

## MODE Summer school

### Multimodal Methods for Analysing Communication and Learning with Digital Technologies

**24-28 June 2013**

In this intensive 5-day course we introduce multimodal methods for analysing communication and learning with digital technologies.

The course is organised around 4 areas of research/interest:

- video analysis of face to face interaction
- moving image and digital film production
- text making in digital and online environments (blogs, forums and websites)
- embodied cognition and interaction with tangible and mobile devices

We draw examples from range of different research sites, including hospitals, schools, galleries and online platforms.

The technologies we explore include digital video recording devices and editing tools, Web 2.0 technologies, and mobile and tangible devices.

The course will be led by Jeff Bezemer, Carey Jewitt, Andrew Burn, Kate Cowan, Myrrh Domingo, Rosie Flewitt, Gunther Kress, Sara Price and Mona Sakr.

#### Day 1: Introduction

Tutors: Carey Jewitt, Jeff Bezemer, Rosie Flewitt

On Day 1 we will give an overview of multimodal methods and develop a rationale for adopting them to investigate communication and learning with digital technologies. We'll also be discussing how to select, record and archive digital data and what the ethical implications are of that.

09:00-09:30	Registration
09:30-10:15	Introductions: each participant gives 1min presentation
10.15-11.00	What are multimodal methods and why consider using them?/ Course overview (JB)
11:00-11:30	Break
11:30-12:30	Selecting, recording and archiving digital data (CJ)
12:30-13:30	Lunch
13:30-14:30	Ethics (RF)
14:30-15:00	Group work: Identifying challenges and potentialities of multimodal methods in your own research
15.00-15.15	Break
15.15-16.00	Discussion: Why adopt a multimodal methodology?

#### Key readings

Kress, G. (2010) *Multimodality. A social semiotic approach to contemporary communication*. London: Routledge

Jewitt, C. (2013) *Routledge Handbook of Multimodality (2<sup>nd</sup> Edition)*. London: Routledge

## Day 2: Analysing video recorded face-to-face interaction

Tutors: Jeff Bezemer and Kate Cowan

### **Theoretical perspective**

On this day we introduce an approach to studying communication and learning that originated from conversation analysis (CA). CA is used to investigate the social organization of action in situ. Originally focused on the study of spoken interaction, in a growing body of this work video is used to analyze gesture, gaze, posture and other means of communication alongside talk.

### **Analytical framework**

We will use fine grained *transcription* and analysis of small strips of video recordings (e.g. 10 seconds) to explore how multimodal interaction unfolds moment-by-moment. Attention will be paid to the *simultaneous* unfolding of action in different modes, as well as to the *sequential* unfolding of action. This analytical work is supported by *Elan*, a free transcription tool.

### **Research context**

We will demonstrate the approach by exploring video data of interaction in schools and in the operating theatres of a teaching hospital in London. Examples will be used to investigate the role of the body and digital video technologies in achieving collaborative work -such as passing objects, cutting stitches and instructing learners- safely.

### **Digital technologies**

We will show how digital video recordings produced by the technologies used by professionals to carry out their work can be analysed using our interactional methods. In so doing we also explore how digital video technologies shape communication and learning at work.

### **Time table**

09:30-11:00	Lecture
11:00-11:30	Break
11:30-12:30	Demonstration of data analysis/application of analytical frameworks
12:30-13:30	Lunch
13:30-15:00	Data analysis workshop
15:00-16:00	Discussion

\*A tour of the British Library and group dinner will take place on the evening of Day 2

### **Key reading**

Streeck, J., Goodwin, C. & LeBaron, C. (2011). 'Embodied interaction in the material world: An Introduction.' In: Streeck, J., Goodwin, C. and LeBaron (eds). *Embodied Interaction. Language and body in the material world*. Cambridge: Cambridge University Press.

