Examining “Response”: Video-based Studies in Museums and Galleries

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Abstract

Purpose – This paper uses a video-taped fragment of conduct and interaction in a museum to illustrate the use of video-based field studies for the study of visitors’ response to artwork.

Design/methodology/approach – The method draws on ethnomethodology and conversation analysis. It is designed to investigate the social and sequential organisation of people’s action and interaction. The fragment discussed as part of this paper sheds light on the social and interactional production of people’s response to and experience of exhibits.

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Findings – The detailed analysis of one video-fragment is designed to illustrate how the analysis progresses from an inspection of the sequential organisation of talk to an examination of the sequential organisation of verbal, visual and bodily conduct. It also makes a small substantial contribution to current debates on people’s experience of artwork in museums. In particular it implies that the experience of works of art arises in and through socially organised, embodied practices at the exhibit face.

Originality/value – This paper discusses an innovative way to analyse video-data. It makes a contribution to the growing body of research in arts marketing and museum marketing on the museum floor.

Keywords - Video, ethnomethodology, conversation analysis, embodying experience, visual arts consumption, museum and arts marketing

Paper type - Method paper

Introduction

Museums provide people with opportunities to encounter and experience original works of art, alone and in concert with others. It is increasingly acknowledged that people often visit museums with companions, friends and family. They explore galleries, encounter, view and experience artworks and other kinds of exhibit together (Falk and Dierking 1992, 2000; Wright 1989). A growing body of research has emerged exploring how social interaction impacts the “museum experience” (cf. Leinhardt, Crowley and Knutson 2002; McManus 1994). This research primarily considers the museum as educational institution and the museum experience as learning experience. It therefore shows relatively little regard to the variety of ways in
which people use museums and ignores the multiple facets of the museum experience (cf. Rentschler and Hede 2007).

The investigation of the ways in which people explore and make sense of exhibits in and through social interaction, requires an approach that provides the researcher with a theoretical and methodological framework to explore the activities through which people examine and experience museum exhibits. This paper discusses an approach that uses video-recordings of museum visitors’ conduct and interaction as principal data augmented by field observation and informal interviews with museum staff and visitors. The analysis focuses on situated conduct and interaction at exhibits. It draws on methodological developments within sociology and in particular ethnomethodology (Garfinkel 1967) and conversation analysis (Sacks 1992). These general methodological developments are augmented by a growing body of research that has come to be known as “workplace studies” (Heath and Luff 2000; Luff, Hindmarsh and Heath 2000; Suchman 1987). These studies have directed analytic attention towards the action and interaction with and around the material environment and in particular the ways in which tools, technologies, objects and artefacts feature in, and gain their occasioned sense and significance through, practical collaborative activity. They include for example studies of control centres, newsrooms and operating theatres. They use video, augmented by field studies, to examine the fine details of interaction and to explore how people, in concert with others accomplish social actions and activities. We are interested in drawing on these methods to explore conduct and interaction in museums and galleries.

**Visual Arts Consumption and Video**

In arts marketing there is a large interest in the visual arts and film and a growing concern with the study of people’s experience of cultural object and event (cf.
Kerrigan, Fraser and Özbilgin 2004; Schroeder 2002). Maybe surprisingly, relatively few researchers in this field explore how cultural objects are experienced and even fewer use visual data to explore how people orient to and make sense of cultural objects.

In retail marketing and cognate areas video has been used as data for considerable time. A growing body of studies explores the consumption of goods and services using video-recordings of social situations in shops, markets and other retail settings (Belk, Sherry and Wallendorf 1988; Belk and Kozinets 2005; Clark, Drew and Pinch 1994; Schmid 2006). In recent years, qualitative research methods including ethnography, video analysis and qualitative interviews have grown in significance also in studies of cultural consumption. This research sheds light on the range of social action and interaction involved in cultural consumption in the privacy of the home as well as in public cultural venues. It explores the social context in which people watch television, listen to music use technology at home, view films in cinemas, participate in music events and respond to exhibits. These studies highlight the “embodied” aspects of the experience of artworks (Joy and Sherry 2003) and suggest that social interaction is critical to the ways in which people watch television, view films in the cinema or participate in cultural events (Ang 1995; Hitzler and Pfadenhauer 1999; O'Reilly and Larsen 2005; Silverstone and Hirsch 1992; Srinivas 2002).

