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Research-In-Progress on Web 2.0 in the Travel Sector”**

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# From Studying Communities to Focusing on Temporary Collectives: Research-In-Progress on Web 2.0 in the Travel Sector

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## **Abstract**

*In this research-in-progress paper, we suggest that methodology is lagging behind innovation in the Web 2.0 environment. While prior art on virtual communities (VC) provides some helpful coordinates for our study of User-Generated Content (UGC) sites in the travel sector, there are some important conceptual differences between these phenomena that raise methodological challenges. To illustrate this, we identify the dominant methodological approaches in the VC literature and consider their value for studying UGC. Having noted key differences between the virtual community ethnographic tradition and the mainly quantitative UGC literature, we examine the potential of integrating different streams of methods in Web 2.0 studies. We suggest that exploring a broader range of options during the research design process presents opportunities for IS scholars to advance studies of social media such as User-Generated Content and increases our capacity to make significant contributions during this important period of their development.*

**Keywords:** research methodology, virtual communities, Web 2.0, user-generated content

## Introduction

Forms of social media emerging in the Web 2.0 environment open up new horizons for the information systems community and present us with distinctive challenges as researchers. Benkler calls the phenomenon “a deep structural change brought about by the networked information environment” (2006, p.1). Social media, such as User-Generated Content websites, have moved from being a future challenge (Dellarocas 2003) to becoming a substantive current issue for organizations. The uptake of seemingly ingenuous opportunities for everyday people to exchange experiences over the Internet is reconfiguring boundaries and recombining organizational knowledge with far reaching implications for information systems strategy formation.

Web 2.0 is the evolution of broadcasting media to a participatory form where users contribute their knowledge and personal view to a common universal collage simultaneously becoming both designer and publisher. We are witnessing “...the evolution of the web from a read-mostly medium to a read-write, or two-way medium” (Rumgay 2007) [with] “the potential to create arenas for more voices than any other previous communication medium” (Hargittai 2000).

Social media, as the dominant term in the Web 2.0 context suggests, emphasizes the central role of computer-mediated peer-to-peer interaction. Although it may still be regarded as an emerging environment, peer-produced social media has become so pervasive that people refer to the generation of Wikipedia, Facebook, Flickr, Second Life and YouTube without the necessity for further clarification. While User-Generated-Content, known by the acronym UGC, is the subject of everyday conversation few scholars have dissected it as a topic or delved into its methodological demands.

In this paper, we suggest that while social media are proving increasingly influential in the way that people organize themselves and make sense of the world, innovation in research methods is lagging behind. After noting that methodological innovation has been on the research agenda for decades Janowski (2005, p.201) defines it as “the use of original or modification of conventional research approaches, design and methods in the study of new media”. This call along with a call for a methodological dialogue (Thomsen et al. 1998) prompts us to present a systematic analysis of the options available to scholars engaged in Web 2.0 research.

The analysis presented here is part of a programme of doctoral research focusing on how User-Generated-Content websites are involved in personal travel habits. It was inspired by what we suggest is a process of deinstitutionalisation whereby lay people are no longer content to depend upon traditional institutions for information but would rather take up the opportunities offered by Web 2.0 to engage independently with alternative sources of intelligence. The Wikipedia project is an illustrative example of this argument; “while some years ago people would only trust reputable encyclopaedias written by experts acknowledged in their respective fields, now people are also confident in the collaborative work of anonymous contributors” (Cachia et al. 2007). The purpose of the doctoral research-in-progress is to deconstruct the assemblages constituting virtual travel communities or, as we will go on to call them ‘collectives’, and to illuminate how the emergence of UGC has changed the interrelationships and dynamics within a specific sector.

Virtual Communities have been analyzed by a wide variety of disciplines and portrayed as an important, distinctive and sometimes even mysterious social space (Preece and Maloney-Krichmar 2005; Ward 1999). The whole Web 2.0 concept can be considered as a huge virtual community where users can choose the degree of participation and interaction that they want with others. Engaging in social interaction presupposes a sense of community among users who produce information. According to Goffman “the individual is linked to society through two principal social bonds: to collectivities through membership and to other individuals through social relationships” (quoted in Breiger 1988, p.86) which is a proximate simulation of virtual community. In the case of UGC sites the provision and manifestation of both kinds of bonds are met. Therefore, both conceptually and methodologically the virtual community literature presents itself as the appropriate starting point for studies of UGC phenomena and social media in particular.