### **Further readings**

Bezemer, J, (forthcoming). 'How to transcribe multimodal interaction?' In C.D. Maier & S. Norris, S. (eds). *Texts, Images and Interaction: A Reader in Multimodality*. Mouton de Gruyter. (pre-print available on NCRM website)

Bezemer, J., Cope, A., Kress, G. & Kneebone, R. (2013). Holding the Scalpel: Achieving Surgical Care in a Learning Environment. *Journal of Contemporary Ethnography*

Heath, C., Hindmarsh, J. & Luff, P. (2010). *Video in qualitative research. Analysing social interaction in everyday life*. LA: Sage.

## Day 3: Analysing moving image and digital film production

Tutors: Andrew Burn, Becky Parry and Vic Hurr

### ***Theoretical perspective***

We will introduce a multimodal theory of the moving image, conceived as 'the kineikonic mode'. This looks at moving image media as a set of metamodal relations (several modes; modes within modes), organised in time and space, within the orchestrating modes of filming and editing. It relates these different modes to the cultural forms of film, and to the specialised roles of cinematography, editing, musical composition and performance, dramatic action and speech, and so on.

### ***Analytical framework***

We will demonstrate close analysis of sample texts, identifying the work of the modes, their relation to each other, and their relation to the social contexts of production and reception. We will consider forms of transcription to support this, as well as appropriate approaches to very diverse cultural forms within film (eg music and drama).

### ***Research context***

The sample texts will be taken from film history and from research in schools and galleries. These will raise questions of the meaning of particular contexts of production and exhibition.

### ***Digital technologies***

The examples will demonstrate how digital media both emulate and transform analogue forms of moving image production, looking at the roles of digital editing software and specialised tools for 3-D animation.

### ***Time table***

09:30-11:00	Lecture
11:00-11:30	Break
11:30-12:30	Demonstration of data analysis/application of analytical frameworks
12:30-13:30	Lunch
13:30-15:00	Data analysis workshop
15:00-16:00	Discussion

### ***Key reading***

Burn, A (forthcoming) 'The Kineikonic Mode: towards a multimodal approach to moving image media'. In Jewitt, C. (ed) *The Routledge Handbook of Multimodal Analysis*. London: Routledge.

### ***Further readings***

Burn, A & Parker, D (2003) 'Tiger's Big Plan'. In Jewitt & Kress (eds) *Multimodal Literacies*. New York: Peter Lang.

Burn, A. (2009). *Making new media. Digital Production and Digital Literacies*. London: Peter Lang.

## Day 4: Analysing text making in digital and online environments

Tutors: Gunther Kress and Myrrh Domingo

### ***Theoretical Perspective***

On this day we introduce an approach to describe, analyse and explore the modes and media of contemporary communication; and, within that, consider the shifting functions of writing. The approach combines and integrates ethnographic and semiotic theory, method, description and analysis for 'harnessing' online materials in research – both in terms of 'forms' and as 'content'. We aim to use the day to provide participants with a background of current and historical principles of design and composition characteristic of ('western') digitally produced environments. Two aspects in particular will be highlighted: the multimodal means for meaning making and the facilities and constraints of digitally produced sites of/for inscription: both online and on contemporary digitally supported screens. The presentations, discussions and workshops will focus on showing how contemporary (digitally sustained) textual practices are increasingly shaped by and draw in a wide range of social, cultural and technological resources. In this we will identify potentials and constraints of these digitally supported sites in shaping authorship, genres, and aesthetics in these 'digital platforms'.

### ***Analytical Framework***

We will offer some guidelines for researching communication on digitally produced 'platforms', whether on-screen or not on screen. We explore the issue of analysing 'ephemeral' digitally produced data, such as those appearing in blogs, various forums, and websites. We will sketch and present a framework that addresses these issues. Attention will be given to the analysis of textual materials (with some discussion of the notion of 'text') and of the contextual factors shaping the production of multimodal ensembles. For example, we will explore the ways in which digital resources afford 'layout' as an actively used resource for producing ordering of various kinds, as well as cohesion and coherence, in integrating words, written and spoken with images, still and moving; ordered through the use of frames, organisational and divisional.

