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Trust in Online Interaction: An Analysis of the Socio-Psychological Features of Online Communities and User Engagement

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Abstract

This paper is part of the authors' joint project on trust in online interaction, and it contributes to the enhancement of collaborative knowledge environments by advancing our understanding of key socio-psychological features of online communities and user engagement. We first review the history of online communities and user engagement, focusing on the socio-psychological features of trust in online interaction. Next, we discuss the issue of trust with regard to user-generated content and cultural heritage, highlighting the issues of trusting beliefs, trusting intentions, and trust transfer. Finally, we argue that a diachronic understanding of online practices holds the capacity to explain much of what we see online today, and we propose that the power of this digital legacy should particularly be valued and employed in the institutions and contexts promoting and fostering cultural heritage in both traditional and contemporary forms.

Key words: trust; user engagement; Internet; cultural heritage.

1. Introduction

The role of users and user communities in the production of online content has become a hot topic in recent academic and public debate, featuring themes such as social networking, user labor, user co-creation, user-generated content (UGC), social annotation, folksonomies, and the like. As van Dijck [1] points out, "with the emergence of Web 2.0 applications, most prominently UGC platforms, the qualification of 'user' gradually enters the common parlance" (p. 41). In this paper, we show that user engagement and user generated online content have a much longer tradition than the current debate implies, and we argue that a diachronic understanding of online practices holds the capacity to explain much of what we see online today. The idea of engaged users and engaged user communities was in a sense "hard wired" into the very earliest pre-Internet systems, thus providing the basis for what we have today and more importantly, for what we have come to expect and even demand in online systems.

Contemporary notions such as "social Web," "participatory Web," "prousers" and the like obscure the fact that the earliest computer networks had been built as networks of people, not wires, and have always been social and participatory, even before they became the Web. What Web 2.0 has brought is rather the matter of performance than of essence; it has brought easy to use content-creating applications—such as blogs, wikis, social networking sites, and file sharing platforms—rooted in broadband access, affordable hardware and software solutions, and with the Internet perceived and used as a "new normal" in contemporary way of life [2]. Put differently,

Web 2.0 has made visible what has always been there—engaged users and engaged online communities.

2. Trust in Online Communities and User Engagement

The concepts of online communities and user engagement have always been central to the analyses of online interaction, even in the pre-Web days. For example, in their prescient 1968 paper, Licklider and Taylor [3] observed that the very earliest networked computers of their time enabled for formation of communities, noting, in a vision that has become the underlying theme of all research in online community to date, that "[online communities of the future] will be communities not of common location, but of common interest" (pp. 37-38; emphasis in the original). As networked computing moved from the laboratories into universities and the corporate world, researchers such as Hiltz and Turoff [4], Kiesler, Siegel and McGuire [5], and Turkle [6] continued to fine-tune our understandings of the social-psychological features of computer-mediated communication (CMC). And as networked computing moved from internal sites (such as corporations and universities) into the general populace, the study of online communities shifted to a wider range of cases and academic disciplines, providing both optimistic [e.g., 7;8] and pessimistic [e.g., 9;10]) interpretations of online sociality.

Gradually, new dynamics involving trust and credibility of online interaction began to emerge, highlighting the issue of user engagement as an inseparable element of online sociality. For instance, in her comparative study of two online protests, Gurak [11] demonstrated that already in the pre-Web days a large number of users could quickly assemble around an idea of common interest, and, by sharing information and providing user generated content, create an efficient and successful online social action. Baym's [12] work on online soap opera fan clubs and Hine's [13] methodologically-oriented study of online activities surrounding the Louise Woodward case offered additional research-based evidence for the power of user-provided content and online communities, while Bakardjieva [14] showed that users transcended the sphere of personal experience by engaging in collective online practice; she asked why the users did what they did and what it mean to them. The same questions—why do users engage in providing online content and what does it mean to them—have come to the fore in the recent analyses of UGC, such as Baym and Burnett's [15] study of amateur experts' provided online content. This last point is one to which we will return in the next segment, when we discuss the main features of user-generated content, particularly in regard to cultural heritage.

