the primary predictors will be monological conspiracist worldviews (Type 4, Type 5-Alien, Type 5-Spiritual), followed by the non-monological conspiracist worldviews (Type 3, Type 2).

Method

Participants

There were 159 participants (male = 91, female = 67, gender variant = 1) randomly selected from the 600 participants of Study 1 (MTurk US Sample, reward $2.20). Participants were aged between 19-73 years (M = 37.04, SD = 11.71, median = 34). Sixty percent completed higher education and 37% held a High School Diploma or Associate Degree. Participants were employed (91%), unemployed (4.4%), retired (1.9%) and students (0.6%). Party identification was Democratic (60.4%), Independent (22%) and Republican (16.4%). In the last election, 81.8% voted and 18.2% did not vote. Participants identified with a religious group (38.4%), were atheist (26.4%), agnostic (26.4%) and other (7.5%).

Measures

Conspiracist Worldview Scale. The 22-item and five-factor measure from Study 1 was taken forward. This comprised of five subscales measuring five types of conspiracist worldview. Non-monological worldviews are characterised by a non-generalised interest in CTs, and were measured by: Type 2 subscale capturing an openness to the possibility that conspiracies happen without conviction, and Type 3 subscale capturing limited belief in one or two CT topics. Monological worldviews are characterised by a generalised belief in CTs, represented by three types: Type 4 concerning human conspiracy (e.g. government conspiracy), Type 5-Alien, and Type 5-Spiritual. The CWS requested a single answer along a 7-point Likert scale: 1. Strongly disagree, 2. Disagree, 3. Somewhat disagree, 4. Neither agree nor disagree, 5. Somewhat agree, 6. Agree, 7. Strongly agree.

Specific Conspiracy Theory Events and Topics. The Specific Conspiracy Theory Events and Topics scale featured 21 items, with six subscales on specific topics: September 9/11, Health, Science and Technology, Government, Extra-terrestrial, and Spiritual conspiracy. CT specific items were generated based upon CT source material and gathered through a review of existing CT belief measures (Brotherton et al., 2013; Bruder et al., 2013; Leman & Cinnirella, 2013; Lewandowsky, Gignac & Oberauer, 2013; Oliver & Wood, 2014; Swami et al., 2010, 2011). The aim was to have a variety of recognisable CTs covering specific topics and events. Please see **Appendix 10** for detail. Participants provided a single answer according to 7-point Likert scale (1. Strongly disagree … 7. Strongly agree).

Results

Descriptives and Internal Reliability

Based upon computed mean-scores, the CWS produced normally distributed results (M = 4.14, SD = 1.15, *Shapiro-Wilk* = .234), and good internal reliability (α = .94). CWS subscales representing types and Specific subscales were non-normally distributed. All subscales showed

good internal reliability consistency, exceeding values of .70. As expected, the highest agreement was for the non-monological types, decreasing across the typology to the monological types (see Means in **Table 13**).

Table 13. *Descriptive statistics of composite mean scores for CWS and type for Study 2C.*

	Mean	*SD*	*α*
CWS	4.14	1.15	.94
Type 2	5.79	.98	.82
Type 3	4.34	1.49	.85
Type 4	3.99	1.53	.89
Type 5-Spiritual	3.25	1.62	.88
Type 5-Alien	3.54	1.62	.91

Correlations with Specific CTs

Since the data was non-parametric, Spearman's Rho correlations were conducted between the Types and Specific CTs (see **Table 14**).

Consistent with *hypothesis 4.*, the types all significantly correlated with each other. Significant high correlations were found between non-monological conspiracist worldviews of Type 2 and Type 3 (r = .56, *hypothesis 4.a.*), and also for monological conspiracist worldviews of Type 4, Type 5-Alien, and Type 5-Spiritual (ranging from r = 0.6 - 0.68, hypothesis *4b.*). Findings between non-monological and monological types (*hypothesis 4.c*.) were mixed with both weak and moderate correlations. For example, Type 2 correlated lowly with both Type 5 worldviews (ranging from r = 0.21 - 0.32). However, unexpectedly Type 3, correlated highly with Type 4 (r = 0.57) and Type 5-Alien (r = 0.53). Together, these mixed findings may reflect the distance between conspiracist worldviews, for example indicating that Type 2 is most dissimilar from Type 5, however Type 3 is a step up in degree of conspiracist endorsement and closer to Type 4.

Consistent with *hypothesis 5.*, correlations between types with specific topics was lowest for the non-monological worldviews: Type 2 produced weak correlations (range = 0.12 - 0.385, average $r = 0.25$) and increased to moderate for Type 3 (range = 0.384-0.602, average $r = 0.49$). By contrast, the monological worldviews produced high correlations with all Specific topics: Type 4 (range = 0.61-0.8, average $r = 0.71$), Type 5-Spiritual (range = 0.57-0.75, average $r = 0.65$), and Type 5-Alien (range = 0.59-0.9, average $r = 0.73$).

Regarding *hypothesis 6.*, as expected, the content of specific belief was related to the types. Type 4 is concerned with generalised monological belief in CTs involving human agents. It was unsurprising then that Type 4 was most highly correlated with government conspiracies (*hypothesis 6.a.*), and also correlated highly with all other human-based specific CTs concerning the events of September 9/11, Health, and Science and Technology. Regarding monological non-human conspiracist worldviews, Type 5-Alien correlated most highly with specific Extra-terrestrial conspiracies (*hypothesis 6.b.*), and Type 5-Spiritual belief correlated most highly with specific Spiritual conspiracies (*hypothesis 6.c.*). These results show that the ontological assumptions founding each type worldview corresponded to the specific topics sharing those assumptions.

Table 14. *Spear-man's rho bivariate correlations between Types of conspiracist worldviews and Specific conspiracy theory topics and events.*

		Typology					Specific					
		Type 2	Type 3	Type 4	Type 5 Spiritual	Type 5 Alien	September 9/11	Health	Science & Technology	Government	Extra-terrestrial	Spiritual
	CWS	.56**	.74**	.89**	.76**	.85**	.81**	.82**	.64**	.80**	.82**	.74**
Typology	Type 2		.56**	.51**	.21**	.32**	.39**	.28**	.05	.38**	.28**	.12
	Type 3			.57**	.37**	.53**	.60**	.56**	.38**	.53**	.50**	.39**
	Type 4				.61**	.68**	.75**	.75**	.61**	.80**	.68**	.67**
	Type 5 Spiritual					.60**	.59**	.66**	.67**	.57**	.67**	.75**
	Type 5 Alien						.73**	.75**	.59**	.71**	.90**	.72**
Specific	September 9/11							.78**	.58**	.78**	.76**	.67**
	Health								.71**	.75**	.78**	.82**
	Science & Technology									.59**	.69**	.71**
	Government										.70**	.67**
	Extra-terrestrial											.77**

*N = 159, ** p < .001.*

Predicting specific CTs

Six multiple regressions with Forward procedure were conducted, inputting all five types as predictors, with one of the six specific topics and events as the criterion variable. Forward selection procedure begins with the null hypothesis that no variables contribute to the model, and first adds the predictor (i.e. conspiracist worldview Type) with the highest bivariate correlation and most significant (lowest *p* value) contribution to the model. Subsequently, the next variable which can explain the highest amount of remaining variance and most significantly improve the model is included and so on, until no significant variables can be added (Field, 2003). This technique of stepwise regression was selected to facilitate an exploratory stage of research in establishing how the types of conspiracist worldviews best predicted a variety of specific CT topics and events (Menard, 1995).

Key regression assumptions were met. Cook's distance did not exceed 1 (Cook, 1977, 1979), VIF statistics were below 2.5 and no correlations were above $r = 0.7$, representing the threshold of high multicollinearity (Dormann et al., 2012; Hair et al., 2014). Scatterplots indicated homoscedasticity and P-P plots showed datapoints close to the normality line, although the data was non-normally distributed (Hair et al., 2014). Type 2 was excluded from the set of predictors for four of the specific topics (Government, Health, Spiritual and Alien), since it did not correlate above $r = 0.3$. All relationships were positive, whereby increasing endorsement for a given type corresponded to increments in endorsement of a given specific CT topic. The best fitting models of the Forward regression are described below and presented in **Table 15**.

As proposed by *hypothesis 7.*, the primary predictors of all specific topics were monological conspiracist worldviews (Type 4, Type 5-Spiritual, Type 5-Alien), as opposed to non-monological worldviews (Types 2 and 3). Three final models were solely monological. That is, when inputting all five types, only the monological types emerged as significant

predictors. Specific Government CTs (F (2, 156) = 169.73, p < .001, R = 0.83) were firstly predicted by Type 4, explaining the majority of variance (62% variance, B = 0.53, p < .001), and secondly predicted by Type 5-Alien (B = 0.31, p < .001). The other two regressions involved non-human specific CTs being predominantly predicted by Type 5 monological worldviews. Moreover, specific Extra-terrestrial CTs (F (2, 156) = 346.17, p < .001 R = 0.9) were only predicted by Type 5 worldviews: firstly, Type 5-Spiritual (79% variance, B = 0.75, p < .001), and secondly, Type 5-Alien (B = 0.21, p < .001). Specific Spiritual CTs (F (3, 155) = 97.67, p < .001, R = 0.81), were predicted by Type 5-Spiritual (51% variance, B = 0.36, p < .001) and Type 5-Alien (B = 0.33, p < .001), with Type 4 significantly explaining the lowest remaining variance (B = 0.21, p < .001).

The remaining three specific CT topics were similarly modelled with monological conspiracist worldviews as the leading predictors but additionally featured the non-monological Type 3 as the last remaining significant coefficient. Endorsement of September 9/11 CTs (F (3, 155) = 104.64, p < .001, R = 0.82) was predicted first by Type 5-Alien accounting for 54% variance (B = 0.41, p < .001), secondly, Type 4 (B = 0.41, p < .001) and finally, Type 3 (B = 0.21, p < .005). Similarly, specific Health CTs (F (4, 154) = 85.38, p < .001, R = 0.83) were predicted by worldviews characterised by Type 5-Alien (55% variance, B = 0.32, p < .001), Type 4 (B = 0.26, p < 0.001) and Type 5-Spiritual (B = 0.22, p < 0.001), and finally Type 3 (B = 0.12, p < .05). Lastly, specific conspiracies of Science (F (3,155) = 57.68, p < .001, R = 0.73) were predicted by Type 5-Spiritual (44% variance, B = 0.40, p < 0.001), Type 4 (B = 0.24, p < .005) and Type 3 (B = 0.17, p < .05). The contribution of Type 3 to each final model was minimal but significant.

Table 15. *Forward regression of Types predicting Specific CT beliefs.*

Criterion Var.		*R*	*R square*	*Adjusted R Square*	*Change in R Square*	*B*	*SE*	*Standardised B*	*t*	*p*	*Confid. Interval (95%) Lower*	*Upper*	*F*	*df*	*Residual*	*p*
September 9/11	*Model 3*	.82	.67	.66									104.64	3	155	.000
	Constant					-.88	.26		-3.38	.001						
	Type 5_Alien				.54	.41	.07	.39	6.02	.000	.28	.55				
	Type 4				.11	.41	.08	.37	5.53	.000	.27	.56				
	Type 3				.02	.21	.07	.18	3.07	.003	.07	.34				
Government	*Model 2*	.83	.69	.68									169.73	2	156	.000
	Constant					.47	.19		2.51	.012						
	Type 4				.62	.53	.06	.56	9.15	.000	0.41	.64				
	Type 5_Alien				.07	.31	.05	.35	5.69	.000	.20	.42				
Health	*Model 4*	.83	.69	.68									85.38	4	154	.000
	Constant					-.72	.22		-3.28	.001	-1.15	-.28				
	Type 5_Alien				.55	.32	.06	.35	5.32	.000	.20	.44				
	Type 4				.09	.26	.07	.27	3.9	.000	.13	.39				
	Type 5-Spiritual				.03	.22	.05	.24	4.13	.000	.12	.33				
	Type 3				.01	.12	.06	.12	2.16	.032	.01	.23				
Science	*Model 3*	.73	.53	.52									57.68	3	155	.000
	Constant					-.36	.25		-1.45	.150	-.85	.13				
	Type 5-Spiritual				.44	.40	.07	.41	5.67	.000	.26	.53				
	Type 4				.07	.24	.08	.24	3.02	.003	.08	.41				
	Type 3				.02	.17	.08	.18	2.31	.022	.03	.32				

		R	*R square*	*Adjusted R Square*		*B*	*SE*	*Standardised B*	*t*	*p*	*Lower*	*Upper*	*F*	*df*	*Residual*	*p*
Spiritual	*Model 3*	.81	.65	.65									97.67	3	155	.000
	Constant					-.64	.20		-3.18	.002	-1.04	-.24				
	Type 5-Spiritual				.51	.36	.06	.40	6.42	.000	.25	.48				
	Type 5_Alien				.13	.33	.06	.36	5.31	.000	.21	.45				
	Type 4				.01	.17	.07	.18	2.57	.011	.04	.30				
Extra-terrestrial	*Model 2*	.90	.82	.81									346.17	2	156	.000
	Constant					-.37	.14		-2.64	.009						
	Type 5-Spiritual				.79	.75	.04	.76	17.89	.000	.67	.83				
	Type 5_Alien				.03	.21	.04	.22	5.08	.000	.13	.29				

N = 159.

[Table continued]

Study 2C Discussion

Overall, these results were part of an exploratory stage of scale development and established concurrent validity of the CWS. They are consistent with expectations, whereby the most developed conspiracist worldviews emerged as the leading predictors of all specific conspiracy theory belief and with the highest correlations. However, Study 2C also extends previous theory by distinguishing between monological worldviews based upon human, extra-terrestrial and spiritual conspiracy, which in turn corresponded to specific CTs matching these belief contents and ontological assumptions. For example, specific Spiritual CTs were most highly correlated with and predicted by Type 5-Spiritual conspiracy worldviews, and likewise specific Government beliefs were most highly correlated with and predicted by Type 4 worldviews representing generalised human conspiracies. Consistent with being less developed belief, Type 2 and Type 3 correlated with specific CTs, although to a lesser degree. Furthermore, Type 3 also emerged as the last predictor for some specific CT events and topics (i.e. September 9/11, Government and Health).

Study 3

Study 3 established diagnostic validity, with the CWS categorising people according to their differing conspiracist worldviews. A latent class analysis (LCA) was conducted to see whether meaningful groups emerged based upon the CWS typology. To date, no LCA using psychometric measures of conspiracist belief have been conducted and since this was exploratory research, the following hypotheses were advanced:

Hypothesis 8. Each type will meaningfully contribute to a class of conspiracist worldview use.

Hypothesis 9. The distinction between non-monological and monological participants will emerge.

Hypothesis 9.a. There will be a non-monological group of participants, who believe in Type 2 and/or Type 3 CTs.

Hypothesis 9.b. There will be a monological group of participants who endorse Type 4, Type 5-Alien and Type 5-Spiritual.

Methods

Participants

Samples of Study 1 and Study 2 were combined. There were 979 participants (female = 45.8%, male = 53.2%, transgender female = 0.1%, transgender male = 0.3%) based in the US, ranging between 19-82 years (median = 36, *M* = 38.6, *SD* = 11.4). Employment was 91.11%, followed by unemployed (4.60%), retired (1.94%), and students (1.33%). Most identified as Democrat (48.83), then Republican (21.55%), Independent (25.94%), and Other (1.33%). The majority of participants voted (82.12%). Religious identification was 45.25%, with atheists (22.88%), agnostics (24%) and other (5.41%).

Procedure

The data was gathered in previous studies. Please see Procedure of Study 1 and 2A.

Measures

Conspiracist Worldview Scale. The CWS was brought forward. Datasets of the previous studies were combined and transformed into binary data. Responses of the 7-point Likert scale were dichotomised accordingly: Agree (2 = 5. Somewhat agree, 6. Agree, 7. Strongly agree) and Disagree (1 = 1. Strongly disagree, 2. Disagree, 3. Somewhat disagree, 4. Neither agree nor disagree).

