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Putting Vision in its Place: the interweaving of senses to create a sense of place at Çatalhöyük

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Visualizing Çatalhöyük

"….vision drives out the other senses. It is the ideal sense for an intellectualized, information-crazed species that has withdrawn from many areas of direct sensation." (Porteous 1990 p.5) Of course, Porteous, like any poetic writer, exaggerates. on the other hand….

I have been caught up in the dominance of the visual sense, along with any other archaeologist who adores visual media of modern digital technology, and along with those who enjoy popular culture in the Western world. It was a wonderful transformation to be drawn into the world of Apple Macintosh with its intuitive point-and-ye-shall-be-rewarded theme and away from the dreadful text- and number-driven Unix system. I was able to create and share visualizations, developing visual skills that had got me into archaeology in the first place. Sure, I used sound in my multimedia pieces, but as a way to *enhance* the expression. I was thus a typical child of the Western world. Until I started thinking seriously how we construct place, and specifically a sense of place. And especially until I started writing this paper.

The visual impact at Çatalhöyük has always been huge. From James Mellaart's excavations in the 1960s came photographs, painted visualizations, drawn reconstructions of mud-brick houses which by themselves were spectacularly preserved (Mellaart 1967). But they were further embellished with visually spectacular elaboration including wall relief sculptures, cattle horn core installations, and wall-paintings of animals and humans apparently in scenes.

The plans and photographs from Mellaart's excavations have created the place of Çatalhöyük for people throughout the world. They are hegemonic:, as are all hyperrreal images (Baudrillard 1983). They influence other kinds of (real) experience even a direct encounter with Çatalhöyük (Rodaway

1994p.177). They have spawned many attempts to visualize the Neolithic settlement of Çatalhöyük (e.g., Detzler and Emele 1998; Scarre 1998; Shane and Küçük 1998)(illustr).

The visual at Çatalhöyük has continued to grow in importance with the research at the site that started in 1993. Image, both still and moving, both drawn and photographic, has grown to be a huge element of the Çatalhöyük enterprise in the creation of the record of preservation (Hodder 1999 p.123).

Interestingly enough the visual element was not a dominating part of the original site database, possibly because the project was started before the widespread use of digital photography and digital non-linear video editing. (The BACH project within the main Çatalhöyük project, however, developed a cataloging system for photography from their first season in 1997). Currently, however, this situation is changing (Ashley-Lopez 2002) (Illustr: Portfolio catalog and visual database)

Video-recording of the archaeological process at Çatalhöyük was considered an important aspect of the "reflexive methodology" of archaeology, as a record of the process of discourse that goes into the construction of knowledge at the site. I note here the various teams and videographers who were engaged in the recording as it will be important in my narrative later. Video-recording of the archaeological process was started in 1996 by a team from the Hochschule für Gestaltung, Karlsruhe (Brill 2000; Cee 1996). These were film-makers who were very interested in using the video-camera as an intimate gazer. Their project finished in 1998.

The Science Museum of Minnesota also recorded the archaeological process from 1999-2001 as part of the development of a website and an exhibit about Çatalhöyük. The videographers were in general museum professionals not archaeologists (http://www.smm.org/catal/).

The BACH team filmed the complete archaeological process in their area from 1998 to 2004. The videographers in this case were students trained in archaeology or – on occasion – myself or Mirjana Stevanovic. The BACH video record is very detailed, and includes a daily diary, special notes for the archaeologists, as well as the discussions with specialists (Ashley-Lopez 2002; Stevanovic 2000)

(http://www.mactia.berkeley.edu/features/rave/default.html)

Other teams have made videos of the work at Çatalhöyük as part of creating films for popular consumption.