In addition to its defining characteristic of peer-production, UGC is distinctive because unlike other community forms participants are rarely restricted by any other rules or limitations. On the contrary, it represents a conscious challenge to the imagination and creativity of its participants who may draw upon any form of media ranging from video, wikis, blogs, recommendations, social networking, fora, and message boards. The most important aspect of UGC is on the one hand its dynamic collective intelligence, described by Levy as an “alternative source of media power which will gradually alter the ways commodity culture operates” (Levy 1997), and on the other a collaborative logic that combines to combine a user-generated collage. We will go on to argue that this and other characteristics that differentiate User-Generated Content from other forms of virtual community necessitate the development of methodological innovations if we are to match our research approach to the information systems phenomenon under study. The aim of this research-in-progress paper, therefore, is to contribute to the current state of understanding UGC by systematically analyzing the scholarship in this area and building on this to ground proposals for future research.

## Literature review

In the first part of our literature review, we examine seminal virtual community studies in order to categorize issues that they address and identify dominant methodological approaches. We then move on to examine existing studies of User-Generated Content sites. Because the focus of the research-in-progress is travel habits, the majority of examples will be drawn from this sector.

### *Virtual Communities*

Virtual Communities have drawn the attention of researchers as a socio-technical phenomenon with unique characteristics and become an interdisciplinary concept. In order to examine the features of virtual communities, we return to the origin of the concept and chart its development. The advent of Electronic Data Interchange (EDI) and inter-organisational systems in the mid-1960 represent an important forerunner to virtual communities because they challenged the way that we think about organisational boundaries. The first project based on collective intelligence emerged a decade later; the Electronic Information Exchange System (EIES) developed in 1976 (see Hiltz 1984). The participatory culture was further advanced by Bulletin Board Systems and the Multi-User Dungeons Domain which lent itself to the creation of a second virtual self. Rheingold (1993, p.43) proposed that “virtual communities” were most usefully understood as: “social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace”. Based on this initial definition the research on virtual communities flourished.

Several typologies, frameworks and models have been proposed in an effort to further clarify the concept of a virtual community along with the subtle connotations that the term creates. Early studies, such as Lazar and Preece (1998), “classified virtual communities based upon their attributes, their support software, their relationship to physical communities and their boundlessness” (Plant 2004). Balasubramanian and Mahajan (2001) developed “a conceptual framework that integrates economic and social activity applicable to management and economic leverage”. Ridings et al. 2002 defined virtual communities “as groups of people with common interests and practices that communicate regularly and for some duration in an organised way over the Internet through a common mechanism”. In her interpretative study, Stanoevska-Slabeva (2002) uses a media reference model to develop a typology of: discussion communities; task and goal oriented communities; virtual worlds; and hybrid communities. She extends Ridings et al’s (2002) examination of duration and communication by drawing attention to a sub-category that she calls “implicit discussion communities”. These are recommendation and reputation communities with a distinctly temporary character that might be seen as a forerunner to UGC.

Among the more business-oriented literature, Armstrong and Hagel (1996) categorize virtual communities into communities of transaction, of interest, of fantasy and of relationships. This early categorisation starts to distinguish between communities of relationships which promote intense interpersonal communication and interactions that are temporary and purpose-specific. The majority of research tends to fall in two broad areas of interest: studies focusing on the underlying reasons behind users’ participation, contribution and development of a digital identity (for instance Wasko and Faraj 2000); or analyses questioning whether virtual communities are authentic community forms which focus on the social bonds and dynamics developed among members (for example Figallo 1998 in Dannecker and Lechner 2004). No matter where researchers come from and what their destination is, “[a]lmost all definitions of virtual communities share four components, namely community, location, bonding and shared objective/ purpose” (Gupta et al. 2033). The most relevant theme within the findings of the aforementioned research endeavours for the purposes of studying User-Generated Content relate to the degree of social bonding within the communities under study and we will now examine this more closely.