Results

Latent Class Analysis is a statistical technique used to estimate hidden subgroups or ‘latent classes’ of people, according to patterns of observed responses. These observed responses are known as ‘manifest variables,’ and are categorical data. The LCA is a maximum

likelihood estimation model, generating a set of conditionally dependent, probabilistic values. Each probability represents the conditional dependence between an observed manifest variable and its unobserved latent class (Hagenaars & Halman, 1989; Linzer & Lewis, 2011). In our study, the manifest variables were the CWS types, and the latent classes to be discovered were groupings of people's various usages of these conspiracist worldviews. The aim was to establish how CT Types were used and combined together, when analysing groups of people.

The approach was exploratory, whereby several classes were generated and compared (McCutcheon, 1987). The model with the lowest Bayesian Information Criteria (*BIC*) and Akaike Information Criteria (*AIC*) were taken forward. Both assess closeness of fit whilst penalising for overfitting (i.e. models with excessive number of classes and parameters to fit the data) (Akaike, 1973; Schwarz, 1978). The *BIC* was given priority since it is more conservative against free-parameters and model complexity, and has been shown to be more accurate in class-number selection (Nylund, Asparouhov, & Muthén, 2007). Additionally, Pearson's χ^2 Chi-square goodness-of-fit test, Likelihood ratio chi-square (G^2) and relative entropy (class membership distinctiveness) are also reported. The LCA was run in R (R Core Team, 2019), using the package 'poLCA' (Linzer & Lewis, 2011) and consistent with recommendations was run multiple times to produce global maximum likelihood models.

Table 16. *Latent class analysis presenting number of classes and model fit indices.*

N classes	*Log-likelihood*	*BIC*	*AIC*	χ^2	G^2	*df*	*p*	*Relative Entropy*	*N Parameters*
2	-2363.579	4802.91	4749.16	82.42	77.13	20	1.20e-08	.71	11
3	-2337.261	4791.59	4708.52	46.43	24.50	14	.040	.64	17
4	-2328.154	4814.70	4702.31	5.59	6.28	8	.616	.63	23

BIC = Bayesian Information Criteria, *AIC* = Akaike Information Criteria, χ^2 = Chi-square goodness-of-fit test, G^2 = Likelihood ratio chi-square, *p* value of Likelihood ratio chi-square.

A 3-class model was chosen based on the lowest BIC (see **Table 16**). Although the *AIC*, G^2 and χ^2 were lower for a 4-class model, the additional class represented only 2% of the

sample and was therefore discounted. Relative entropy values aim to be closer to 1 but at .64 for the 3-class model, this indicated reasonable class membership distinctiveness (Celeux & Soromenho, 1996). Consistent with *hypothesis 8.*, each type of CT worldview meaningfully contributed to the latent class model; and, as proposed by *hypothesis 9.*, evidence of both non-monological and monological groups was found. The conditional probabilities of the 3-class model are presented in **Table 17** and graphically in **Figure 5.**

Table 17. *Conditional probabilities showing agreement corresponding between type of conspiracist worldview with class categorisation of people.*

	Class 1	*Class 2*	*Class 3*
Type 2	.71	.94	.99
Type 3	0	.60	.88
Type 4	0	.34	.98
Type 5-Spiritual	.05	.18	.73
Type 5-Alien	.01	.16	.71
Estimated class population shares	.37	.47	.16

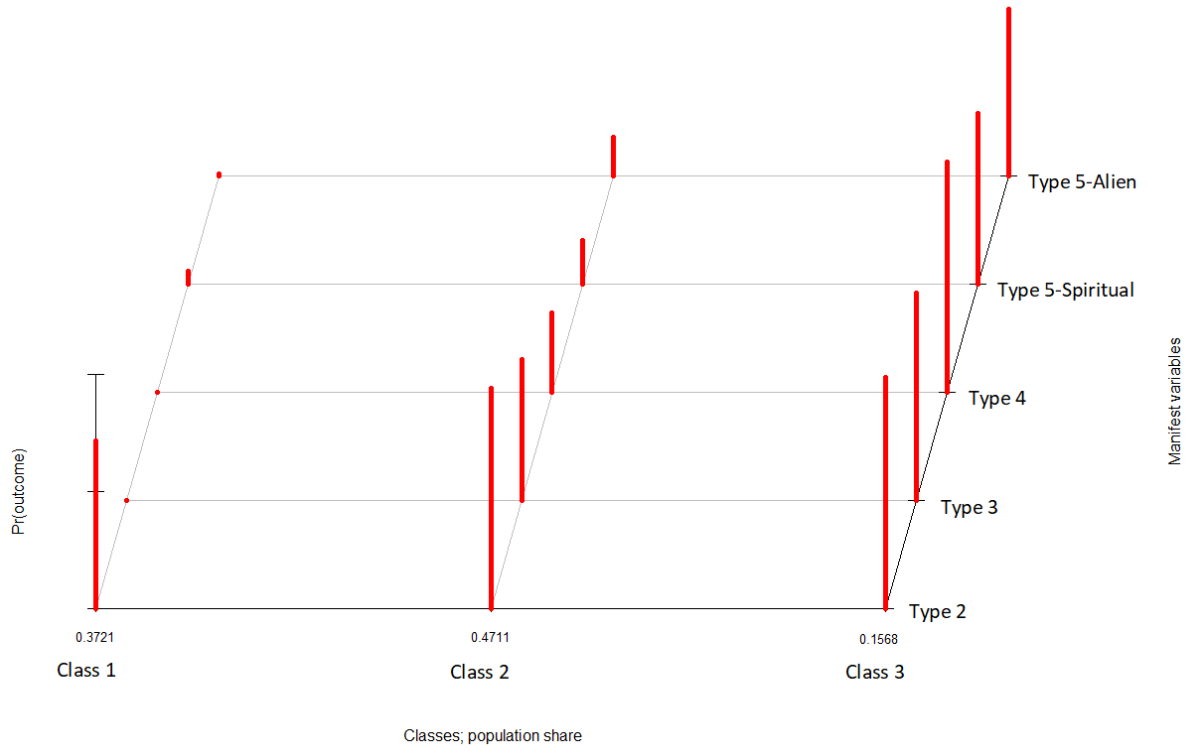

Figure 5. Conditional probabilities showing agreement corresponding between type of conspiracist worldview with class of people.

Supporting *hypothesis 9.a.*, Class 1 represents a non-monological group of people for whom the probability of highly agreeing to Type 2 (71%) is conditional upon zero (Type 3 & Type 4) or near minimum agreement (Type 5-Spiritual, 5%; Type 5-Alien, 1%) with other types. Thirty-seven percent of the sample used Type 2 worldviews, expressing an openness to CTs being possibly true without conviction.

Supporting *hypothesis 9.b.*, Class 3 represents a monological group of people who highly endorsed all conspiracist types (all > .71%). Class 3 was monological because they endorsed all types of conspiracist worldviews, including more developed ideas premised upon generalised CT perspective involving humans (Type 4), aliens (Type 5-Alien) or spiritual entities (Type 5-Spiritual). Sixteen percent of the sample were monological in this way.

Notably, a unique finding emerged in Class 2. Class 2 was mainly non-monological, since endorsement was conditional upon moderate to high agreement of Type 2 (94%) and Type 3 (60%). However, this group also expressed low agreement with the monological worldviews of Type 4 (34%), Type 5-Spiritual (18%) and Type 5-Alien (16%). Considering this unique arrangement, Class 2 was regarded as non-monological but with the potential to transition. Their high agreement with the non-monological types was conditional upon low agreement with the monological types. This group represented the majority at 47% of the sample.

All three classes considered together indicate that the typology may be an incremental belief scale. Type 2 held high agreement in Class 1 and this was maintained throughout all three classes. In Class 2, Type 2 and Type 3 additionally achieved high agreement, but with low agreement with the monological types. Finally, in Class 3, all types scored high agreement. This progressive endorsement is noteworthy and may represent a developmental trajectory, beginning with Type 2 across to Type 5 beliefs.

Study 3 Discussion

The LCA provides strong evidence of the diagnostic validity of the CWS and is, to date, the first psychometric measure classing people according to their conspiracist beliefs, from non-monological to full monological worldviews. Consistent with past work on CT belief (e.g. Goertzel, 1994; Swami et al. 2011), a monological group emerged endorsing all types of conspiracist worldviews, including worldviews involving humans, aliens and spiritual conspiracy. Uniquely, this study found two classes of non-monological belief. One non-monological group highly agreed with Type 2. The other non-monological group highly agreed with Type 2 and Type 3, conditional upon low agreement with the monological Types. The latter may represent a transitional or 'liminal' group who have limited CT endorsement but the potential to engage with more fully developed CT worldviews (Turner, 1969). Notably, the non-monological groups represented the vast majority of the sample. Finally, the classes progressed across the typology, suggesting an ascending, developmental trajectory. The non-monological appeared as an isolated group (class 1), and as a group with the potential to transition (class 2 agreement: high non-monological, low monological). The final group was high in both non-monological and monological types (class 3). Surprisingly, this suggests that non-monological belief may have a continued role even when people develop more substantive monological belief in CTs. This last finding perhaps mirrors reports that cognitive dissonance remains throughout Types 2-5 (see Hall et al., 2020 [Chapter 3]).

General Discussion

This study introduces the Conspiracist Worldview Scale (CWS), comprised of five subscales measuring five distinct types of conspiracist worldviews. The CWS makes a unique contribution to the study of conspiracist belief, offering a more nuanced understanding of monologicality, and additionally capturing several non-monological ways of engaging with CTs. This measure triangulates previous qualitative research by Franks et al. (2017 [Chapter

2]) which importantly revealed several non-monological worldviews and found a distinction between monological worldviews premised upon human CTs (e.g. government conspiracy) and supernatural CTs (e.g. alien coverup). Through five quantitative studies, we developed and validated the CWS, an empirical measure that both verifies and extends these past qualitative findings.

The CWS is a testament to the mixed-methods approach, since without prior qualitative findings gained from interviewing people who have an active interest in CT beliefs (Franks et al., 2017; Hall et al., 2020; Hall, 2020 [Chapters 3, 4, & 5]), it would have been difficult to gain the necessary insights to design the CWS, which we hope captures the full spectrum of conspiracist belief. The prior qualitative findings revealed the need to look beyond the outgroup, and to consider the self, ingroup, reality, future and action. The CWS, as a newly introduced psychometric measure, does just that. Each method offers one set of tools to unpack the phenomenon of CT beliefs, and through triangulating qualitative and quantitative studies, we gain greater confidence in the validity of these findings (Caillaud, Doumergue, Préau, Haas, & Kalampalikis, 2019; Denzin, 1978).

In Study 1, an exploratory factor analysis was conducted revealing a five-factor structure representing five subscales. Two subscales captured non-monological worldviews: Type 2 involved an openness to CTs being possibly true, whereas Type 3 expressed a particular belief in one or two CTs. The others were all monological worldviews. Type 4 measured a generalised, multiple belief in human CTs. Type 5-Alien captured generalised, multiple belief in extra-terrestrial existence and cover-up, whereas Type 5-Spiritual assessed monological belief in spiritual CTs (e.g. Satan agenda, spiritual entities and energy). Compared with Franks et al. (2017 [Chapter 2]), these findings are largely consistent. It was unsurprising that Type 1 did not emerge since this type did not feature any conspiracist belief. A welcome, unexpected finding was the further distinction of Type 5 worldviews, being split according to alien and

spiritual beliefs. The relationship between CTs and spirituality has been previously recognised in religious studies, with concepts such as 'conspirituality' (see Ward & Voas, 2011), but no measure had hitherto been developed recognising this specific configuration.

Subsequent studies validated the CWS. In Study 2A, a confirmatory factor analysis determined the five-factor structure, thus demonstrating construct validity. In Study 2B the CWS gained convergent validity by positively correlating with existing measures of CT belief: Belief in Conspiracy Theories Inventory (BCTI, Swami et al., 2010, 2011), Conspiracy Mentality Questionnaire (CMQ, Bruder et al., 2013), General Conspiracist Beliefs Scale (Brotherton, 2013), and the Single-item Scale (Lantian et al., 2016). While others' approaches vary from considering multiple components (e.g. GCB, Control of Information) to a focus on famous CTs (BCTI), all are intended to be unidimensional scales (e.g. CMQ, Single-Item), and all claim to be generic measures of conspiracist belief, ideation or mentality (Bruder, et al., 2013; Brotherton et al., 2013; Swami et al., 2010, 2011; Lantian et al., 2016). In practice, as expected, these existing conspiracist measures had the closest relationship with Type 4, representing their predominant focus on monological CTs involving human agency. There were lower correlations with the other types and a subscale of GCB (i.e. Extraterrestrial coverup) correlated highly with Type-5 Alien. Overall, the CWS provides a more comprehensive multi-dimensional measure, not only examining fully-fledged conspiracist worldviews but additionally non-monologicality (i.e. less developed CT worldviews) and supernatural monological CT worldviews.

Convergent validity was also established by positively correlating with other related phenomena, based upon their conceptual congruence. Regarding Type 5, the highest correlations were between: Type 5-Alien and alien cover-up beliefs (Swami et al., 2009), and Type 5-spiritual and paranormal beliefs (Darwin, Neave & Holmes, 2011; Douglas et al., 2015; Stieger et al., 2013; Swami et al., 2011). Type 2, Type 3 and Type 4 are concerned with human-

based conspiracist belief; these significantly correlated with political cynicism (Swami, 2012; Swami & Furnham, 2012; Swami et al., 2011). All types correlated with paranoia, akin to other existing CT belief measures (Brotherton & Eser, 2015; Bruder et al., 2013, Darwin et al. 2011). It is noteworthy that the two Type 5 worldviews did not correlate with political cynicism. It has been found that higher CT endorsement via powerlessness negatively relates to political engagement (Jolley & Douglas, 2014b). Considering the link between powerlessness and political cynicism (Jolley & Douglas, 2014b; Pattyn, van Hiel, Dhont, & Onraet, 2012), our findings would suggest that reduced political engagement might only be the case for those CT believers preoccupied with human CTs. Supernatural beliefs may play a role in buffering against political cynicism.

Study 2C demonstrated concurrent validity, whereby types predicted belief in specific CT topics and events of: September 9/11, health, science and technology, government, extra-terrestrials, and spiritual conspiracy. Predictions showed correspondence in belief content between the types and specific CT topic (e.g. Type 4 predicting government conspiracy; Type 5-Spiritual predicting specific spiritual CTs). As expected for more developed conspiracist thinking, the leading predictors were all monological worldviews. Regarding non-monological worldviews, Type 2 and 3 significantly correlated with several specific CTs although to a lower degree, and Type 3 emerged as the last predictor of several specific CTs (health, science, September 9/11). The lesser role of non-monological types is consistent with their profile as less developed CT worldviews. This is a noteworthy contribution since no existing measure has yet taken seriously that for some people, CT belief is not always 'all or nothing' but that they can maintain CT beliefs as a possibility or endorsed to a limited extent.

Study 3 established the diagnostic validity of the CWS using a latent class analysis (LCA). As such, the CWS is the first psychometric measure of CT belief to use latent class analysis to group people according to dimensions of CT worldviews. Three distinct groups of

people emerged showing unique combinations of the typology. There was an ascending trajectory for the classes, progressing from non-monological to monological types. Indeed, one group of people endorsed Type 2 alone. The next group of people were also non-monological but with the potential to transition, since they held high agreement with Type 2 and 3 accompanied by low agreement with the monological types (Type 4, Type 5-Alien, Type 5-Spiritual). Finally, a fully monological group of people emerged based upon high agreement with all five types. The different groups may indicate a developmental trajectory from Type 2 to Type 5 beliefs, with non-monological worldviews being a foundation to more fully developed CT worldviews. Moreover, the continued presence of Type 2 within the fully monological worldview lends support for the proposition that CT endorsement has quasi-religious characteristics (Franks, 2013). Religious belief functions through indeterminant beliefs – with representations which remain open to doubt (i.e. lacking empirical resolution by ordinary means) (Boyer 2001; Boyer & Ramble, 2001; Franks, 2003, 2004). Similarly, since CTs are rarely 'officially' confirmed (e.g. acknowledged by authorities or conspirators), people maintain an open-mindedness about the possibility of CTs being true and false, even when having more developed CT worldviews, as evidenced by the combination of Type 2 and 5 beliefs in the fully monological group of the LCA.