### ***Research Context***

We will demonstrate this approach by presenting digital data that range in scope and purpose from personal blogs, professional websites and organizational forums. The samples will be used to investigate categories of texts prevalent in online communication, including varieties of navigation devices and forms of cohesion and coherence that both replicate and depart from print media and book-based platforms.

### ***Digital Technologies***

We will show different digital platforms as sites of textual production and demonstrate how these public sites can be used to generate research data across fields of interests (e.g., media and communication, educational research, cultural studies). In so doing, we show, among other textual materials, common and distinctive categories of writing materialised in screen-based and online writing.

### ***Time table***

09:30-11:00	Lecture
11:00-11:30	Break
11:30-12:30	Demonstration of data analysis/application of analytical frameworks
12:30-13:30	Lunch
13:30-15:00	Data analysis workshop
15:00-16:00	Discussion

### ***Key Reading***

Domingo, M., Jewitt, C., & Kress, G. (in press). 'Multimodal and social semiotics: Writing

in online contexts'. In Rowsell, J. & Pahl, K. (Eds.). *Routledge Handbook of Literacy Studies*.

### **Further Readings**

Adami, E. (2013). A social semiotic multimodal analysis framework for website interactivity, *NCRM Working Paper* (<http://eprints.ncrm.ac.uk/3074/>)

Miller, D. & Slater, D. (2001) *The Internet: An Ethnographic Approach*. Oxford: Berg Publishers.

Horst, H. & Miller, D. (Eds.) (2001) *Digital Anthropology*. Oxford & New York: Berg Publishers

Wilson, S.M., Peterson, L.C. (2002) The Anthropology of Online Communities. *Annual Review of Anthropology*, 31: 449-467.

## Day 5: Analysing embodied cognition and interaction with tangible and mobile devices

Tutors: Sara Price, Mona Sakr and Carey Jewitt

### ***Theoretical perspective***

On this day we introduce a range of concepts of embodiment and multimodality in the context of emergent digital technologies. This will provide a historical background to current thinking about embodiment; identify some of the key theoretical arguments and situate these within the context of emergent digital technologies. It will also highlight the use of multimodality in investigating the modes of embodied forms of interaction.

### ***Analytical framework***

Drawing on multimodality we will provide a step-by-step guide to the process of analyzing body position, posture, gesture and manipulation, gaze, and talk. This will also focus on the patterns of how these modes are configured, and the idea of multimodal flow of interaction. The analysis will be based on video and interview data.

### ***Research context***

We will demonstrate the approach by exploring video data of student interaction with a tangible learning environment designed to support science learning and mobile technologies in the context of learning history.

### ***Digital technologies***

We will show how digital technologies like tangible and mobile technologies change the character of interactions and foreground the body in new ways in the context of learning.

### ***Time table***

09:30-11:00	Lecture
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11:30-12:30	Demonstration of data analysis/application of analytical frameworks
12:30-13:30	Lunch
13:30-15:00	Data analysis workshop
15:00-16:00	Discussion

### ***Key reading***

Price, S., & Jewitt, C. (2013) "A multimodal approach to examining 'embodiment' in tangible learning environments." TEI conference, February 2013, Barcelona.

### ***Further readings***

Farr, W., Price, S. & Jewitt, C. (2012) Embodiment: interdisciplinary themes and perspectives for digital technology research, *NCRM Working Paper*

Jewitt, C. (forthcoming) 'Multimodal methods for researching digital technologies'  
In: Price, S. Brown, B. & Jewitt, C. (eds.) *The Sage Handbook of Digital Technology Research*. London: Sage

Price, S. & Jewitt, C. (2013) "Interview Approaches to Researching Embodiment" CHI conference, April 2013, Paris.

Price, S. (forthcoming) 'Tangibles: Technologies and interaction for learning' In: Price, S. Brown, B. & Jewitt, C. (eds.) *The Sage Handbook of Digital Technology Research*. London: Sage