The crux of the debate surrounding social bonding in the virtual communities literature is whether the dichotomy between virtual and real implies that the virtual is unreal and impoverishes the authenticity of it. Granovetter’s seminal study of “strong” and “weak ties” (1973) in addition to “multiplex ties” which are more “intimate, voluntary, supportive and durable” (Wellman 1988; Wellman & Wortley 1990 in Garton et al 1999, p.80) help shed light on the constitution of a community. Preece takes up this theme and suggests that “Strong tie relationships satisfy important needs and produce closely-knit groups as in family relationships whereas weak tie relationships occur when people do not depend on each other for life supporting resources” (2001). In other words, in a thick community members look beyond personal interests and instead “define their own values in reference to the collective goods”, but in thin communities the “public interest is dependent upon the convergence of personal interests (Bimber 1998).

Katz and Rice (2002, p.117) argue that the heterogeneity of the members of the virtual community cannot be compared with the strong relationships created in an organic one with a unique culture and identity. This may be partially the case, but the development of social relationships cannot be de facto rejected since there is still a reason why the members of the virtual community interact and *communicate*. Van Dijk (2006, p.173) describes this binding force as “an extremely diversified and shifting complex of overlapping similarities and differences, particularly in the

growing number of multicultural societies". Like any social system, virtual communities are an extremely complex phenomenon; indeed, Smith (1998) concludes that cyber-communities must include diversity and find some way to integrate it if they are to thrive" (in Rheingold 1993, p.340). Ellis et al. (2004) note that it is important to distinguish between different approaches to the creation of virtual networks because these lead to different forms of virtual community.

We would argue that not only is it our scholarly responsibility to recognize the diversity of virtual community forms emerging, but also to explore a range of methodological approaches in order to find the most appropriate way to pursue the distinctive research questions that they raise. So far ethnography has been the most widely used research design for studying virtual communities starting with Rheingold and "WELL" (the Whole World 'Lectronic Link'). Rich descriptions followed aiming to explain "both individuals and collective behaviour within online communities" (Preece 2001) and to identify social structures from within the phenomena (e.g. Baym 1995; Bruckman 1992; Curtis 1997; Hine 2005; Markham 1998; Mnookin 1996; Paccagnella 1997). The ethnographic approach is well fitted to the primary purpose of these studies which is to make sense of the emerging digital selves that members of a community develop, the relationships that they form, and their code of communication.

Although they are conducted using a predominance of (if not exclusively) on-line data, proponents of virtual ethnography argue that this does not undermine the quality and depth of the "thick description" generated: "Just because a researcher does not have to physically travel to a site, they still have to "case the scene", create a strategy for entering, engage the culture, create a strategy of "watching" and "listening" via text..." (Schatzman and Strauss 1973 in Thomsen et al. 1998). The researcher has to develop alternative vocabulary to the one applied in traditional ethnography to be able to immerse themselves in the contexts. Wittel (2000) describes ethnographic practice as "attendance and co-presence of the ethnographer and the observed social situation", where co-presence is not so much a strict prerequisite but rather can be regarded in multiple ways that encompass more flexible definition of a research setting.

As a general principle, choice of method should be appropriate to an explicit research goal; "the method and the phenomenon should define one another in a relationship of mutual dependence", as Hine (2005, p.8) puts it. While ethnography has become the core research methodology in virtual community research, other approaches have also been developed with specific research questions in mind. For example, De Souza and Preece (2004) use semiotic theory to present a theoretically-based online community framework. Their use of semiotic theory focuses on an analysis of interactions in a real time communication system (MSN Messenger) and enables them to develop an analytic tool called online community framework (OCF) to identify "sociability" and "usability" within the online community. Scholars working within the Communities of Practice field, which bares some similarities to virtual communities, as Davenport and Hall (2002) note, have used participatory action research strategies to analyze communities that span conventional organisational and geographical boundaries.