The advantages of the Conspiracist Worldview Scale compared with existing measures

The CWS stands out amongst existing measures of CT belief. Firstly, the CWS includes two non-monological CT worldviews which have not been considered by other existing measures, and therefore substantiates a new phenomenon worthy of further empirical enquiry. That is, the role of 'less developed CT worldviews,' measured in the CWS by the Type 2 subscale (i.e. openness to CTs being true without conviction) and Type 3 subscale (i.e. limited interest in a few particular CT topics). Notably, two of the five items of the CMQ (Bruder et

al., 2013), emerged in the Type 2 subscale of the CWS which shows the advantage of doing a preliminary review of existing CT belief measures to develop a multi-dimensional measure. It is expected that, with other existing measures, people with less developed CT beliefs score at the midpoint or below, and thus may have been overlooked. This likely reflects the fundamental issue of treating CT belief as a unidimensional construct where all CT belief is assumed to fit along a single scale. For measuring less developed CT worldviews, Type 2 and Type 3 of the CWS mark unique contributions to the study of CT belief.

Secondly, regarding details of other measures, the BCTI (Swami et al., 2010, 2011) claims to measure 'general conspiracist ideation' and be an example of monologicality. However, this measure is comprised of famous specific CTs, and thus may be more a measure of agreement with popular CTs, rather than general CT belief. The GCB (Brotherton et al., 2013) comprises of five subscales of CT belief, but is intended to measure monologicality as a unidimensional construct, where these five subscales are aggregated together. For example, Brotherton et al. (2013, p. 7) notes that, "in practical usage the final GCB is primarily intended to assess conspiracist ideation as a unidimensional construct." The Single-Item scale (Lantian et al., 2016) has the advantage of being less-resource intensive but in its simplicity likely fails to capture the complexity of different CT worldviews. By contrast, the CWS is designed to be a multidimensional measure, whereby each of the type subscales can be used independently or in conjunction with others, depending upon the research question. This shows that the CWS is a more flexible and comprehensive measure in its potential application.

Thirdly, the CWS is the only existing measure to recognise that supernatural beliefs can be a foundation for monological worldviews in their own right. The CMQ features no supernatural CT beliefs and BCTI features only two items on extra-terrestrial CTs out of its fifteen items. Only one of the GCB's five subscales includes items examining extra-terrestrial CTs. However, as noted, this GCB subscale is intended to be used as only a subcomponent

within a unidimensional approach to measuring monologicality. By contrast, the CWS includes two subscales measuring two types of supernatural monological worldviews – Type 5-Alien and Type 5-Spiritual. Whilst some measures feature items about extra-terrestrial CTs (e.g. GCB, Extraterrestrial Belief Scale), all existing CT belief measures have overlooked how spiritual CTs (e.g. Satan's agenda) can be a foundation for a monological worldview. Moreover, we would expect the Type 5-Spiritual subscale to be useful in understanding the relationship between CTs and religious and paranormal belief. The CWS uniquely offers the Type 5-Alien and Type 5-Spiritual subscales to capture these supernatural monological worldviews.

Finally, none of the existing measures on CT belief have focussed on elements of CT worldviews beyond the outgroup. The CWS is uniquely informed by past qualitative findings which showed that CT belief is also concerned with the self, ingroup, reality, future and action (Franks et al., 2017 [Chapter 2]; Hall, 2020 [Chapter 4]). In the CWS, these themes informed the design of items and emerged as subscales through the exploratory factor analysis and achieved statistical validation. The CWS pushes beyond a sole focus on the outgroup and includes these other themes. The CWS is therefore a more comprehensive measure of conspiracist worldviews, when compared to all other existing CT measures.

Limitations and Future Research

The CWS was developed with US samples using MTurk, and informed by a qualitative framework developed with UK samples. Overall, we found a diverse balance across the demographics (consistent with Buhrmester, Kwang & Gosling, 2011), although the samples were more Democratic and exhibited high voting behaviour. A next step would be to administer the CWS with a representative sample to establish the distribution of types by classes. Since this was exploratory research, and the motivation was to show in simplest terms the diagnostic potential of the CWS, the LCA was conducted with composite scores (mean scores transformed

into dichotomous data). Nielsen, Vach, Kent, Hestbaek and Kongsted (2016) found that LCA by single items provide overlapping results in class content compared with summary scores, but also more nuanced outcomes with several additional groups generated. We would therefore expect that if the LCA were conducted with single CWS items, we would find the same groups but also greater differentiation of monologicality based upon variations in Type 4, Type 5-Alien and Type 5-Spiritual.

Evidently, the monological hypothesis as originally proposed by Goertzel (1994) does not exhaust all possibilities – conspiracist belief is complex with different incarnations. The typical image of the CT believer as extreme, secluded and 'irrational' does not hold ground. Indeed, CT belief may be a common, functional and adaptive way of thinking. If indeed, our sample has some semblance to the population, whereby the monological worldviews were a minority compared with the two classes of non-monological worldviews, we would expect to find less developed CT worldviews (i.e. Type 2, Type 3) to be more widespread than monological worldviews in the general population. This is an area requiring further investigation.

Implications

The implications of the CWS are far-reaching. Many of the CWS items were designed towards wider elements than just the outgroup alone and this was informed by past qualitative findings which took an open-minded attitude in interviewing CT believers (Franks et al. 2017; Hall, 2020; Hall et al., 2020 [Chapters 3, 4, & 5]). For example, these findings included a focus on the ingroup (e.g. "I identify with others who recognise that the public is being deceived by hidden elites"), perceived changes in self (e.g. "There were periods in my life when I have been interested in particular conspiracies") and action ("Through our spiritual existence, we can challenge the dark energies at work in the world."). Whilst many use online platforms for resources and argumentation (Bessi et al., 2015; Wood & Douglas, 2015), CTs also translate

into in vivo social groups (e.g. social clubs, activism) (Franks et al. 2017 [Chapter 2]; Hall, 2020 [Chapter 4]). Indeed, the political profile is multifaceted. CT belief relates to political cynicism (Swami, 2012; Swami & Furnham, 2012; Swami et al., 2011), as well as political extremism (van Prooijen, Krouwel, & Pollet, 2015), and support for democratic principles (Swami et al., 2011; Swami & Furnham, 2012). CT endorsement can also diminish: political engagement (Jolley & Douglas, 2014b), policy relevant behaviours such as vaccine intentions (Jolley & Douglas, 2014a), and support for climate change (Lewandowsky et al., 2013). Together, these findings add weight to the proposition that CTs may be a pre-figurative social movement characterised by CTs as an important medium for a diffuse community of engaged citizens (i.e. local researchers), seeking to contest those perceived to be in power (Howarth 2011, Howarth, Andreouli & Kesi, 2014; Yates, 2017). CTs for the layperson, therefore have a 'use value' that extends beyond the narrative appeal of a given CT event, but rather affords the opportunity to put forward their own CT 'truth' whilst challenging the 'truth' constructed by institutions and proposed conspirators (see Pelkmans & Machold, 2011). There seems to be an emergent political profile associated with CT belief and we suggest that different political consequences may be related to the typology, whereby Type 3, Type 4 and Type 5 may be more inclined to engage in action directly related to their CT worldviews. This is an important implication connecting the CWS with the wider politics of CT belief, which could be taken forward in future research.

Conclusion

The CWS is a new psychometric measure capturing the diversity in conspiracist worldviews through five types. The CWS advances the study of conspiracist belief by capturing two types of non-monological worldviews and also differentiating fully monological worldviews according to CT belief predicated upon agency involving humans, extra-terrestrials or spiritual agents. This was achieved by triangulating previous qualitative work (Franks et al.

2017; Hall, 2020; Hall et al., 2020 [Chapters 3, 4, & 5]), which recognises that CT beliefs are not only concerned with the outgroup, but can encompass wider worldview elements such as the self, ingroup, future, reality and action. This study runs contrary to the typical image of the CT believer as extreme, secluded and 'irrational.' Through establishing construct, convergent, concurrent and diagnostic validity, the CWS is a sound psychometric measure for future research.

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CHAPTER 6 | Conclusion

Aims and key findings

The central aim was to achieve a revised understanding of monologicality and explore the different ways CT belief are endorsed. Monologicality represents a generalised conspiracist perspective and endorsement of multiple CT beliefs. In the empirical literature, this is evidenced by correlations between CT belief, and predictions between general CT belief and belief in specific CT events. As noted in Chapter 1, this has emerged as a consistent finding. However, Goertzel (1994) explained that monological thinking is 'closed-minded,' and novel events are interpreted based on their consistent relationship with existing CT beliefs. Indeed, Goertzel (1994, p.740) stated, "In a monological belief system, each of the beliefs serves as evidence for each of the other beliefs." Monologicality involved a closed epistemology which shallowly engages with the context of an event and also a nomothetical approach to the world whereby general rules are used without attention to specific details (Sutton and Douglas, 2015). Goertzel (1994) further distinguished between monological and dialogical belief. The latter involves a more thorough engagement with their context and "may even be disconfirmed by new evidence" (p. 740). Monologicality and dialogicality were treated as non-opposing concepts. The overarching aim of the thesis was to achieve a revised understanding of monological CT belief as proposed by Goertzel (1994) and explore the different ways CT belief are endorsed. This was achieved across Chapters 2-5. For each empirical chapter, the research questions, aims and key findings are summarised below.

Research Questions for Chapter 2:
What are the symbolic resources of CT belief?
How might variations in these beliefs relate to a CT worldview(s)?
Specifically, are there non-monological worldviews (non-generalised and limited CT endorsement) or is all CT belief characterised by monological worldview(s) (generalised and multiple CT endorsement)?

Chapter 2 focussed on monologicality. Specifically, the study aimed to identify the symbolic resources characterising CT belief and how this might be the basis for a conspiracy theory (CT) worldview. The chapter aimed to show that not all CT belief is monological. Indeed, a further aim was to distinguish between different types of monological (i.e. generalised conspiracist perspective, endorsement of multiple CT belief) and non-monological worldviews (i.e. non-generalised perspective and limited interest in CTs).

Chapter 2 found that not all CT belief is monological and reported five distinct types of CT worldview. A person's CT worldview was based upon beliefs about the: self, ingroup, outgroup, reality, future, and action. It was found that based on these themes, CT beliefs could be categorised into five types of CT worldview, including: Type 1, Type 2, Type 3, Type 4, and Type 5. These findings are discussed below in relation to the literature, in the section: 'Contributions to understanding monologicality.'

Research Questions for Chapter 3:
Are there dialogical forms of belief coexistence showing a relationship between CT and non-CT beliefs (e.g. beliefs about science, religion and politics)?
Are there different types of dialogical relations between CT and non-CT beliefs?

Chapter 3 focussed on dialogicality. Latent in existing CT research was the finding that CT belief related to non-CT beliefs about science, religion and politics. The aim was to identify dialogical forms of belief coexistence, involving the relationship between CT and non-CT beliefs. Specifically, the study aimed to establish whether there were different types of dialogical relations and ascertain the nature of that relationship (e.g. parallel or integrated). The dialogical relations were cross-tabulated with the monological belief type (established in Chapter 2).

Chapter 3 found that CT belief involved dialogical relations with non-CT beliefs in the areas of science, religion and politics and society. Five dialogical relations were identified.

Three were based upon the work of Legare, Evans, Rosengren and Harris (2012), including: integrative thinking, synthetic thinking, and target dependent thinking. Additionally, participants expressed cognitive dissonance and used analogical thinking. These findings are discussed below in the section, 'Contributions to understanding dialogicality.'

Research Questions for Chapter 4:

What are the significant experiences related to CT belief development as perceived by people who have an interest in CTs?

Can these perceived experiences be mapped according to pre-CT belief development, early-CT belief development and later-CT belief development?

Chapter 4 focussed on CT belief development. The aim was to understand the significant experiences which contributed to CT belief development as perceived by people who have an interest in CTs. The study aimed to map these experiences according to pre-CT, early-CT interest and later-CT interest. Trajectories of belief development were also considered according to monological type (established in Chapter 2).

Chapter 4 explored the issue of belief development, based upon a distinction between pre-CT belief, early-CT belief, later-CT belief experiences and contrasting narratives. Early-CT belief development involved an initial CT interest emerging through five experiences: conspiracy event, an interest in alternative histories and cosmogonies, spiritual experiences, social issues, and personal trauma. Later-CT belief development included four themes: research, self-discovery, conspiracist reality and outgroup, and action. Contrasting narratives meant that individuals at later points described a lessening CT engagement. These findings are discussed in relation to the literature in the section, 'CT belief development and quasi-religious hypothesis.'

Research Questions for Chapter 5:

Can a psychometric measure (Conspiracist Worldview Scale) be developed and validated, which captures the various non-monological and monological CT worldviews, as found in Chapter 2?

Chapter 5 aimed to establish and validate a new psychometric measure, called the Conspiracist Worldview Scale (CWS). The monological typology reported in Chapter 2 was used to design a multidimensional measure of CT belief, aiming to capture various non-monological and monological CT worldviews. Several studies aimed to establish the construct, convergent, concurrent and diagnostic validity of the CWS.

Chapter 5 founded the Conspiracist Worldview Scale (CWS). This scale was established through an exploratory factor analysis, with 22 items emerging across five subscales. The subscales represent non-monological and monological CT worldviews. The non-monological worldview subscales are Type 2 (i.e. openness to possibility of CTs being true) and Type 3 (i.e. limited endorsement of one or two CT topics). The monological worldviews involved multiple CT endorsement and generalised conspiracist perspective, differing according: human-based CTs (e.g. government) represented by Type 4, extra-terrestrial CTs represented by Type 5-Alien, and spiritual CTs represented by Type 5-Spiritual. The CWS is a sound psychometric measure representing five distinct types of CT worldviews. The findings are discussed below in the section, 'Contributions to understanding monologicality.'

Empirical and theoretical contributions to the literature

Contributions to understanding monologicality

Chapter 2 established the symbolic resources of CT beliefs and their relation to monological worldviews. As such, Chapter 2 is the first qualitative analysis of CT worldviews in the discipline of psychology, based upon meeting with people who have an active interest in

CTs. This has particular strengths, affording the unique opportunity to hear first-hand accounts of CT belief. It was found that the typical characterisation of CT endorsement as being solely fixated upon the outgroup was not substantiated. Rather, CT beliefs could involve many other aspects of a person's life. Specifically, CT worldviews were defined according to six themes: the self, ingroup, outgroup, reality, future and action. This is an important contribution to the existing literature because it provides the real-life contexts of CT belief, establishing their symbolic resources, and how such beliefs inform social sensemaking.

Chapter 2 showed that not all CT belief is monological, but rather, that there are many non-monological ways of engaging with CTs. This runs counter to Goertzel's (1994) monological hypothesis that belief in one CT will predict belief in many others. Chapter 2 reported two types of CT worldviews which were non-monological – Type 2 involved an openness to the possibility of CTs without firm conviction, and Type 3 with a limited endorsement of a few CT topics. These qualitative insights were further validated and triangulated in the development of the CWS psychometric scale in Chapter 5, where both Type 2 and Type 3 emerged as subscales. These non-monological types expanded beyond the scope of conspiracist belief outlined by Goertzel (1994) which was limited to a strict dichotomy between monologicality and dialogicality, and thus identified a new empirical phenomenon worthy of further study. That is, Chapter 2, through reporting Type 2 and Type 3 CT worldviews, foregrounded the phenomenon of 'less developed CT belief.' In Chapter 5, non-monologicality (i.e. Type 2 and 3) was associated with paranoia and political cynicism, whereas exclusively for Type 3 a low positive correlation was found with paranormal belief. Beyond these initial findings, we do not know the relevant social and personality attributes which could be associated with less developed CT belief. This is due to the limitations of existing CT measures which have all hitherto treated CT belief as a unidimensional construct, not catering for people with a less developed interested in CTs. It is likely that openness to

experience which has been found to correlate with other general CT belief measures, would likely correlate with Type 2 (i.e. openness to CTs being possibly true), since both share the personality attribute of being open. This remains a hypothesis to be verified in subsequent research.

