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Multimodal meaning making: Navigational acts in online speaking tasks

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ABSTRACT

Intentionally clicking screen-based navigational resources can be one way in which learners exercise agency in online tasks by making choices and acting on them. Because such navigational acts require learners to be initiators and responders of navigational resources, possibilities may exist for meaning making beyond the lingual. However, the meaning making potential of navigational resources and the impact on task processes have received little attention in Second Language Acquisition research. This case study explored how learners across three peer-to-peer, online spoken interaction tasks carried out navigational acts using an audioconferencing tool. The analysis employed Multimodal (inter) actional analysis, a Computer Mediated Discourse analytical perspective and incorporated learners' explicit mention of resources on the screen in order to 'track' their trajectories during task process. Results suggest that depending on different case trajectories, learners orally negotiated navigational acts as part of meta-modal talk, or navigated in ways whereby this oral negotiation was eliminated from talk in the target language. Furthermore, technological tool-use was also negotiated physically, underscoring the importance of learner roles as tool users or managers and the non-verbal meaning making emerging from this process. Implications for task design and language learning in online spoken interaction tasks are discussed.

1. Introduction

Carrying out navigational acts, understood as learners' intentional actions for navigational purposes, such as clicking a screen-based navigational resource, can form part of how language learners exercise their agency because they can make choices and act on these choices in online tasks. Navigation can be defined as "the process of determining and maintaining a course or trajectory from one place to another" (Gallistel, 1990, p. 35). The ability to maintain a trajectory is a core component of the process involved in approaching a destination (Ferretti, Adornetti, Cosentino, & Marini, 2013) and goal achievement. Therefore, navigation implies learners making choices about how to achieve particular goals and learners' actions based on those choices are needed in order to maintain the trajectory for goal achievement, understood as task completion. To maintain a trajectory, learners also need to control navigational possibilities. Learners' choices and intentional actions not

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only can shape task outcomes (Knight, Barberà, & Appel, 2017) but also conceivably offer ways for learners to shape the task process as well as the non-verbal meaning that may emerge from this scenario.

Parallel to this scenario is the fact that digital tools that facilitate computer-mediated communication (henceforth CMC) are expanding in range and complexity. For example, through tools such as Skype, Google Hangout and Webbex, learners may communicate through audio, video and/or text whilst also carrying out navigational acts (e.g. click on a hyperlink or screen-based navigational resource that moves the task on in some way). This scenario conceivably reflects an "ever expanding semiotic budget" (Blin & Jalkanen, 2014, p. 150) whereby learners can be 'semiotic initiators and responders' (Coffin & Donohue, 2014) not only with language as a semiotic resource but also with navigational screen-based resources (e.g. a button for accepting an invite from another participant to connect).

Navigational screen-based resources, when considered as forming part of all the semiotic resources learners have at their disposal during a task, may have what van Leeuwen calls 'meaning potential' Van Leeuwen (2004, p.3). However, their meaning potential realised through learners' choices and related actions and their effect on spoken interaction, have received little attention in Second Language Acquisition research (henceforth SLA). Whilst a dominant conceptualisation of meaning making during task processes has been studied through the notion of 'negotiation for meaning' (henceforth NfM) some argue that the term is problematic because of its dominance and narrow focus that has led to an omission of other understandings (Block, 2003). Furthermore, the term 'Negotiation for Meaning' has been applied to purely verbal meaning making over non-verbal, highlighting 'the lingual bias' (Block, 2013) in the field. However, the presence of navigational screen-based resources in tasks and the acts that learners can carry out using them can be another way in which learners might negotiate meaning. For example, a navigational resource may be designed to move learners forward but learners may use it to go backwards and therefore resignify its original purpose/meaning.

In this study, we seek to explore non-verbal meaning negotiation that pertains to navigational acts. In order to advance our understanding of non-verbal meaning making and to gain insight into how navigational acts may also be shaping spoken interaction in online language learning environments, we use a multimodal perspective. This perspective has the aim of encompassing some of the complexity of all the layers and modes involved in meaning creation (Calvo-Ferrer, Melchor-Couto, & Jauregui, 2016). It signals a shift away from a purely linguistic approach to meaning making. Greater insight into screen-based navigational resources as having meaning making potential and their relationship with online spoken interaction may inform future task and/or tool design for task-based synchronous CMC (henceforth SCMC) whereby navigational screen-based resources play a prominent role in learners' experience(s).

Throughout the paper we use the term 'navigational resources' in place of 'screen-based navigational resources' for the sake of expediency.

2. Theoretical framework

2.1. Learner agency, computer-assisted language learning and tasks

Without learner agency, navigation cannot take place as part of the mediation process. Agency is understood in this study as "the capability of individual human beings to make choices and act on these choices in a way that makes a difference in their lives" (Martin, 2004, p. 135) and is used over the more common definition "the socioculturally mediated capacity to act" (Ahearn, 2001, p.112). However, many agree that an individual's capacity to act is socioculturally, contextually and interpersonally mediated (Mercer, 2011).

Whilst a few studies have focused on agency and tasks involving speech (e.g. Novick & Sutton, 1997; Van Lier, 2008), more recently Knight et al. (2017) identified types of agency in online speaking tasks. One type, related to navigational choices and acts, is named 'directional agency'. Directional agency is described as being physical in nature, but also implies a spoken or written aspect accompanying or preceding it, necessary for decision-making. It involves choices and physical moves to navigate (e.g. with a button or hyperlink) using technological features (Knight et al., 2017). Learners' use of directional agency was found to affect both time interacting in the target language (henceforth TL) and whether spoken interaction was recursive or not (Knight et al., 2017).

2.2. Navigation and CALL

Navigation has been studied in CALL in relation to navigating hypermedia (visual/musical/animation elements) and/or hypertext (textual) in Intelligent CALL systems and tools. Heift (2002) identified three different personas within an ICALL system, namely 'browsers', 'peekers', and 'adamants', which were reflected in navigational patterns. Results suggested that language proficiency and the amount of control the learner could exert in an instructional situation needed to be considered. Navigation as a design consideration has also been a focus for ICALL (e.g. Amaral & Meurers, 2011; Virvou & Tsiriga, 2001). Virvou and Tsiriga's (2001) study on adaptive navigation support found that due to extra navigational freedom they provide, hyper-documents imposed greater cognitive loads on users compared to linear documents.

The integration of navigational resources in tasks is one way in which learners can be 'scaffolded', namely the steps taken to reduce the degrees of freedom in carrying out some tasks so that learners can concentrate on the difficult skill they have in the process of acquiring (Bruner, 1978). Whilst, 'scaffolding' in SLA has been considered with respect to language learning (e.g.