In summary, contemporary online forums facilitate and promote features of online discourse that have been part of online interaction from the outset. The gathering of like-minded people around communities of common interest is key to understanding user engagement in the 21st century. Today's user wants quick, accurate, customizable, smart systems, and they want systems they can trust.

Indeed, all forms of human communication, but particularly online communication, depends heavily on trust. As Seligman [16] has stated, "[t]he existence of trust is an essential component of all enduring social relationships" (p. 13). Drawing upon the work of Luhmann, Seligman

notes the relationship between trust and confidence, the latter based on whether "one can rely or place confidence in the other's words or commitments or acts" (p. 21; emphasis in the original). Trust, in these terms, then, "involves a vulnerability occasioned by some form of ignorance or basic uncertainty as to the other's motives," which Seligman notes as a particularly interesting concept in the Internet age, because of the "fundamental opaqueness toward the will of another" (p. 21). In other words, while trust and confidence in others is a foundational concept in all forms of human communication, it is a particularly interesting one in the digital age. We could not have functioning online communities without trust; indeed in broad terms, trust is "an important dimension of civic culture" [17, p. 14]. And we could not have any level of user engagement without both trust in the system and confidence in the motives of the system itself as well as the motives of other online participants.

Numerous studies and commentaries have been written on the issue of trust in digital environments in relation to issues such as usability [18], e-commerce [19], interface design [20], credibility [21], and other areas. Bailey, Gurak, & Konstan [22] have noted that "[t]rust plays a critical role when a user assesses the believability of online information content or when selecting an exchange site to purchase a product from. Users will not believe or participate in a transaction with those whom they do not trust" (pg. 311). Bailey, Gurak, & Konstan thus define trust as "the perception of the degree to which an exchange partner will fulfill their transactional obligations in situations characterized by risk or uncertainty" (p. 313), and they posit seven dimensions of trust in digital settings: attraction, dynamism, expertness, faith, intentions, localness, and reliability (p. 315).

More applicable to this paper, however, is recent work on trust in digital repositories [23]. Summarizing the literature regarding technical considerations when building a trusted digital repository, Prieto notes issues such as persistent access, content migration, resource discovery, data collection/quality, and so on (p. 596). He also notes the importance of users feeling that the content within a digital repository is itself trustworthy (p. 596). Yet he then makes this point: the role of the digital repository's stakeholders (whether they are referred to collectively as a community or individually as depositors or users) is key to establishing trust. Put another way, he says that "the repository can be trusted because it has been deemed an appropriate place into which content can be contributed or from which content can be retrieved for purposes of research, study, enrichment, or personal enjoyment" (p. 596). Prieto then goes on to describe the kinds of incentives that might need to be put in place in order to move the academic world from trust that is rooted in print to trust in digital repositories (p. 597).

To this end, we feel that user-generated content, a key feature of the Web 2.0 age, would build on the features of online community as well as digital trust, and could be of key importance to online systems designed for cultural heritage in the 21st century.

3. Trust in User-Generated Content and Cultural Heritage

User-generated content refers to online content produced by end-users. Online material is considered user-generated when/if it is publicly available, created outside of professional

settings, and includes a user's creative effort (i.e., the user did not simply copy and paste the content, but rather has added his or her own creative value to it); [24]. The practice of creating and providing user-generated content is usually considered to stem from the following motives: obtaining public acknowledgement; earning peer recognition; building reputation in a community; expressing oneself; developing skills that can become a profession; having fun; sharing knowledge/contributing to a common idea. In the case of UGC related to cultural heritage, sharing knowledge and contributing to a common idea is often seen as key stimuli, although other motives also play the role in this type of user engagement. For instance, both professional and amateur subject specialists are often prompted to contribute specialized local and/or minority content in different languages, and/or to engage in cultural heritage tribute online activities [25].

