General Collective Intelligence and the Usefulness of Unprovable Beliefs and Conspiracy Theories

Abstract

Unprovable beliefs or conspiracy theories are often held as needing to be eliminated. However such beliefs or theories can have concrete benefits in certain well-defined contexts. General Collective Intelligence or GCI can potentially maximize the degree to which unprovable beliefs or conspiracy theories are used within the contexts in which they are beneficial, and maximize the degree to which they are avoided in the contexts in which they are harmful.

Background

This paper considers unprovable beliefs and conspiracy theories from the perspective of what is believed by this author to be the first model of cognition with the potential to represent all the functions of human-like intelligence. Being derived from first principles using a functional modeling approach, this model does not refer to earlier work. Since this model is so new, all of the references to this model are the authors own published or unpublished work in the form of pre-prints. Being a functional model independent of implementation, it has also been used to define what is believed by the author to be the first model of Artificial General Intelligence (AGI) with the potential for human-like general problem-solving ability [4], as well as a model for an artificial collective cognition (General Collective Intelligence or GCI [5], [6]) with the potential to exponentially increase human intelligence.

Introduction

Reasoning might be fact based, or might be based on function. As an example of fact-based reasoning, one might base one's spiritual belief on the historical accuracy of claims made in whatever religious text one ascribes to. In this case, any newly discovered passages revealing contradictory information might cause those beliefs to collapse, or might force that information to be hidden or ignored.

On the other hand, one might take a functional approach. The truth of a passage that functions to convey gratitude to a given individual is that it is a grateful message. The truth of a passage that functions to convey forgiveness to a given individual is that it is a forgiving message. If the concept of an individual acts as a uniquely powerful conduit for that message, that individual functions as a messenger. From this perspective, regardless of whether the historicity of that individual's existence can or cannot be proven, the truth of that individual's function as a messenger is indisputable.

This has a graphical interpretation. In the functional model of cognition [1] discussed in this paper, reasoning consists of a path through a "conceptual space", and a problem is defined as the lack of a path between two points in conceptual space. Consider points C_1 and C_2 in conceptual space. These points are connected by some reasoning R_{12} , such that $C_2 = R_{12}(C_1)$. And R_{12} consists of some set of reasoning functions $[F] = [F_1, F_2, F_3]$ such that R_{12} is obtained by executing F_1 , then executing F_2 , and then executing F_3 . Consider also some adjacent points C_1' and C_2' in conceptual space that are connected by reasoning R_{12}' . If reasoning R_{12} depends on facts alone, then the set of reasoning functions $[F]$ will be very different from the set of reasoning functions $[F]'$. If reasoning R_{12} depends on reasoning functions alone however, then the set of reasoning functions $[F]$ will be very similar to the set of reasoning functions $[F]'$.

Function Based Reasoning

Figure 1: The same reasoning functions might be reused in a different region of conceptual space. Using similar reasoning on similar points (nearby starting points in conceptual space), function based reasoning might come up with similar conclusions (nearby ending points in conceptual space).

Fact Based Reasoning

Figure 2: Fact based reasoning might use completely different reasoning in different regions of conceptual space.

Similarly, the facts to any given conspiracy might be unprovable, but the functions assigned to entities within that conspiracy might have utility in allowing an individual to reliably navigate to a conclusion, potentially even a correct one, where no conclusion can be reliably reached otherwise. That is, the reasoning functions within a conspiracy theory trace a path through conceptual space and reliably allow some destination in conceptual space to be reached. Without such reasoning functions, and without information that might never become available, it might be impossible to navigate at all from the current position in conceptual space.

Conspiracy theories might have a tendency to function differently on the political left vs on the political right. Of the two modes of human thought that have been identified [2], this paper proposes that one of the main cognitive distinctions between the political left and political right is that those on the left have a predisposition to use intuitive (type 1) reasoning in topics in which those on the right have a predisposition to use rational methodical (type 2) reasoning [3]. The use of type 1 reasoning might be driven by a conviction that the issues are too complex to be boiled down to any simple reasoning. Left leaning individuals also tend to share some dimensions of personality, tending to be more open and agreeable. Right leaning individuals tend to share other dimensions of personality, tending to be more conscientious.

These personality attributes might impact decision-making style. Anecdotally, those on the left are predisposed to want to be protected by the group. Those on the right are predisposed to want the rights and freedoms required to protect themselves. Accordingly, those on the left are predisposed to want to be protected from being exposed to information that might “trigger” negative emotions, and therefore to want the group to be constrained from expressing opinions that might potentially be triggering.

Anecdotally, those on the right are predisposed to want to have the individual right and freedom to access any information at all, and the freedom to express controversial opinions on sensitive topics.

Individuals on the right might be more prone to beliefs and conspiracy theories that might disparage and exclude some group for what the right considers to be that out-group's objectionable characteristics. Individuals on the left might be more prone to be inclusive of other groups (except for those groups not sharing in-group beliefs), and might be more prone to believe that criteria used as to identify any given in-group are not characteristics that those individuals can choose, and therefore might be more prone to believe that such use of those characteristics is discriminatory.

Conclusions

Unprovable beliefs or conspiracy theories might have useful functions that outweigh their harm in certain contexts, particularly since the disruptive innovation needed to address existential challenges often lies in the unexplored margins, whether in new information or in new reasoning.. While one might attempt to move society to the right or to the left, and therefore away from beliefs or conspiracy theories tilted in the opposite direction from one's own biases, doing so according to any logic possible within the capacity of individual human cognition must be harmful to some subset of individuals to some degree. For this reason, such efforts are misguided, regardless of how well-meaning. However, GCI can significantly expand the reasoning capable of fitting within the collective cognition, creating the capacity to accommodate all biases while moving society to the right or left in each specific context where doing so maximizes collective outcomes. Using GCI to maximize outcomes for all individuals of all cognitive biases is a more optimal solution than achieving beneficial outcomes for some at the expense of oppressing some other subset of society. Particularly since evidence suggests that the unwelcome cognitive biases of those other subsets of society might serve some beneficial function for those with other biases who would eliminate them.

References

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