The theoretical lens applied in many of these studies ranges from discourse analysis, conversation analysis and genre analysis. All of these can broadly be grouped as forms of linguistic and semantic analysis and sometimes as forms of "ethnography of communication" when researchers investigate the communicative habits of the community as a whole" (Hymes 1964). Some of these habits may only be captured by gathering visual data and "techniques for visualising activity in online communities have also been developed" (e.g. Erickson et al. 1999; Sack 2000; Smith and Fiore 2001; Viegas and Donath 1999 in Preece 2001).

In an effort to move away from categories in existing literature, Plant (2004) adopts a grounded-theoretic approach inspired by an exploratory single case study enriched with ethnographic principles (see Rothaermel and Sugiyama 2001). He categorizes examples of existing virtual communities according to his proposed model of virtual community space. This method fits with his goals to generate grounded categories that capture a shifting social form and is well suited to a research area in which the scholarly agenda is developing in response to changes in an emergent field of study.

Social Network Analysis has been used by several researchers (e.g Barnett and Richards 1993; Wellmann, et al. 1996; Wellmann and Berkowitz 1988; Wasserman and Faust 1994) as a "broad intellectual approach" to identify patterns of relationships. Howard (2002) critiques this body of work saying that Social Network Analysis does not answer why these patterns are socially significant: "social network analysis may be an excellent means of testing the expanse of cultural norms, but not of uncovering and identifying culture in the first place". Therefore he proposes a variation of ethnography, "network ethnography" as a combination of ethnography and social network analysis which gives the advantage of "striking a balance between macro-structure and technological or organizational determinism on the one hand, and micro-agency of the social construction of culture on the other" (Howard, 2002). Andrews et al. (2003) address a gamut of methodological concerns related to electronic survey in the context of a virtual community followed by an online case study to unmask the reasons why free-riders who do not contribute to the community, known as "lurkers", behave in this way. Of particular note, in this study is the movement between qualitative and quantitative methods which serve the different foci within the study at different stages.

All these interesting either mainstream or alternative research designs and methods are by no means exhaustive of the infinite magnitude of virtual communities' literature but give an overall sense of the direction that research methods have taken. A key point that has emerged from our review of this literature is that mainstream virtual communities are characterised by strong ties and bonding among the members which frequently leads to the development of authentic relationships. However that is not the case in the Web 2.0 and UGC context. In the next sub-section, we distinguish between studies on virtual communities and key features of UGC sites which we refer to as "virtual collectives" in the Web 2.0 environment.

### ***Virtual collectives***

Having established that all virtual communities are not the same, and that User-Generated Content sites cannot be approached using the more general model of a virtual community, we now need to clarify where UGC falls within this spectrum. The term community and its derivations *comunitate* and *co(m)munité* incorporate a sense of fellowship and strong relational bonds (Plant 2004) are at odds with the temporal patterns of interaction through UGC. Users of UGC tend to drop-in on an as-needed basis making their sense of connection to the site temporary and 'purpose-full'. This suggests that we need a clear conceptual and methodological distinction between these virtual phenomena. Romm et al. (1997) pre-empted the emergence of loci through which participants find value in transient on-line encounters by noting that "many communities qualify as ephemeral ones". This is a fundamental point for our discussion in this research-in-progress paper. To this end, we examine the landscape of online virtual collectives, present examples from the UGC literature, and call for scholars to consider an expanded range of methodological approaches to enrich the research undertaken in this area.

Cooke and Buckley (2008) suggest that UGC are not simply a novel information systems phenomenon for us to study but "a new opportunity for us to utilise as a research community". If we rise to this call, then we must open up our methodological tool box and challenge ourselves to craft approaches that capture the increasing turn to virtual collectives as social information hubs. Although we maintain that information sharing itself "is fundamentally a social act" (Elis et al. 2004), participants in virtual collectives enter and leave as strangers. The interaction that takes place is part of a broader sense-making process and while social processes are at work the primary motivation is not socialisation. For example, in virtual communities members may be pursuing a project of identity on-line (either by enriching an on-going biographical interest or nurturing a second-self), whereas in the case of travellers who visit UGC sites they are using them as resources for the construction of an externally enacted lifestyle. In other words, maintaining the social capital that sustains the community is not the primary driver for UGC which serves a different agenda: extending capability for alternative, trusted peer intelligence. UGC becomes fodder for and reproduces a form of 'social epistemology' for those who draw upon them.