Chapter 2 and Chapter 5 also found evidence of monologicality in CT belief. However, this was not uniform in the sense described by Goertzel (1994). Instead, monologicality took three different forms which are new contributions to the literature. These include: Type 4, Type 5-Alien, and Type 5-Spiritual; and each will be discussed below.

The Type 4 monological worldview was made up of a generalised perspective and multiple CT endorsement based upon solely a human ontology (e.g. government officials) (reported in Chapter 2), and achieved psychometric scaling (in Chapter 5). Type 4 shares most in common with existing measures of general CT belief which claim to be examples of monologicality, such as the General Conspiracist Beliefs Scale (GCB, Brotherton et al., 2013) and Belief in Conspiracy Theory Inventory (BCTI, Swami et al., 2010, 2011). This was reflected in the strong positive correlations between the Type 4 subscale of the CWS and other general CT belief measures. This can be explained by the GCB and BCTI only having a limited number of items examining non-human CTs and thus predominantly focus on human-based conspiracy involving the outgroup. Type 4 is similarly concerned with generalised human CTs. With this in mind, it is proposed that Type 4 represents the most 'prototypical' monological belief in relation to the existing general CT measures. Reinforcing this point, Type 4 had the highest relationship with political cynicism and paranoia, both of which have been vital in validating other scales (e.g. BCTI, Swami, 2012; Swami et al., 2011, 2012; Stieger et al., 2013).

Despite these similarities between the Type 4 subscale and other general CT belief measures, Chapter 5 showed that the CWS and its constituent subscales stand out from other existing measures in a few notable ways. Firstly, the BCTI (Swami et al., 2010, 2011) claims

to capture generalised conspiracist ideation but measures this by a set of items concerned with specific famous CTs. Therefore, the BCTI may be more a measure of agreement with popular CTs, rather than general belief in CTs which is the focus of the CWS. Secondly, the GCB (Brotherton et al., 2013) is made up of five subscales distinguished by topic (e.g. Government malfeasance, Control of information), but is still intended to be a unidimensional measure where all subscales are measured together. For example, Brotherton (2013, p. 7) states that, "in practical usage the final GCB is primarily intended to assess conspiracist ideation as a unidimensional construct." By contrast, the CWS treats CT beliefs as multi-dimensional and the type subscales can be used independently or in conjunction with the others, depending on the research aims. This highlights that the CWS has a more flexible approach than preceding measures, such as the GCB. Finally, the Conspiracy Mentality Questionnaire (CMQ, Bruder et al. 2013) claims to measure 'general conspiracy mentality' but does this with items designed to focus solely upon the outgroup. Two of the five CMQ items contributed to two outgroup items of the non-monological Type 2 subscale. By contrast, the CWS emerged out of qualitative findings (as shown in Chapter 2) which demonstrated that the outgroup is only one of six relevant themes. Indeed, the Type 4 subscale also features items capturing self, ingroup and multifaceted outgroup (sheep, middle management and evil elite). Together, the work of Chapter 2 and 5 in developing Type 4, has provided a more refined examination of the phenomenon of monological human-based CT belief.

Monologicality has received a lot of empirical support, particularly through measures of general CT belief predicting belief in specific CTs (e.g. Brotherton et al., 2013; Stieger et al., 2013; Swami, 2012; Swami & Furnham, 2012; Swami et al., 2011). However, when considered more closely, it was found that across the existing CT measures, there was a diverse range of CT items – ranging from human-based conspiracy within the natural world to those which involve aliens within a supernatural world. Two existing measures feature subscales

relevant to extra-terrestrials, including the Extra-terrestrial Belief Scale (EBS) subscale of Alien visitation and cover-up (Swami, Furnham, Haubner, Stieger, & Voracek, 2009), and the GCB subscale of Extra-terrestrial coverup (Brotherton et al., 2013). However, none of these measures show how supernatural CT belief can represent a distinct form of monologicality in their own right. Firstly, in the development of the Extra-terrestrial Belief Scale (Swami et al., 2009), there is no discussion of its potential relevance to monologicality. Secondly, the GCB (Brotherton et al., 2013), as noted previously, treats its subscales as subcomponents to four other human-based CT topics which, when aggregated, represent conspiracist ideation. This conspiracist ideation is therefore a combination of predominantly human-based CT beliefs alongside some items about alien coverups. Finally, neither the GCB or EBS recognise that spiritual beliefs can be the basis of CT worldviews, since both only focus on extra-terrestrials. Considering these three shortfalls of the GCB and EBS, the CWS is a more comprehensive measure of supernatural CT beliefs. The CWS involves two subscales to assess two distinct types of supernatural monological worldviews: Type 5-Alien and Type 5-Spiritual. The broader Type 5 CT worldview found through the qualitative work of Chapter 2, was bifurcated into these two types—Type 5-Alien and Type 5-Spiritual—through psychometric scaling in Chapter 5. Notably, these two subscales push beyond a sole focus on the outgroup (as found with the GCB and EBS), and additionally feature items tailored towards supernatural CT-relevant beliefs about the self, ingroup, reality, future and action.

Contributions to understanding dialogicality

Chapter 3 established the dialogical relations between CT and non-CT beliefs. This contradicts another important aspect to Goertzel's (1994) monological hypothesis – that CT belief is 'closed-minded,' involving a closed epistemology disengaged with non-CT beliefs (Sutton & Wood, 2014). Indeed, Chapter 3 revealed that the most developed and elaborated monological worldviews (i.e. Type 4, Type 5), used the most integrated forms of belief

coexistence. They combined into a single explanation, CTs with non-CT ideas about science, religion, and politics and society. Integrative thinking was of particular explanatory value and ran against the monological hypothesis that monological CT believers are 'closed-minded' and engage only with CT ideas.

Chapter 3 contributes to the literature on CT belief by being the first study to systematically examine various forms of dialogical belief. The potential for dialogicality was latent in the existing literature, since studies had reported correlations between CT beliefs and a variety of external non-CT beliefs. Correlations indicate the existence of a positive or negative relationship but they do not specify the way in which CT and non-CT beliefs interact. Chapter 3 addressed the potential for dialogicality directly. Qualitative analysis established the way CT and non-CT beliefs coexist and are represented in the minds of CT believers.

Positive correlations have been reported between CT and religious beliefs (Darwin et al., 2011; Douglas, Sutton, Callan, Dawtry & Harvey, 2015). However, Newheiser, Farias and Tausch (2011) found that religious beliefs negatively predicted a specific belief in the Da Vinci Code conspiracy. This finding was interpreted as evidence of belief competition between CT and religious beliefs, because the Da Vinci Code provides an alternative historical account to the traditional narratives about Jesus. Chapter 3 and Chapter 5 adds to this emerging picture, illustrating the push and pull between CT and religious beliefs. Chapter 3 demonstrated how religion was dialogically represented by integrative, synthetic and analogical ways of thinking. Religion was negatively portrayed in relation to CT beliefs. For example, through integrative thinking, Type 5 proposed that religion was used to control the masses, making reference to religious texts, symbols and sites. Moreover, Chapter 5 found that some individuals became interested in CTs by rejecting a former-self who had a religious upbringing. Some early-CT experiences focussed on alternative histories and cosmogonies which rivalled religious representations of history. However, there were also positive references to religion. In Chapter

3, Type 5 revered religious leaders (e.g. Jesus) and used religious texts to anticipate the future. Religion also facilitated an understanding of the epistemic uncertainty of CT belief, by drawing analogical connections which likened CT belief to the conviction in the existence of God. Chapter 3 and 5 contribute to an understanding of how CTs are represented in relation to external religious beliefs.

The competition between science and CT is well documented. People who believe in CTs are more likely to reject science on climate change, vaccinations and genetically modified foods (Lewandowsky et al., 2013; van der Linden, 2015). Indeed, higher CT belief predicts less vaccination intentions (Jolley & Douglas, 2014a). These views and behaviours likely emerge from the way science is represented by CT beliefs. In Chapter 3, it was reported that through integrative thinking, science had a perceived role in realising conspiracist agendas – by causing harm to the public (e.g. fluoride in toothpastes to inhibit supernatural abilities of pineal gland) and dismissing scientific alternatives (e.g. alternative therapy). This connects to qualitative studies outside psychology, whereby people rejected the 'epistemic authority' of science on the grounds of dogma and biased outcomes because of vested interests (e.g. financial influence of pharmaceuticals) (see Harambam & Aupers, 2015).

Despite this, Chapter 3 and Chapter 5 also documented positive representations of science. In Chapter 3, people used science to justify CT claims by, for example, citing scientific consensus on a given issue (e.g. science about negative impact of sugar causing ill-health deliberately ignored). In Chapter 5, the later CT belief development was characterised by periods of research, and Chapter 3 showed that people highlighted similarities between CT belief and science based upon both establishing theory through supporting evidence. Again, this connects to Harambam & Aupers (2015) who found that individuals criticised science by reference to ideal scientific standards (e.g. "objectivity"). Moreover, belief in CTs positively correlates with pseudoscience (Lobato et al., 2014). Pseudoscience represents advancing ideas

that give the impression of science but are generally rejected from scientific consensus or do not have sufficient nor appropriate data to warrant their claim (Hansson, 2013). There is an evident tension here in the rejection of science and the endorsement of quasi-scientific ideas. Chapters 3 and 5 speak directly towards this issue in the sense that CT beliefs can involve scientific conspiracies to the harm and detriment of the public (e.g. vaccinations as depopulation agendas), but also use scientific ideas to explain how a CT happens or its consequences (e.g. control of the masses explained through conditioning of the brain).

The relationship between CTs and politics was more oppositional. It has been shown that individuals create hybrid accounts in card-sort tasks—pulling information from official and conspiratorial sources—to make sense of events like 9/11 (Raab et al., 2013). Building upon this finding, Chapter 3 showed that CT belief was not isolated to specific events of government malpractice and coverup (e.g. 9/11), but rather CT belief was informed by current affairs and political developments. Through integrative thinking, people brought together conventional ideas about the status quo (e.g. education, debt and mortgages) and political developments (e.g. changes within the European Union) with conspiracy involving a hierarchical outgroup of top conspirators, mid-level conspirators and brainwashed public (as developed in Chapter 2, see Outgroup: Evil elite, Middle management, Sheep). This shows the capacity for people to subsume current affairs and new developments within a broader CT outlook, that is not necessarily limited to significant, destabilising events.

In Chapter 3, through target dependent thinking, it was also possible for people to consonantly manage their CT beliefs with everyday non-CT experiences, by keeping these beliefs apart. However, cognitive dissonance could arise by the perceived influence of CT agendas intervening in their day-to-day life (Aronson, 1969; Festinger, 1957). This dialogical relation likely connects to reported correlations between CT belief with political cynicism (Swami & Furnham, 2012), anomie, alienation and feeling powerlessness (Abalakina-Paap,

Stephan, Craig, & Gregory, 1999; Leman & Cinnirella, 2013). People who are unable to find a consonant way of managing these two beliefs may feel conflicted due to CTs and thus score highly on these variables. Chapter 5 further developed these themes, by documenting that in their later CT belief experiences people perceived conspiracist realities and could transition away from CT beliefs based on perceptions of being marginalised or reaching conclusions about CTs. The potential to transition away from CTs represents a unique finding that has hitherto not been documented in the psychology of CT belief. We now know that people can consonantly and dissonantly manage their CT beliefs, and also become less engaged with CTs despite having developed fully monological worldviews.

On a theoretical level, this study also shows a unique application of the theory of belief coexistence of developmental and cognitive psychology, and cognitive polyphasia of Social Representations Theory (SRT). Firstly, Legare et al. (2012), whose background is in developmental and cognitive psychology, sought to show how two seemingly contradictory ideas could be maintained in development without one idea necessarily displacing another. They specified three types of dialogical relations—integrative, synthetic and target dependent thinking—in order to understand competing beliefs about religion and science. Their focus was on various coexistent explanations of human origins, illness and health (Legare & Gelman, 2008; Legare et al., 2012). Secondly, cognitive polyphasia emerges from the field of Social Representations Theory (SRT). SRT has thoroughly investigated belief coexistence and competing representations across a range of cross-cultural scenarios, in order to understand layperson sensemaking of, for example: science and religion (e.g. Caillaud, Kalampalikis, & Flick, 2012; Falade & Bauer, 2017), traditional and modern knowledge and practices of health and illness (e.g. Jodelet, 1991; Jovchelovitch & Gervais, 1999; Wagner, Duveen, Verma & Themel, 2000).

It is important that a dialogue develops between these theoretical approaches. In this thesis, developmental and cognitive psychology offered three of the five dialogical relations (i.e. integrative, synthetic, and target dependent thinking) (Legare et al., 2012). Meanwhile, SRT provided the insight that individuals live within a world made up of competing groups and representations (Jovchelovitch, 2007; Moscovici, 1961/2008). People therefore have to negotiate between ingroup and outgroup representations (Vala, Garcia-Marques, Gouveia-Pereira & Lopes, 1998; Wagner, 1995), i.e. negotiating between CTs as well as scientific, religious, and political representations. Moscovici (1987) noted that the function of CTs relates less to causes of a particular event, and more to integrating the self with one's views of and purpose in society. Legare et al. (2012) provided a detailed understanding of coexistent cognition, whilst SRT provided an understanding that CTs are a form of contested knowledge which emerge between groups with different representations (e.g. CT knowledge versus scientific knowledge). The thesis was informed by both approaches, and showed a unique example of belief coexistence whereby CT ideas negotiate with external beliefs and representations of science, religion and politics.

CT belief development and quasi-religious hypothesis

Goertzel's (1994) monological hypothesis had very little to say about the development of monological beliefs. If, as proposed by Goertzel (1994), existing CTs serve as evidence for novel CTs, we would expect a relatively linear development based upon a cumulative accommodation of CT beliefs. In the existing literature there is minimal empirical focus on how people develop CT beliefs, although we can appreciate the cognition associated with CT beliefs by, for example, the need for cognitive closure or tendency towards anthropomorphism (Brotherton & French, 2015; Bruder et al., 2013; Leman & Cinnirella, 2013; Marchlewska, Cichocka, Kossowska, 2017). Specifically, there is a lack of longitudinal data tracking CT belief. There are examples of focussing on specific CT belief at two timepoints (e.g. Newheiser

et al., 2011; Stieger et al., 2013) but these studies do not consider temporal changes in generalised CT belief.

In the absence of longitudinal data, narrative data was gathered, informed by research on religious conversion. This approach was advanced based upon the quasi-religious hypothesis which proposes that religious beliefs and CT beliefs share semantic similarities (e.g. by counter-intuitive beliefs and paradoxical beliefs; see Franks et al., 2013). On this basis, CT conversion was likened to religious conversion. There were several applicable findings from research on religious conversion including the recognition that people are agentic in their belief change and that conversion can happen through various experiences. These experiences include, for example: interaction and affective social relations (Austin, 1977, Greil & Rudy, 1984); organisational characteristics and social groups (Gordon, 1974; Greil & Rudy, 1984), and actively seeking transformation (Richardson, 1980; Straus, 1979).

Chapter 4 found similar results. Indeed, the transition into CTs was not uniform and linear as may be assumed based on Goertzel's monological hypothesis. The early CT experiences were multifaceted. Some were intrinsically conspiratorial, emerging from an interest in a specific CT event (e.g. 9/11) or alternative histories and cosmogonies. Other early CT experiences arose externally from non-CT aspects like personal trauma, social issues and spiritual experiences. This lends further support to the dialogical hypothesis advanced in Chapter 3.

In religious psychology, a central finding is the ability to 'quest' and thus positively self-develop by having to work through fundamental existential questions (i.e. open-ended search for meaning) (Batson, Schoenrade & Ventis, 1993; Rambo, 1993). Similarly, in Chapter 3, we found that later-CT belief development seemed to be intimately connected to experiences of self-discovery, with positive gains in agency by achieving self-understanding and people redefined their relationship with society (e.g. distancing from status quo and outgroup). This

was important for Types 2-5; however, Type 5 viewed this self-discovery as a form of spiritual growth premised upon new age and CT beliefs.

