

Crafting participation: designing ecologies, configuring experience

Christian Heath, Paul Luff, Dirk vom Lehn, Jon Hindmarsh
and Jason Cleverly

Journal of Visual Communication, 2002, Volume 1(1): pp. 9-34

Edited by Carey Jewitt

Key words: social interaction, galleries and museums, design

ABSTRACT

There is a growing interest amongst both artists and curators in designing artworks which create new forms of visual communication and enhance interaction in museums and galleries. Despite extraordinary advances in the analysis of talk and discourse, there is relatively little research concerned with conduct and collaboration with and around aesthetic objects and artefacts, and to some extent the social and cognitive sciences have paid less attention to the ways in which conduct both visual and vocal is inextricably embedded within the immediate ecology, the material realities at hand. In this paper, we examine how people in and through interaction with others, explore, examine and experience a mixed-media installation. Whilst primarily concerned with interaction with and around an art work, the paper is concerned with the ways in which people, in interaction with each other (both those they are with and others who happen to be in the same space), reflexively constitute the sense and significance of objects and artefacts, and the ways in which those material features reflexively inform the production and intelligibility of conduct and interaction.

They (these lectures) will begin with aspects of invention and design that express the artist's responses to the assumed presence of the spectator. These reactions develop in a way that can be presented schematically in three stages: from awareness and acknowledgement, to the spectator entering the artist's subject and completing the plot, and finally from that kind of involvement to its exploitation, the artist assuming, now, the complicity of the spectator in the very functioning of the work of art.

in *Only Connect...: The A.W. Mellon Lectures in Fine Arts* (Shearman 1988, p. 17)

INTRODUCTION

In a influential monograph, *Only Connect*, Shearman (1992) suggests that from the early Renaissance onwards, the visual arts demand a more engaged spectator. Paintings and sculpture become increasingly 'transitive', encouraging the spectator to enter the subject, to help complete the plot, and to become more complicit in the functioning of the art work itself. He discusses the ways in which art is designed with regard to presence and involvement of the spectator, and how the immediate ecology of the work and the occasion of its viewing animate the spectator's experience. For example, the glance of a figure of an altarpiece may be directed towards the image of a Saint in the roof of the chapel in which it is located. Or, in paintings of the Entombment, the body of Christ appears about to be gently laid on the actual altar in the chapel below. Or, the painting on a dome may be configured so that the relationship between the figures are seen in one way by the spectator who enters beneath it and is viewing the painting with an initial glance, and in another way by members of the confraternity who sit and meditate below it at every Mass. Shearman powerfully demonstrates how the painters and sculptors of the High Renaissance were not only sensitive to the location where the painting was sited, the placement of other artefacts in the local setting and the likely positioning of the spectator, but also to the experience of different kinds of spectators as they approach the image and how through engagement with the painting, familiarity and expectation the spectator can understand the 'genealogy of the moment'. The active spectator becomes engaged with a sequence of moments portrayed in a single image.

Correggio's altarpiece for the Confraternity in Modena provides a powerful example of the transitive character of Renaissance painting, its ability to incorporate and animate the spectator. Here the viewer is drawn into the scene of action by the surrounding figures of John

ate Baptist and St George, whilst simultaneously the Virgin, by the presence of the viewer, is encouraged to return the gaze of the spectator.



Figure1: Correggio: Madonna of Saint George (permission sought).

The painting becomes intelligible by virtue of its interrelationship with the ecology in which it is located. It demands the engagement, the complicity of the spectator, the viewer's active involvement in interweaving the figures and scene of the painting with its location within the Church. Features of the painting are transposed to the immediate environment, just as features of the Church become part of the artwork and provide the spectator with an inclusive and unique experience.

Shearman's remarkable treatise raises some important issues for our understanding of visual communication. It directs out attention towards the idea of an 'active spectator' who constitutes the sense and significance of objects and artefacts. It points to the relevance of the ecology or setting in which a painting or sculpture is positioned, and to the ways in which the spectator actively 'connects' features of the object to action within the local milieu; a connection which is critical to the ways in which constitute the sense and significance of conduct and its environment. Perhaps most importantly, it raises important questions concerning the circumstances or occasions on which objects and artefacts are viewed and of the competencies that people bring to bear in their recognition and interpretation. Surprisingly perhaps, these aspects of conduct and experience have remained relatively under-developed in

research concerned with visual communication in the social and cognitive sciences. Despite the burgeoning body of research concerned with language and with gesture (see for example McNeil 2000), studies of social interaction remain curiously dislocated from the material circumstances in which it is accomplished.

In this paper, we would like to draw upon Shearman's thesis to explore how people, in interaction with each other, constitute the sense and significance of an artwork. We are concerned therefore with how people in ordinary circumstances constitute the sense and significance of aesthetic objects through their interaction with others. In this particular paper, we discuss how visitors to a contemporary arts and crafts fair in central London collaboratively, explore, examine and experience a mixed-media installation. We address the ways in which visitors discover the installation, how they assemble the sense and significance of the different components, and how the piece is used to engender curiosity, surprise and laughter. Whilst primarily concerned with interaction with and around an art work, the paper is concerned with the ways in which people, in interaction with each other, both those they are with and others who happen to be in the same space, reflexively constitute the sense and significance of objects and artefacts, how the engagement with the artefact emerges in different ways for different participants, and the ways in which those material features, and the ecology in which they lie, reflexively inform the production and intelligibility of conduct and interaction.

In recent years there has been a growing commitment amongst artists, designers, curators, and educationalists to enhance the ways in which people participate and collaborate with and around, installations, exhibits and artworks. In different ways digital technologies have provided resources with which to represent and transform conventional materials in order to engender new forms of interaction and experience. So for example, designers have created exhibits, which require visitors to touch and manipulate objects and receive 'feedback' and information. In a rather different vein, artists are increasingly experimenting with computing technology, largely conventional workstations and monitors, to create new forms of image, which in some cases encourage the viewer to configure and 'interact' with particular scenes, arrangements and figures. These are important developments which will undoubtedly, in the longer term, transform the creation and experience of different forms of artwork and exhibit. As yet however it is not at all clear that they serve to engender new forms of participation and collaboration.