In addition to information-sharing UGC websites, transaction-based sites like auction spaces can be considered as virtual collectives, where once again users enter and leave after completing their situation specific goal. While research on information sharing UGC is mostly in pipeline, there is a relatively prolific literature about on-line auctions and feedback mechanisms. The latter has been dominated by quantitative approaches such as game theory (Dellarocas 2003) field experiments (Resnick et al. 2006; Yang and Chen 2008), the development of aggregate reputation models (Wood et al. 2003), and building models using transactional data (Dellarocas 2004; Houser and Wooders 2006; Resnick and Zeckhauser 2002; Zacharia et al. 2000). Although the analysis of market interaction and business transactions lend themselves to quantitative analyses, it can be argued that "since homogeneous groups do not exist, methodologies relying on statistical metrics to uncover them will not work" (Ozcan, 2004, p.142) because heterogeneity among the users contributing to virtual collectives of all sectors is one basic characteristic. We return here to the acknowledgement above, that interaction on UGC may be transient but it is nonetheless infused with projects of social identity and sense-making that overflows most macro quantitative models. In our example of the traveller using a UGC site, such as TripAdvisor or IgoUgo, the user dismisses narratives if they regard them as pitted with unfamiliar prejudices and turn instead to those that resonate with them, in other words they search for narratives from 'people like them' whether this be young professionals, green travellers, particular ethnic groups, or youth hostellers.

Moving to academic literature focusing on the travel sector itself, there is a confusing tension between the concepts used and the research designs employed. Although most authors claim to base their studies upon definitions in the literature that centre on thick community, their research designs rest upon methods such as on-line surveys to test hypotheses (for instance Kim et al. 2004). Similarly, in Wang et al.'s (2002) study of virtual travel communities they emphasise "the personal investment, intimacy and commitment" of participants that reflect the existence of strong ties but their descriptive analysis concludes by presenting communities in a relatively narrow way as a cost-effective marketing tool. In a continuation of that study, Wang and Fenenmaier (2004) conducted a survey and analysed it with the use of structural equation modelling to propose and evaluate a model of relationships and interactions within a travel "community".

Our conclusion is that the majority of e-tourism research treats User-Generated Content sites as if they were conventional virtual communities. However, as Lindlof and Schatzer (1998) point out, “when members can easily come and go, when many members do not even post, and when identities cannot be verified beyond the current situation, the power of a community ethos maybe weakened considerably”. Under these circumstances, either the conceptualisation of virtual travel spaces as “communities” needs to be reconsidered or if we acknowledge that they are real communities the research designs have to be developed accordingly. Research towards both directions is presented below.

If we move away from the virtual community model and consider related research streams, we find that scholars in other areas of the social sciences are viewing the UGC phenomenon as a form of electronic word-of-mouth. Of particular note here are studies on web-based consumer-opinion platforms (such as Brown and Reingen 1987; Buttle 1998; Haywood 1989; Litvin et al. 2008.) where research questions tend to centre on reputational issues, transaction value, and business models. Research methods tend to be mostly quantitative using on-line survey data (e.g. Hennig-Thurau et al. 2004) and sampling (e.g. Greun et al. 2006) with a few studies turning to depth interviews (e.g. Schindler and Bickart 2004). Among these authors, Litvin et al. (2008) acknowledge the necessity to “devise new methods to study online interpersonal influence” in their descriptive analysis of the electronic word-of-mouth in the travel industry. Although the range of research methods is somewhat narrow at present, the electronic word-of-mouth literature may prove useful in the future work of scholars seeking an alternative way of conceptualizing UGC because it emphasises the informational character of the temporary virtual collective in a way that creates distance from conventional themes in the virtual community discourse.