In recent years, studies of cultural consumption and audience research have begun to consider museum visiting as a social activity that forms part of many people’s everyday lives (Bagnall 2003; Goulding 2001; Longhurst, Bagnall and Savage 2004; Macdonald 2006; Storey 1999). They explore how people embed their visit to museums within the social context of their day-to-day activities. However, they have
shown relatively little interest in the specifics of the social context in which people’s experience of exhibits and exhibitions arises, on the museum floor. They therefore often neglect to investigate how the experience of exhibits is embodied within and through people’s activities at the “point of experience” where people consider and experience exhibits (cf. Heath and vom Lehn 2004; Katz 1996; vom Lehn 2006).

This area of research has largely been covered by visitor studies, an applied field of research. Visitor studies have developed from behavioural studies of people’s response to the physical environment. They primarily consider and assess the effectiveness of exhibits and exhibitions in attracting and holding visitors’ attention and in communicating to the audience (Screven 1976; Shettel 1973, 2001). In recent years influenced by the emergence of socio-cultural theory and its impact on the cognitive sciences they have increasingly begun to explore how the experience of exhibits arises in and through social interaction and talk at the objects (cf. Leinhardt, Crowley and Knutson 2002; vom Lehn 2006, 2007). These studies are preoccupied with the impact of social interaction on the learning outcome of museum visits. They focus on the content of talk and its relationship to the exhibition. Yet, they largely ignore the social organisation of talk and how it is embedded within visitors’ bodily and visual conduct and their interaction with others.

As part of a small programme of research we have recently begun to explore visitors’ practical experience of exhibits. We investigate how people examine exhibits in social interaction with each other and how the experience of exhibits is inextricably embedded within the practical circumstances in which it is produced (Heath and vom Lehn 2004; vom Lehn, Heath and Hindmarsh 2001). This paper discusses an approach to analyse video-recordings of conduct and interaction in museums.

Joy and Sherry (2003) have pointed out that people’s experience of art is an embodied experience. They however focus on cognitive and subjective aspects of the aesthetic experience and curiously ignore that experience are produced through bodily action and activity undertaken in social situations.
Data collection

As part of our research we have undertaken studies of conduct and interaction in a range of museums and galleries in the UK and abroad including, the Courtauld Galleries, the National Gallery, the National Portrait Gallery, the Tate Britain and Tate Modern, the Victoria and Albert Museum (all in London), the Musee des Beaux Arts Rouen, Beatrice Royal Arts and Crafts Gallery, Nottingham Castle, the Zentrum für Kunst und Medien (ZKM, Karlsruhe), the Sculpture and Functional Arts Exposition (Chicago) and Shipley Art Gallery as well as a number of science centres and museums in the UK and abroad.

We gathered a large body of audio-visual recordings augmented by fieldwork and a small number of interviews with museum staff and visitors. The audio-visual recordings however form the principal vehicle for analysis of social interaction. They offer certain advantages over more conventional qualitative data. They provide the resources through which we can capture (versions of) the conduct and interaction of visitors and subject their actions and activities to detailed, repeated scrutiny, using slow-motion facilities and the like. They expose the fine details of conduct and interaction, details that are unavailable in more conventional forms of data, and yet details that form the very foundation to how people see and experience exhibits in museums and galleries. Unlike other forms of data, audio-visual recordings also provide the researcher with the opportunity to share, present and discuss the raw materials on which observations and analysis are based, a facility that is rare within the social sciences and that places an important constraint on the analysis of data.

Field observation and data gathered through interview and discussion augment the analysis of the audio-visual materials. These and related materials, such as exhibit specifications, requirement documents, copies of labels, instructions, gallery guides
and the like, provide important resources with which to situate and understand the conduct and interaction of visitors. For example, it is not unusual for people to selectively voice instructions or labels to others as they approach or examine an exhibit. The analysis of the interaction needs to consider how participants occasion, embed, or transform, this information within talk and action. Moreover, audio/video recording inevitably provide a selective view of events, and while this view may encompass a broad range of actions and activities that arise at an exhibit, it can be useful to know what else may be happening more generally within the scene. As part of data collection therefore we systematically interleave field observations, information from materials and comments from interviews and discussions, with recorded data, and where relevant, take these into account in the analysis of the participants’ action and interaction.

