

Chapter 10

Cognitive Authority Revisited in Web Social Interaction

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ABSTRACT

Social software is a growing reality worldwide, while the design of systems that promote and keep users' participation and reflect a respect to users' culture and values is still a challenging task. In this chapter, the authors revisit the concept of Cognitive Authority as a means for supporting better social interactions on the Web. To revisit this concept, they draw on the Value Pie: an artifact that favors the analysis and informed discussion about values and culture in social software. In order to situate the discussion in a practical setting, the authors present a case study related to the design of a social network system intended to support the constitution of a network of authorities. The case study shows examples of how values and cultural aspects influence the way a computational feature must be designed to make sense to its users.

INTRODUCTION

Social Software has been regarded as bringing both opportunities and challenges to academy as well as to governmental institutions and private organizations. They have been widely adopted, reaching impressive numbers in terms of users, information produced/shared, and the time users expend on them. There are almost no geographical-cultural-social frontiers in social software adoption.

The impact brought by social software is easily perceived. Users have assumed an important and clear role, regarding not only the production and consumption of content (prosumption), but also regarding the dissemination and the creation of the application itself. Without users, social software is useless, having no value at all. *Facebook*[®], *Twitter*[®], and *Youtube*[®] are well-known examples of applications that have influenced the way people interact and live: from personal relationships to professional activities; from learning and play

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to scientific investigations. Their role during the unrests in countries like Tunisia and Egypt (Economist, 2011) illustrates the impact of Information and Communication Technology (ICT) in the modern society.

However, in spite of the acceptance and popularity of some social software, social implications related to values and cultures are being widely reported and can be easily perceived. Winter (2010) draws attention to the value of privacy in Web applications. Using *Facebook*[®] as an example, he states that privacy issues go from what the application does with users' data to what it allows other applications to do. In another interesting example, Mui (2011) reports how pedophiles were using *Wikipedia*[®] as a medium to both disseminate their ideas and enter in schools, easily reaching the students. Besides the impact on values such as identity, privacy, reputation and security, other issues related to users' participation (motivation, engagement) and the quality of the content produced by them have also demanded attention. These issues are commonly cited by those concerned with ethical issues, as well as by those interested in improving the quality of contents produced by users and the quality of contacts/interactions they experience with each other via the system.

As we have already highlighted (Pereira et al., 2010, 2012a, 2013; Pereira & Baranauskas, 2011), part of the difficulties in promoting and maintaining users' participation in social software and part of the negative side effects they trigger on users are due to the lack of understanding and attention to values and cultural aspects, in their widest sense. Traditionally, social software (and Web applications in general) have been produced and delivered for people's use even without a clear perception of their utility and potential impact. For instance, users have been inadvertently serving as beta testers of applications as well as subjects of implicit behavioral experiments to identify the viability of a resource or product. Privacy policies and terms of use are constantly

changed and updated, many times without users' awareness. Users are often unaware of the actual consequences of their actions when interacting with/via the application (e.g., sharing pictures, leaving comments, recommending information). Accessibility issues are often neglected, making it difficult or even preventing the access of people that do not fit the myth of the "average user." These examples show negligence with the "social" aspects in social software and indicate some important points that must be addressed.

In this chapter, we argue that we must consider the culture and values of people if we want to create applications that make sense to them and are truly social. As social software is all about users interacting with each other, we revisit the concept of Cognitive Authority proposed by Wilson (1983) as a mean for supporting better social interactions in such systems. This concept, however, needs to be understood in the light of a society mediated by Information and Communication Technologies (ICT), and through the lenses of culture and values in social software. We re-exam this concept, and present examples and discussion from a context of a social network where authority as well as identity and confidence are values that must be taken into account.

BACKGROUND

In this section, we introduce the Cognitive Authority theory and present the bases we are using to revisit it in the context of values, culture, and social software.

The Cognitive Authority Theory

Different meanings for the term "authority" are found in disciplines such as Philosophy, Politics, Religion, and Information Science. Originally introduced in social sciences, the term Cognitive Authority (CA) was proposed to explain the kind of authority that influences people's thoughts and

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