The Microanalysis of Online Data: The next stage

1. Introduction

MOOD, the international and interdisciplinary network of scholars who study the Microanalysis of Online Data, came into being at Loughborough University's Discourse-Communication-Conversation conference in 2012. The three editors of this special issue found themselves presenting papers on the same challenges of applying established analytic methods to new and emerging forms of digital communication. After an initial workshop at Radboud University in early 2013, the network has held an event each year, and the papers in this issue represent the broad range of issues that are covered at MOOD symposia. We feature studies of dynamic, multimodal environments such as twitch.tv and Soundcloud (Recktenwald, Reed), platforms such as Wikipedia where data are in continuous evolution (Gredel), explorations of the specific affordances of digital media such as hyperlinks (Stommel et al.), and other contexts where the negotiation between different media cause particular problems for methods that assume the fundamental properties of offline talk.

As more researchers in the social sciences and humanities are turning to digital phenomena as their substantive objects of interest, it is becoming increasingly clear that traditional methods of inquiry need considerable adjustment to fully understand the kinds of interaction that are taking place in online environments. Indeed, the *Journal of Pragmatics* has already published two special issues on this broad topic: 'Participation framework revisited: (New) media and their audiences/users' (Gerhardt, Eisenlauer & Frobenius, vol.72, 2014) and 'The Pragmatics of Textual Participation in the Social Media' (Bou-Franch & Garces-Conejo Blitvich, vol.73, 2014).

The 'new' of new media is in parentheses in Gerhardt et al's (2014) collection because its focus is on media communication frameworks in general, applying earlier work by Goffman and Levinson to a range of contexts where communication takes place (or is assumed) between media producers and their audiences. Likewise, many of the papers in Bou-Franch and Garces-Conejo Blitvich (2014) take a 'participation framework' perspective to new media, typically those media (such as YouTube) which resemble more closely the broadcast format of one-way communication. Here too, Goffman is the principal source for much of the analysis. There is also a wide range of methods featured in both special issues, including (quantitative and qualitative) corpus-based analyses, interviews and ethnographic studies.

While both collections of articles make important contributions to the literature on language use in online communication, their focus is somewhat different from the present issue. Here, most contributors adopt a conversation analytic perspective on online communication in general, typically in environments which afford direct interaction between members, which includes fairly well-established platforms like Facebook and text-based chat software as well as recent, more visually complex media such as Wikipedia and Soundcloud.

Much of the research presented in this current issue has relevance for what has been called 'multimodal interaction', also the topic of a recent special issue of the *Journal of Pragmatics*: 'Conversation Analytic Studies of Multimodal Interaction' (Deppermann, vol.46, 2013). The editor of

this particular issue saw multimodal analysis as an essential step in the evolution of conversation analysis (CA) if the discipline were to fulfill its aim of 'a comprehensive understanding of human interaction and…the practices by which social interaction is produced' (ibid, p. 2). For example, the application of CA to video recording has incorporated analysis of relevant embodied interaction alongside the verbal record (Goodwin, 2000). This kind of additional data has required a degree of adaptation of traditional CA methods in order that researchers become 'sensitive to the properties of the material surroundings' (Deppermann, 2013, p. 4). To cite just one example of how this presents challenges for traditional CA, a 'turn' may not necessarily be verbal, or even linear, once we have access to the visual record of embodied gestures and gaze orientation. In line with such insights, the scope of pragmatics as a research domain has been widened beyond the verbal/ linguistic level of communication. Many of the insights of multimodal interaction are relevant to the complex online environments studied in the present issue and the authors have drawn on similar concepts (such as 'lamination') in order to understand the social action produced in online media.

More recently still, the journal *Research on Language and Social Interaction* has published a special issue on mediated interaction (Arminen, Licoppe and Spagnoli, 2016), which critiques some of the earlier approaches to technology-based communication as rooted in a "deficiency" paradigm, whereby face-to-face communication is held up as an ideal. The authors also argue against a dualistic approach that aims to separate social interaction from technology use. Both of these arguments are endorsed by the contributors to the current issue and are very much at the heart of the ideas articulated within MOOD.