There is a substantial body of research concerned with conduct, and to a lesser extent, interaction, in museums and galleries. These studies are not primarily concerned with visual communication though implicitly deal with a range of issues which bear upon how people experience museums and galleries. With a few exceptions (e.g. Diamond 1986, Hensel 1987, McManus 1987) that explore how people make sense of exhibits in interaction in the past decades increasingly research has focussed on cognition and on the ways in which particular forms of exhibit, exhibition, and accompanying information displays may enhance educational opportunities (see for example Serrell 1996, Cox et al 1999). There are relatively few studies of the ways in which people both alone and with others respond to exhibits, such as pictures and sculptures, in museums and galleries, and almost no studies of collaboration and participation with and around new forms of mixed media interactive artwork and installation. Given the turn to 'rezeptiongeschichte' in the arts in the past few decades (see for example Iser 1986, Baxandall 1992, Todorov 1990), it is perhaps surprising to learn that there is little research concerned with how participants themselves, or to use Shearman's term, 'spectators', explore, examine and experience artwork in museums and galleries, that is in 'naturally occurring environments'.

In the light of these and related issues, we have initiated a programme of work concerned with the analysis of conduct and interaction in museums and galleries (see for example, vom Lehn et al. 2001). We are particularly interested in the ways in which people experience exhibits in and through their interaction with others, both those they are with and others who happen to be 'within perceptual range of the event' (cf. Goffman 1981). This programme of work involves video-based field studies in museums and galleries including major institutions arts and applied arts, science centres, and galleries dealing with contemporary work. The programme of work also includes participation in the design and deployment of exhibits, in particular mixed media art works. Our particular interest is in exploring the ways in which people 'respond' to these works and in particular how they serve to facilitate, engender, encourage particular forms of participation and collaboration. In this paper we discuss interaction with and around one such piece, a mixed media installation, known as *Deus Oculi* exhibited at the Chelsea International Crafts Fair in September 1999. Throughout the duration of the exhibition we gathered data, video-recordings and field observations, of how people responded to the piece. In this paper we address three main themes:- how people configure their experience of the installation, the ways in which they 'uncover' its qualities and functionality through their interaction with others, and how the actions of a range of people

who happen to be within the immediate ecology feature in the discovery and experience of the piece. In a way we are concerned with the ways in which visitors and viewers are, and can be seen to be, active and engaged spectators.

DEUS OCULI

The artist in our team, Jason Cleverly, has a long-standing commitment to creating aesthetic automata from well-worn materials; automata which engender curiosity, surprise, and not infrequently laughter. Cleverly uses the concept of interaction to drive forward ideas; these include the production of sound activated sculpture, radios and figurative automata. Another strand to his work which is, in a sense more formally interactive, but similarly visual and tangible, are the cupboards, mirrors, lights, and other prosaic artefacts given a surreal or augmented treatment. The use of 'low-tech' materials provides the possibility of creating artefacts which are designed to engender interaction and participation, whilst retaining a strong commitment to enhancing the aesthetic experience of those in the locale of the exhibit. We were particularly concerned with how we can interweave digital media and tangible objects and artefacts to enhance interaction with craft-works and engender interaction and collaboration around craft-works.

Through our collaboration we have adopted an approach, which differs from those typically taken in the digital arts. Rather than replace material objects with digital displays, we are keen to explore the ways in which we can 'augment reality' (cf. Weiser, 1991). In particular, we wish to consider the ways in which we can take 'low-tech', tangible objects and refashion or augment them to engender interaction and co-participation.

Deus Oculi is based on the use of re-cycled imagery. It consists of three parts: a main picture on which is displayed a tranquil Renaissance scene and two false 'mirrors' (see Figure 2).

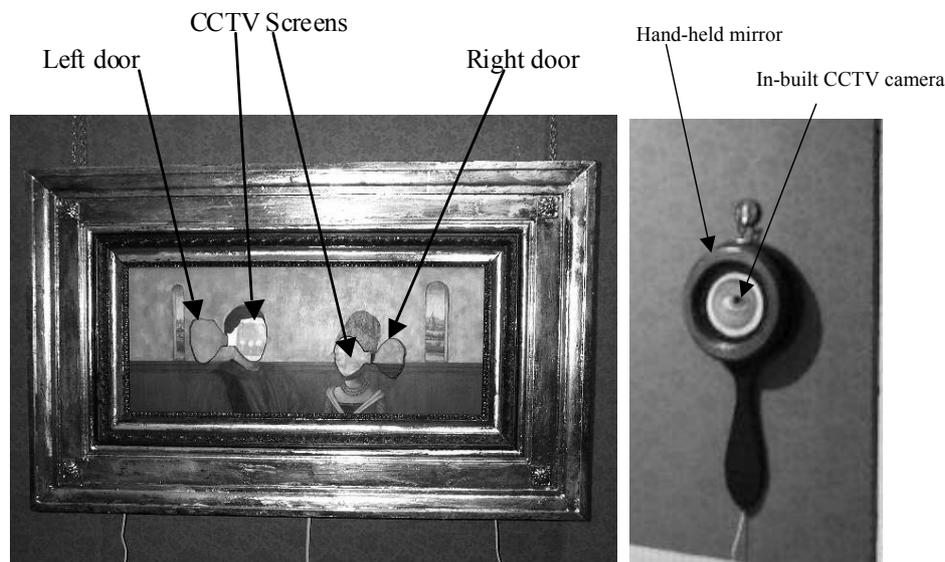


Figure 2: *Deus Oculi* – the main picture is on the left, one of the ‘mirrors’ that are positioned either side of the picture, is on the right

The picture is devised by combining elements from three separate paintings and rendered in cold enamels and water-soluble pencil directly on wood. The picture, which is framed by a wooden box, includes the faces of two individuals, a man to the right and a woman to the left, each face is on a little door which can be opened up to reveal a small CCTV monitor. The hand-held mirrors to either side of the picture each contain a CCTV camera. Indeed, although they are designed to imitate the general form (if not scale) of a hand-mirror, they actually display a painting of an eye, behind which the hidden CCTV camera is located. The image from the left mirror appears on the right monitor behind the woman’s face, and the image from the camera in the right mirror appears on the monitor behind the man’s face. The three pieces are connected by wires. Thus, if a door is opened and someone is standing next to the mirror or holding the mirror up to their face, their image will appear embedded in the picture (see Figure 3). The aim of the piece is to provoke curiosity, surprise and amusement, and it has certain similarities to cut-out pictures found at the seaside or at fairs. But in this case one is momentarily immersed in the scene as if part of the work of some long-dead master.

