

# Chapter 42

## The Diffusion of Ignorance in On-Line Communities

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### ABSTRACT

*This article aims to investigate how information-sharing mechanisms in online communities favor activities of ignorance distribution on their platforms, such as fake data, biased beliefs, and inaccurate statements. In brief, the authors claim that online communities provide more ways to connect the users to one another rather than to control the quality of the data they share and receive. This, in turn, diminishes the value of fact-checking mechanisms in online news-consumption. The authors contend that while digital environments can stimulate the interest of groups of students and amateurs in scientific and political topics, the diffusion of false, poor, and un-validated data through digital media contributes to the formation of bubbles of shallow understanding in the digitally informed public. In brief, the present article is a philosophical research that applies the virtual niche construction theory to the cognitive behavior of internet users, as it is described by the current psychological, sociological, and anthropological literature.*

### INTRODUCTION

It is easy to think about online communities<sup>1</sup> focusing only on their role as social aggregators. Someone could argue that social media, particular instances of online communities, are not meant to be places where accurate sharing of information happens because they are just socially based Internet websites for catching up with old flames or sharing what you ate for breakfast. Unfortunately, if that could once be true, now it is just a big oversimplification. Initially, Facebook and other sites were indeed designed as

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personal spaces to gossip and share personal information. Even so, now the amount of news, scientific data and political statements the users share on online platforms should force even the most skeptic person to consider them popular venues for sharing – and for consuming and commenting – external content with one's (actual and virtually extended) network. Recently, the science writer Christie Wilcox (2012, p. 87) went even further, asking scientists to be aware of these new tools for science communication, deeming this effort as “an integral part of conducting and disseminating science in today's world”. Online communities could be powerful instruments for education, but the current diffusion of fake or, at best “oversimplified” scientific reports, political statements, and news in online platforms are the main reasons to consider social networks actual ignorance spreaders. Indeed, online communities distribute misinformation as well as news and high-quality information, and the problem regarding this binary distribution is the lack of epistemological tools the users have to distinguish what is relevant and accurate and what is not (Bessi, Scala, Rossi, Zhang, & Quattrociocchi, 2014). Thus, in this sense, the aim of the paper incorporates also the question “how have social oriented tools developed a mechanism for sharing news and data that can also easily distribute misinformation and hoaxes?”

In the attempt to answer this question, the authors aim at investigating how information-sharing mechanisms<sup>2</sup> in online communities, such as social network websites, newsgroups, forums, and blogs, favor activities of ignorance distribution on their platforms, such as fake data, biased beliefs, and inaccurate statements. Thus, in the first section, the authors will briefly present their research as following the precepts of the recently developed epistemology of ignorance, referring to existent epistemological and moral frameworks (Proctor, 2005; Tuana, 2006; Sullivan & Tuana, 2007; Davies & McGoe, 2012; Pohlhaus, 2012). They will also highlight the research gap that exists in the epistemologies of ignorance, which concerns the diffusion of ignorance through online media. In the second section, the authors will present online communities as virtual cognitive niches following the account provided by Arfini, Bertolotti, & Magnani (2017) and using basic definitions from cognitive niche construction theories, in order to analyze those traits that make online communities particularly apt frameworks for the toleration of ignorance distribution. In the third section, they will argue that the creation and use of online communities as information sources promote biased epistemic judgments over the data the users receive and share. We will underline how this proves to be particularly interesting as far as it concerns online communities because they are engineered not only as to be “fool proof,” but to naturally co-opt the inferential patterns developed by human beings in settings of real-life cognition (as reported by Bertolotti, Arfini, & Magnani (2017)) for instance social cognition and one's natural disposition towards sharing (Simon, 1993). The promotion of biased judgments happens inasmuch as the communication of data is adjusted to meet the interests and motivations of the singular users (who are subject to what Pariser (2011) calls the “filter bubble”). As an example of this phenomenon, the authors will comment the so far unsuccessful but tireless campaign of the UNICEF Social and Civic Media Section (2012) aimed at contrasting the diffusion of anti-vaccine sentiments through East-Europe.

In brief, the present study is a philosophical research, embedded in the theoretical framework of the epistemologies of ignorance, that applies the virtual niche construction theory to the cognitive behavior of internet users, as it is described by the current psychological, sociological, and anthropological literature.

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