Undertaking video-based field studies raises a number of ethical issues that are widely discussed within textbooks and monographs in qualitative research (Grimshaw 1982; Knoblauch, Schnettler, Raab, and Soeffner 2006; Speer and Hutchby 2003). In discussion with museum personnel and visitors we have developed a set of practices that are designed to publicise the research and its aims and objectives and to maximize opportunities for participants to withhold or withdraw cooperation if they so wish. We place notices informing visitors of the research at the entrance to the museum and the relevant galleries; notices that invite potential participants to discuss data collection with the researcher, and if they have any reservations, before, during or after the event offering to cease recording or destroy any records. In general, visitors have shown a great deal of interest in the research and willingness to participate.
Audio-visual recording is preceded by a period of fieldwork in museums and galleries. Fieldwork, including discussions with museum staff, provides useful information concerning exhibits and exhibitions and areas in galleries that might be of particular interest. It also provides an opportunity to consider how it might be best to position the camera(s) and place microphones. An important consideration is how to position equipment so as to minimize the obtrusiveness of the equipment and the recording. In this regard, it is important to position and focus the camera so that it captures the conduct and interaction of the participants within the scene whilst not demanding that the researcher remains behind the camera. Indeed, it is not unusual for potentially interesting data to be undermined by the ambitions of the person filming the scene, who mistakenly believes that through subtle operation of the camera, it is possible to encompass the interaction of the participants. We remain in the gallery to undertake field observation, answer any queries from visitors, whilst having set the camera to record, avoiding being seen to operate the equipment. In this regard, audio-visual recording coupled with background fieldwork can prove far less obtrusive than conventional participant and non-participant observation.

Initial data collection is followed by a review, in which we examine the materials to assess the quality of the images and sound and to identify any issues that might be relevant to further data collection. We also undertake preliminary analysis of a selected number of fragments and begin to reflect upon any particular actions and activities that might inform how we gather further data, be it through video, fieldwork or even interview. The preliminary analysis is followed by further data collection in turn that is subject to more detailed analysis. Data collection and analysis therefore is an iterative and complimentary process designed and refined with regard to the
practical issues and analytic insights that emerge through detailed inspection of the data.

**Analyzing audio-visual data**

Our studies draw on ethnomethodology (Garfinkel 1967) and conversation analysis (Sacks 1992) as theoretical and methodological framework. They highlight the local, “indexical” and practical production of social action and interaction. They argue that action and context are reflexively interrelated. Sense and significance of actions and objects are inextricably linked to the specifics of the occasion in which they arise. They therefore rely on a dynamic and contingent concept of context. Social actions and activities are contingently accomplished with regard to each other, gradually reshaping and renewing the context in which they arise (Heritage 1984). Conversation analysts have utilised ethnomethodology’s principal assumption of “indexicality” and “reflexivity” to explore the social organisation of talk. They have revealed the sequential organisation of talk and elaborated on how a next utterance, a turn at talk, is produced with regard to preceding action(s) and provides the framework for a subsequent action. The emergent and socio-temporal character of human action is a critical feature of context and situation; indeed, the real time contributions of others is the most pervasive ‘contingency’ for social action. The situated character of practical action like talk, visual and bodily conduct therefore does not simply point to the circumstances in which an activity arises, but rather to the ways in which social actions and activities emerge, moment by moment. The analysis of audio-visual data elaborates on the ways in which participants produce and make sense of particular actions. It focuses on the practices and reasoning that inform the practical accomplishment of everyday, emergent, context embedded, activities.
The analysis of audio-visual data proceeds ‘case-by-case’. Particular actions are subjected to a very detailed inspection to unravel the interactional context in which they arise. It focuses on how particular actions reveal interactional relations to the immediately prior and proceeding action(s). For example, it might consider how a discovery and characterisation of a particular aspect of an artwork occasions a co-participant to respond to the piece and encourages a subsequent action. Thus, it elaborates the sequential organisation of actions and describes how participants accomplish activities in interaction with each other.