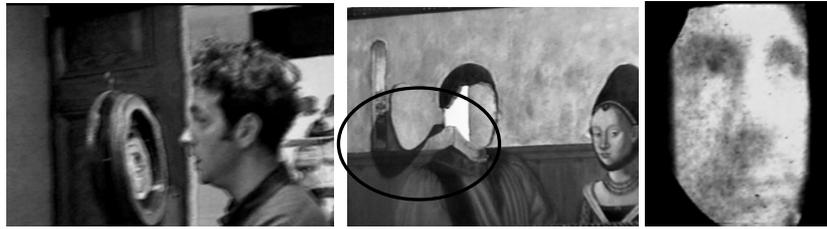


Figure 3: When someone looks at the hand-held mirror, their face appears in the central painting on the shoulders of one of the figures.

Deus Oculi was exhibited at the Chelsea International Crafts Fair; a major event for displaying contemporary arts and crafts. The exhibition space enabled us to display the piece on the whole of one wall, bounded by a door opening and a passageway (see Figure 4). Therefore, the piece could stand alone, independently of surrounding work. The location of the space, towards a restaurant, also guaranteed passing traffic as well as visitors actually looking carefully at the various pieces in the exhibition space.



Figure 4: The setting for *Deus Oculi* in Chelsea Crafts Fair.

When exhibited we decided not to give any written instructions, rather to let the participants discover for themselves, or others, the nature of the work. Occasionally, however, there was some verbal encouragement and demonstration. We collected data for most of the period of the exhibition (a week). We undertook field observation, discussed the exhibit with visitors and with other artists and designers exhibiting at the fair and also undertook extensive video (and audio) recording. The video-camera was positioned to one side of the exhibit attached to a nearby doorframe so that we could record what people did with and around the exhibit.

SHAPING EXPERIENCE

Amongst Florentine doctors, there is an illness, a diagnostic category, known as Stendhal's syndrome. It was first used in the nineteenth century and applied to young ladies, in particular

from England, who, on first seeing the beauties of Florence would be overcome by the experience and faint. Sadly, such aesthetic exhaustion, has now become relatively rare. Curators and museum managers are often disappointed by the absence of emotional response to art, and it is perhaps not ironic that recent contemporary art has once again become preoccupied with creating sensation.

One conventional view of aesthetic experience, indeed the pleasure that people gain from museums and galleries, is characterised in cognitive terms; an individual's emotion arising primarily through a psychological process through which the unique qualities of an art work are contemplated and internalised. Exhibits themselves are thought of as having 'stopping power' and the interest and pleasure that people gain arises through their individual engagement with the art work. As we have suggested elsewhere, this individualistic understanding of behaviour and experience in museums and galleries, stands in marked contrast to the conduct and interaction of visitors; visitors who are often with others, friends, family and the like, and who reveal an extraordinary sensitivity to the conduct and experience of others – both those they are with and others who happen to be in the same space (vom Lehn and Heath 2000, vom Lehn at al in press). Indeed, what people chose to look at in a museum or gallery, how long they spend with an exhibit, and how they look at and experience particular objects and artefacts may well arise in and through interaction with others – not just those they may be with but others who happen to be within 'perceptual range of the event' (cf. Goffman 1981).

Certainly, in the case of *Deus Oculi*, participants go to some trouble to create dramatic experience for both themselves and others. Indeed, the very discovery of the piece, the seemingly haphazard assembly of artefacts, and the very ways in which it is perceived and enjoyed, arises in and through the interaction of those who happen to be in the same space.

Consider the following example. Two women, Susie and Julia, are looking at the 'mirror' on the right hand side of the installation attempting to work out what it does and its relationship to main body of the piece. Susie then asks Julia to 'just stand there a moment'. Julia adopts a rather severe pose, and raises herself directly in front of the mirror as Susie moves the centre of the installation. She opens the little door to the monitor. A moment later, Susie bursts out laughing. Still laughing, Susie turns towards Julia whilst preserving her bodily orientation towards the monitor and holding onto the small door. She turns back and looks at the monitor. Whilst retaining her pose, Julia, glances at the open door, the monitor, and bursts out laughing uttering 'oh I see'.

Fragment 1

Suzie Julia



S: Stand there

J: Oh I see::

Susie's sudden and dramatic response to the installation emerges in and is preserved through interaction with her friend; indeed Julia's pose is critical to the character of the object in question. The outburst however is systematically designed to have Julia see for herself what has happened and why it is funny. It renders the referent, the object, at which Susie is laughing problematic; it poses a puzzle for Julia and encourages her to figure out what has happened.

Susie's laughter not only reflects her personal enjoyment of the piece, but is designed to encourage Julia to understand what the installation does and why it is funny. Susie's response, her laughter, bodily orientation towards the object, coupled with her glance to Julia and back, is designed both to encourage Julia to glance at the object, and to 'connect' her self, to the object in question. Her actions render the object noticeable and funny and invite Julia to look towards it and discover, for herself, what has happened. Susie's response displays and sustains the element of surprise, whilst displaying a potential connection between what is seen and Julia. Both Susie's initial response and the ways in which her laughter is articulated and doubly oriented towards her friend and the 'object' within the installation allows Julia to discover for herself what has happened; that she, herself, is part of the object and the source of amusement.

In the case at hand therefore, Susie, through the ways in which she fashions her response, not only encourages her co-participant to look at something, but to create a connection between what is seen and her own conduct and appearance; it allows Julia to transpose herself into the object of amusement.

We can begin to see therefore how an individual's response to the artwork may not simply consist of a direct personal reaction to the qualities and character of the piece. Rather, the very response, may be designed to facilitate and engender particular forms of co-participation, and to enable others to see and experience what you have seen in the ways that you saw it. The

encounter with the work is not simply collaboratively accomplished, but rather the aesthetic response, within the very course of its production, is designed to display, and encourage, a way of seeing, of making sense, of experience by others.

With regard to the installation in question, participants may attempt to configure what is seen and experienced. We have discussed elsewhere how participants through their talk and visual conduct attempt to animate exhibits, highlight particular elements and dramatise certain features and operations (vom Lehn et al, 2001). Part of the exhibits are selectively rendered visible through gesture, bodily comportment and talk, so that a co-participant, momentarily experiences the object in particular ways. So for example we have noted how in science museums, children may exaggerate the operation of a particular process, by vocalising the movement of a liquid, or in an art gallery the inscribed canvas of a painting may be revealed through a series of 'exaggerated' curvaceous gestures. *Deus Oculi*, with the ways in which it incorporates and re-frames images within the installation provides rather different opportunities for shaping how others experience the piece. And indeed, as many other instances in our corpus of data show visitors go to some trouble to use the installation to engender an experience for themselves and then for the person(s) they are with.