On a theoretical level, both religious conversion and CT belief development, show that individuals are agentic in their belief change. Traditionally, religious conversion was regarded as being sudden and passive, consistent with the 'stereotype of profound change' which has its historical roots (see Paloutzian, Richardson, Rambo, 1999; Richardson, 1985). CT believers have their own stereotypes of, for example, 'friendless seclusion' (see Uscinski & Parent, 2014). Contrary to these stereotypes, both religious conversion and CT belief change can be drawn out and require an active, purposeful approach and engagement with ingroups. Chapter 5, established that the later-CT belief development involved, for example, research and action. The latter, shows the importance of social interaction (e.g. joining social clubs) and desire to impact on the world (e.g. protests). It was also possible for people to become less interested in CTs. However, disengaging with CTs, also appeared to be a strategy towards positive agency. By lessening their interest in CTs, a person could buffer against some of the negative aspects of developing a CT perspective, which was perceived to be marginalised and not valued by other standards of society.

Methodological contributions: The value of a qualitative methodology and mixed-methods approach

As noted in Chapter 1, findings based upon qualitative data on CTs have been lacking from the empirical literature. Their potential to yield important insights has been demonstrated by disciplines outside psychology (e.g. Harambam & Aupers, 2015; Lewis & Kahn, 2005; Popp, 2006). Chapter 2 overcame the accessibility issues associated with CT believers being a difficult-to-reach population. This was achieved by communicating details of the project to group organisers as gatekeepers, who both safeguard the groups and could communicate details of the research project. It was also achieved by using non-stigmatised terms such as "alternative

explanations," rather than the socially stigmatised label of "conspiracy theorist" (Barkun, 2003, 2016; Husting & Orr, 2007; Lantian et al., 2018; Pelkmans & Machold, 2011). Importantly, the interest in CTs was made clear in the information sheet and interactions with potential participants. Furthermore, having used the term, "alternative explanations," it was important that we were open to the various ways in which it was used. Participants appreciated that despite the main research focus on CTs, other elements of their alternative worldview were also considered, such as new age beliefs or non-CT beliefs (e.g. negotiating day-to-day experiences). These were evidently important and informed their CT worldview, which therefore justified their consideration during the interview and inclusion in the data analysis. For example, new age beliefs featured as an aspect of Type 5 (Chapter 2) and non-CT beliefs were central in understanding dialogicality (Chapter 3). Taking a broader scope was made possible through qualitative methodology and the flexibility of the semi-structured interview. Using qualitative methodologies, the thesis pursued research questions typically beyond the scope of quantitative methodology. For example, the thesis was able to characterise the symbolic resources of CT worldviews as perceived in the real-world by people who claim to follow an interest in CTs. Specifically, the thesis gained insight into how CTs were meaningful and informed people's sense-making of events and others in the world.

The thesis took a mixed-methods approach, triangulating findings first established through qualitative data with UK samples in Chapter 2 and supported by quantitative data with US samples in Chapter 5. Specifically, the CWS, a psychometric measure, was developed through online surveys (Chapter 5). The survey design was based upon the monological typology derived from the thematic analysis (Chapter 5). In Chapter 5, Types 2, 3 and 4 emerged as expected, whereas Type 5 could be further distinguished according to monological worldviews concerning aliens (Type 5-Alien) and spiritual conspiracy (Type 5-Spiritual). This shows the advantage of the mixed-methods approach. Two different methodologies provide

two different angles on the same phenomenon. The gaps and shortfalls of one method can be improved upon by another method. In this case, Type 5 representing supernatural monologicality emerged through qualitative analysis in Chapter 2. However, when psychometrically scaled in Chapter 5, it was found that there were actually two distinct types of supernatural conspiracist worldview (Type 5-Alien, Type 5-Spiritual). Finding the Type 5-Spiritual worldview may be explained by demographic information of using a US sample in Chapter 5, since research shows that Americans are more religious than people in the UK (Pews Research Center, 2018). Therefore, Americans may be prone to spiritual forms of CT belief. This new empirical development was accommodated into theory on monological conspiracist worldviews. Overall, the consistency and substantial overlap between the qualitative and quantitative results showed that Chapter 5 corroborated with Chapter 2. Triangulating data and analytic outcomes provides greater confidence in the validity of the findings and the conclusions drawn in this thesis (Caillaud, Doumergue, Préau, Haas, & Kalampalikis, 2019; Denzin, 1978).

Implications: Conspiracy theories as a pre-figurative social movement

Importantly, CTs may represent a pre-figurative social movement. A thread that runs throughout the thesis is the potential social and political implications of endorsing CTs. In Chapter 2, it was first recognised that CT believers have the potential to be far more politically active than had been previously acknowledged. Existing research recognised that CT belief leads to decreased intentions to vote (Jolley & Douglas, 2014b), but does not consider how CTs have the potential to mobilise people. Yates (2015) proposed that pre-figurative movements are based upon attempting to build "alternative or utopian social relations" (p. 1), which take place in action-relevant and everyday activities (e.g. occupying public spaces) in efforts to gain political significance. This may be informed by SRT: through political participation, people seek to communicate their views and representations over others; namely,

the political elites and people with power in society (Howarth, 2011; Howarth, Andreouli, & Kesi, 2014). CTs therefore emerge within a changing landscape made up of contested ideas between the layperson and people in positions of power, and may gain their status of 'untruth,' not due to 'facts,' but simply because they are incongruent with the constructed 'truth' put forward by those in power (see Pelkmans & Machold, 2011).

It followed that through Chapter 2 and 4, there were various forms of action indicating CTs to be a pre-figurative form, involving contested ideas. People met in social groups to discuss CTs and new age beliefs, participated in CT research groups and engaged in protests. These activities occurred in vivo at local locations and online (e.g. forums). One central tenet to the pre-figurative social movement is the diffusion of ideas, and based on interview accounts (Chapters 2-4), this seemed to be a highly valued element of participating in a community. The ingroup provided resources stimulating their interest in CTs and involved leaders who were role model researchers and proponents of CT knowledge (Haslam, Reicher, & Platow, 2011). Based on narrative data, it seemed that action emerged at a later-belief development period. For Types 3-5, action could address a CT directly (e.g. protesting at Bilderberg), but unique to Type 5 was 'spiritual action,' attempting to make changes in a supernatural way premised upon new age beliefs (e.g. energy work). The latter is consistent with the emergent trend of 'conspirituality' which recognises a fusion between new age beliefs and CTs, and features resistance through non-violent action, social networks and raising awareness of a spiritual shift happening in humanity (Ward & Voas, 2011). Drawn together, the implications of prefiguration are that CT belief represents a geographically distributed social and political movement, characterised by like-minded people with differing levels of CT engagement and social consequences (e.g. communities, action), as represented by the different types of non-monological and monological CT belief.

The findings of this thesis can be applied to other issues, such as the relationship between CTs and populism. A particularly relevant element of populism to the focus on CTs is the notion of a divide between the 'people' and the 'elite' (Canovan, 2002; Mudde, 2004). Indeed, higher CT belief is related to people-centrism and anti-elitism (Silva, Vegetti, & Littvay, 2017). According to the quasi-religious hypothesis and SRT, CTs spread through a process of anchoring and objectification. That is, by naming conspirators and providing explanatory accounts that make familiar the unfamiliar aspects of expert discourse, CTs may facilitate social sense-making (e.g. filling in the gaps left by official accounts, Birchall, 2001). This thesis provides an understanding of how to better understand the distinction between 'us' and 'them,' and specifically the differential representations of power and agency (Moore, 2016), which characterise populism. In Chapter 2, it was found that the CT outgroup was multi-faceted and power was hierarchically distributed. The most powerful outgroup consisted of the 'evil elite,' who were the top conspirators. This was followed by 'middle management,' who were mid-level conspirators, complicit in the evil elites' agenda. Finally, the least powerful were the outgroup 'sheep,' representing the public who were blindly unaware of the conspiracies at play. Chapter 2 also revealed the self and ingroup who diverged from the outgroup sheep and gained agency by an awareness of CTs. These findings were replicated in Chapter 3 in the first order of analysis (see **Appendix 3**).

How then can we transfer these findings to the question of populism? CTs offer a sense of exclusivity and ingroup status, and in doing so, they also make clear the intergroup boundaries of ingroup and outgroup (Tajfel, 1981). Although CTs and populism should not be seen as synonymous, where CTs do arise within populist rhetoric, it is likely that communication to potential converts will aim to make familiar these intergroup boundaries. They may mobilise based upon accusations of conspiracy that represent these different levels of the outgroup. This could take form, through for example: expressions of doubt, suspicion,

and mistrust (Pelkmans, 2018), or as a competition over sacred ingroup values (e.g. nationalism) (Franks et al., 2013). However, Chapters 2 and 5, also found that there were multiple types of CT worldviews, with each type characterised by different qualities of ingroup and outgroup. The more developed the monological CT worldview, the starker and more elaborate the intergroup boundaries. In a similar vein, the reaction to populist discourse may not be uniform, but rather vary according to CT worldview type and views on partisan politics. CTs and populism share this common basis of making apparent the ingroup and outgroup – 'us' and 'them.' They can make one group be seen as 'positively familiar' and another as 'strange' and different (see Kalampalikis & Haas, 2008; Moscovici, 2002).

Some CTs can have a negative impact upon the uptake of science and policy initiatives (e.g. Jolley & Douglas, 2014a; Lewandowsky et al., 2013; van der Linden, 2015). These effects could be mitigated through effective science communication. One recommendation based upon this thesis would be to embrace the dialogical relationship between science and layperson thinking. Chapter 3 revealed the different ways (e.g. by integrative, synthetic, and analogical thinking) that science was featured in CT explanations. In one sense, CTs offer a sense of uniqueness (Lantian, Muller, Nurra, & Douglas, 2017) and ingroup exclusivity (Cichocka, Marchlewska, Golec de Zavala, & Olechowski, 2016). This may resemble the apparent esoteric status of science, which is made up of specialised knowledge and a community of experts (Fleck, 1935/1979). However, many scientific ideas have come to feature in layperson thinking, and therefore, the notion that there is a strict divide between science and layperson thinking does not seem to hold ground (Bangerter, 1995). CTs in their various dialogical forms (as shown in Chapter 3), are a prime example of a dialogue between science and common sense. CTs simulate science through the practice of research (as shown during the later CT belief development of Chapter 4), use of evidence, and attempting to achieve epistemic authority by explaining real-world phenomena (Byford, 2011; Harambam & Aupers, 2015).

The interaction between science and CTs indicates that people are engaged with science; and embracing this dialogical relationship could support the uptake of scientific initiatives (e.g. support for climate science). As such, this thesis supports the ongoing initiative for the effective dissemination of scientific findings (e.g. by journalism and online media), so that people are not limited to local experts and CT resources, but can engage with accessible scientific findings and opinion.

Limitations and Future Research

The main limitation of the thesis is that all empirical Chapters drew upon non-representative samples. The qualitative samples of Chapter 2-4 were all recruited in the UK and mainly sampled purposively, by approaching specific groups with an interest in CTs. Organisers acted as gatekeepers and notified their members who could then contact me to volunteer for the research projects. Other participants were recruited by snowball sampling, whereby participants shared details of the project to others, and by opportunistic sampling which involved approaching potential participants at popular CT events (e.g. Icke conference). Chapter 5 recruited participants in the US via Amazon Mechanical Turk (MTurk), an online platform requesting humans to complete computer-based tasks. Qualifications can be used to ensure data quality (e.g. completion of a set number of tasks) and MTurk benefits from a diverse group of people using the platform (Buhrmester, Kwang & Gosling, 2011). Despite an ongoing discussion about its representativeness (e.g. Berinsky, Huber & Lenz, 2012; Huff & Tingley, 2015; Levay, Freese & Druckman, 2016), it has been found that MTurk samples closely resemble political ideology divisions found within society on the dimensions of liberalism versus conservatism (Clifford, Jewell & Waggoner, 2015). In the sample of Chapter 5, there was a slight leaning towards Democrats, although Republicans and Independents were reasonably sampled. Future studies should take forward the CWS with other groups using representative sampling techniques to establish different CT belief according to the

monological CT typology of the wider population. As previously noted, the final study of Chapter 5 involved a latent class analysis (LCA), and demonstrated the diagnostic utility of the CWS in grouping people according to their CT worldview. For example, administering the CWS and using LCA in a larger cross-cultural project could provide important insights about cross-cultural similarities and differences in CT belief according to the monological typology.

In Chapter 3, the insights regarding dialogicality were also limited to the views of a small sample. The importance of a sample's qualities should not be understated and the content of dialogical relations may not be transferable across all scenarios of CT belief (Guba & Lincoln, 1981). For example, the Da Vinci Code conspiracy called into question traditional accounts of Jesus. Newheiser et al. (2011) found that people with high endorsement of religion, negatively predicted the Da Vinci code endorsement, while new age beliefs positively predicted Da Vinci code endorsement. Chapter 3 revealed that religion was seen negatively in the context of CTs, although there were some instances of affirming religion through CTs (e.g. revering Jesus). The sample used in Chapter 3 held new age beliefs which have been shown to recognise the importance of divine beings of traditional religions, albeit as different representations of the same fundamental and universal, spiritual source (see Aupers & Houtman, 2006; Hanegraaf, 2013), and thus this could explain why some people made positive references to religion in their dialogical CT beliefs. This is just one example of how demographic details can influence dialogicality. Several steps forward are proposed to follow upon on this. Future research should continue with qualitative analyses. Firstly, there is a need to conduct interviews with larger samples to replicate the findings. Secondly, research should conduct text analysis of CT media to explore the dialogical form. People's perspectives are likely influenced by the media they read (Stroud, 2008), and there might be a dialogical basis to media content, influencing their thinking. Finally, we do not know how dialogicality emerges and this remains a gap in the literature. Dialogicality should be explored with quantitative methodology,

whereby an experiment could be conducted to see whether certain dialogical outcomes are the result of certain stimuli, such as for example, informational cues in media (Uscinski, Klofstad, & Atkinson, 2016), and influence of social groups and leaders (Haslam, Reicher & Platow, 2011).

In Chapter 4, the belief development of participants was understood through narratives which are subject to recall bias. For example, individuals view their distant past-self more critically compared with their present-self (Wilson & Ross, 2001, 2002). Indeed, interviews provide an opportunity for positive self-appraisal bias (e.g. Haddock, 2004) and social desirability (Collins, Shattell, & Thomas, 2005; Rapley, 2001). The latter involves participants providing responses towards their perception of what the researcher deems to be an appropriate standard. Despite this, narratives do provide 'thick description' of people's perceived experiences and the possibility of 'local surprises,' demonstrated by the unexpected finding of people's decision to engage less with CTs (Gaskell & Bauer, 2000; Geertz, 1983). Future research should take forward pre-CT belief development, early-CT belief development and later-CT belief-development themes in designing a longitudinal study. This could involve a mixed-methods approach with interviews and standardised measures (e.g. CWS), monitoring over time changes in generalised and specific CT beliefs, along with other relevant social and personality variables (e.g. trust, Rempel, Holmes & Zanna, 1985; or, Big-Five personality dimensions, Gosling, Rentfrow & Swann Jr., 2003).

Chapter 2 and 5 revealed an expanded spectrum of CT belief. These included: supernatural CTs (Type 5-Alien, Type 5-Spiritual) and non-monological CT worldviews (Type 2, Type 3). These types of CT beliefs have been overlooked and are relevant areas for further study. The potential for CT beliefs to impact political and policy relevant behaviours has been documented (e.g. Jolley & Douglas, 2014a, 2014b; Lewandowsky et al., 2013; van der Linden, 2015), but could be further informed by taking forward the CT typology. For example, do non-

monological CT worldviews (Type 2, Type 3) lead to different political perceptions, intentions and behaviours? How does the monological typology compare with people who have no interest in CTs, when examining political phenomena, such as party identification and voting behaviours? Chapter 5 found that political cynicism did not correlate with Type 5-Spiritual and Type 5-Alien, although it strongly correlated with Type 4. The monological types also seem to motivate different forms of action as shown by the qualitative work of Chapters 2 and 4. However, this requires further confirmation through quantitative work. In responding to these possible research questions, a useful resource might be the work of Pinkleton & Austin (2001), who provide indexes with simple sets of items for examining individual motivations, and perceived views on media and politics.