Our examination of the User-Generated Content phenomenon suggests that there are different types of communities with different characteristics. The research methodologies employed at present tend to be polarised between quantitative and qualitative with an often ill-fitted conceptual treatment of the virtual. In the next section, we will discuss the potential of other methods, including mixed methods more closely and make some suggestions regarding the appropriate fit between particular approaches and the most significant research questions that arise in the UGC area.

## **Research Designs for studying virtual collectives**

The movement from virtual communities to virtual collectives presents itself as an opportunity to explore the adoption of different research designs. In this section, we make two propositions: firstly, we consider how virtual ethnography might be extended in ways that acknowledge the difference between perennial virtual communities and temporary virtual collectives. Secondly, we attempt to transcend tired stereotypes in which qualitative methods are categorized as interpretive and quantitative methods are seen as rigidly positivist by exploring the integration of methods in research designs for particular research questions in the UGC topic area.

Since there have been such significant advances in the field of virtual ethnography it makes sense to review developments in this area first. Virtual ethnography is a self-referencing methodology that is being constantly reconstructed according to the situation and the participants by its proponents. In this spirit, Stockdale and Borovicka (2006) develop an analysis of how travel businesses can use online resources to develop interaction with customers using a research method developed by colleagues in marketing research called “Netnography” (Kozinets 2002). Underpinned by a familiar social constructivist position which is interested in the reproduction of society rather than measuring or making binary true/false judgements, net-ographers observe the textual discourse that characterizes on-line interaction. Drawing on methodological advice from Harrison and Stephen (1999), Stockdale and Borovicka (2006) use netnography to make a subtle shift in focus in which “emphasis of data collection is moved from the perspectives of the initiators and users of the website in favour of...“what is online” from the perspective of the users experience. This may be a helpful way to focus studies where the research question centres of understanding the role that UGC plays in the habits of travellers and incidents such as flaming (incidents of controversy associated with deliberately hostile postings on a website), however it raises a further set of issues because UGC researchers have to problematise the notion of “user”. Unlike virtual communities, the generation of UGC is not the sole project of specialist initiators and dedicated users, but has a high proportion of transient relevance to those who ‘drop in’ on a temporary basis.

Wittel (2000) offers a potentially innovative way for ethnographers to overcome this by proposing a multi-sited approach, conducted in a network; “the multi- sited network ethnography neither searches for deep dimensions within a culture, nor for hidden layers of meaning, instead culture is created in the area of the “in between”, it is a dynamic process (Wittel 2000). In his monograph he centres upon historical observations and interprets incidents based on the literature of ethnographic approaches to illustrate that ethnography is undergoing structural and methodological changes. Multi-sited virtual ethnographies hold particular value for research questions concerned with examining threads of User-Generated Content and analysing how this becomes appropriated by vendors either as part of their reputation-making, market intelligence gathering, or other strategy formation

processes. The notion of multiplicity that Wittel emphasises in this method is one that UGC researchers must grapple with.

Whereas virtual communities tend to be by definition bounded in membership, virtual collectives are colonised by multiple interests. In the travel sector this ranges from: traveller-contributors; read-only customers-in-the-making; responsive vendors; marketers that pepper the sites with tactically placed 'net-verts'; UGC site administrators; and professionals in the sector (hoteliers, Online Travel Agents) who audit the sites. This diffuses the term "user" in a challenging way for the researcher. At first glance, this ecology of stakeholder relationships seems to lend itself to an Actor-Network Theory approach, a research method that is conspicuous by its absence in current UGC research. From this perspective, the UGC would constitute a 'flat world' brought into existence through the instantiation and enactment of multiple relational ties. The analyses of interests influencing the manifestation of the virtual collective are important, but with an information systems phenomenon that is by definition unbounded as a consequence of its transient membership (unlike virtual communities) ANT may exacerbate the challenges faced in scoping the scale of studies. Further issues arise because the methods associated with both virtual ethnography and ANT are longitudinal which are ill-suited to the study of ephemeral collectives unless the research question is interested in the broader trajectory of discourse on UGC. If not, researchers need to give careful consideration to establishing a databank of case-worthy "moments of interest" (Hosein 2002).