In the case at hand, we see how the very appearance of a co-participant within the scene is configured to occasion a particular emotional reaction. Participants often do more than simply appear in the image, however carefully positioned. In various ways they attempt to animate the image and create a particular response, especially in instances where a co-participant is familiar with the operation of the system and it therefore no longer stands as a curiosity in its own right. At the moment at which the person who looks into the 'mirror' believes the co-participant is looking at the scene he or she produces an action which momentarily transforms the image. So for example, when Susie places herself in front of the camera to enable Julia to experience the sensation, she sticks her tongue out. In other instances we find people playing with the image, raising their eyebrows, pulling faces and the like; the force of the animation deriving not simply from a person's image but that stands against the backdrop of a tranquil Renaissance scene. Splendidly, these animated displays, interweave, at that moment, conduct within the physical space with action within the painterly, mediated scene. The force and significance of the installation in part derives from its ability to incorporate actions and spaces, which are ordinarily distinct and unrelated. This achievement is produced in the collaboration of the participants. They shape their own and each other's experience in, and through the installation.

CHANCE DISCOVERIES

In recent years there has been a revitalisation of interest in the ways in which people discover and perceive objects and artefacts (Gibson 1979, Norman 1990, Gaver, 1991). Despite the methodological diversity of research concerning the ways in which people discover objects and artefacts, in particular their 'affordances', these studies primarily focus on the psychological and cognitive abilities of the individual. Surprisingly perhaps, the social and practical circumstances in which people encounter novel objects and artefacts has received relatively little attention, nor have the ways in which individuals may interact with others when discovering how to look at, use and experience the new.

Each area within the fair displays an assembly of similar objects, for example porcelain, furniture and the like. People enter and pass through the various exhibition spaces and can see, at a glance, the assembly of similar objects within a particular scene. In our particular case, the areas consisted of a collection of curious, crafted objects that were displayed as distinct items, and as with any conventional gallery, were items that could be and are viewed alone, independently of each other. *Deus Oculi* however demands a rather different standpoint; a visitor who examines the interrelationship between seemingly independent objects and thereby discovers their curious functionality. Various aspects of the piece engender inquiry and investigation, for example people discover the hinges in the painting and flip the doors open, or with the doors open would try to determine what the screens behind were for. Cleverly happened to leave the wires showing which connected the mirrors to the main part of the installation and it is not unusual to find visitors tracing the path of the wires and working out the interconnection. It is interesting to note however that certain aspects of the piece that were designed to encourage independent viewing and collaboration, for example the ability to remove and hold the mirrors, are rarely exploited or even discovered unless shown to people. Interestingly however, visitors did indeed look at the main part of the installation and recognised that they needed to do more to work out the functionality and characteristics of the piece.

The discovery of the functionalities of the piece are largely discovered in and through interaction with others, both those people with and others that happen to be in the same space. It is not unusual however for people to discover the characteristics of the piece, by chance, even before they have begun to examine the installation. In the following fragment two visitors, Vanessa and Simon enter the scene. Vanessa approaches the main body of the installation whilst Simon approaches the first mirror. As he approaches the mirror, Vanessa

bodily orients towards the installation and exclaims “Ooh: look (.) you just popped up the(h)re:(hh)”.

Fragment 2



V: Ooh:: look you just popped up thehre:hh

→ V: Ooh: look (.) you just popped up the(h)re:(hh)
(0.7)

V: heh
(0.4)

V: You jus:(t) heh (.)°hh
(0.2)

V: °heh

S: There's an eye::,
(1.2)

V: Yers: there's eye (here) hah
(0.5)

S: Let me see you,
(3.2)

As she utters the word ‘look’, Vanessa begins to gesture at the monitor; pointing towards Simon. By the time the gesture arrives at its acme, the image to which it is addressed has already disappeared, as Simon moves away from the mirror. He does not however, initially turn towards Vanessa or the object at which she begins to point, but rather looks upwards as if searching for the ‘look-able’ above the mirror. As he moves, Simon begins to disappear from the image. Vanessa’s account is neatly designed to provide a sense of what is ‘noticeable’ and of continuing relevance (not simply his appearance but the fact that he did appear), and she holds her pointing hand at the monitor until Simon turns and looks at the (changing) object in question. Vanessa’s actions therefore transform, as the image transforms, the thing which is

being pointed out. Whilst the gesture is held, Simon turns and looks at the monitor. Securing his orientation, Vanessa then realigns her pointing gesture, and orients to the mirror, providing Simon with a sense of the potential connection between the object and main body of the installation. He immediately peers back into the mirror and begins to describe what he can see 'there's an eye' as Vanessa returns her gaze to the monitor. A few moments later they exchange places and he then sees what Vanessa saw, or at least sees where he appeared.

In the case at hand, we can begin to see how the issue for the participants become not what the installation does, but how it is done. The shifting scene within the installation not only serves to catch Vanessa's eye, but provides the resources through which she begins to assemble the relationship between different artefacts within the space. It is not simply the co-participant's appearance, but the very action in which he is engaged at that moment, as accessed both through the installation and his physical presence alongside hers, which allows her to configure the relationship. Whilst the action disappears as quickly as it emerged, she is able to demonstrate the interrelationship between the two parts of installation by having Simon see the monitor and see the current scene on the monitor. Retrospectively, he is able to recover what she saw, and how she saw it, and the use the piece as resource for subsequent investigation and entertainment.

We can begin to see therefore how the qualities and functionality of objects may be discovered through social interaction. In the case at hand, the installation transposes the location of action and re-presents it within the painterly scene. Its representation serves to engender practical inquiry concerning what happened and how it happened. The transposition and its noticing, occasions interaction between the participants, in particular the series of actions through which individuals determine and exploit the qualities of the piece, just as the initial noticing arises, by chance, in and through their interaction with each other. Their very co-presence, their continuing conversation as they examine the two pieces alongside each other engender the very transformation which serves to engender talk and interaction.

It is not only through the conduct of people one is with that one might be encouraged, or even happen, to notice some thing or action within the local milieu. Rather, the ways in which others traverse, orient to, glance at, even comment upon, the objects and artefacts within the local milieu may encourage people who just happen to be in the same space to notice some thing of interest, of curiosity, some thing 'noticeable' (cf. Sacks 1992). This may be quite a distinctive way of considering Shearman's 'transitive' relationship between the artefact and the active spectator. Objects and artefacts and in particular, their occasioned sense and

relevance, can become visible through the actions and activities of others. The ecology ‘emerges’ in highly selective and interested ways by virtue of the conduct of people who are with you and those who just happen to be ‘within perceptual range of some event’.