A position paper arising from the MOOD workshops (Giles et al, 2015) argued in favour of a 'bespoke' approach to methodological development for understanding social interaction mediated by digital technologies, underlining the importance of research design that respects the diversity of online data types. This paper was not a blueprint for method as such but a discussion of the various challenges that online data pose for established methods such as conversation analysis. At present there are still relatively few published studies that adopt the perspective of MOOD and our goal with this special issue is to present analytic examples of different data types and the kinds of research topic it is equipped to deal with.

In particular, the focus is on the challenges facing researchers using conversation analysis to study interactional phenomena which resemble spoken conversation but differ in several quite significant ways, not least because in many cases the primary data are visual (or written/typed) rather than auditory. While this might seem to make transcription unnecessary, the complexity of the online environments studied here (especially the multimodal platforms) make transcription – and the presentation of data – central concerns for researchers.

2. The papers in the special issue

At this point, we will briefly introduce each of the papers in sequential order before returning to a more general discussion of the themes covered in the special issue. The issue opens with **Meredith**'s analysis of the various affordances available to users of Facebook's chat facility; which of these are taken up, and which ones overlooked. **Stommel**, **Paulus and Atkins** explore the specific affordance of the hyperlink and how it is used by service providers and users of two different chat facilities, one

belonging to a campus library and the other an alcohol and drug information service. **Recktenwald** then discusses the challenges posed by information-rich multimodal environments, specifically the multi-channel gaming website *twitch.tv*, focusing specifically on transcription issues. **Reed** examines a similarly complex multimodal data source, the music-sharing site *Soundcloud*, where listeners are able to comment on sound files uploaded by composers and performers. **Gredel**'s focus is on the user-created online encyclopedia Wikipedia, whose archived text enables the researcher to examine the incremental creation, and continuous negotiation, of 'knowledge'; whereas previous contributors have taken a broad CA standpoint on their respective environments, Gredel introduces a Foucauldian perspective, an unusual application in this literature. Finally, a more conventional CA treatment to online data is applied by **Balaman** and **Sert**, drawing on the work of Goodwin (2013) to consider knowledge co-construction in an online informal learning activity that required students to co-ordinate several media while solving riddles set by the instructor.

3. Themes covered in the special issue

3.1 Transcription

Most of the papers grapple with the issues posed by the need to transcribe data from a variety of sources – text (which may include both asynchronous and synchronous text), visual, auditory, or simultaneous relevant action such as game events. For **Meredith**, the challenge concerns the insertion of writing activities alongside standard textual communication and integrating these using Jefferson conventions, e.g. where participant A's writing is overlapping with participant B's text entry. Transcribing the multiple channels of information in twitch.tv is a central concern of **Recktenwald**'s paper, where he argues for the inclusion of 'game events' because these help analysis by explaining other data (such as player's reactions that may be otherwise ambiguous). Verbal data arrives in two streams (online chat, as in type, as well as the live-stream of articulations by the gamer). Here, the primary concern is the distance to which the transcript takes analyst and readers away from the authentic data.

Concerns around authentic data capture are salient for most researchers of digital culture, though not a new one: qualitative researchers have always had to confront the fact that any transcript of recorded interview data is effectively the 'bastard' production of the researcher (Kvale, 1996). **Recktenwald**'s validity criteria are that the transcript should at least be an accurate account of events which is sufficiently clear for the analysis to be evaluated by the reader, echoing recent concerns elsewhere about not '[overwhelming] the reader with useless details' (Arminen et al., 2016). This is particularly important when the 'authentic' data are hard to access, such as the chat studied by **Stommel** et al. (reviewers asked to see screen capture, but this was simply not possible, the researchers having to rely on text logs). However, the development of coding software that allows direct access to video recordings raises the question as to whether transcription is necessary at all, especially for research reports in online publications that can link readers directly to the authentic data.

Another issue for transcription of online interaction is how to represent *time* in environments where information is not always received at the same time that it is generated. What looks on transcript like synchronous communication may have an asynchronous history (as in **Meredith**'s study of the

Facebook chat facility, where both interactants are, unbeknown to each other, simultaneously constructing their next turn). Does receipt of message have to (co-)occur simultaneously for it to count as truly 'synchronous'? **Recktenwald** describes his chat channel as 'quasi-synchronous' because the player only receives the messages between 8 and 15 seconds after their transmission. This leads us to query the relevance which the synchronous/asynchronous distinction deriving from computer-mediated communication (Walther, 1996) holds for complex digital cultures.