The examination of fragments of interaction requires the use of a system to map the occurrence of actions. In conversation analysis there is long-standing convention to transcribe talk that captures what people say as well as when and how they say it (Have 1998; Jefferson 1984). The transcription of visual and bodily conduct has been a long-standing problem for students of social interaction. Despite several decades of research there are still no conventions for the transcription of visual and bodily conduct. Yet, there is an increasing number of attempts to develop software solutions that are designed to help with relating talk and non-vocal actions, such as Transana³. Whatever system is used the transcription generally aims to capture, at least the onset and completion, of the visual and material features of the participants’ conduct with regard to the talk and/or silence or pauses. To provide a more suitable spatial representation of the participants’ conduct and its relationship the transcription is laid out horizontally (Goodwin 1981; Heath 1986).

It is important to note however that the transcript remains a tool for the researcher and the data that are subject to analysis are the audio-visual recording. The transcription provides an important vehicle for becoming familiar with the

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³ http://www.transana.org/
complexities of a particular fragment and beginning to explicate the relations between actions and activities. It also provides an important resource for documenting observations and recalling insights and analytic observations.

Although data collection and analysis are primarily undertaken by the principal investigator we regularly hold data workshops involving some or all members of our research group. In those workshops we discuss one or two short video-fragments. This discussion aids the refinement of transcripts and helps to further develop the analytic focus of our research. The participation of external researchers and practitioners is of great value as they often are able to provide a distinct perspective on the data, which supports the relevance of our investigations. However, such data workshops should not be confused with the data analysis. In a sense, they only are “aids to sluggish imagination” (Garfinkel).

**Encouraging Response**

Museum managers and curators are increasingly interested in the ways in which people examine, respond to and make sense of artwork. They track and observe people in museums and use questionnaires and other interview techniques to gain insights into the ways in which people experience and make sense of exhibitions. The analysis of video-recordings of conduct and interaction allows us to explore, in detail, how people’s response to artwork arises at the exhibit-face. In the following we would like to discuss a fragment to illustrate the analysis and the observations and findings arising from it.

The fragment has been recorded at a painting entitled “Man seated reading at a table in a lofty room” displayed in the Rembrandt 400 exhibition at the National
Gallery in London in 2006. The painting shows a large room with a fireplace on the right and a figure sitting at a table on the left. Behind the man is a window through which light comes in, casting a shadow on large parts of the scene.

The analysis uses a transcript of the participants’ talk that captures line by line the participants’ utterances. The transcription uses Jefferson’s (1984) conventions. A ‘[‘ stands for overlapping talk, ‘:’ for elongated utterances, ‘=’ for talk that latches onto another, ‘(.)’ for momentary but hear-able pauses (“micropause”) and ‘.hhh’ for an audible in-breath.

Transcript 1

National Gallery – Rembrandt 400

Jo (J) and Paula (P)

A man seated reading at a table in a lofty room (1628–30)

1  P:  .hhhh (.)
2   look at all that (.) porcelain thats a fireplace isnt it (.)
3->  theres a tall fireplace
4->  [     ]
5->  J:  quite difficult to see::: isn't it?
6  P:  =yes
7  J:  that’s the sort of darkness
8  P:  =yea:::h