Consider the following fragment. Four visitors enter the scene and begin to walk past *Deus Oculi*. Al turns the corner first, closely followed by, Jean, Anne and Doug. As Al walks past the piece he opens one of the windows and finding nothing but a monitor walks on. As Doug nears the installation, he exclaims ‘Ooh look, look look’.

Fragment 3



D: Ooh look, look look

D: Ooh look (0.2) look look
(0.4)

D: When he is over there and the camera is over here
(0.2)

Al: Yeh
(0.3)

D: Jean (0.2) look at this camera

The characteristics of the piece which pass unnoticed to Al, are revealed by Doug. His exclamation is accompanied by a series of gestures. The gestures begin by briefly pointing at the mirror/camera and then the monitor demarcating a connection between the objects which is then glossed within the subsequent explanation. Simultaneously they serve to reconfigure the participants’ conduct, Jean arresting her progress and reorienting firstly towards the mirror/camera and then the monitor. They also encourage Anne to look at the monitor and Al to arrest his progress. He assembles the relationship between the components for his friends, and momentarily configures their location and orientation to enable them to see how they become relevant within the experiential framework of the installation. Indeed, by

reconfiguring their orientation he once again has Al and Jean appear in the monitor and provides them with what he had seen moments before.

Doug's actions, and the conduct of his friends, do not pass unnoticed by others within the local milieu. Looking at the objects on the opposite side of the exhibition space are Tim and Mary, and as they laugh at one of the exhibits, Tim appears to overhear Jean saying 'can you touch this' and turns and looks, not at Al, but at the door that Al is holding open. Tim begins to re-orient towards *Deus Oculi*, as Mary continues to look at the mirrors on the far wall.

Fragment 4

Tim Mary



D: Ooh look

look, look

M: Oh::no::::

°hhhhh Go::d: (.)

it's ma:::::d

D: Ooh look

M: Oh::no::::

D: Look look

M: °hhhhh Go::d: (.) it's ma:h:d

D: When he is over there and the camera is over here

(0.2)

Al: Yeh

J: argh:::::::::::::

D: Then he plugged (0.2) into this camera

J: I didn't see tha:t

A few moments later, Tim turns around further towards *Deus Oculi*. He momentarily opens and closes his mouth as if about to speak. Mary turns round to look at whatever he is looking at (and about to speak of). Al and Jean move on with Anne and Doug close behind. A moment later (as Jean happens to walk past the left hand mirror) Doug exclaims 'Oh look' and, almost simultaneously, Mary cries, Oh::no::::.

For Tim and Mary the installation becomes noticeable by virtue of the actions of others who enter the space. Jean's initial query, coupled with the AI's opening of the door and inspection of the scene behind, has Tim reorient, not simply to what AI is doing, but rather to the object that he is examining. The ecology, and in particular the installation become visible by virtue of the others' conduct. In turn, Tim's reorientation, coupled with his unvoiced utterance, serve to encourage Mary to inspect the scene to determine what has been noticed. Mary's orientation to, and experience of, *Deus Oculi* emerges in the light of the conduct of Tim and those who are looking at the installation, just as Mary's exclamation serves to encourage further inspection of the piece by Tim and one suspects Doug and his friends. A number of people therefore, some of whom are with each other, and others who just happen to be in the same space, notice and experience and momentary event within the immediate environment, by virtue of the actions of others, and in particular noticing others notice something within the scene. The ecology, and in this case the installation, becomes visible and intelligible in a particular way by virtue of other people looking and seeing.

As Mary and Tim notice the changing image on the screen, they immediately glance at the left hand monitor to see the source of the changing image. Doug too connects the scene and points out to the others how the installation works. Tim, followed by Mary, immediately turn back to the displays they were looking at earlier, to see whether the mirrors on their wall, are connected into the piece, either as cameras or monitors. A moment later they turn back to the installation to see whether the mirror on the right hand side, is also a camera and connected to the face in the painting. The event therefore, noticing the changing image on the monitor, encourages Tim and Mary to re-inspect the scene and in various ways to explore the potential relationship and the affordances of different objects within the immediate ecology. Once again, the interaction of the participants, and all those who happen to be in the same space, provides resources for inspecting and seeing features of the immediate environment; just as the immediate environment provides the participants with the ability to interrelate and make sense of each others conduct.

A feature of the world is progressively discovered by virtue of one person noticing someone else notice something. The objects, their character, interdependence and functionality are assembled. then and there. by virtue of how others selectively orient and respond to the world in which they are located.

PASSING ENCOUNTERS: LEGITIMISING CO-PARTICIPATION

The conduct of others within the same space can feature in how people orient, what people chose to look at and how they experience particular objects, artefacts and events. In one sense, people become sensitive to the surrounding environment and its occasioned relevancies by virtue of the action and activity of others, and can make sense of the conduct of others by discovering, determining, connecting, its relationship, or potential relationship, to particular features of the local milieu. In this and other ways, the conduct of others come to feature in action and activity to which, at first glance, it seems unrelated, and can play an important yet unobtrusive part in the very interaction of people who are together in the same space. These seemingly fluid boundaries of social interaction within public space are of increasing practical relevance to museum curators and exhibition designers, and the growing interest in developing exhibits which facilitate and encourage co-participation and collaboration even amongst those who may simply happen to be in the presence of others. It should be added that this commitment to encouraging co-participation and collaboration in museums and galleries derives in part from developments in education and with its growing emphasis on situated cognition and informal learning.

It is relatively rare in galleries and museums, even those which house objects and artefacts designed to facilitate co-participation and collaboration, to find strangers coming together to explore and discuss particular exhibits.

Curiously however, we find that *Deus Oculi* does occasion passing encounters and even conversation amongst strangers who happen to be in the same space. Consider the following instance; a fragment in which a young lady, Beatrice, followed by her boyfriend, approach the installation. She points to one of the portraits, chuckles and exclaims ‘visual art’. Behind them, looking at the pieces on the opposite wall, are Jo and Allan. As Beatrice inspects the piece and looks for a potential connection between the mirrors either side, Jo turns and approaches the camera to the left of the installation.

