Analysing technological affordances of online interactions using conversation analysis

Joanne Meredith *

Directorate of Psychology and Public Health, University of Salford Manchester, United Kingdom

Abstract

The use of conversation analysis (CA) as a method for analysing the interactional practices of online communication has been growing in recent years (Giles et al., 2015). A key challenge for analysing online communication is the varied platforms through which interaction can occur. This paper demonstrates how using CA and the concept of affordances (Hutchby, 2001) can provide a lens through which to analyse not only the interaction, but also the technological context of that interaction. A corpus of instant messaging chats, captured from Facebook chat using screen-capture software, is used as a case study to demonstrate how the concept of affordances can be used alongside CA analysis to address the role of technology in the interaction. Two key interactional practices – turn adjacency and openings – are analysed to show the insights that CA can offer for providing an in-depth analysis of online interaction. By using affordances as a lens through which CA analysis can be refracted, scholars using 'digital CA' can better develop an understanding of patterns of interaction across different interactional platforms.
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1. Introduction

The study of online interaction using conversation analysis (CA) has grown in recent years (Giles et al., 2015). This 'digital' CA does not focus just on the topic of online interaction, but also addresses the interactional norms, dynamics and practices which have arisen online (Giles et al., 2015). Studies of online interaction which use CA have been categorised according to their main aims (Paulus et al., 2016). The first type of study tends to compare face-to-face interaction with online talk (e.g., Meredith, 2014; Garcia and Jacobs, 1999). In other words, this research analyses online interaction and compares it with findings from studies of spoken interaction. The second category of research aims to understand how online talk is coherent to participants, most prominently focusing on disrupted turn adjacency (e.g., Berglund, 2009). A third type of research aims to understand how participants deal with trouble in talk; in other words, it focuses on repair (e.g., Schönfeldt and Golato, 2003; Meredith and Stokoe, 2014). The final category of research focuses on how participants accomplish social actions in asynchronous environments (e.g., Paulus and Lester, 2013; Stommel and Koole, 2010). Paulus et al. (2016) note that articles which fall into this latter category often use discursive psychology, but draw upon CA in order to understand broader social practices in online interaction.

Despite this growing literature which uses digital CA, the field is still in its infancy when compared to spoken CA, and there are still methodological questions to be addressed. One question relates to the extent to which spoken CA findings should be used in the analysis of online interaction (Greiffenhagen and Watson, 2005). For example, there is an issue in

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* Correspondence to: Directorate of Psychology and Public Health, C810 Allerton Building, University of Salford, Greater Manchester M6 6PU, United Kingdom.

E-mail address: j.m.meredith@salford.ac.uk.

online interaction with presuming, as CA does, that communication is linear, because in online communication there are often issues with sequential disruption (Herring, 1999). A second question is how to take account of the technological context. In spoken CA the interactional context should be demonstrably relevant to the participants themselves (Sidnell, 2011). This means that the analyst should be able to demonstrate that the fact that the talk is conducted in a particular setting has consequences ''for the shape, form, trajectory, content, or character of the interaction'' (Schegloff, 1991, p. 53). For digital CA we can re-purpose this argument to suggest it is necessary to demonstrate that the fact that the interaction occurs on a particular technological platform has consequences for the shape, form, trajectory or character of the interaction.

In order to examine the role of technology in interaction, the concept of 'affordances' can be drawn upon. This concept was first developed by Gibson (1979) within the field of psychology of perception. For Gibson, an affordance refers to the possibilities that any object offers for action. This does not mean that an object does not have particular properties; however, these properties only emerge through interaction between actors and those objects. The way in which an actor interacts with an object is not, though, only related to its physical properties but also to social norms and rules (Gibson, 1979). Norman (1988) further developed this notion of affordances in relation to human–computer interaction. Norman similarly noted that an affordance should not be understood as a property, but rather as a relationship. He argues that an affordance is not a static feature of an object, but rather whether an affordance exists depends entirely upon the relationship between the actor and the property. The concept of affordances allows for the possibility that the practices of online interaction are not determined by the technology, but rather by how an actor *uses* that technology. Affordances are not static features of technology, but are features that can be seen by users as having a number of potential actions associated with them. Therefore, an affordance exists once a user has perceived it and perceived the potential actions associated with it.

Hutchby (2001) drew on the concept of affordances when analysing technologized interaction using CA. As both Gibson and Norman did, Hutchby argued that features of technology can both afford and constrain the interactional potential (Hutchby, 2001), but that using the concept of affordances allowed us to move away from both technological determinism and social constructionism in the analysis of technologized interaction. Therefore, the concept of affordances allows for an analysis of online interaction, which also demonstrates how the interaction orients to particular technological features. The concept of affordances has been used alongside CA in analysing interaction of multi-party chat rooms (Hutchby, 2001), mobile telephones (Hutchby and Barnett, 2005), text messaging (Hutchby and Tanna, 2008) and video messaging (Rintel, 2013). There have been limited studies which have discussed the affordances of one-to-one private instant messaging. However, a recent study by Stommel and te Molder (2015) considered the notion of affordances in relation to one-to-one online counselling sessions. They noted that the affordances of an interaction – in their case a pre-screening questionnaire – may in fact hinder the interaction, due to the interactional norms which may become relevant to the interaction. In other words, they highlighted a potentially unexpected relationship between the technology and how the interaction unfolded.

In this article, I demonstrate an analysis of instant messaging interaction using CA and viewed through the lens of affordances. I aim to show how this method of analysis allows for an in-depth understanding of the technological and interactional context of instant messaging interaction.

2. Methods

2.1. Data collection

The data in this article come from interactions conducted via Facebook chat, the instant messaging service on the social networking site Facebook. The data were collected in 2011–2012, when Facebook chat could only be used for instant messaging rather than as private messaging. At the time of data collection, the chat facility on Facebook appeared at the bottom of a user's profile page and allowed them to talk to their friends 'in real time' The chats collected are one-to-one interactions, where both participants have to be online at the same time in order to interact, with each user typing their message in the 'message construction' box (see Fig. 1). The person to whom they are chatting cannot see what is being written here. However, if the co-participant is writing, a small writing icon will appear next to their name as in Fig. 1. Once a message is sent it appears in the chat window and is visible to *both* participants.

2.2. Participants

Four participants were recruited through advertising to students in lectures at the author's university. These participants all collected chat logs of their Facebook chats. In addition, screen-capture software was used by participants to record their screens while they were conducting their chats. This method for collecting data for a conversation analytic study is used relatively rarely, but allows the analyst to have access to the real-time unfolding of the interaction. Once the participants had recorded their chats they returned the screen-capture and log files to the author on DVD. Informed