

Multimodal (Inter)action Analysis in a Nutshell: Philosophy, Theory, Method and Methodology

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Abstract

This paper presents a concise introduction to Multimodal (inter)action analysis (MIA), which began to be developed in the early 2000s in tandem with technological advances for visual qualitative research. By now, MIA has grown into a fully-fledged research framework, including multimodal philosophy, theory, method and methodology for the study of human action, interaction and identity. With systematic phases from data collection to transcription (including transcription conventions) and data analysis, this framework allows researchers to work in a data-driven and replicable manner moving past common interpretive paradigms (Norris 2019, 2020).

Keywords

Multimodal (inter)action analysis, multimodal philosophy, multimodal theory, multimodal method, multimodal methodology

1. Introduction

Video-based qualitative research is an exciting area to work in. There are many new developments and perspectives. The one that we work in at the AUT Multimodal Research Centre is multimodal (inter)action analysis (MIA) (Norris 2004a, b, 2011a, 2029, 2020; Geenen et al. 2015), which has grown from theory and methodology to a fully-fledged framework. I will take a moment to set out the state of this framework and discuss the role that audio-visual technology plays in MIA.

2. What is MIA?

First, multimodal (inter)action analysis is a coherent framework to analyse video-based qualitative research of human action, interaction and identity, which was made possible through technological advances. Second, and often in connection with video-based data, this framework can be used to analyse other types of data from interviews, images and chats to diaries.

What makes MIA coherent is that all parts from philosophy to theory, method and methodology are interconnected. On the overarching philosophical strata, MIA posits

that human action, interaction and identity come about through a primacy of perception and a primacy of embodiment (Norris, 2019). On the theoretical strata, MIA follows MDA (Scollon, 1998, 2001), insisting on the principles of social action (including communication) and history (Norris, 2020). On this theoretical level, MIA further follows MDA by arguing that all human actions are mediated, and that mediated actions with a history are practices. Then, MIA moves on from MDA to multimodal mediated theory, noting that mediated actions appear on different levels (lower-level, higher-level and frozen) (Norris, 2004a). Multimodal mediated theory further suggests that modes are systems of mediated actions (Norris, 2013) and discourses are practices (mediated actions with a history) with an institutional and/or ideological dimension (Norris, 2020).

| MULTIMODAL PHILOSOPHY Primacy of Perception & Primacy of Embodiment | | | | |
|--|-----------------------------|--|----------------------------------|---|
| MULTIMODAL MEDIATED THEORY Principles of Social action (incl. communication) & history Units of Analysis: Mediated action (lower-level, higher-level & frozen), Mode as system of mediated action, Practices & Discourses | | | | |
| METHOD | | | | METHODOLOGY |
| Phase I | Phase II | Phase III | Phase IV | Phase V |
| Producing data collection table(s) | Producing data set table(s) | Transcribing Interviews etc; Producing higher-level action & bundled tables | Transcribing video data excerpts | Analysing data by engaging with methodological tools such as Modal density, Modal configurations, Foreground-background continuum of attention/awareness, Semantic/pragmatic means, Scale of Actions, Levels of action, Agency, Site of engagement etc. |
| Data Collection | | Transcription | | Analysis |

Figure 1 - Multimodal (inter)action analysis is a coherent framework for the analysis of human action, interaction and identity

When looking at Figure 1, we see how the philosophical and the theoretical strata seemingly sit above method and methodology. However, a two-dimensional image does not do this framework justice. Rather, philosophy and theory play an integral part in all phases depicted in the method and methodology sections.

2.1. The Phases of MIA and the technology needed

The method part is divided into four phases (Norris, 2019), all of which depend on audio-visual technology, but *none are technology-specific*. In other words, researchers can use the kind of technology *they* have easy access to, without having to download any kind of specific software. The first two phases help us collect and keep track of multimodal, and often diverse, data pieces in a systematic manner. In these first two phases, the researcher initially produces data collection tables and then data set tables. Regular computer software from Word to Excel, Free Writing software, or some kind of qualitative data analysis software, can be used for this.

The next two phases are the transcription phases. In Phase III, interviews, videos as well as all other data are transcribed into higher-level action tables and the higher-level actions are then bundled. By doing this, *we systematically work through all of the data that has been collected in a consistent manner*, allowing us to work in a data-driven way that moves beyond common interpretive paradigms (Norris 2019, 2020). As with Phases I & II, easily accessible computer software chosen by the researcher is used.

During and/or after the bundling of higher-level actions in Phase III, we select video-data pieces for micro analyses, which are then transcribed in detail by using multimodal transcription conventions (Norris 2004a, 2011, 2019, 2020) in Phase IV. Here, we again rely on readily accessible audio-visual technology. Rather than relying on a particular video-editing software, researchers can use whichever one that allows them to examine individual frames and take screenshots.¹ As transcription continues and researchers assemble the screenshots and embed circles, arrows, overlaid language, etc., the researcher again chooses an easily accessible software that allows this kind of assembly. This can be done in writing programs, photo-editing programs, or even in software such as PowerPoint.

The video excerpts that we transcribe in this detail are usually quite small (often from a few seconds to less than a minute). The reason for this is that we are interested in the great detail of an unfolding moment: how does the moment unfold with and through the multiple modes that are involved? As we transcribe the actions performed in great detail, we begin to see what we cannot see when watching a video clip. There are small movements, gaze-changes, etc. that are so very easily missed when watching a video, but which in fact drive the interaction under scrutiny in the direction that it is moving. During multimodal transcription, we embed those findings in the transcript and highlight them through the circles, arrows, etc. mentioned above to make them clearly visible (Norris, 2016). Because of our transcription conventions, we can ensure that our process is replicable.

Once we have produced transcripts of pertinent excerpts from our video data, we engage with methodological tools that are relevant for the data pieces such as modal density (Norris 2004a), modal configuration (Norris 2009a), the foreground-background continuum of attention/awareness (Norris 2004a; 2008), semantic/pragmatic means (Norris 2004a), levels of action (Norris 2009b), scales of

¹ As to which frames are selected, please have a look at Norris (2004a, 2019).

action (Norris 2017b), agency (Norris 2005; Pirini, 2017), or the site of engagement (Scollon 1998, 2001; Norris, 2004a, 2019, 2020; Norris and Jones 2005). Here again, we rely on audio-visual technology without, however, favouring any one kind.

2.2. Some areas of human action, interaction, and identity where MIA has been used

Multimodal (inter)action analysis is thus a coherent and comprehensive research framework for the analysis of qualitative video-based data.² All the pieces in this framework fit together (Norris 2012; Pirini 2014b), allowing the researcher to build a coherent picture of whatever human action, interaction or identity is being studied. In this way, we have made strides in examining space and place or children's acquisition (Geenen 2013; Geenen 2017, 2018); identity (Norris 2005, 2007, 2008, 2011; Norris and Makboon 2015; Matelau-Doherty and Norris 2021); video conferences (Norris 2017a; Norris and Pirini 2017); business coaching, high school tutoring and intersubjectivity (Pirini 2013, 2014a, 2016), to name but a few areas in which the framework has been used. What we at the AUT Multimodal Research Centre are finding is that with a coherent framework such as MIA, there is much potential to discover new insight and knowledge about any kind of human action, interaction, and identity.

3. In summary

Multimodal (inter)action analysis is a framework that allows us to make new discoveries about human action, interaction and identity, and while MIA uses and relies on audio-visual technology, MIA is *software-independent*. No doubt, as technology advances, MIA will advance in tandem.

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² MIA also allows the integration of other kinds of data and allows for the same systematic collection, analysis and transcription of all varied data.

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