Having noted above the issues limiting the effectiveness of economic, ethnographic, and ANT research methods we consider the potential of mixed methods approaches to ameliorate the challenges facing scholars of UGC. As early as 1998, Thomsen et al. called for additional methodological dialogue in the context of virtual communities and it was from these authors that the suggestion of a multi-method employing qualitative interviews alongside descriptive and inferential analyses of message content first emerged.

It is commonplace for methodological texts to suggest that qualitative research may be used to establish the agenda for subsequent quantitative analysis. Since the more conventional approach to this has been well documented elsewhere (see Yin 2003), we will not repeat it here. Of more interest to us are research designs that overcome the tendency to position qualitative research in a predominantly preparatory role and find value in a complementary blend of both. Indeed, we would argue that as information systems phenomena become less distinguishable as separate entities consciously drawn together into a socio-technical ensemble and more commonly experienced as a seamless fusion of technology with social practice, we will be drawn increasingly to explore mixed method based research design. For example, as IS researchers attempt to render domains such as UGC available for analysis, traditional approaches such as intensive field case studies and population surveys may be joined by less commonly pursued quantitative analyses of usage data patterns and click streams to map sense-making habits.

If we hope to understand how this connects with specific profiles and individual biographical projects our research design will have to blend our analysis of patterns in this data with the qualitative methods that we have discussed above. In addition to netnography, "moments of interest" (Hosein 2002) and multi-sited virtual ethnography other methods used by professional researchers in this topic area such as on-line focus groups and video-analysis lend themselves to further exploration. In general, "focus groups can be seen and used as simulations of everyday discourses and conversations or as a quasi-naturalistic method for studying the generation of social representations or social knowledge in general (Lunt and Livingstone in Flick 2006, p.199). On-line focus groups have particular practical advantages compared to traditional ones. Using video analysis can be an answer to the contemporary equivalent to participant observation in the virtual ethnography. Although many of these methodological approaches (and their combination) are in the process of on-going development they present us considerable potential for areas such as UGC.

To achieve methodological innovation in information systems research, we suggest that discourse perpetuating a quantitative/ qualitative dichotomy has to be transcended. As we have seen in the discussion above, UGC is a reflexive and dynamic area which encourages the integration of research methods whenever appropriate to the research question. In the end "it is not a methodological choice, but a choice of what has to be studied" (Holliday 2007, p.17).

## **Conclusion**

Web 2.0 is evolving rapidly and its study should be synchronized with contemporary tendencies and requirements of information systems methodology. Despite the increasing social and economic impact of UGC, the range of research methods used to study them in the current literature appears notably limited. Social media and UGC are dynamic phenomena emerging at such a pace that it is difficult to corral them too closely; they represent a mosaic of different spaces with particular methodological requirements. In this research-in-progress paper, we have suggested that developments in virtual ethnography alongside creative quantitative approaches broaden the methodological horizons in this area of study and help to demystify virtual collectives in the contemporary society. As Coffey and Atkinson remind us: "Whatever research strategy is being followed, research problem, research design, data collection methods and analytic approaches should all be part of an overall methodological approach and should all



imply one another" (1996, p.11). However, these potential innovations in research design present opportunities for IS scholars to advance studies of social media and make significant contributions during this important period of their development. Researchers interested in the study of contemporary phenomena such as UGC can select the most appropriate "colour" from the methodological palette proposed here and adjust their "picture" according to the broader epistemological and ontological nature of the study.

Finally, although word length precludes further discussion here, we propose that the theoretical lens used to craft methodology for research about the UGC phenomenon needs further development which we suggest might better support innovation in research method. If we hope to identify relevant and exciting research questions that we can develop into appropriate research designs we must advance the theoretical lenses available our topic of study: virtual collectives. As Ward (1999) puts it: "The inclusive yet fragile state of the virtual aggregation does not make it any less of a community; on the contrary it suggests that our understanding of community is changing".

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