Relational ontologies, power relations and media convergence

JULIE CUPPLES
Department of Geography
University of Canterbury
Email: julie.cupples@canterbury.ac.nz

My interest in this field of intellectual endeavour is situated at the intersection of geography and media and cultural studies. In particular, I am interested in the ways in which digital social networks and other convergent media, including Google Earth, Facebook and Twitter, are shaping everyday experiences of space and place in dynamic and complex ways and the potential of these technologies for forging social transformation and new modes of cultural citizenship, particularly among marginalized populations in the global South and elsewhere.

The development of media geography (geography's engagement with media and cultural studies) and the spatial turn within media and cultural studies potentially enable the two most vibrant subdisciplines of geography, namely critical cultural geography, on the one hand, and GIS and geospatial technologies, on the other, to find points of intersection and areas of mutual collaboration. A growing body of literature by a number of scholars including Crampton, Dodge, Goodchild, Graham, Kitchin, Sui, Kwan, and Zook attests to this development. The theoretical barriers to such collaboration are also well documented and geographers have highlighted the influence of different philosophical traditions and understandings of the concept of ontology. I would like to contribute three main themes that I feel are pertinent in terms of developing interdisciplinary research on the spatio-temporal constraints of social networks.

Social networks are actor-networks. It is important to consider the difficulties which arise when social networks are modelled using techniques developed to model infrastructural or biological networks. The complex, dynamic and shifting spatialities of social networks are potentially less amenable to algorithmic calculation. This is a particularly difficult problem given that the media effects argument (i.e., the idea that media have measurable and therefore predictable effects) has been deeply challenged. Media "effects" if they exist are also multidirectional, with users shaping media just as media shape users. Similarly, distance and proximity are themselves relational outcomes without any fixed and measurable status. Even if distance and proximity can be measured in minutes or kilometres, these measurements usually matter less than the level of connectivity. Social networks should therefore be understood as actor-networks in which outcomes, including distance and proximity, are relational and therefore often unpredictable. How can we account for the (sudden) enrolment of new actants? How can we account for the moments in which media consumers suddenly become media producers? How could computer models account for the fluidity and dynamism of user

driven creativity which constantly creates new limitations or disrupts old ones? What might GIScience, in its attempts to understand the spatio-temporal constraints of social networks, look like if it started to move towards relational and non-essentialist ontologies, embracing the insights from STS and ANT?

Social networks are embedded in power relations. The new media environment and the development of digital social networks are clearly providing new forms of connectivity which overcome to some extent the constraints posed by time and space. It is clear that convergent media technologies such as YouTube, Twitter, Facebook, Google Earth and cell phones are being used in socially and politically transformative ways in many places and by a range of differentially situated users, including people who are socially and economically marginalized or who are working to contest marginalization (e.g., indigenous peoples, immigrant communities, disenfranchised voters, civil society organizations in the global south). Users are however constrained by a range of proprietary regimes, the digital divide, affordability and access to the technology, the rapidity of technological change and the ways in which information can be lost and buried in the Web 2.0 environment and thus lose or fail to gain social or political effectivity. In part, this unevenness comes about because digital social networks, like any social networks, are embedded in complex and shifting relations of power, shaped by gender, class, race/ethnicity, geographic location, and access to technology, which are necessarily contested. Furthermore, while new media technologies facilitate new possibilities for connection and social transformation, they also facilitate new modes of surveillance and monitoring that are not always benign. The disciplines of geography and anthropology have recently been subject to substantial controversy, given the growing linkages between military geospatial applications and geographic and anthropological research (human terrain mapping, the controversies surrounding the Bowman expeditions). So how do we gain understanding of the spatial-temporal constraints of social networks while remaining cognizant of shifting power relations? Could a more topological approach enable us to get to grips with the power relations of social networks?

Digital social networks exist in a convergent media environment. Digital social networks (the Internet, GIS) are converging with other media in complex ways. On the one hand, the digital social networks which form for example around "old" media such as television drama show many similarities and continuities with the face to face discussions which prior to the Web 2.0 environment took place in workplaces and other sites of everyday face-to-face interaction, although they take place across vastly enlarged spatial and temporal frames. On the other, phenomena such as reader-generated visualizations and mash-ups, which find their way into established newspapers' online content have dramatically transformed the ways in which we read and use "newspapers." Both of these convergent media forms clearly overcome a

number of spatial and temporal constraints in that people can participate over much larger time-spaces, can do so with a range of media platforms (Internet, television, cell phones, radio etc), can interact with a greater number and diversity of people, and leave digital traces of themselves over time which others might pick up in important ways. Consequently, the interactions become less fleeting and the network potentially more robust and resilient. While crowd-sourced data are sometimes used by media corporations to enhance profits, media content becomes more user driven and is potentially more resonant with the social, political and cultural investments in such media by users/viewer participants. However, the Web 2.0 environment creates its own constraints and limitations, which include the fragmentation of the media environment (a phenomenon that co-exists with media convergence) and the potential excess of information that users face. How might the concept of media convergence inform the debates which are under discussion at this meeting? What are the points of connection and distinction between the concepts of media convergence and meta-network? How might the established scholarship in media and cultural studies on media convergence and on everyday life inform our understandings of the spatio-temporal constraints in social networks?