Fragment 5



B: Oh I see it's you:::

J: Oooo↑oooooh

As she looks at the monitor in the installation, Beatrice suddenly exclaims ‘oh I see it’s you’ as she notices that she is looking at the woman (Jo) to her left. As she produces the utterance, Beatrice turns from Jo back to the monitor and then back to Jo, pointing to her as she utters ‘you’. Her actions not only voice the surprise, both for her boyfriend and Jo, but provide them with the source of ‘it’s’ as she glances momentarily at the monitor. It appears as if the utterance is produced in such a way that it presumes that Jo, who is appearing in the monitor knows what she has done, as if it has been done to Beatrice. Whatever, finding that Jo is not familiar with her part in the action and the operation of the installation, Beatrice reconfigures their respective positions to provide the experience. She suggests that they swap places and points to the monitor uttering ‘if you stay there’. Jo repositions herself and looks at screen in the picture, as Beatrice goes to peers into the mirror.

Beatrice suddenly thrusts her face into the mirror. Jo produces a loud exclamation “Oooo↑oooh” and grabs her mouth in surprise. The response has all the hallmarks of the section on surprise and wonder in Darwin’s (1872) famous treatise on the expressions of man and animals.

Jo’s exclamation is exquisitely designed and curtailed with regard to the circumstances at hand and in particular Beatrice’s emerging conduct. Even though she would see an image of Beatrice’s face before it fills the monitor, the onset of the exclamation is delayed until her co-participant has achieved the appropriate position. The exclamation whilst loud and dramatic is audible to those who gather around the piece, in particular Beatrice and her boyfriend, but not beyond. The sudden gesture to the mouth, coupled with the open eyes and raised brows, help dramatise the response, and yet simultaneously



circumscribe its domain of relevance. Beatrice occasions and fashions Jo's experience of the installation and Jo exquisitely tailors her response to provide her co-participants with the unanticipated surprise and awe. In turn, Jo's response provides resources for further discussion about the installation, how it could be happening, a vehicle for the co-production, and escalation of mutual awe and appreciation.

The very appearance of another within the installation therefore can provide the resources with which to engender talk and interaction between people who just happen to be in the same space. It is not that in looking at someone in the piece, you are looking at someone at a distance, in a voyeuristic manner. Rather, the person who appears in the installation is standing next to you, and is looking out at you; in a curious way the viewer becomes the recipient of another's gaze, just as in looking at the piece you find yourself looking at someone. It is not simply that 'seeing you looking out at me' provides a 'ticket for talk' (cf. Sacks 1992), but that failing to remark upon another's appearance within the work may itself be potentially accountable. Either way, these occasioned appearances make talk appropriate and relevant between apparent strangers in as much as they legitimise talk concerning the operation of the piece and why things have occurred in the way that they have. They also provide a responsibility, to give the other of sense of the very experience that you have experienced, so that they can see for themselves how they appeared. The very asymmetries that pervade the piece, provide the foundation to a 'my turn your turn' structure to the ways in which people interact with the piece and each other.

The movement from preliminary interaction into mutually focussed talk and discussion can be a delicate and complex matter, and in many cases a sensitivity to another's conduct at the exhibit, even a passing remark may go no further than just that. The ways in which people who happen to be in the same space, especially third parties who witness the actions of others, progress from co-orientation into 'focussed interaction remains largely unexplored in studies of visual communication (despite its potential importance to our understanding of human sociality and interpersonal relations, see Sacks 1992 and Goffman 1971 and 1981). It is worth noting for example that it is not unusual to find 'third parties' entering the space and watching for example a couple together explore the exhibit. For instance, as Julia and Susie examine the piece and Susie poses for Julia (sticking her tongue out), a woman standing behind smiles at the image on the screen and holds that smile so that the it is visible to the protagonists. Indeed, Julia returns the smile and the woman moves to one side.

Though of little lasting significance, the discussion of the fragment begins to reveal that in some instances people may begin (attempts) to participate in a particular activity, and become included within the framework of emerging action and activity. In the case at hand, we find a critical juncture within the emerging event; a shift from witnessing and being seen to witness the activities of others, to responding to their action and having them respond to yours. The moment of an action almost embodies the principle concerns of those interested in ‘peripheral participation’ and related matters. The transition point, from periphery into the principle strip of activity, hinges not on the spatial distribution of the participants, or even simply on the character of the conduct, but rather through the ways that actions are treated as sequentially responsive and prospectively relevant. In the case at hand, we find a microcosm of the sorts of tensions and difficulties which arise in social life, not infrequently amongst couples when they are socialising with others. Through no fault of their own, or anyone else’s (necessarily), a moments exchange can engender a curious intimacy between two of the participants, in this case literally behind another’s back.

DISCUSSION

Galleries, museums and exhibitions provide an important opportunity for those with an academic interest in visual communication. They are settings *par excellence* that provide people with things to see and with ways of seeing and experiencing objects, artefacts and events. They are committed to engendering new ways of seeing and experiencing objects, of providing people with the ability to discover, learn and understand, and with the ability to reflect upon both the unusual and the mundane. Galleries and museums are institutional environments committed to a large extent in providing an opportunity for, and facilitating, visual communication. In this light it is interesting to note that to the pervasive model of the visitor or viewer, in museums and galleries, and amongst artists and designers, would appear to remain the individual, alone, perhaps with others, contemplating and experiencing objects artefacts and events. Even centres and museums designed to encourage more active involvement in issues and collections, and committed to introducing new technologies and the like, often enhance an individual’s ‘interaction’ with, and experience of, an exhibit at the cost of co-participation and collaboration. Social interaction in galleries and museums, and the ways in which it informs what people chose to look at, how they examine and experience particular exhibits, and the conclusions they draw, remains a neglected field of study.

In the case at hand, one can begin to see how the discovery and experience of an exhibit arises in and through the interaction of the participants both those who are together and others who happen to be in the same space. We see for example how people take it upon themselves to configure how they use and experience the installation; aligning a co-participant to enable them to see and encounter the scene in particular way. Similarly, we find participants positioning themselves so as to become an object in part of the scene, and, in figuring their appearance, occasioning surprise and delight from the person they are with. In these and other cases, participants not only organise themselves or others within the scene, but coordinate their actions with those whom they are with to produce, at the point at which the other looks at the scene, the relevant action and thereby engender response. The installation is used to occasion surprise curiosity and delight from others; and these emotional reactions are carefully and systematically configured to provide the relevant appearance at just the moment the other enters the pictorial scene. Action is embedded, cast into the scene, by virtue of the timeliness and character of the other's appearance within the scene. It may simply involve aligning yourself to the camera, but even this involves orienting to how your appearance might appear in the scene elsewhere. It often involves specific attempts to animate the image, to pull faces and the like; the force of the action deriving not simply from its appearance elsewhere, but from the way in which the individual's image and action jars with the scene in which it is located. If you like, it is a splendid illustration of the ways in which participants may orient to 'perspective of the other' and design actions to occasion particular response, which independently of their appearance in the others scene would seem of place and out of time.