An alternative to video images are the digital QTVR imagery of the excavation process. This was first done by me in 1996, to give others a sense of place in Building 1. Much more elegant examples followed by the SMM team and by Michael Ashley of the BACH team. Both of these were for use on a website or presentation as a digital or remote version of touring the site of Çatalhöyük during excavation. http://www.smm.org/catal/virtual_tour/

Images that catch the eye – most of them recently in the form of digital imagery – have been used to interpret and visualize the reconstructed place as it "looked" 9000 years ago since the publications of and spawned by James Mellaart. Such visualizations continue and multiply (Swogger 2000 p.147). The most recent are based on the recent excavations rather than Mellaart's plans and interpretations. John Swogger is an archaeologist whose task at Çatalhöyük is to visualize. He has written about the challenge of expressing the flexibility of interpretation in visual images, a theme I will take up below. And yet his own visualizations have been used as the basis of other visualizations. For example the new village and landscape images of the Science Museum of Minnesota team. I'll come back to this

(Others to be illustrated include my "Baba Story" from Dead Women do tell Tales) in which the illusion of a visualization of the past is created using only photography of the excavation. A 3D visualization created for Yehuda kalay's Virtual Place)

A movie was shot in summer 2004 for the Discovery Channel using the physical full-scale replica of a Neolithic house at Çatalhöyük with actors and props to re-enact "life" 9000 years ago. It is likely that the replica and the scenes will have a powerful effect in fixing in popular imagination the place of Çatalhöyük.

From all these examples, and by using the word "visualization" , it is clear that the sense of vision plays a crucial and dominant role at Çatalhöyük in
- Recording the archaeological process as a record of preservation, an archive
- Sharing the experience of the archaeological process and of being at the excavation

- Sharing and remembering the experience being at Çatalhöyük?
- Constructing a sense of place at the strange international oasis of Çatalhöyük in late @0th/early 21st century Turkey.
- Constructing the place of Çatalhöyük 9000 years ago and sharing the visualization of that place

There is no doubt that digital visual representation of the archaeological process and interpretation at Çatalhöyük enhances the complexity of recording and retrieving data and the power of the construction and sharing of place. It can even make the process transparent, that is, demystified. Potentially digital technology can enhance the flexibility of interpretation, richness of discourse, and its multivocality (Hodder 1999 p.124). Ian Hodder is enthusiastic about digital media that enable the world beyond the discipline of archaeology to experience the archaeological process. He is especially optimistic about the more immersive technologies of imagery such as QTVR and VR to give an idea of "what it could have been like to move around within and between buildings flying around the site, exploring it" (Hodder 1999 p.126)

Apart from the main critique of this world of electronic media in the service of archaeology in terms – quite justifiably –of the growing divide between those who have access to such technology and those who do not, I want to explore now some of the implications that digital media have for the construction of the place (both present and past) at Çatalhöyük. Currently, you could say that Çatalhöyük has been constructed as a hyperreal place. I think this is true especially for its past visualization, but also to a certain extent for its present representation as an archaeological site. But that's OK, because it means we are fully in line with the dominant Western culture of Hyperreality (Baudrillard 1983).

In Hyperreality Vision Dominates

Hyperreality, a term favored by Baudrillard, to describe the postmodern geographical experience, clearly applies to the visual imagery created for and about Çatalhöyük, especially in its current form. We could also call it Remediation (Bolter and Grusin 1999).

In the hyperreal experience

- vision is central. The other senses are transformed into and subordinated by vision. Because of this, following the lead of vision. the hyperreal experience tends to be a detached, passive gaze (Rodaway 1994 p.175).

- the interrelationship of the senses that affects both sensation and meaning is simplified (Rodaway 1994 p.177), so that the complexity of many sensuous elements including texture and smell are lost (Emele 1998; Swogger 2000p.147).

- the senses are domesticated and sensing is orchestrated. Photos, videos, movies are cleaned and selected that makes their effect very powerful; not only are they illusion of reality, they are more real than reality (Emele 1998; Porteous 1990; Rodaway 1994 p.161). I wonder to what extent we can include reality shows such as Time Team in the (Clarke 2004).

- the effect of the hyperreal experience is often so fascinating and powerful that it will often dominate even direct encounters with the physical experience.

- the senses are mediated by technology and cultural practice (popular culture).

The digital media at Çatalhöyük have done all they set out to do in an explicit, dangerously unforgettable, and concrete way, all appealing to one sense: the visual.

But what if we tried to harness to powers of digital media to create a multi-sensory experience and exploration of a place, one which is less explicit, and more complex and much more subtle?

