

A Geographic Conceptual Framework for Understanding the Spatio-Temporal Constraints on Social Networks

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In much the same way as web search engines provide instant access to the retrospective web of previously crawled and indexed content, rapidly expanding social computing services are a catalyst for what is known as the prospective web, with constantly modified real-time content that reflects the current activity of the web's participants. As an integral part of the prospective web, social media is quickly becoming social sensors that broadcast signals at both individual and societal levels. The explosive growth and diffusions of locative social media and the spatial turn in media studies, coupled with the communicational turn in geography, are providing us a golden opportunity to study social media and social networking from geographic perspectives. As the first step, I am interested in contributing a geographic conceptual framework for understanding spatio-temporal constraints on social networks. This framework will be developed by synthesizing the insights gained from the spatial turn in media studies (Falkheimer, and Jansson, 2006) and the communicational turn in geography (Adams, 2009).

For this workshop, I have made the initial attempt to piece together such a comprehensive framework (Figure 1). This synthetic framework is influenced by Gregory's (1994) earlier writings and Adams' (2009) recent effort to synthesize the literature. Embedded in our framework are a myriad of ideas developed by both geographers and scholars in other disciplines. Page limit makes it impossible to elaborate the framework in detail, but it suffices to highlight the key components that can shed light on many of issues stated in the workshop call for papers.

Following Adams' (2009) lead, I argue that geographic studies on the new social media should incorporate perspectives of space & place (the horizontal dimension of Figure 1) and coding/representation and spatial organization (the vertical dimension of Figure 1). As Sack (1980) and Casey (1998) have so cogently argued, conceptualizations of space and place have a rich history and do not lend themselves for easy summary. According to Tuan (1977), space has often been associated by geographers with freedom, movement, distance, potential, and abstraction whereas place often implies confinement, stability, proximity, meaning, and the concrete. In the context of media and communication, Adams (2009) argues for the dual process of both space-making and place-making—pace implies patterns, flows, and ideals of public life while place implies territory, daily routines, and ideals of personal identity & privacy.

According to this framework, space, place, and media are mutually constituted, as Adams (2009) observed that "without space and place as the (a) priori frameworks for

experience communication is meaningless, yet without communication we would not be able to conceive of space and place (p. 5).” The double Mobius strip at the center of the figure is used to signify the mutual constitution among space, place, and media. When media is examined from both space and place perspectives, four core set of themes can be raised, i.e., media in spaces (I), spaces in media (II), places in media (III), and media in places (IV).

According to the preliminary framework, the dialectical relationship between media and spaces is examined via the relational view and processes of transduction. The relationship between places and media is studied via the performative view and the processes of structuration. Spaces and places in media are socially integrated via a diverse scheme of coding and representation which can be linked to co-presence in time and space that contributes to time-space compression and routinization. Media in spaces and places are technically integrated via absence in time and space that leads to time-space distantiation. This is a hybrid framework because space and place serve both as the container (providing the context for social media, top half of the figure) and the contained (produced by the content of social media, bottom half of the figure).

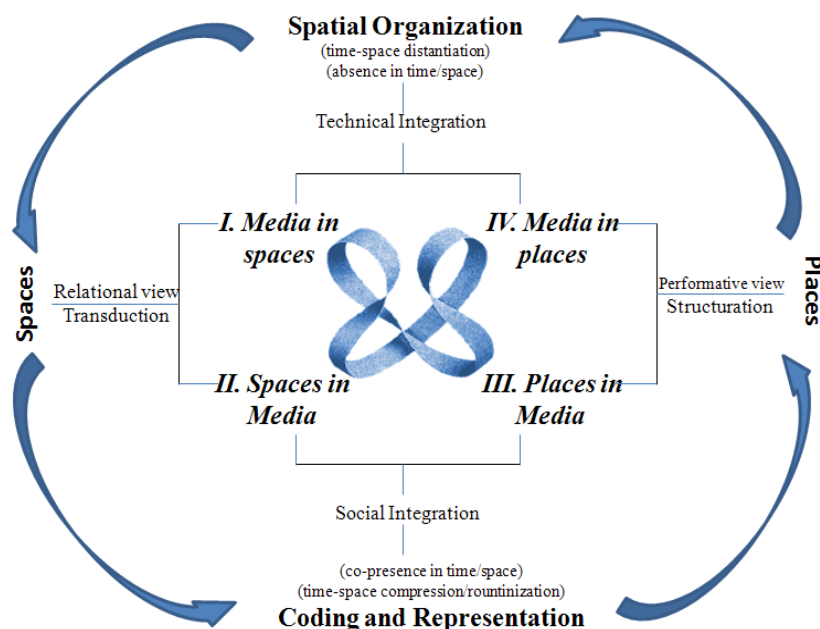


Figure 1. Conceptual framework for studying geographies of social media [Developed based upon synthesis and expansion of ideas in Adams (2009) and Gregory (1994)]

References Cited

- Adams, P.C. 2009. *Geographies of Media and Communication*. New York: Wiley-Blackwell.
- Casey, E.S., 1998. *The fate of place: A philosophical history*. Berkeley, CA.: University of California Press.
- Falkheimer, J. and A. Jansson eds. 2006. *Geographies of communication: The spatial turn in media studies*. Göteborg: Nordicom.
- Gregory, D. 1994. *Geographical Imaginations*. Malden, MA.: Blackwell.
- Sack, R.D. 1980. *Conceptions of space in social thought: a geographic perspective*. Minneapolis, MN.: University of Minnesota Press.
- Tuan, Y.-F. 1997. *Space and place: The perspective of experience*. Minneapolis: University of Minnesota Press.