The conduct of the participants points to the ways in which emotional reaction not only emerges within interaction but is carefully designed with regard to the concurrent and prospective conduct of the participants. For example, consider the ways in which Jo's shock is not only timed to respond to the Beatrice's emergence within the pictorial scene, rather than the initial appearance, but is tailored with regard to both the ways in which the wonder of the piece has been intimated, and with respect to the location and orientation of her co-participants. The hand placed over the mouth is indeed an exquisite way of revealing shock whilst displaying appropriate decorum within the circumstances at hand. Similarly we find in other instances the ways in which emotional reaction is systematically articulated with regard to the interactional constraints at hand, and produced even in cases where it is elicited and the object to be reacted to is already familiar. These expressions have many of the characteristics discussed by students of the motions and bodily behaviour, and yet here we can discern the

ways in which these emotional reactions are tailored, even within the very course of their articulation with regard to the presence and participation of others. As we have suggested elsewhere the very objects that are used to express suddenly emotional reaction. ‘oohs’, ‘arghs’, laughter, and the like, coupled with their bodily counterparts, are themselves devoid of lexical commitment and can extended and foreshortened at will and in particular ways that the moment demands (vom Lehn et al 2001).

It is surprising that the substantial body of research concerned with how people discern and discover the functionality and affordances of objects remains principally concerned with the cognitive abilities they bring to bear in perception rather than with the social circumstances in which objects and artefacts are seen and discovered. *Deus Oculi* and the conduct and interaction which arises within its auspices, raises some interesting issues in this regard, and in particular points to the ways in which action and co-participation provide a vehicle for the discovery and experience of the installation. As we have suggested for example, people may discover the functionality of the piece simply by observing others using it, or by chance, when someone walks in front of the camera and momentarily appears on the monitor. It is interesting to note that when participants do indeed undertake an investigation of the piece, then a principle concern of their practical inquiries is directed towards discovering the relationship between different objects, not simply with regard to their spatial juxtaposition, but rather with regard to potential relations between the actions that they may afford. In other words, the inquiries are directed towards, discovering what it is that happens in one domain, with one object, which might engender, encourage, facilitate action which occurs elsewhere.

In his lectures on High Renaissance art, Shearman suggests that in the work of Michelangelo, Solario, Raphael, Pontormo, Correggio and others we can see a way that the assumption that such visual art is concerned with portraying just a single moment need not hold. Rather, painters such as these, by exploiting the expectations of the spectators with the narratives portrayed, their familiarity with related pieces and the location of the piece, were concerned with drawing the viewer through a ‘sequence of moments’ (p.82). With more modest designs, *Deus Oculi*, draws spectators into active engagement with the piece. But through analysis of interactions around the installation we can consider quite different sequential relationships between the conduct of spectators and artworks. The analysis suggests ways in which the installation provides or supports sequential relations between the actions of viewers; where what those actions might be, is opaque. Spectators through their moment-to-moment conduct, for example when endeavouring to discover how it ‘works’,

display a sensitivity to how others are viewing and orienting to the piece. Indeed, there are multifarious ways in which ‘sequences of moments’ emerge in the viewing of the artwork through the conduct of various participants whether they are with each other or just in the perceptual range of a viewing. In this regard it is worth noting that once discovered, then the activity becomes one party producing actions which are designed to engender sequentially related conduct from another. It is as if the foundational organising feature of human conduct and sociality, namely sequence-in-interaction, provides the ways of investigating and perceiving the properties of artefacts.

The installation, and the interaction it occasions, points to some interesting issues with regard to the relationship between conduct and the immediate environment. We can see for example how through interaction participants discover and reflexively create the sense and significance of the installation and its various components; their playful actions and activities giving a flavour or character to the piece and the surrounding artefacts. Indeed, as people enter the scene and see others exploring and playing with the piece they not infrequently adopt a particular demeanour, a low smile that pervades their inspection of the various pieces of display and glances at their others within the same space. More importantly however, the installation provides participants with ways of making sense of, of ‘reading’, the conduct of others. Their bodily comportment, their orientation, exploration, investigation, manipulation and the like become sensible, by virtue of their ‘connection’ to the installation. Indeed before it is known, or its functionality discovered, the piece can serve as a resource in rendering the actions and activities of others within the space intelligible, and critically, as a resource for the organisation of one’s own conduct and interaction. This may entail not more than providing the ‘elbow room’ to enjoy the piece for themselves, as arrangements for getting in line for one’s own turn, or it may provide ways of recognising what the piece does and how it can be played with when space becomes available. The immediate ecology therefore is a critical part of the production and coordination of conduct, just as it provides ways of making sense of the actions of others; their actions pointing to (literally in some cases) the very occasioned sense and relevance of objects which make their conduct intelligible and recognisable to others.

In this regard, it is interesting to contrast *Deus Oculi* with many of the interactive exhibits that one increasingly finds within museums and galleries. They are largely PC based and even in cases where they involve more sophisticated technologies, the display is provided through a conventional monitor; consider for example many of the exhibits in the new Wellcome Wing in the Science Museum, London. Many of these exhibits are highly entertaining and provide

complex forms of ‘user interaction’. One difficulty however, is that when someone is looking at the screen and interacting with the system, it is difficult for others (either those they are with or people within the same space) to see the scene or realm of action to which their actions are designed and addressed. Such display technologies (and one suspects also the nature of the interaction the systems engender) undermine the mutual or public visibility of conduct; it is difficult not only to see what others are doing, but the very material foundations on which action is based. It is interesting to note that many conventional exhibits in science centres and museums, even where they are highly complex, such as large scale mechanical objects, provide others with ways of seeing the scene of action, whereas digital systems and displays often undermine mutual availability and visibility. Removing the visibility of the scene of action from the view of others, not only undermines co-participation and collaboration at the exhibit itself, but removes the possibility of others seeing and making relevant sense of what people are doing elsewhere within the scene. The relevant ecology of action is largely denied those who happen to be within the same space. In contrast it is worth adding that even those who design for fairgrounds and the like have long recognised the importance of making their displays visible to a ‘gathering’ allowing others to participate in various ways in the scene of action. *Deus Oculi* plays with the ecological configuration of conduct within the space, but does provide people with ways of seeing the scene that forms the basis to the actions of others. It is designed to render actions and material foundations visible, albeit in a dislocated fashion.