Conclusion

The aim of the thesis was to achieve a revised understanding of monologicality and explore the different ways CT beliefs are endorsed by people who pursue an active interest in CTs. Chapter 1 proposed the need to qualitatively investigate monologicality, dialogicality, and how CT worldviews develop; as well as the need to establish an appropriate psychometric measure for potentially different types of CT worldviews. Chapter 1 detailed the relevant literature motivating the research questions of the empirical Chapters 2-5. Chapter 2 populated the CT worldview by examining the symbolic resources according to six themes (self, ingroup, outgroup, reality, future, action), and reported five different types of CT worldview, showing that not all CT belief is monological. Chapter 3 explored the phenomenon of CT dialogicality, advancing the five dialogical relations which showed the relationship between CT and non-CT beliefs about science, religion, and politics and society. Chapter 4, using narrative data, revealed that people were agentic in developing CT beliefs, with multifaceted origins and later experiences, and also had the potential to transition away from CT beliefs. Chapter 5

established and validated a novel psychometric measure, called the Conspiracist Worldview Scale, measuring five types of non-monological to fully monological CT worldviews.

Empirically, the contributions are a revised understanding of CT belief, opening the avenue to further explore types of non-monological and monological CT worldviews, premised upon different degrees of conspiracism and assumptions about the world (e.g. natural and supernatural assumptions). The thesis also foregrounds dialogicality as a relevant phenomenon to CT belief and provides the first attempt to document CT belief development experiences. On a theoretical level, the thesis takes forward the quasi-religious hypothesis, showing the potential relationship between religious and CT belief. It also provides a bridge for dialogue between belief coexistence from cognitive and developmental psychology and cognitive polyphasia from Social Representations Theory, which both share a focus on dialogicality. Methodologically, the thesis is an example of how qualitative and quantitative methodologies and analyses can mutually inform one another. The implications are that monological CT worldviews, when considered alongside findings on political and policy relevant behaviours, may represent a pre-figurative social movement. Overall, CTs are becoming increasingly relevant in the internet age and this thesis provides a resource to understand the phenomena characterising conspiracy theory belief.

CHAPTER 7 | Bibliography

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Appendix 1 | Participant information sheet and consent form (Chapter 3 and 4)

Ethics was granted by the Research Ethics officers in the Department of Psychological and Behavioural Science at the London School of Economics and Political Science. A very similar information sheet and consent form were used for Chapter 2, and was modified for Chapter 3 and 4 to reflect my status as a PhD candidate. The information sheet and consent form for Chapter 3 and 4 are detailed below:

Participant Information Sheet

You are being invited to take part in a research study. Before deciding to participate it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information. Feel free to discuss issues with anyone, and if there is anything which is not clear or any questions you have, feel free to ask. Take your time reading, and don't feel rushed.

What is this research about?

The research explores: The Social Psychology of Alternative Worldviews and Beliefs.

The project is being organised and conducted by the Department of Social Psychology at the London School of Economics and Political Science.

The objective of the study is to gain an understanding of how individuals develop an interest in either mainstream, non-mainstream, conspiratorial or alternative beliefs.

The research will seek to explore the content of specific mainstream, non-mainstream, conspiratorial or alternative beliefs; and will also consider the role of different forms of information and media in your understanding of various mainstream, non-mainstream, conspiratorial or alternative beliefs.

Who is doing this research?

The research is conducted by Matthew Hall, a research assistant with the Department of Social Psychology at the London School of Economics (LSE).

[Researcher contact details]

Why have you asked me to participate?

You have been selected to participate based on your interest in alternative worldviews and beliefs, your knowledge of conspiracy theories, and / or due to having a critical perspective with regards mainstream media, politics, economics, religion or society.

What will participation involve?

Participation involves an interview lasting around one hour, exploring your worldview and discussing your interest in either mainstream, non-mainstream, conspiratorial or alternative beliefs.

What about confidentiality?

Data will be recorded using an audio-recording device.

Your data shall remain anonymous.

A pseudonym shall be used in place of your name unless you state otherwise. [*note: pseudonyms were used in all cases*]

Data retrieved will be used for doctoral research in Psychology and feature in associated publications.

If at any point you wish to withdraw your data either during or after today's session, please inform Matthew Hall using the contact details specified above.

If you are willing to participate, then please sign a Consent Form.
You can keep this Information Sheet for your records.

Informed Consent

Project: The Social Psychology of Alternative Worldviews and Beliefs.

Researcher: Matthew Hall
[Researcher Contact Details]

Supervisor: Dr Bradley Franks
Doctor of Social Psychology at the London School of Economics and Political Science.
[Supervisor contact details]

To be completed by the Research Participant

Please answer each of the following questions:

Do you feel you have been given sufficient information about the research to enable you to decide whether or not to participate in the research?	Yes	No
Have you had an opportunity to ask questions about the research?	Yes	No
Do you understand that your participation is voluntary, and that you are free to withdraw at any time, without giving a reason, and without penalty?	Yes	No
Are you willing to take part in the research?	Yes	No
Are you aware that the interview/focus group will be audio/video recorded?	Yes	No
Will you allow the research team to use anonymized quotes in presentations and publications?	Yes	No
Will you allow the anonymized data to be archived, to enable secondary analysis and training future researchers?	Yes	No

Participant Name:

Participant Signature:

Date:

If you would like a copy of the research report, please provide your email or postal address:

Appendix 2 | Interview Topic Guide (Chapter 3 and 4)

A. Introduction

Outline the purpose and structure of the interview.

Restate:

- Confidentiality

- Anonymity

- Free to withdraw

Specify intention not to debunk.

Permission for audio recording?

B. Personal background

Who are you?

Tell us a bit a more about your background?

What is important to you in life?

C. Self-development

How did you become interested in alternative explanations / conspiracy theories?

At what stage in your life?

Any key experiences?

How has your interest in alternative explanations developed since then?

Before you were interested in alternative explanations, how were you as a person?

How has your interest in alternative explanations impacted upon your life?

D. Specific alternative explanations / conspiracy theories of interest

Can you tell us a bit more about an alternative explanation that has really interested you?

Were there any other accounts to these events?

What do you think happened?

What do we know about these people / beings?

What is their objective?

E. Research approach

What is your motivation to research alternative explanations?

What does it take to be interested in alternative explanations?

How do you know that alternative explanations are true?

Do you read alternative explanations that you don't subscribe to?

F. New age and Spiritual beliefs

Would you consider yourself a spiritual person? If so, in what way?

What does that mean to you?

Are there things, [powers, being, entities or forces] beyond what we perceive?

Life after death?

G. Interaction and groups

Is there anyone you can talk to about your interest in alternative explanations?

What do you think about the people who share this information?

Do you ever think about how others view your interest in alternative explanations?

What do you think about the term, 'conspiracy theorist?'

H. Media use

What are your main sources of information in learning about alternative explanations?

What do you think about mainstream media?

I: Close interview

Is there anything you would like to add?

Do you have any questions?

Thank you.

Appendix 3 | First order: Themes, coding frame and examples (Chapter 3 and 4)

The first order coding frame was a foundation to the empirical work of Chapter 3 and 4, before their respective second order codes: Dialogicality (Chapter 3, Appendix 5) and Belief development (Chapter 4, Appendix 7). Participants were allocated a conspiracy theory worldview type using the coding frame developed below. The main themes of this coding frame are informed by Franks, Bangerter, Bauer, Hall & Noort (2017) of Chapter 2.

Theme	Subtheme	Definition / Criteria	Example
Self	Alternative self-development	Narrative statements, biography and life history, and temporal self-related comments on the subject of developing conspiracist beliefs and alternative beliefs.	"That slowly came in but it wasn't something that I was initially so much interested in. It was seeing that more presented itself and as time progressed, I couldn't ignore it so much, where before it was, 'ok, yes maybe, maybe not, it doesn't interest me that much.' I was more interested in other things but again conspiracies became—I started to realise that actually we are surrounded by illusion, so therefore we probably are. So, I started taking an interest in things like that but I'm not exactly sure when it started."
	Alternative self-view	Atemporal statements about self, i.e. present approach to CT research as well as attributes and values of alternative self.	"Because not living in truth, is not really being authentic and that's important to me."

	Non-CT self-development	Narrative statements, biography and life history, and temporal self-related comments unrelated to CT beliefs e.g. career.	"Growing up? Oh gosh. I grew up in a highly traditional family, where keeping up appearances was paramount, when social decorum and keeping to certain paradigms was very important. I grew up in a family, where you know, where keeping to the rules and abiding by the rules, again was paramount."
	General self-view	Atemporal statements about self, i.e. personal attributes and general value - not explicitly linked to their CT research.	"I think I'm quite caring. I love being around animals. I love nature."
Ingroup	Conspiracy label	Reflections on the words: 'conspiracy theory' and 'conspiracy theorist.'	"Well it's often applied to me whenever I go up to say something, 'oh that's a conspiracy theory.' It's just a great way of putting somebody down."
	Alternative group	Identification with an alternative social group, community or collective.	"Yeah, I think they are really interesting and I think that it's great that people are doing that. I guess it makes you feel more connected and they are making people feel more connected because the internet is a great resource for anyone who wants to meet anyone with a different point of view."
	Dissimilar alternative others	General statements about dissimilar others within an alternative collective (e.g. perceived extreme views of ingroup CT others).	"I think the danger with conspiracy is when people get paranoid about it and think, 'I should know everything, I must know everything, why aren't you telling me that?' And start freaking out about it."
	Positive interactions	Positive interactions and events with likeminded others in vivo or online.	"Yeah, I do talk to other people. Yeah, some people will talk to you about it. And it's interesting, it's interesting. I think since the internet came along more people are more open towards those views. That's it really."
	Negative interactions	Negative interactions and events with likeminded others in vivo or online.	"I have found along this spiritual path a lot of people have embarked on the spiritual path but they have fallen into the trap of spiritual arrogance. 'Oh I'm spiritual. Oh, I'm trained in this. I know this and therefore I'm better than you. And don't you tell me because I know it all.' That kind of arrogance comes in many people who embark on this path."

	Alternative media research	Use of alternative media and social media for researching CTs and alternative beliefs.	"I do a lot of reading and try to go back to source, so I have got a library of books here. Depending on what issue I'm looking at, I'll always try and get two or three viewpoints on it."
	Mainstream media	Mainstream media covering alternative or CT topics - positive or ambivalent comments.	"It's not to shun mainstream media or newspapers or anything like that, because there are some really good columnists and really good journalists. There are some really good people that do work in mainstream media."
	Type 4 - Ingroup heroes	Human ingroup leaders, proponents of CT knowledge, exemplify pursuit or sacrifice for alternative causes e.g. role model researchers.	"We need people to question. We need groups to question. Single people can question like David can stand up. But he has more power now that he has a following, than he ever had when he was like being called stupid, crazy and nuts."
	Type 5 - Ingroup heroes	Ingroup entities challenging conspirator's agendas (e.g. Archangel Michael), representing supernatural ontology.	"And as I investigated further I came across Archangel Raphael who's responsible for healing. I stood in the field one day and just asked for him to channel through me and I just got this surge of power."
	Non-CT heroes	Human ingroup leaders not overtly connected to CT knowledge but are figures perceived to represent the truth-seeking cause, including politicians (e.g. Members of Parliament).	"Well I have seen him so many times in so many rallies when I was upset about things like the imperial wars and I never dreamt somebody like that would be leading the Labour Party."
Outgroup	Sheep negative interactions	Negative social interactions with people who do not have alternative worldviews.	"There's just no point. What I found is where I am trying to discuss something with someone like a realisation or an understanding, most people will try to contradict your reality."
	Sheep duped	Public blindly unaware of their manipulation by conspirators.	"Most people are sheep. Sheep they need a shepherd to herd them. So, that's how I always put it. That's the analogy I always make of a hierarchical society. Even in the world, there are shepherds, leaders and then they tell, 'yes you've got to do this, you've got to do this, you've got to do this,' and everybody else does it."

Sheep waking up	Members of the publics becoming aware of CTs or deception.	"Yeah but I think that what's changed now is that I feel that more and more people are becoming aware about all of these issues and are wanting to put a stop to it."
Evil elites - Type 4, top conspirators	Top-level human conspirators in control, exercising power, with secret agendas.	"There is a wider agenda by a small group of people to take over the world and that has been clearly laid out in their document."
Evil elites - Type 5, top conspirators	Supernatural or extra-terrestrial agents referenced in conspiracist context. Comments refer to top-level conspirator(s), capturing evil elite hierarchy.	"An alien race that's been here for thousands of years. But that doesn't really matter, I mean, because it doesn't really matter where they come from, you know. It's how they've been able to hoodwink the Western world."
Middle management	Mid-level conspirators subservient to a top-level conspirator(s) (e.g. compromised politicians or media).	"Ultimately, they're probably all puppets, but you know, the ones at the top are also toeing the line. You can meet local MPs who genuinely are interested in their communities. I think they must have a very hard time!"
Media	Media non-hierarchical CT comments.	"Well, it's symbolic of this thing we were talking about earlier. News comes out. It's completely fabricated. It influences events that shape our lives and then 2 years later it's found to be not true."
Politics and society	Politics and society non-hierarchical CT comments.	"I mean, even with the mainstream accounts and everybody knows that the White House explanation is completely flawed, that Iraq had nothing to do with 9/11. it was all to do with Saudi Arabia."
Science	Science non-hierarchical CT comments.	"There was another enquiry that was supposedly looking at the science but never did. And, the whole thing is just fabricated on lies upon lies upon lies. […] There's no physical evidence in the temperature record."
Religion	Religion non-hierarchical CT comments.	"But the view of the *Last Supper* is that it's only men. Now, there was a situation where, the men did something and the women did other things in

			those times. But, also, they used to come together and debate. But I think that sort of tried to be glossed over a little bit, and hence the Michelangelo picture of the *Last Supper* which everyone's now talking about is looking at Mary and saying, 'that's Mary and she is almost holding his [Jesus] hand!'"
Reality	Non-CT world	Non-CT general statements about the world without explicit reference to CTs e.g. culture, capitalism.	"The system? I mean the current way things work. So that sometimes I talk about the money system and that is that most of the money in our society is created by debt and that's a whole other subject of itself."
	Conspiracist world	Society viewed in conspiracist terms (e.g. exploitation of masses).	"The authorities or the powers that be. The powers that be, about 2 years ago, became the powers that once were. Yay! So they've fiddled around with the education system. They've fiddled around with the political system, financial system, business system, scientific system, medical system. Every major system they've manipulated. religious system, everyone has been carefully manipulated."
	Societal dependence	Being dependent upon aspects of society e.g. banking.	"I don't really see myself as part of a society in a way. I'm definitely obviously a consumer because I earn money and I spend it. And that money, anything I spend gets taxed and goes towards the country. So I'm definitely a consumer. I can't help but not be a consumer and that's probably what I really am."
	Type 5 energy	Supernatural energy and unseen forces.	"There are symbols of hugely propaganda, especially in the logos of corporates if you know the symbolic language. And if you spent some time, studying those things, you'll see. You'll also know that if you were to put your symbols in a certain aspect to give a certain energy to it."
	Type 5 contact	Contact with or awareness of non-human agents or entities (e.g. extra-terrestrial	"It was almost as if they were illuminous balls, orange balls. And the two that I saw in 2011, I was woken up at 2 am in the morning. I rolled over in

		encounters, spirits), assuming supernatural ontology.	my bed and looked out the window, and one went passed. And I thought God did I just see that?"
	Religious beliefs	Endorsing traditional religious beliefs e.g. Buddhism.	"Buddhism, bit of paganism, bit of shamanism. I've got nothing against the core beliefs of Christianity. I mean, most religions – I think their core beliefs are great."
	Atheism	Endorsing atheism, humanism and human evolution.	"Well, yeah, so again I like to say I am an atheist which describes not being a part of any religion"
	Agnosticism	Agnostic and uncertain beliefs about spirituality, religion and God.	"For me, I've had personal experiences to have a belief in something beyond this realm, beyond, but I can't put a name to it. I don't have a very hardcore—I certainly don't have enough a belief system to proselytise anyone else say, 'you should belief' or anything like that."
Future	Idealised future	Macro-level statements about idealised and desired change: express values and the change they would like to see.	"I think it'd be nice if the whole thing came tumbling down and we just started again from scratch."
	Alternative forecast	Anticipated future and predictive statements about the future contingent upon CTs.	"So, what I think is breaking through is a sort of awakening and it's facilitated by social media, internet, obviously. Because people can self-organize in ways which were unthinkable 10 years ago. So, the capacity for doing good and creating things that work I think is absolutely amazing. That's why I'm not giving energy to what's dying. And I'm saying, right, the line I like to use a lot is, 'it's dark out there, sure it is but we can see it. That's because there's enough light on. We can see it.'"
Action	Conspiracy direct action	Action based on alternative beliefs with explicit reference to conspiracy (e.g. direct action against conspirators).	"But what I'm doing is I'm just trying, in my way, to put over, to try and make people aware of things that're happening around them. So, some people shout and scream, some people are really good on computers and

		stuff like that. For me, this is my way of trying to make people aware of how everything is interconnected, the techniques they use to interconnect them. By exposing that, hopefully it's like the emperors got no clothes."
Communication style	Approach to positively communicating with others who are not interested in CTs.	"It depends on the audience. Some people will be open to certain ideas in certain areas. And, it's a question of laying breadcrumbs and I try to avoid telling people the whole story in one hit or time to tell them the whole story one hit."
Alternative action	Action based alternative beliefs with no reference to conspiracy.	"I'm climbing the mountain that I talk about people's health, help people to be healthy and aware of what it is that can strengthen them, give them confidence and stability in this life and a knowing."

