Chapter 3.15
Like a Poke on Facebook Emergent Semantics in Location-Aware Social Network Services

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ABSTRACT

Location-aware social network services are set to be the next generation of social networking services. These services typically allow users to send and receive messages and icons. Iconic signs, which look like what they represent, may be said to have a commonly understood meaning attached to them. However, this is fluid, leaving them open to variation in meaning. More precise meanings are free to emerge within specific contexts and within particular social networks. Within this chapter the authors explore the semantics that emerge for three icons used within a location-aware social network service. Using Systemic Functional Linguistics (SFL), focus is given to the dominant speech function attached to each icon and the resultant meanings that emerge within social networks of the systems users. This study allows the authors to better understand how users interact with each other in smart spaces and utilise location information in social network services. By understanding how icons are used to engage others and how the meanings attached to these icons develop, the authors are better placed to create systems that fit naturally and beneficially into the users' context.

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INTRODUCTION

Social network services have received a tremendous amount of attention in recent years. Internet-based services such as Facebook, MySpace and LinkedIn have recently emerged and quickly become

an integrated part of many people's lives. Most of these services connect people to other people through the use of more or less stable profiles, which each user has to fill in and maintain. In addition, recently people's position has been an important parameter. Either explicitly stated by the user in services such as Twitter or Facebook, or directly sensed though location-based services such as Google's Latitude. These location-aware social network services are predicted to be the next generation of social network services.

Social network systems that link people to people and people to geographical places are referred to as P3 systems (Jones & Grandhi, 2005). P3 systems are divided into two different types: people-centered and place-centered. People-centered systems typically use absolute user location or proximity. Place-centered systems typically employ either physical or virtual places as their representation. A simple example of a people-centered system is one where a user has a contact list, and the contacts show up in different colors, such as green, yellow and red, depending on proximity.

One of the features on many digital communication channels is the use of iconic signs. The most notable of these are 'emoticons' which are typically 'smilies' or graphic representations of facial expression. Icons in digital communication are used to reflect the sender's mood or tone of communication. Yet, icons are also used as a means of conveying information about one's availability. The most obvious example of the former is the ironic-smiley (;-)), and for the latter is the availability traffic light known from instant messaging. As an example, Skog (2009) reports on a survey among 560 Norwegian users of Facebook aged between 15 and 30 years. She demonstrates that 90% use emoticons when communicating.

The work presented here investigates the use of iconic signs to mediate social interaction and interpersonal relationships. This case study revolves around the FindMyFriends project, which is a place-centred location-aware social-network service. The use of iconic signs in FindMyFriends is investigated by using the SFL notions of speech function and context to examine the language structures and emergent semantics of interaction in smart spaces. Systemic Functional Linguistics (SFL) has a stratal representation of language comprising context, semantics, lexicogrammar and expression, where each of these both constructs and construes each other (Halliday & Matthiessen, 2004). Meaning then is represented both as a strata of language and as emergent from patterns of realisation across all strata making it a complex systems solution to meaning making.

Importantly for the current purposes, Systemic Functional Linguistics (SFL) is also a social semiotic theory that sets out from the assumption that humans are social beings that are inclined to interact (Halliday, 1978). We can think of semiotics as a perspective, looking at anything from the point of view of how it generates meaning (Halliday, 1978; Eco, 1984). This results in viewing all behaviour, and indeed all artefacts and even the environment itself, as potentially meaning bearing (Fawcett, 1992). However, as Hasan suggests, "despite overlaps, what can be said through the verbal code is not coextensive with what can be said through the gazing code or the gesture code or the code of dress" (Hasan, 1980). Each code carries distinct representational capacities. While language has the capacity to transcend the present, gesture or gaze need some sort of temporal proximity even if this is mediated by technology. It can be argued that these codes, and in particular gaze, are heavily oriented towards interpersonal meanings (Hasan, 1980). To see the significance of gesture to interpersonal meaning making, it is only necessary to consider the attempts at iconic representation of gesture in the form of emoticons.

Variation in semantic potential is not new; after all, Bernstein's (1971) studies showed that individuals do not share the same meaning potential. Not having equal access to the full range of meanings in a code is distinct however from the code itself having a limited potential. Individuals