Interweaving the senses

Martin Emele, who was an important member of the team that created the Çatalhoyuk CDF-ROM and himself is a skilled practitioner of New Media was well aware of the downside of his VR reconstructions of Çatalhöyük: "we multimedia makers, virtual reconstructionists and animators grasp reality in a historically determined, blinkered manner, *not in a "full-sensory" way.*

(Emele 1998 p.223). The blinkers he is referring to are those of hyperreality and hypervisuality.

So what are we missing in our love of hyperreality at Çatalhöyük?

The "sensuous geographers": Gibson, Rodaway, Tuan and Porteous and many others have their answers (Gibson 1968; Porteous 1990; Rodaway 1994; Tuan 1993). For example Sullivan and Gill go so far as to say that "sight paints a picture of life, but sound, touch, taste and smell are actually life itself" (Sullivan and Gill 1975 p.181).

Rodaway suggests that "A sensuous geography, therefore, may lay some claim to reasserting a return of geographical study to the fullness of a living world or everyday life as a multisensual and multidimensional situatedness in space and in relationship to places" (Rodaway 1994 p.4). Porteous P. 7. Along with many others suggests that vision is a cool, detached sense. "Sight alone is insufficient for a true involvement of self with the world" (Porteous 1990 p.7). Tuan insists that non-visual experience is 'not just a picture but a circumambient world pulsating with life' (Tuan 1982 p.118). The sources of the non-visual senses are closer to the sensor and are, in fact, part of the sensor's body. These senses are hot and emotional: pleasure, nostalgia, revulsion, affection (Porteous 1990 p.7).

So I am thinking that perhaps there is room for a "sensuous archaeology" in which the non-visual senses - especially their complex and subtle interweaving – are understood as playing important roles even in our vision-dominated experience and representation. Their roles for us as archaeologists practicing at Çatalhöyük are taken for granted; we are not practiced in thinking about them and do not take pleasure in recording them (there is a way of determining soil texture at Çatalhöyük by making a small sausage of wet earth and feeling it and measuring its textural attributes; most excavators refuse to record this!). Their roles for the Neolithic inhabitants of Çatalhöyük are very likely to have been very different from ours (even supposing that ours is homogenous) . We assume that the impact of painting the interior walls of the houses was as dramatic visually for them as it is for us; but it is as likely that the kinesthetic performative effect of creating the paintings was much more dramatic than the visual finished product.

There is a large literature on the explanations for variability of sensuous experience related to the literature on perception. I am not going to discuss that literature here, but there are some very interesting avenues of exploration for an archaeology of the senses, particularly in terms of the cultural dimension (Hall 1969; Jeans 1974; Tuan 1974) and the ecological model (Gibson 1968) has been written about at great length by the "sensuous geographers" (see Rodaway 1994).

My initial interest in broadening out from vision in the exploration of sensual experience of place was to focus on sound, hearing, and listening, because it seemed that this sense would be the most straightforward to represent using digital technology. I was thinking that it could be incorporated into hypermedia narratives about the past and present at Çatalhöyük; and I was well aware from my own hyperreal experience with film etc. the power of background music and voice to transform a visual image, along with the traps of voiceovers to destroy it. In one presentation, I even toyed with introducing the possibility of a user to choose their background sound. There is still plenty of room for an exploration of sound, although for this conference I leave that to Chris.

My interest currently is in exploring a sense that at first glance seems impossible to incorporate or "transform" into a digital format – touch or the haptic or tactile sense.

The Sense of Touch, Tactile-kinesthetic, Haptic Sense
The tactile-kinesthetic sense is the most fundamental and immediate of all the senses and is very important in structuring space and thus in the interpretation of a person's relationship to other people and to the physical and built environment (Porteous 1990 p.6). Touch is far more than just fingers; includes whole skin surface (Montagu 1971).

Gold identified in addition to the five traditional senses, four tactile or skin senses (Gold 1980): Pressure, Pain, Cold, Warmth; and two body senses: Balance and Kinesthesis (sense of movement in any part of the body). Porteous refers to the tactile-kinesthetic sense as including all of these (Porteous 1990 p.5). And Rodaway and others would have a similarly broad definition of touch to include a sensation of surface, Form, Texture, Temperature, Pressure and Movement (Rodaway 1994 p.28).