CT = conspiracy theory

Appendix 3 References

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Appendix 4 | Dialogicality data excerpt (Chapter 3)

Interviewer: **What do you consider to be an alternative belief or an alternative explanation?**

Participant: What would be your definition be of that—an alternative to what? What I believe about the government and things.

Interviewer: **What would you consider to be an alternative …**

Participant: I mean there's an agenda to why they're doing it and it's very obvious what they're agenda is. I don't have to buy it.

Interviewer: **OK, so it's seeing the agenda, seeing the propaganda and then looking at it differently.**

Participant: Yeah and knowing that they are just all bastards. Because they are in fact, they're just puppets. Because they are being manipulated by this power behind the scenes. You see none of them would be where they are, unless they had made—well the pigs head thing came about Cameron. So that was in response to something that they said or did, right? So, but they have, probably got all these sorts of sex scandal things on him or whatever. With a lot of the child abuse, bits and pieces, Dolphin Square and all that sort of thing, where politicians are being implicated, it literally has them trapped into do stuff. Because they don't—they are so terrified of the public exposure of their misdoings.

Interviewer: **So, who is manipulating, say for example the prime minister or the government?**

Participant: Oh, the Rothschilds.

Interviewer: **The Rothschilds.**

Participant: There are 13 families they say. There are the [*family name*], the [*family name*], the [*family name*] might be one of them. You've got the Rockefeller family, the Bush's, the Bush family. They're really into the Nazi thing because Prescott Bush—he was actually an orphan brought from Germany from the Hitler Youth movement. He doesn't look at all like the Bush who brought him here in the first place. So, he came here in the 30s, I think it was. It was after World War 1. It's sort of an interesting story about the Bush family but they are all Satanic ritualists. They are the most horrible people you don't want to come into contact with. George Bush Junior, he was such a weak pathetic individual who could hardly string two words together anyway. He—they manipulated the election to get him in the first place. A Clinton's election too was manipulated. So, they have been manipulating elections in American forever.

Interviewer: **These 13 families are manipulating things. What are the manipulating things towards?**

Participant: If you do research into the Illuminati, they're agenda is world domination and power, control of all the money and everything. Total enslavement of humanity

Interviewer: **So, we are talking about these 13 families and the illuminati? So, is this all linked together and perhaps even the one world government, as well?**

Participant: Yeah, yeah, ah yeah.

Interviewer: **Yeah.**

Participant: Totally, totally. Well that's what Europe is about. That's a further step towards the one world government thing. And that's why they're so sort of fighting the UK getting away from it all but they—the bottom line is we don't have any sovereignty at all at the moment. So, and the EU movement has literally dissipated the sovereignty of all these countries but they're all rebelling, you know. The Austrians are all building their barriers. They are all saying we won't do this and we won't do that. OK, you want us to do that, well we won't do it.

Interviewer: **And I have heard about this agenda for One World Government and complete domination, and I wondered when it would might come into place …**

Participant: In about 10 years

Interviewer: **And how it manifests itself?**

Participant: Well when they did 9/11, the day before 9/11, what was his name? he was the—there was Cheney, and there was with—it being with a—he announced that the defence department at the Pentagon had a giant hole and several trillion in its budget. OK? 9/11

happened the next day and one of the places that was actually hit was the Pentagon. That part of the Pentagon that was hit by a missile, not a plane, actually was where all the computers were. All the accounting system was wiped down in one by that missile that hit the Pentagon. So their books they were cooked by the missile. So, what was his name? I can see his face, horrible little man.

Interviewer: **So, we're about 10 years in though …**

Participant: They're about 10 years behind their indication.

Interviewer: **They're about 10 years behind their plan.**

Participant: Yeah because in 96—which was when, was that the first Clinton government? When was Bush elected? He was elected in 2000 wasn't he? Was when Clinton was in power. He signed into effect something called [NAME], which was a whole re-evaluating the financial structure. It was supposed to come into force on the 11th September 2001 but we got the twin-towers instead. I mean just so much crap came out about the 9/11 thing because it was a totally inside job but the Americans were supposed to protect their population from enemies – domestic and foreign. It was the domestic that they actually attacked.

[END OF EXCERPT]

Appendix 5 | Second Order Dialogicality: Themes, coding frame and examples (Chapter 3)

Theme	Subtheme	Definition / Criteria	
Integrative thinking	Science	Integrating CT belief with non-CT belief about science – causal link, whereby one influences another.	"So, what we are doing is going up to the 12 strand DNA configuration and still the blueprint is still there because DNA is only a blueprint but we are going back to that. So, the physical human race has had a journey. Some of us have come from Sirius to this planet. Some of us come from other planets to this planet as well. That's why there are so many varieties of humans."
	Religion	Integrating CT belief with non-CT belief about religion – causal link, whereby one influences another.	"Bible says, there were giants that used to walk around, so these giant people were the people who amassed the power and they ruled the countries ..."
	Politics and society	Integrating CT belief with non-CT belief about politics and society – causal link, whereby one influences another.	"The whole aspect of how schools are run with the cameras and political correctness, that's all a part of the shadow governing and as I see it—the social engineering of people—and I believe and I know people are socially engineered. I know there is very little thinking involved because if you are stupid, you can be manipulated in any way."
Synthetic thinking	Science	CT belief and belief about CTs and science are loosely brought together – no causal link specified.	"The same with GMOs and pesticides, so there's a lot of elements that appear to be destructive to the human race which is not logical on any level, if you put it all together."
	Religion	CT belief and belief about religion are loosely brought together – no causal link specified.	"I'm a kind of believer in Karma … I suppose evil people have no problem committing evil and living with themselves. But yeah, I think people will have to answer for it in one way or another on this plane or another."

	Politics and society	CT belief and belief about politics and society are loosely brought together – no causal link specified.	"Well was it [September 9/11] just an excuse to start this war on terror. Does the war on terror actually exist? How much of it is real and how much of it has been generated?"
Target dependent thinking		Expresses sense of consonance in holding CT and non-CT beliefs. These beliefs do not interact and remain distinct.	"The reality of what is actually occurring, conspiracy aside, I can separate my opinions on one from another. My opinions about politics or this and that, might not necessarily have any direct overlap with opinions on conspiracy theories and secret societies."
Cognitive dissonance		Expresses sense of conflict in holding CT and non-CT beliefs. Difficultly in reconciling these beliefs, and discomfort due to their interaction.	"It's looking at the mainstream news and there's a constant lingering sense that everything's a lie. I don't know what is and what isn't, and you're definitely left with that. That's what leads to the more crazy side of conspiracy and the people who believe everything's a lie because you do get a sense of stuff that's so big and so instrumental and so world-changing and you realise it's a lie."
Analogical thinking	Science	Likening a CT belief to a non-CT belief about science; and vice versa.	"Because at the end of the day, the theory of evolution is only a theory. Still only a theory but most people believe it as a fact, don't they? Actually that's more theory than a conspiracy theory because they've got a load more facts on conspiracy theories than Darwin does have on the Theory of Evolution."
	Religion	Likening a CT belief to a non-CT belief about religion; and vice versa.	"So, it's just a process of elimination, I mean what's realistic and what's not. It's like basically when people have a religion and when they get older and they choose what religion they want to believe in or the truth of the power of God or whatever they want to call it, they go through a process of elimination. I guess what most right feels for them, same way with all those conspiracy theories."
	Politics Society	Likening a CT belief to a non-CT belief about politics; and vice versa.	"I mean, there was a whole thing in the '60s like with the homosexuals like using the word 'queer' because 'queer' was a dirty word. But then they start using it more and more themselves, and the more people 'queer, queer, queer,' and suddenly it loses all power. And, the same with conspiracy theorist. People have almost like 'come out' as 'I'm a conspiracy theorist."

Real world	Likening a CT belief to a non-CT belief about some phenomenon, person or object in the real world (e.g. chair); and vice versa.	“Most people are sheep. Sheep they need a shepherd to herd them. So, that’s how I always put it. That’s the analogy I always make of a hierarchical society. Even in the world, there are shepherds, leaders and then they tell, ’yes you’ve got to do this, you’ve got to do this, you’ve got to do this,’ and everybody else does it.”
Media	Likening a CT belief to a non-CT belief about some phenomenon, plot, object or character featured in popular media (e.g. books, films); and vice versa.	“Like the whole Matrix idea that we’re basically like batteries and they’re feeding off our fear, our pain, our emotions. I've done years of research looking at that whole thing and that totally makes sense as well.”

CT = conspiracy theory

Appendix 6 | Belief development data excerpt (Chapter 4)

Appendix

Interviewer: **So, at what stage in life did you develop an interest in conspiracy theories and alternative explanations?**

Participant: Yes, I think I explained this before. That, I suppose from a young age my dad was always aware of this sort of stuff. You know when you get those things through the post that say, 'Look you've won.' And then they'll tell you, 'No you haven't won.' They're just trying to do this—And you soon realise that the world was a bit corrupt and not everything's as straight forward as you think. When you go somewhere and they're like, 'Buy one and get one free.' Or, 'Look dad, I want to do this, I want to go on these rides.' He'll just say, 'It's a capitalist plot to get your money and stuff.' So, you—it's quite a worry at a young age. There were higher powers than you, even if it's just like the person that owns that stall is trying to have one over on you, like at the fair ground. 'Look, I want to throw that loop over that thing.' 'Dad, I want to play that game and win a toy.' 'No, because it won't fit over it.' And you soon realise, 'OK, so there are things in this world that aren't fair and aren't right, aren't just,' and you know from them I've always had an open mind to the fact that everything isn't what it seems. But suppose, yeah that was a childish mind that you know I was aware then. When I was, I think, because we have said this before and I can't remember what I said originally because I kept thinking which was it? Which one was it that really made me think? But I think it might have been the lunar landing one that made me like really start to believe in really, 'Oh my God, this world is corrupt with, you know, the government and higher powers that are making us believe certain things in society and all this. Because when I was a kid, you're told, 'We landed on the moon.' You're told, this, that and the other and you do believe that up to a point. So yeah, at that point when I watched a documentary on that, it made me really think. Yeah.

Interviewer: **Made you think what?**

Participant: That what you believe to be true, told to you in society, probably isn't true at all. Not everything but anything that you could believe to be true, you've got to start questioning. You can't just take it as it is, if you've been told it, even to the point where—you know, anything could—you're told, you have to question everything.

Interviewer: **With the lunar landing?**

Participant: Yeah, well I don't think we did land on the moon.

Interviewer: **OK.**

Participant: Yeah, you know that, I've said it before.

Interviewer: **What happened?**

Participant: It was a space race with America and Russia to see who could land on the moon, who could make it out of orbit and land on the moon. And then obviously America wanted to be the one that's sort of won, so they fabricated a fake lunar landing to get the people thinking that America are the best. And I don't know, they've probably had a million political and other reasons beyond it. But the Russian cosmonauts failed because it was impossible because of the radiation and so many other things that were going wrong. I mean up until the moon landing there were so many things that were going wrong and then suddenly it went right when they apparently landed on the moon. So many evidence that they didn't. The documentary that I watched had so many valid people pointing things out, why it was wrong. You know not just a weird bloke in a room going, 'No, I don't think it was true. I don't think landed on the moon.' It was like scientists saying, 'Hang on, how come, this is this. This, that and the other,' you know. And it's mad that that's considered a conspiracy theory. It's just like a little documentary but yet because society had been brainwashed to just thinking about ourselves, watching the

X-factor and things like that. You know there are a group of people, obviously a lot of people who do believe these so-called conspiracy theories which are actually probably true. But there's a load of people that don't care and that's what government rely on.

Interviewer: **How does the government not rely on … Sorry, rely on these people that don't care?**

Participant: Because then they're the people that believe they are puppet shows when it comes to politics or any decision that they make, those brainwashed, drone type people. And I say drone type, I don't mean that they're necessarily a toilet cleaner. They can still be lawyers and police officers or anything like that. They could be educated, intelligent people but they don't want to believe these things because they are actually just as brainwashed as the other people because they're getting on with their life and working their way up the property ladder, getting an education. The system is so aimed at making us so focused on just trying to drudge through this life and exist. It's impossible for anyone to afford things. Like I said, my little world, that's all I can focus on because that's how they've made me. I know I believe these things exist but what can I do about it? How can I? I've still got to focus on my little world drudging on.

[END OF EXCERPT]

Appendix 7 | Second order Belief development: Themes, coding frame and examples (Chapter 4)

Theme	Subtheme	Definition / Criteria	Examples
Pre-CT belief development	Self-discrepant	Past experiences and descriptions of self before developing an interest in CTs. Portrayed as distinctly different from who they were to become (i.e. alternative self), with typically negative phrasing.	"I was probably more judgemental and more like nervous and emotionally triggered and like emotionally tense and chaotic."
	Self-consistent	Self-attribute described as a positive, personal characteristic, before interest in CTs.	"Before I thought about these things, I was still definitely outside of anyone's average thinking. I was, even as a little child, I was always questioning things."
Early-CT belief development	Conspiracy event	Significant CT event(s) which took their attention, description of their thoughts and feelings at the time, and the appeal of the event. Sources detailed.	"Then as I became older, I met somebody and I questioned society, especially after 9/11. I remember after 9/11, people were like so horrible. And I was like, 'America kind of brought this on themselves. They go around trying to take over lands and stuff and they didn't think someone is going to react?'
	Alternative histories and cosmogonies	Alternative histories and cosmogonies which took their attention, description of their thoughts and feelings at the time, and the appeal of these alternative accounts. New age beliefs (e.g. astrology) and shares significant author(s) or CT text.	"After those documentaries it just led to me really questioning the events of 9/11 and seeing all the holes in the official story. It was just really interesting and that just opened the floodgates of all other conspiracies."