3.2 Limits of CA

'Adjacency pairs' make sense when studying linear talk in real time, but when dealing with archived data, data gathered from several channels (e.g. twitch.tv), adjacency becomes a matter of interpretation. Which is The Next Turn? We can either treat the next turn as the property of the author (who interprets their turn as the next one, even if they are beaten to it by a rival author), or the analyst (who identifies a given turn as the next one, usually on the basis of timestamp or other contextual information). **Meredith** takes the former approach, exploring the ways in which participants in Facebook chat make sense of the non-linear receipt of information, displaying a preference for 'maintaining contiguity'.

At the same time there are elements of traditional CA that are relatively easy to adapt in online research. **Stommel** et al.'s study of service-focused chat found that several aspects of traditional CA were useful in understanding the social action of encounters between service providers and clients: turn-taking, overall structural organisation, sequence organisation, turn design and lexical choice are all relevant for understanding this particular type of environment. Nevertheless, hyperlinks exchanged in these encounters pose a challenge to traditional CA concepts. Even less obvious analogies can be made between offline talk and online activity, such as Meredith's description of the 'chat starter' as a 'summons' akin to the ringtone of the telephone. Online interaction creates new textual forms that need to be interpreted by communicators, such as emojis: these lie beyond the scope of traditional CA and it is tempting to treat them as para-linguistic (i.e. as analogous to facial expressions). These seem to be just as capable of effecting changes in the state of the interaction, and can add supplemental information that alters the face value of the text: for instance, in **Recktenwald**'s study the text 'well done' conveys a quite different message when paired with an 'embarrassed' emoji.

3.3 The need for context: the role of affordances

Online researchers are obliged by editors and readers to provide a full description of the technological environment (unless very familiar, such as Facebook and Twitter – but even here some technical aspects may not be recognised by the reader). This is important culturally as well as methodologically – this is not just timeless, universal 'talk' reconfigured by a computer, but new social environments with unique characteristics that afford new ways of interacting. In many respects the affordances of the (landline) telephone posed the same challenges for emergent CA researchers in the 1960s (e.g., Schegloff, 1968) – the only difference is that the telephone had been almost universally adopted in US society when CA began. CA researchers, nevertheless, felt obliged to develop a whole new set of rules to explain how telephone communication worked. While this was done largely in the interest of applying these rules more generally, they were unable to avoid

treating phone calls (with a summons, opening/closing sequences and so on) as a special case of communication. A new set of rules was subsequently required to deal with the unique affordances of the mobile phone (Hutchby, 2014). We need to do this for each different environment into which we take our analytic toolbox.

Meredith introduces an important point into the discussion of affordances, namely: at what point do we interpret a feature of a medium as an affordance? Is the affordance a feature of the environment identified at the point of design (where it is perceived by the manufacturer as an affordance) or does a feature only become an affordance at the point of use (where it is perceived by the user as an affordance)? This might seem an obvious distinction, but one that is often overlooked in studies of technological affordances. Most researchers take something of a midway point, arguing that affordances emerge out of the interplay between technologies and their users (e.g., Hutchby, 2001). So the 'writing icon' that was designed as a *potential* affordance in Facebook chat is not, claims Meredith, actually taken up as such by its users.

Stommel et al.'s study of hyperlinks in service-focused chat considers a different usage of affordances. Here, the affordance may be used by one party in the chat environment (the service provider) but not by the other (the client). The former sends the latter a hyperlink as an informational resource. Although this is an affordance at first sight, the link actually confronts the client with the dilemma to navigate to and read the linked information or to postpone this and evaluate the link later. Checking the link after the chat session means the client is unable to ask follow up questions when the link does not provide what he/she looked for. Immediate navigation is beneficial when it results in collaborate navigation between professional and client, but it may also create long pauses between posts, leaving the professional in uncertainty about the client's engagement with the chat session. So, the original Gibsonian theory, where an affordance only comes into being when it is perceived as such – stairs only afford climbing for those with the requisite action capability – should be nuanced when it comes to linking: the hyperlink is effectively an affordance in some cases, but not always.