From this definition, we must know that as archaeologists we are very sensitive to touch and that our discipline is inherently as tactile as it is visual. We are all aware that to watch someone excavating is a very different experience from actually touching the ground with hand or trowel yourself.

Coming back to the images and visualizations from Çatalhöyük, we can think of what is their ultimate purpose in light of an awareness of non-visual senses:
- To remember the multisensuous experience of being in the place?
- To share the multisensuous experience of being at the excavation?
- To experience (voyeuristically) the past lives of Çatalhöyük inhabitants?
- To create a deep complex multisensuous content about place at Çatalhöyük (past and present) that can be contributed to

In terms of touch, however, there are three challenges for archaeologists:

- How do we share this tactile experience with others who cannot, are not allowed, or do not wish to have the direct encounter?

- How do we use our knowledge of the cultural diversity of tactile-kinesthetic experience to help construct a multi-sensuous place of 9000 years ago at Çatalhöyük?

- Can we develop our own performance of archaeology to enhance the tactile experience? That is, are there other ways of doing archaeological research that involve a tactile sense that we have not yet thought of doing?

There are two aspects of the tactile-kinesthetic sense that give us a chance to address this challenge: movement and intimacy. Digital media can express movement of the first person through space at a human wandering exploratory pace in addition to the soul-sickening fly-through pace that are much favored by VR reconstructionists. The ability of digital media to focus on the intimate scale of sensing, close proximity, and immense detail has always been present, it is their creators who have lacked patience or motivation to take advantage of this potential, or perhaps such a scale of representation does not sell well!

Sharing the multi-sensual experience of archaeological excavation

The first challenge: how do we share this tactile experience with others who cannot, are not allowed, or do not wish to have the direct encounter?

In Turkey, even if you visit Çatalhöyük physically, you may not have a direct encounter with the hallowed archaeological ground, except through your feet, unless you are on the permitted list of archaeologists and other specialists. And of course there is the whole world of people who may never visit Çatalhöyük beyond its place on the Internet.

In terms of the physical visitor, the problem faced by Çatalhöyük is repeated at most archaeological sites. The average visitor will never get to do more than gaze at the archaeologists working and many will only visit once the work is complete and there is no active excavation at the site. The design of "heritage places", "interpretive centers", and museums has worked around and around this challenge with varying success to present a multi-sensorial experience for the visitor (Bolter and Grusin 1999 p.168; Hewison 1989; Rodaway 1994 p.168-169). In most of these examples, the visitor gazes passively, the visual sense overwhelmed (except in York where they have engaged the sense of smell).

At Çatalhöyük, Mirjana Stevanovic has built (with help) a replica of a Çatalhöyük Neolithic building, modeled on a composite of Building 1 and 3, complete with storage chambers and ladder for roof access. Here the visitor may walk in and – if they are in a large group – experience the sense of crowding, bending down to enter the storage rooms through the crawl space. They will get an idea of light and shadow inside such houses. Ambient sound of food-preparation noises, chatting, singing has occasionally been added, but only on special occasions. I thought it made a huge difference when there were just a few people inside. By far the most stimulating experience for me, however, was the time the fire was lit inside the house and the whole room filled with smoke and our bodies heated up and became grimy and sweaty.

There are many other things that could be done to give visitors a tactile experience here, which would probably be just as memorable: having a purpose to move around the house, carrying out certain tasks, experiencing the difference between working inside the house and working on the roof.

But how to give visitors a multi-sensual experience of what it is like to reveal such a house through excavation. I do not know short of a "sand-box" (and why should adults feel embarrassed to be doing this?) how to do this involving a direct tactile encounter. However, I believe that the tactile experience could be mediated to a certain extent, digitally, for sharing at the site Interpretive Center or remotely over the Internet.

Of key importance is the ability of the body and its extremities to move, to manipulate, inspect, and explore with all senses cooperating in sensuous experience (Rodaway 1994 p.28). So the sensing of body in space within a dynamically changing environment (with other people also sensory beings) brings in possibilities for representing tactile experience through the medium of active first person explorers of computer game engines. When we touch the keyboard or mouse we are already engaging in a tactile experience, and immersive technologies with gloves, moving headsets, foot-pads etc. allow the experience to be taken much further. But for modesty's sake (and for the rest of the world to have access to what we do) the simple game engine manipulated by keyboard and mouse will do.