Spiritual experiences	Key spiritual experiences related to their developing CT belief. Description of their thoughts and feelings at the time, and the perceived transformation which occurred. New age beliefs and abilities (e.g. telepathy).	"It was like nourishment—spiritual energy from heaven—which then I felt I was being cared for through my meditation and then it was easy for me to care for other people. And again, it kind of gave me a different level of consciousness. It made me feel that really 'the establishment' didn't really matter and worth because their values didn't really mean anything to me. I felt the values were completely false and I felt that the connection—spiritual connection—that I was getting through meditation was at such a much higher level that it just kind of made total sense for me."
Social issues	Key social issues (e.g. healthcare underfunding) which motivated early in CTs. Description of their thoughts and feelings at the time, and how this led to CT interest. Media sources may be cited.	"Mainly the dominant narrative of politics, status quo, basically. Status quo 'things are like they are because we are for the people.' Mainly that, I always believed that and then I realised, well not realised, well I came to hear other opinions and I was like 'Hang on a minute.' I observed myself and it's not the case how the government and the government aren't as for the good of the money. They are usually in the interest of big corporations to the detriment of healthcare and now I'm in [healthcare] working fulltime, I see that day to day."
Personal trauma	Early traumatic experiences (e.g. ill-health) connected to their interest in CTs. Description of their thoughts and feelings at the time, and how trauma led to CTs. New age beliefs and alternative healing may feature in explanations.	"They [medical doctors] did as little as possible to help. […] I couldn't understand it at all. I really couldn't understand why they would do that. That led me on to reading a lot about pharmaceutical companies, how they influenced journals, why things don't get published and why things do. It kind of took me down a rabbit hole really."

Later-CT belief development *(any time after early-CT experience)*	Research	Later CT experiences characterised by research; description of their thoughts and feelings at the time, and the appeal of these alternative accounts. Topics or CTs events researched. Media sources may be cited.	"And then from there, it just kind of snowballed into other stuff, into other things, the Bush dynasty, Al Qaida, and the CIA, fake drug-running and into the big families—the Rockefellers, Bilderberg's, Rothschilds—and then all the other stuff."
	Self-discovery	Positive changes to self by pursuing interest in CTs. Shares insights about the self (e.g. revising values, goals or disposition), description of their thoughts and feelings at the time.	"What are the characteristics of a really good person? And what are the characteristics of a truly evil person? And by comparing and contrasting the two, it's given me a view of the sort of person that I need to try and become and the sort of person I need to avoid becoming."
	Conspiracist realities	Revised perception of society and outgroup conspirators, during later CT experiences. Views about general aspects and institutions in society (e.g. education, law) and potentially generalised expression of conspiracism.	"I was very into a comedian called Bill Hicks who'd talk a lot about the kind of the Iraq War and the behind-the-scenes things. There's a lot going on around those times about the kind of CIA and things like that and national security councils. And, again, it just made so much sense. Like the idea that the President hasn't got the real power; there's people behind them and behind them. It's just illogical that it wouldn't happen."
	Action	Activism and community-orientated behaviours following CT endorsement. Behaviours aimed at making positive changes to the world.	"I describe myself as a peace activist and parent, and I suppose that really says who I am. Having been a participant in this world in relation to family, working, running a business and all those sort of things, I have spent the last 13, 14 years of my life trying to make a contribution to society and focusing in particularly on the eradication and elimination of war, so I am an odd ball in most people's eyes."

Contrasting narratives	Less CT engagement	Less interest in CTs described (thoughts and feelings at the time). Reasons for the lessened appeal of CTs and not being as engaged with CTs.	"I think it's quite depressing actually. I think you get to a point where you've learnt so much that you don't really need to keep reading, you know."

CT = conspiracy theory

Appendix 8 | Participant information sheet and consent form (Chapter 5)

Ethics was granted by Research Ethics officers in the Department of Psychological and Behavioural Science at the London School of Economics and Political Science.

The information sheet and consent form as presented on Amazon Mechanical Turk are detailed below:

[*Title of project*]

Name of researcher: Matthew Hall

Department of Psychological and Behavioural Science,

London School of Economics and Political Science

Research Subject Information Sheet and Consent Form

Thank you for considering to participate in this study which will take place between August 2019 to January 2020. This information sheet outlines the purpose of the study and provides a description of your involvement and rights as a research subject, if you agree to take part.

Please take time to read the following information.

1. What is the research about?

The objective of this study is to gain an understanding of your views on society, politics and alternative topics. You will be invited to complete an online survey. This survey will feature a range of questions on mainstream, conspiratorial and alternative views. You will be asked for your opinion on historical events, media and government, and some questions on any religious or spiritual beliefs that you might have.

2. Who is doing this research?

The research is conducted by Matthew Hall, a PhD research candidate at the Department of Psychological and Behavioural Science at the London School of Economics (LSE).

Name: Matthew Hall

[Researcher: contact details]

Supervisor: Professor Bradley Franks

[Supervisor: contact details]

The project is being organised and conducted within the Department of Psychological and Behavioural Science at LSE.

This study is funded by a LSE Scholarship and Department of Psychological and Behavioural Science at LSE.

3. Do I have to take part?

It is up to you to decide whether or not to take part. You do not have to take part if you do not want to.

Your participation in this study is completely voluntary. You are free not to participate or to withdraw at any time, for whatever reason.

4. What will participation involve as a research subject?

Your participation as a research subject will involve completing:

1) four screening questions
2) main online survey

A web-link is embedded below for you to access the survey via Qualtrics.

The screening determines whether you are human or robot, and therefore appropriate for the main online survey.

The main online survey involves responding to survey items:

- You will be presented with a statement to read.
- You will then be required to indicate your level of agreement with the statement.
- You can then move on to the next question by clicking on the arrow in the bottom right corner.

You can skip any of the questions you do not want to answer.

The main survey includes [*number*] questions and takes approximately 20 minutes to complete.

Survey completion code and Payment

At the end of the online survey, you will be provided a unique survey code.

You will return to Amazon MTurk and enter your unique survey code to this HIT in order to request your payment of [*payment value*].

One survey submission per worker

The survey should be completed **only once** per worker. If you have completed this survey before, do not continue. For any additional HITs submitted, your work will be rejected and you will not be paid the reward. The survey data for any additional submissions will not be used.

5. Online Platforms for this study: Amazon MTurk and Qualtrics

This study will use Qualtrics to collect your research data and therefore Amazon will not have access to your research data.

Payment for participation is distributed via MTurk corresponding to the MTurk worker IDs.

As with any MTurk HITs, your work can be rejected and this may affect your worker rating. We strive not to reject work unnecessarily.

6. How do I withdraw from the study?

You can withdraw at any point of the survey, without having to give a reason. If you withdraw from the survey, we will not use any information you have given.

7. What will my information be used for?

The anonymised data collected through this survey will be used for a Doctorate thesis in Psychology and feature in associated publications in academic science journals.

8. Will my taking part and my data be kept confidential? Will it be anonymised?

The records from this study will be kept as confidential as possible. The data will be accessed by myself and other researchers involved in this project. Your data will be anonymised – your name / worker ID will not be used in any reports or publications resulting from the study. All digital files and completed surveys will be given codes and stored separately from any names or other direct identification of subjects. Any hard copies of research information will be kept in locked files at all times.

MTurk worker IDs will only be collected for purposes of distributing payments and to avoid research subjects completing the survey more than once.

Limits to confidentiality: confidentiality will be maintained as far as it is possible, unless you tell us something which implies that you or someone you mention might be in significant danger of harm and unable to act for themselves; in this case, we may have to inform the relevant agencies of this, but we would discuss this with you first.

9. Data Protection Privacy Notice

The LSE Research Privacy Policy can be found at: [*weblink*]

The legal basis used to process your personal data will be Students "Legitimate interests". The legal basis used to process special category personal data (e.g. data that reveals racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, health, sex life or sexual orientation, genetic or biometric data) will be for scientific and historical research or statistical purposes.

To request a copy of the data held about you please contact: *[email address]*

10. What if I have a question or complaint?

If you have any questions regarding this study please contact the researcher, Matthew Hall via email: [*email*]

If you have any concerns or complaints regarding the conduct of this research, please contact the LSE Research Governance Manager via email: [*email*]

11. For any contact via email

It is advised that you contact the Requester using Amazon Mechanical Turk platform, however for any requirements to communicate via email messaging, please consider the following:

Details about using email

Transmitting your information by e-mail has a number of risks that you should consider. These include, but are not limited to, the following:

- E-mail can be circulated, forwarded, stored electronically and on paper, and broadcast to unintended recipients.
- E-mail senders can easily misaddress an e-mail.

· Back-up copies of e-mail may exist even after the sender or the recipient has deleted his or her copy.

· Employers and on-line services have a right to inspect e-mail transmitted through their systems.

· E-mail can be intercepted, altered, forwarded, or used without authorization or detection.

· E-mail can be used to introduce viruses into computer systems.

Conditions for the Use of E-mail

· The researcher cannot guarantee but will use reasonable means to maintain security and confidentiality of e-mail information sent and received. You and researcher must consent to the following conditions:

· E-mail is not appropriate for urgent or emergency situations. The researcher cannot guarantee that any particular e-mail will be read and responded to.

· E-mail communications between you and the researcher will be filed in your research record.

· You should not use e-mail for communication regarding sensitive medical information.

E-Mail Instructions

· Avoid use of your employer's computer.

· Put your MTurk worker ID in the body of the e-mail.

· Put the title of project in the subject line.

· Take precautions to preserve personal information and confidentiality of e-mail.

Your choice ...

If you are not happy to take part in this study, do not proceed.

If you are happy to take part in this study, please confirm your consent by clicking, 'Accept.' After accepting, please click on the Survey link to access the survey via Qualtrics. Once the survey is completed, paste the unique survey code in the box below to request payment.

Survey link: *[weblink to Qualtrics survey]*

Appendix 9 | Focus group Procedure and Aims (Chapter 5)

Focus group with six participants conducted in Kent, South England. The focus group informed the development of the Conspiracist Worldview Scale (Chapter 5).

Procedure

Welcome

Typology: Administer original items tailored towards qualitative findings of Franks, Bangerter, Bauer, Hall, & Noort (2017).

Discussion

General measures 1.: Administer Conspiracy Mentality Questionnaire (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013) to see how items examining general conspiracy theory (CT) beliefs are interpreted.

Discussion

General measures 2.: Administer Beliefs in Conspiracy Theories questionnaire (Leman & Cinnirella, 2013) to explore how general CT beliefs are interpreted.

Discussion

Specific measures: Administer selection of items focussing on 9/11 CT (Swami, Chamorro-Premuzic, & Furnham, 2010) to see how items examining specific CT beliefs are interpreted.

Discussion

Self measures: Administer modified version of quest scale by Batson & Schoenrade (1991) – to see how self-development and self-view as they relate to CTs could be potentially explored through a questionnaire format.

Discussion

Open discussion

Aims and key questions

How is each item understood?

What are the preferred response options?

How could certain questions be improved?

Are there any details or questions which are not understood?

Any items which participants would like to see included?

Appendix 9 References

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Appendix 10 | The Conspiracist Worldview Scale and Specific Conspiracist Events and Topics (Chapter 5)

Conspiracist Worldview Scale

The Conspiracist Worldview Scale (CWS) is made up of 22 items. It began with a review of existing conspiracy theory (CT) belief measures, a focus group to assess these measures and novel items, before designing several items towards the qualitative findings of Franks, Bangerter, Bauer, Hall & Noort (2017). Eighty-eight domain general, conspiracy theory beliefs items were entered into an exploratory factor analysis with 22 items emerging, representing five types of conspiracist worldview. The five types are presented as subscales below: Type 2, Type 3, Type 4, Type 5-Alien, and Type 5-Spiritual. In subsequent studies, the measure achieved construct, concurrent, convergent and diagnostic validity.

Type	*Number*	*CWS Items*
Type 2	1	I think that politicians sometimes do not tell us the true motives for their decisions. *[1]
	2	Questioning is the first step to uncovering the truth.
	3	Important things happen in the world which the public is never informed about. *[1]
	4	I keep an open mind that some official accounts released by authorities did not happen as they described.
Type 3	5	I have discussed with others my views on particular conspiracies.
	6	I have raised awareness about at least one conspiracy.
	7	There were periods in my life when I have been interested in particular conspiracies.
	8	There is clear evidence to indicate that certain conspiracies have actually happened.
Type 4	9	I changed how I view the world when I learned who was really in control.
	10	A small, secret group of people is actually in control of the world economy. *[2a]
	11	Elected politicians are just puppets to a secret shadow government.

	12	People are too busy focusing on daily living and work to see that they are being controlled.
	13	I identify with others who recognise that the public is being deceived by hidden elites.
Type 5-Alien	14	One day the truth about extra-terrestrial contact with humans will be common knowledge.
	15	Evidence of extra-terrestrial contact is being concealed from the public. *[2b]
	16	I am interested in understanding the hidden truths about alien contact.
	17	Extra-terrestrials have shaped human history.
	18	My interest in the hidden truths about extra-terrestrials sets me apart from most others.
Type 5-Spiritual	19	My spirituality helps me make sense of the malevolent agendas at work in the world.
	20	Through our spiritual existence, we can challenge the dark energies at work in the world.
	21	I identify with others who are aware of the evil energies in the world.
	22	I am interested in people who speak out against the satanic plans of the evil elites.

CWS = Conspiracist Worldview Scale,
*1 Modified item, originally designed by: Bruder, Haffke, Neave, Nouripanah, and Imhoff (2013),
*2a Originally designed by: Brotherton, French, and French (2013).
*2b Modified item, originally designed by: Brotherton, French, and French (2013).

Specific Conspiracy Theory Events and Topics

The Specific Conspiracist Events and Topics is a measure of specific CT beliefs. The aim was to design a multi-dimensional measure which captured a variety of specific CT beliefs that theoretically converged upon specific CT topics. The scale emerged from a review of existing CT belief measures, leading to a focus group, before designing items towards the qualitative findings of Franks et al. (2017). In total, there were 25 items but only 22 items were used, based upon theoretical congruence and Cronbach's alpha scores as reported in Chapter 5, Study 1B. Eleven items are original and the other 10 from existing measures (with some modifications) which are detailed below.

Topic	*Number*	*Specific CT Items*
September 9/11	1	I identify with others who believe the government lied to us about 9/11.
	2	The US government knew that 9/11 was going to happen and chose not intervene.
	3	I am interested in experts who criticize the official explanations for 9/11.
	4	The World Trade Centre towers were brought down by a controlled demolition. *[1a]
Health	5	Vapor trails left by aircraft are actually chemical agents deliberately sprayed in a government program. *[2]
	6	Cures for certain deadly and common diseases exist, but are being deliberately withheld. *[3a]
	7	Doctors are following orders to administer poisonous vaccines.
	8	Certain chemicals are put in the water supply in order to control people. *[3a]
Technology	9	The American moon landings were faked. *[4]
	10	The scientific consensus on global warming is based on lies and manipulated data.
	11	We cannot trust mainstream science because it is based upon lies.
Government	12	I think that government agencies closely monitor all citizens. *[5]

	13	A powerful and secretive group are planning to eventually rule the world as a one world government. *[6]
	14	President John F. Kennedy was assassinated by the CIA.
Extra-terrestrial	15	NASA is following orders to hide the truth about extra-terrestrials.
	16	Area 51 in Nevada, US, is a secretive military base that contains hidden alien spacecraft. *[1b]
	17	Movies featuring extra-terrestrials are a way of preparing the population for the news that extra-terrestrials are visiting earth. *[3b]
	18	Some existing technologies are the result of reverse engineering alien technology. *[3a]
Spiritual	19	Symbols like the All-Seeing Eye represent the mystical powers of the ruling elite.
	20	Evil elites are trying to harness the powerful lines of energy flowing from ancient sites and landmarks.
	21	The ruling elites can shift into reptilian form.

CT = Conspiracy Theory,
*1a Originally designed by: Swami, Chamorro-Premuzic, & Furnham, A. (2010),
*1b Modified item, originally designed by: Swami et al., (2010); Swami et al., (2011),
*2 Oliver & Wood (2014),
*3a Original item designed by: Brotherton French & Pickering (2013),
*3b Modified item, originally designed by: Brotherton French & Pickering (2013),
*4 Leman & Cinnirella (2013),
*5 Bruder et al. (2013),
*6 Lewandowsky, Gignac, & Oberauer (2013).

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