The import of considering how people actually respond to and participate through, exhibits such as works of art or scientific displays may not only be relevant to those with interest in design or curatorial practice. It may also have a bearing on contemporary issues and debates within particular disciplines that bear upon our understanding of visual communication. Take for example the history of art, and the importance of the writings of Baxandall to recent debates concerning the form and focus of critical analysis. An important part of the force and influence of Baxandall’s argument derives from its concern not simply with production but the circumstances in which works were/are received and the competencies, intelligence and the like that spectators brought to bear in experiencing painting, sculpture and the like (see for example Rifkin 1999 and Baker 2000).

“The maker of a picture or other historical artefact is a man addressing a problem of which his product is a finished and concrete solution. To understand it we try to reconstruct both the specific problem it was designed to solve and the specific

circumstances out of which he was addressing it. This reconstruction is not identical with what he internally experienced: it will be a simplified and limited to the conceptualizable, though it will also be operating in a reciprocal relation with the picture itself, which contributes, among other things, modes of perceiving and feeling.”

Baxandall 1985 Pp 14-15

The thrust of Baxandall’s argument concerns the ways in which the production of objects and artefacts is fundamentally sensitive to the ways in which they will be and are received, In part by virtue of its historical focus, the critical analysis of art, has largely disregarded the ways in which works are experienced within the practical circumstances and constraints of museums and galleries. Cognitive perceptual models have been developed, and of course there is a substantial body of research concerned with ‘visitor behaviour’, and yet neither of these traditions take the social and interactional organisation of looking at, discussing and reflecting upon, art work seriously. In some sense, the very practice of looking and seeing art work has remained epiphenomenal, and yet the arguments of Baxandall and others place the situated and socially organised experience of art work at the heart of the analytic agenda. We believe that detailed naturalistic studies of practice can provide a unique yet complimentary approach to understanding art, in particular by placing the spectator, his conduct and experience at the forefront of investigations.

Returning to Shearman’s treatise, we can begin perhaps to see why it may well be of relevance to studies of visual communication and more generally the analysis of human conduct and interaction. Our understanding of visual aspects of human communication – of seeing, gesture, bodily comportment and the like – has largely been conceived in terms of a face to face model principally involving interpersonal communication. Not surprisingly the criticalness of language use and discourse pervades this model and has provided a vehicle both for analysis and conceptualisation of visual communication (see for example Birdwhistell 1970). The material circumstances in which interpersonal communication is conducted has largely been disregarded, and even when it has been considered, they are largely treated as the ‘framework’ in which conduct and interaction takes place. How objects and artefacts come to feature in the production, coordination and intelligibility of conduct remains largely disregarded in our understanding of human communication, and yet is recognised as having profound impact on what we do and how we do the things that we do. In taking visual communication seriously therefore, we need to increasingly transgress the conventional models of visual conduct and interaction and to direct analytic attention towards the ways in

which occasioned features of the local ecology reflexively inform and are constituted through social action and activity. Domains such as galleries and museums with their institutional concern with visual communication, even small scale naturalistic experiments may provide interesting opportunities for developing these analytic and substantive concerns.

ACKNOWLEDGEMENTS

We are grateful to the organisers of, and visitors to, Chelsea International Crafts Fair for the help and support with data collection and the many visitors who participated in the study. This work is part of the project “Design for Interaction and Collaboration” funded under the ESRC/EPSRC Programme PACCIT (Project no. L328253030).

REFERENCES

- Baker, M. (2000) Limewood, Chiromacy and narratives of making. Writing about the materials and processes of sculpture. In Rifkin, A. (ed) (1999) *About Michael Baxandale*. Oxford: Blackwell pp 36-69.
- Baxandall, M. (1985) *Patterns of intention: on the historical explanation of pictures*. New Haven & London: Yale University Press.
- Birdwhistell, R. L. (1970). *Kinesics and Context: Essays on Body Motion Communication*. London: Allen Lane.
- Button, G. and Sharrock, W. (1997). 'The Production of Order and the Order of Production: Possibilities for Distributed Organisations, Work and Technology in the Print Industry', in *Proceedings of ECSCW '97*, Lancaster, pp. 1-16.
- Darwin, C. (1872) *The Expression of the Emotions in Man and Animals* (ed. P Ekman). Fontana.
- Gaver, W. W. (1991). Technology affordances. *Proceedings of CHI 1991*.
- Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.
- Goffman, E. (1971). *Relations in Public*. Harmondsworth: Penguin.
- Goffman, E. (1981). *Forms of Talk*. Oxford: Blackwell. Iser, W. (1985). *The Act of Reading*. London: Routledge.

- McManus, P. (1987). It's the company you keep... The social determination of learning-related behavior in a science museum, *International Journal of Museum Management and Curatorship*. (June), 263-270.
- McNeil, D. (2000) *Language and Gesture*. Cambridge: Cambridge University Press
- Norman, D. A. (1990). *The Design of Everyday Things*. New York: Doubleday.
- Rifkin, A. (ed) (1999) *About Michael Baxandale*. Oxford: Blackwell
- Sacks, H. (1992). *Lectures in Conversation: Volumes I and II*. Oxford: Blackwell.
- Shearman, J. (1992). *Only Connect...Art and the Spectator in the Italian Renaissance: The A.W. Mellon Lectures in Fine Arts, 1988*. Princeton, NJ: Princeton University Press.
- Todorov, T. (1990). *Genres in Discourse*. Cambridge: Cambridge University Press.
- vom Lehn, D. and Heath, C. (2000). *Participation in 'Desert Rain'*. WIT Report.
- vom Lehn, D., Heath, C. and Hindmarsh, J. (in press) Exhibiting Interaction: Conduct and collaboration in museums and galleries. *Symbolic Interaction*.
- vom Lehn, D., Heath, C. and Knoblauch, H. (2001). Configuring Exhibits: The interactional production of experience in museums and galleries,, in *Verbal Art Across Cultures: The aesthetics and proto-aesthetics of communication*, Knoblauch, H. and Kotthoff, H. (eds.), pp 281-297. Tübingen: Gunter Narr Verlag.
- Weiser, M. (1991). The Computer for the 21st Century, *Scientific American*. Sept.