As I shall describe below, the Joshua Davidson of the Science Museum of Minnesota has already built such an exploratory tableau for prehistoric Çatalhöyük using the open source game engine Blender http://ltc2.smm.org/visualize/toolkit

Such a game engine has a great advantage over the more conventional QTVR models and the complex VR models, in which the gazer stands in one spot and rotates to see different views, in that it is cheap, easy to learn, and the explorer can *move* through the space. Such a game engine may be a way in which the explorer can also move through the excavation area and the modern site itself exploring in a more "dynamic" landscape. Laser scanning as well as digital photography have eliminated many of the previous problems with "dead spots" that Emele and others refer to (Emele 1998 p.223).

The use of video recording can also be designed to play a much larger role in mediating the sense of touch than it has. We have already discussed the traditional use of video recording of archaeological sites in which "the scene is set", selected, orchestrated. At Çatalhöyük, we have been exploring ways

in which to express a tactile sensibility by a more intimate scale of photography. This does not mean only or even close proximity to the subject, but refers also to the lack of orchestration, lack of clarity and explicitness, and an intimate pace of scene playout. I will demonstrate two clips one by BACH videographer Jason Quinlan, and one by the Science Museum of Minnesota for public dissemination.

I believe that these same qualities can also enhance our attempts to create the prehistoric place of Çatalhöyük. I suspect that Discovery Channel's Çatalhöyük re-enactment will not resort to these unconventional methods, but will rely on the visual, the clear, the immediate, and the sellable.

Constructing a sensuous place of 9000-years-ago Çatalhöyük

How do we use our knowledge of the cultural diversity of tactile-kinesthetic experience to help construct a sensuous place of 9000 years ago at Çatalhöyük?

Emele puts his finger on the key when he discusses expressing the "atmosphere" of a place through digital media. "…. We did not want to predetermine the viewers' imagination. Where the world seen on the monitor becomes too concrete, the view of the possible is distorted. It is well known that a correspondence exists between the images which remain unseen and those which the brain (imagination) then produces. Digital visualization forces an on-screen situation where an off-screen element might be far more effective. This has always been an important aspect of the traditional interpretation of paintings: the aspect an image does not show explicitly: its atmosphere." (Emele 1998 p.224-225).

What if we could create "the atmosphere of the place" that Emele refers to; to be shared, explored, walked through. What would it look like?

In creating the images for the Chimera Web I wished to address the problem that Emele refers to. How to avoid the concrete hyperreality of digital media to retain the ambiguity of archaeological interpretation (that Hodder also seeks) and yet take advantage of the wide dissemination and other benefits of digital media. "….. I would like to suggest that, when we try to construct visual past realities - whether by drawings, paintings, replications, photographs of replications, or computerized imagery - instead of trying to envision the past *as lived*, we try to envision the past *as remembered* by

these various actors and even by ourselves – the archaeologists. If we do this, then we have a very different aim in our imaging of the past. Instead of presenting the past as a real (or Virtually Real) lived-in linear past that is experienced generically and normatively by all actors, we can present a past that is a dream or memory, remembered piecemeal, selectively, and uniquely by the different actors. In this way the prehistory that we construct and the multiple histories that we express, through computer-generated imagery and other media, can be regarded as more *surreal* than virtually real." (Joyce and Tringham in press; Wolle and Tringham 2000).

I believe that it is not only the close-up image, but the oblique ambiguous sensing of an object or place that can express the intimacy from which we can derive the tactile experience of an imagined prehistoric Çatalhöyük. Compare the three images from C. Chang's Divostin visualizations or John Swogger's three images of the same phenomenon and think about how the close-up affects you in each case (Swogger 2000 fig.12.3). At the same time, the engagement of an active mover through a place using the game engine Blender has the potential, as demonstrated by the Science Museum of Minnesota team (specifically Joshua Seaver) to allow an explorer to gain a multisensual experience of an imagine Neolithic place. http://ltc2.smm.org/visualize/gallery

Obviously this imagery has to be accompanied by a rich spoken or written text. The question, as always, remains how to include the element that completes the tactile experience – the dynamic sensing moving people and animals and vegetation who are a significant part of the multisensuous experience. I have discussed this in other papers, the pros and cons of avatars, actors, manipulated modern imagery. I still do not have the answer, except ambiguity, mystery, subtlety and semi-concealment seem an essential part (Joyce and Tringham in press; Wolle and Tringham 2000).