The issue of social affordances has received relatively little attention from researchers of online communication. How we identify these depends very much on the focus of our research, but both **Reed** and **Recktenwald**'s studies draw us into studying the interaction between individuals who are conspicuously unequal in terms of their social capital (at least within the environment concerned). Sometimes this is measured in terms of quantitative information (how many followers a member has); otherwise it may be a reflection of the status within the medium. Soundcloud users are following the creative productions of named individuals who have the elevated status of artists; twitch.tv users may all be game players, but some are more popular and successful than others. These social contexts will shape the interaction and cannot be ignored.

Gredel's study of evolving interaction in Wikipedia draws our attention to a different affordance of many online environments: the access to a visible record of interaction. In her case the visible record concerns the continuous editing of documents, many of which have a contentious or politically sensitive nature, leading to the phenomenon of 'warring' where respective editors take turns to amend an encyclopaedic entry to suit their own ideologically-slanted version of events. This revision

of history is only partially successful, though, because the 'warring' traces are left behind for all to see.

3.4 The need for additional theoretical/analytical tools

Although CA acts as a methodological touchstone for most of the authors in the special issue, the challenges discussed so far mean that it is often not enough to fully understand the nature of online interaction, and additional theory and analysis is required.

As in the earlier special issues mentioned at the start of the Introduction, Goffman's work has proved to be a valuable resource for authors studying the communication practices in new media, and both **Reed** and **Balaman and Sert** draw on the concept of 'lamination' to explain the layers of interaction in complex multimodal environments. Reed's analysis of Soundcloud is also informed by 'remix culture' (Lessig, 2008) – here, an intellectual framework for understanding and analysing a multimodal environment where content is transferred from one medium to another (e.g. sound converted into a visual display).

Epistemics are a central concern in much contemporary CA research, and **Balaman and Sert** focus specifically on this aspect of the interaction in their study of student co-construction of knowledge on a university website. Finding the right answer to the quiz items in their assignment required the students to use their institutional task interface to switch from one medium (e.g. visible chat on Google Hangouts) to others, such as Wikipedia and Twitter, and the authors explore how these various media contribute to the changing epistemic status of the participants. In a similar vein, **Recktenwald** introduces the concept of pivoting, where an identifiable 'turning point' in interaction changes the focus of the interaction in a way that changes the state of the interaction (e.g. a pun in a joke that creates ambiguity). In his study, where users of twitch.tv are often engaged in largely phatic communication while nothing much is happening in the game, the pivot is an event in a game that switches the interactants' attention away from whatever they were discussing towards the game itself. At other times the change of state might be represented by a sudden (and otherwise unexplained) alteration of the pitch or volume of the player's voice, or a pause (while focusing attention on the gameplay) or a shift in posture (as she turns towards the monitor in order to read the chat text). Similarly, **Stommel** et al. bring in Goffman's concept of focused versus unfocused interaction to understand clients clicking on links and thus temporarily disengaging from the chat session, but returning later.

Finally, **Gredel**'s study of Wikipedia co-construction takes the unusual step of applying a Foucauldian genealogical perspective to the practice of microanalysis. The Foucauldian style of discourse analysis has previously been considered antithetical to CA (although see Wetherell, 1998 for an attempted synthesis), the archival nature of much online data forces us to revisit some of these schisms. Where the data consist of a textual document unfolding over time, adding new layers and (visibly) editing out previous content, the genealogical approach becomes complementary to the microanalytic goals of interpreting specific episodes of interaction. As with all the papers in this collection, it articulates the need for a methodologically pluralistic outlook in understanding the complex interpretative world of digital culture.

3.5 Conclusion

The MOOD network continues to organise workshops, symposiums and panels on at least a yearly basis. We hope that the research showcased in this special issue captures the diversity and timeliness of our broad project and demonstrates the need for a context-sensitive approach to methodology in this rapidly-changing field. At a time when many believe that only 'big data' can offer solutions to the challenges posed by the sheer quantity of digital communication, we argue that understanding digital culture requires in-depth and piecemeal scrutiny to complement the insights of data mining, visualisation and quantitative corpus analysis. Above all, the microanalysis of online data can provide detailed insights into the nature of the actual interaction that takes place in online environments, and ultimately, the impact of those environments on social interaction itself.

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