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A picture off the painting can be seen at, http://www.nationalgallery.org.uk/
The overlapping utterances arise in light of Paula’s actions a moment earlier. After a few seconds of silence during which the two participants view the painting Paula produces an in-breath (Transcript 2; line 1) that projects a subsequent utterance; “.hhh”. She then encourages Jo to, “look at all that (.)”, and then while gesturing along the contours of the fireplace depicted in the painting describes the object, “porcelain thats a fireplace isnt it (.)”. By virtue of her talk and gestures coupled with her looking to the fireplace Paula demarcates visibly for her friend a particular exhibit feature. In the course of Paula’s actions Jo shifts her visual orientation to that part of the painting; yet she does not exhibit a response to the fireplace. Only when a moment later Paula begins to reformulate her description of the object Jo produces an utterance, “quite difficult to see”. This utterance at the same time displays that Jo has seen the fireplace and offers an account for her delayed response to it (Transcript 2).
The analysis of the video-data provides an understanding of the overlapping talk. People who simultaneously view a work of art often examine different aspects of it. To align their perspectives they produce and coordinate their talk, visual and bodily conduct and thus momentarily constitutes particular exhibit features as noteworthy. In the case at hand, Jo’s experience of the painting and her noticing of the tall fireplace depicted in the piece derive from and are shaped by Paula’s actions. By virtue of her slight shift in bodily orientation and gesture as well as her talk Paula encourages Jo to look at a particular aspect of the painting and configures her way of seeing it. Despite being encouraged to look at the fireplace Jo notices and experiences the object on her own, first hand. She uses Paula’s actions in front of the canvas as resources to adjust her stand- and viewpoint. She displays her discovery of the fireplace when she is in the right place to see it. Her experience of the painting arises in the moment at hand, when she and Paula collaboratively assemble their bodies in particular ways at the painting and consider the piece together. The shared experience of the work of art however lasts only for a brief moment; a split of a second later, Jo notices and points out another exhibit feature and Paula shifts her orientation to the next painting on the wall.

The detailed analysis of this fragment suggests that the response to a work of art is produced in interaction between visitors. It illustrates how the analysis progresses from an inspection of the sequential organisation of talk to an examination of the sequential organisation of verbal, visual and bodily conduct. Thus, it highlights the importance of considering how people coordinate their visual and bodily conduct with their talk for an understanding of the emergence of people’s response to artwork in museums. The analysis does not stop here but continues by comparing and contrasting similar fragments in which people progressively align their perspectives to an exhibit.
The comparison of fragments allows for the understanding of reoccurring patterns of interaction, illuminating general aspects of specific cases.

Implications

Arts marketing research is concerned with cultural production and consumption. It explores people's participation with and experience of cultural objects, events and programmes. It hopes observations and findings from the research inform the design and deployment of resources that enhance people's experience of cultural events like films, concerts and museums. This paper has discussed video-based research methods that are being used to examine how people use the resources provided by museums to make experiences of exhibits and exhibitions. Observations and findings of research employing this method may have important implications for current academic debates as well as for the work of art marketing practitioners in museums.

Recent debates in marketing have been increasingly concerned with the “embodied experience” (Joy and Sherry 2003) of aesthetic, leisure and shopping environments. Drawing on interview data these studies suggest that people’s experience is shaped by their bodily relationship to the environment. The focus of these studies is with the individual and her/his subjective, inner experience of the world. They rarely examine how the body is practically involved in the production of the experience in situations where they are alone or with others. The detailed analysis of video-recordings contributes to these debates by exploring the “embodied practice” (Garfinkel 202) through which people examine and make sense of exhibits.

Research on museum visiting increasingly suggests that social interaction is critical for people’s experience of exhibitions (cf. Falk and Dierking 2000). This research coincides with museum managers growing interest in creating environments that people can explore and experience with family and friends as well as in larger groups.
Video-based studies in museums provide observations and findings about the ways in which people explore and make sense of exhibits in and through social interaction. They suggest how people’s response to and experience of exhibits arises in and through the social organization of people’s verbal, visual and bodily action and activity (cf. Heath and vom Lehn 2004; vom Lehn 2006).

Museum managers are concerned with the way in which people navigate, explore and experience exhibitions. They collaborate with architects and exhibition designers to support visitors’ navigation and experience of the galleries. Research by architects argues how the navigation of galleries is influenced by the presence of and interaction with others (Hillier and Tzortzi 2007). Video-based studies add to this body of research by exploring the social organisation of people’s transition between exhibits. They reveal that people are continually sensitive to other people’s activities and state of engagement and align their actions with them (cf. vom Lehn, Heath and Hindmarsh 2001).