The Performance of a Multi-sensual Place at Çatalhöyük
Can we develop our own performance of archaeology to enhance the tactile experience? That is, are there other ways of doing archaeological research that involve a tactile sense that we have not yet thought of doing?

One further experiment which I have thought of though not yet tried out was inspired by the work of artist Janet Cardiff, especially Chiaroscuro, her walk

through the San Francisco Museum of Modern Art http://www.abbeymedia.com/Janweb/chiaro.htm. This was in 1997-1998. In 1997 Sonya Atalay, responsible for clay ball analysis at Çatalhöyük actually filmed a walk through the mound and archaeological faciility at Çatalhöyük with no more intention of sharing it than as a "family movie". In 2001 did a video tour of Çatalhöyük with a view to creating an installation similar Janet Cardiff's at the site, or in the Science Museum of Minnesota Mysteries of Çatalhöyük exhibit. I updated this tour in 2004, when the BACH tent that had stood for 7 years was dismantled and moved, and a new area opened up for excavation next to it. So now we have these three movies from different times of the project (I will run a clip from each side by side on Sunday) that walk you through the site (with commentary).

I see this video footage ideal for giving the physical tourist or the touring couch-potato a more multi-sensorial exploration of Çatalhöyük, helping to create a richer sense of place than a hyperreal video of the site or a Quicktime VR tour of nodes or even a game engine exploration. The videos take advantage of movement through space and proximity to various textures and objects, tactile sensation of the feet, even the heavy (more or less) breathing of the videographer. The physical tourist could walk across the site with a video camera to one eye, as in the Janet Cardiff exploration, and see the site through the senses of different participants in the Çatalhöyük project at different times (voiceovers, and video selectable). The couch potato could participate in a number of tours juxtaposed on the computer screen. I have even thought of putting in there a parallel tour of a walker 9000 years ago.

This idea of moving slowly around the mound and facilities of Çatalhöyük resonates well with a performative style of archaeology and the sharing of the archaeological experience and interpretation as suggested in Borderline Archaeology (Campbell and Ulin 2004 p.13)One of their aims in their joint dissertation was to create an archaeology that involves the inclusion of sensory experience. "The act (I wish they had written "art" – RET) of moving affects the way we experience, perceive, and re-present the past-present" (Campbell and Ulin 2004 p.5).

Following this idea of movement, performance, event, memory, I have begun to think of a way to bring together memories and stories of sensual

experience at Çatalhöyük from the many different participants to weave into the intimate (and some not so intimate) video footage to create a place that exists in the present and existed in the past – in this case the mound of Çatalhöyük . These storytellers participate in the construction of place through their interpretation of the archaeological material. At the same time their own sensual experience of modern Çatalhöyük acts as a filter in their construction of the past place (Jeans 1974; Rodaway 1994).

I see this effort as contributing to the transparent representation of the process of constructing the place we call Çatalhöyük, and contributing to the importance of author-ship in the construction as well as the flexibility of what is created.

Finale: A Sensuous Archaeology

At the end of their talk at the EAA in Thessaloniki 2002, Campbell and Ulin describe the scene that could be an excavation or any other performative event in the present or past: "…and we are all moving around in the room, talking, packing things away, moving in time and place, but we are still a bit caught up in the emotion of a space that exists somewhere in-between ourselves and the stories we have just heard, a bit caught up in the experience of site-seeing (*RET: sensing*) of sharing stories about the secrets of everyday, of life, trauma and pain, about the dramas of anguish, sorrow, and the feelings of loss" (Campbell and Ulin 2004 p.63).

In creating their sensory archaeology with text and photographs (and a website) I am struck by their tremendous depth of detail and observation and emotion. In this respect they echo very much the 'poetic' style of Douglas Porteous. My new project: if we can have "Sensuous Geographies" as a legitimate field, then I am all for practicing and exploring "Sensuous Archaeology". And it does not have to be Borderline!

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