User-generated content that contributes to the cultural heritage sector is deemed to have both positive and negative aspects. For instance, UGC is often considered to complement and enhance institutionally provided content by offering novel information on specific—often local—cultural phenomena, as well as by offering novel ways of presenting and/or interpreting those phenomena. UGC is also regard as a means of transforming static content authority into dynamic, multisided knowledge platform, which has the capacity to engage the public as an acknowledged knowledge-provider [26, p. 20]. Finally, users' active online engagement with cultural phenomena is considered to have broader implications for the perception of cultural heritage, by fostering understanding of culture as an ongoing process, not as closed, historic experience completed and rooted in the past [25]. However, UGC is also considered to introduce unverified and/or difficult to verify popular knowledge (sometimes called "crowdsourcing") into the cultural heritage domain. Participatory culture prompted by Web 2.0 applications especially raises the question of trusted and reliable content with regard to sensitive multicultural issues and/or issues stirring intercultural debates. Similarly, UGC prompts the question of intellectual property (IP), either in the sense of granting users IP rights over their online creations, or in the sense of insuring that UGC acknowledges authorship of the original source(s) when needed.

Both positive and negative aspects of user-generated cultural heritage content bring us back to the subject of trust, by invoking the issues of trusting beliefs, trusting intentions, and trust transfer [27, p. 21]. While trusting beliefs refers to a person's perception of a certain actor and/or source as trustworthy, trusting intentions encompass a person's willingness to make him or herself vulnerable in accordance with such a perception. With UGC, trusting intentions encompass users' willingness to make themselves vulnerable to cultural information provided by other users. Vulnerability in this case implies exposure to potentially incorrect, incomplete, misleading, biased, or in some other way corrupted content. On such occasions, the issue of trust-transfer often comes to the fore, requiring that the burden of establishing trust be transferred from the user to an external proof source. In case of UGC, the proof source is usually institutional and/or contextual. For instance, if a piece of UGC is provided within the official website of an acknowledged cultural institution, the cognitive mechanism of trust-transfer associates such a piece with the given organization, reassigning the proof burden from the user to the institution. Similarly, if a particular user-generated post is provided within an acknowledged online resource, such as Wikipedia, and/or within an online community known to the post

recipient, the trust-transfer process shifts the proof burden to the given online context. User-generated content thus reflects a complex interplay among users, institutions, and online contexts, or, as Ridge [28] points out, it reflects the issues of sharing authorship and authority with regard to cultural heritage. To address those issues, both the users and the cultural heritage institutions should be empowered to efficiently employ online systems designed for cultural heritage in the digital age. User empowerment in this sense implies providing customizable, smart, and easy to use systems, which enable users to employ their knowledge, creativity, interest and other positive stimuli by creating, sharing, and discussing cultural content. Similarly, institution empowerment implies enabling cultural heritage organizations to employ the power of user engagement, while at the same time avoiding previously mentioned downsides of UGC through sets of relevant procedures [28]. In other words, developing trust both within and among users and institutions is key to empowering these major actors in contemporary processes of cultural production and preservation.

4. Conclusion

Research on digital technology and culture has always made clear that the power and potential of the Internet lies in the unique dynamics and possibilities for online communities and user engagement. Nowhere is this concept of user and communal power more clearly visible than with today's social networking applications and Web 2.0 forms. Contemporary users expect to play an active role in shaping their online experience and want systems that are smart, customizable, and cross traditional boundaries. Consequently, cultural heritage institutions should transcend the "search and access" approach, and in contract should serve as collaborative knowledge environments that promote users actively engaged in creation, modification, and distribution of information objects. To achieve this, cultural heritage institutions have the potential to employ valuable knowledge on user practices harvested in the field of Internet Studies over the past thirty years. While technologies and forms of online interaction have been and will keep changing in a blink of the eye, the main socio-psychological features and dynamics of user engagement have been and most likely will remain rather steady across the platforms and contexts of use. The power of this digital legacy should particularly be valued and employed in the institutions and contexts promoting and fostering cultural heritage in both of its traditional and contemporary forms.

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