In recent years, museum managers have increasingly deployed new technologies such as Personal Digital Assistants (PDA), information kiosks and more advanced systems to enhance people’s experience of exhibits and exhibitions. The deployment of these systems is often driven by technological innovation and current fads and rarely on research that examines how visitors may use systems and devices when viewing artwork or other kinds of exhibit. Video-based research has begun to explore how people use technology like PDAs and information kiosks on the exhibition floor. It argues that some of these systems and devices are detrimental to and undermine the emergence of social interaction and talk between visitors. It suggests to use observations and findings from detailed studies of action and activity in exhibitions to inform the development of resources that people may seamlessly embed in their

By using observational and video-based methods arts marketing research may produce observations and findings that make important contributions to current debates in arts marketing and cultural consumption and maybe also to other marketing areas. Furthermore, the possibility to show video-recordings to practitioners provides arts marketing researchers with a powerful tool to inform practice and policy.

**Discussion**

In light of recent social scientific debates about the importance of “experiential” aspects of people’s participation in society and engagement in social life (Schulze 1992, 2000; Pine and Gilmore 1999) arts marketing has increasingly become concerned with cultural consumption and the experience that people have of events, exhibitions and other cultural objects. They have recently turned to qualitative research methods and approaches like Grounded Theory (Goulding 2000, 2001) to unpack people’s experience of museums and heritage sites. The research primarily relies on interviews and therefore provides relatively little insight into the action and activities through which the experiences are produced at exhibits.

This paper suggests to using video-recordings of visitors’ conduct and interaction at exhibits as principal data coupled with an analytic and methodological framework drawn from ethnomethodology (Garfinkel 1967) and conversation analysis (Sacks 1992). By employing this approach the analysis investigates the social and sequential organisation of action and activities through which people experience and make sense of exhibits. It suggests for example how a response to an exhibit is occasioned and shaped by the actions of co-participants. It argues that social interaction not only
influences what exhibit feature people consider but also how they experience and respond to it. The “response” is not a “pure response” to an object but it is occasioned and shaped by the way in which verbal, bodily and visual conduct are designed; it is produced as a display of a discovery, an emotion or taste in “response” to the object and not to the co-participant’s talk and gesture that overlay the object.

Having discussed the analysis of a video-fragment in some detail and having explored the contribution of such analyses to current academic debates and for the work of marketing practitioners in museums it may be worthwhile to consider possible directions for future research concerned with interaction in museums.

Arts marketing research often draws on Bourdieu (1990, 1991, 1993) and related research (Schulze 1992) to explore how museum visiting and the experience of exhibitions are influenced by social conventions and “cultural codes”. Video-based and ethnographic studies in museums may help exploring how such conventions and codes are brought bear at the exhibit-face and how people themselves differentiate between and assess cultural objects when they face and examine them.

When people visit museums they have myriad and multifaceted experiences. Arts marketing research on the exhibition floor may help bring to light the different aspects of these experiences and the ways in which these experiences are produced as and when people encounter works of art or other kinds of exhibit. For example, visitor research increasingly highlights affective aspects of the museum experience, often considering emotion as a response to exhibits. Video-based studies may help unpack the relationship between emotion, people’s activities and the material environment by exploring how emotional responses arise in social interaction.

In museum studies and cognate areas there is a growing concern with the relationship between visitor behaviour and exhibition design (cf. Macdonald 2006;
2007). Arts marketing often focuses on knowledge about (potential) visitors’ social and cultural dispositions to inform museum managers’ decision-making. Findings from video-based studies on the exhibition floor add to this important body of knowledge about visitors. They provide arts marketing researchers with a powerful resource and with visual evidence to support managers in deciding on the development of galleries and the deployment of new interpretation devices.

Despite the growing corpus of research arts marketing still is a relatively young discipline. This paper has discussed how video-recordings coupled with an appropriate analytic and methodological framework can be used to explore people’s experience of museums. Detailed studies of the practices in and through which culture is seen and experienced then and there, provide arts marketing with insights about the emergence of cultural experiences that are critical to enhance the impact of the discipline on academic debates and to inform marketing practice and arts policy.

Bibliography


http://www.archimuse.com/ichim07/papers/ciolfi/ciolfi.html


Leinhardt, G., Crowley, K. and Knutson, K. (Eds.) (2002), Learning Conversations in Museums, LEA, Mahwah, NJ.


