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**Media, Connectivity,
Literacies & Ethics**

**The White Cube and the
Ivory Tower: Use and
Production of Online Media
Space as Art Worlds**

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1 Introduction

Artists who choose to work with information and communication technologies (ICTs) face a set of particular challenges. Not only must they continually stay informed of new technologies on the market, but they must also work out how their role as artists ‘fits’ within new technologically mediated spaces. Can an artist work within or challenge the boundaries of such spaces? Is the artist’s role relegated to that of a ‘do it yourself’ user of technology? Is the artist only formulaically empowered to be a ‘content provider’? To answer these questions, this working paper develops a framework for treating these technological spaces as spaces for artistic creation and appreciation. The framework is then applied to the electronic spaces enabled by new ICTs. The way in which an artist works within such a space to create artworks is examined together with the potential for such work to contribute to the transformation of these spaces so that they become sites for further artistic activity.

The following section (s.2) presents the idea of an art world space by developing an analogy with the ‘white cube’, a term used by art curators of galleries located in physical spaces. The idea of tactics is developed as a way of understanding how artists pursue their creative work within specifically designed spaces and this theme is further discussed in the context of both online and offline spaces. In section 3, the discussion focuses on a particular instance of the use of ICTs, in this case a videoconferencing application, as a means of examining the extent to which artists work within and seek to modify the new technological space which is available to them. Section 4 offers concluding observations about the role of ICT-enabled spaces in the art world and the innovative capacities of the artists.

2 The White Cube as an Art World Space

When visiting well-known contemporary art galleries of cities such as New York or London, one is struck by the success of what curators and other art world aficionados call the ‘white cube’. The rooms of the Gagosian Gallery in New York, for example, like its sister gallery in London, have the same white walls and high ceilings as those of the Tate Modern, the

MoMA and most other contemporary art galleries. The white cube is what Howard S. Becker describes as an art world 'convention' (Becker 1982). Conventions are 'agreements that have become part of the conventional way of doing things' (Becker 1982: 29) which allow for the coordination of resources between people (audiences, gallery owners, and artists) in an art world, i.e. the collection of individuals and organizations that make or support the making of any kind of artwork. The white cube is a space where artworks are displayed; audiences who are familiar with the contemporary art world have come to expect this space when they visit a gallery. The same expectation applies in the case of an artist who submits an artwork to a gallery or to an architect who is planning a gallery's construction.

The white walls of this space are the seemingly neutral, invisible face of the gallery; what might be called a kind of non-place (Augé 1995). They allow the works to 'come alive' without interference. But as Brian O'Doherty (1986: 79) argues, the white cube is a 20th century social construction that 'stands for a community with common ideas and assumptions'. However, this supposedly disinterested non-place is arguably itself a discursive space (Silverstone 1998). It can be understood as one of the means through which the institution of contemporary art generates credibility and value for the artworks (Lammers & Barbour 2006). The convention of the white cube has been distributed, reproduced and accepted by a majority of mainstream contemporary arts organizations. It constitutes a convention that can be understood as mediating understanding of artworks displayed within a given space.

It is interesting to consider how space as a social construct is produced and used by those in an art world. The white cube is designed to be a space for the appreciation of artworks. It is also one of the locations where roles such as 'artist', 'visitor', 'connoisseur' or 'philistine' are performed and contested (Baker & Faulker 1991). Access to the space is mediated by gallery owners and museum curators who seek to maintain legitimacy and status in art world institutions. The white cube becomes a symbol of contemporary art as an institution where access to it, or rejection from it, impact on an art world actor's status within the art world. Once identified, however, it is possible to challenge or circumvent the conventions of the white cube. Over the course of the 20th century, art objects such as Marcel Duchamp's *Ready Mades* have been found to have been used to explore the limits of the white cube's power to bestow the status of art work upon an object (O'Doherty 1986). Other artistic movements

such as *Land Art* have tested new locations for the production and appreciation of contemporary artworks (Ginsburg & Penders 1997).

The Internet, as a network of digital connections (December 1996: 4), is an example of a new location for an art world or perhaps even many art worlds. Net.art and other online artistic movements that initially were unable to gain recognition from representatives of contemporary art institutions (Stallabrass 2003, Gere 2006) have adopted the Internet as a virtual space in which they are able to not only display their work but also to produce it. However, the consequences of making art within the Internet-supported space remain unclear (DiMaggio, Hargittai, et al. 2001, Pratt 2004). The artist's role as a producer of artworks may remain embedded within the conventions of the white cube and within the power relations that articulate that context (Mansell 2004). New roles may not be as easily defined and defended in the new online spaces.

Tactics as used in New Media Art

In the case of artists who use ICTs to produce art the notion of 'tactics' as a means of engaging with these technologies is a powerful one. It evokes images of maverick artists who stealthily wind and weave their way through the strategies of control imposed by commercial and state interests in the art world. The concept of 'tactics' as developed by de Certeau (1984) has been employed by new media art theorists to suggest an empowered 'user' who engages with ICTs as a structured space (Manovich 2001, Geertz and Garcia 1997, Galloway 2004). Manovich interprets de Certeau's concept as follows:

His analysis of the ways in which people employ "tactics" to create their own trajectories through the spaces defined by others (both metaphorically and in the case of spatial tactics, literally) offers a good model for thinking about the ways in which computer users navigate through computer spaces they did not design [...] (Manovich 2001, p.268).

Manovich (2001) employs an example to demonstrate the concept of a dialogical relationship of tactics and strategies whereby an artist generates strategies to produce an online space which is then 'tactically' navigated by online users.

Galloway (2004) and Geertz and Garcia (1997) apply the concept of ‘tactical media’ to consumer electronics which provide access to the Internet, potentially enabling users to contest the hegemonic power of government and corporations. By tactically using these technologies in unconventional ways, these authors argue that users are enabled to criticize the establishment. In this model, there is the ‘us’ of the general public – including artists – who are users of ICTs and an unseen ‘them’ who produce, maintain and attempt to structure online spaces. The distinction between users of different kinds depends upon the kinds of tactics that they use to engage with ICTs.

The tactics/strategy dichotomy as applied in new media art theory is employed recursively to describe certain types of user/producer power relations (Suchman 1999). Just as an audience member uses tactics to navigate the online space produced by the artist, the artist uses tactics to navigate the technical protocols introduced by the governments or corporations (Galloway 2004). However, such protocols are not always beyond the reach of interested individuals to modify, nor are they the result of private or public decision making that is external to the individual user; in some cases, users may in fact become producers as they shape the technical protocols through their use of the technology (see Hawkins, Mansell and Skea 1995). Is it therefore only feasible for the artist to assume the role of user when working with ICTs as an art world? Is it also feasible for the artist to construct aspects of an online space in such a way that he or she assumes the role of producer? An answer to these questions requires a further elaboration of the idea of ICTs as a space.

ICTs as online and offline media space

The spatial analogy for ICTs is based on December’s (1996) ‘units of analysis’ classification for the study of the Internet: the media *space* and the media *experience*. The former constitutes the collection of hardware, software and content that is shared on a network. For the average user of the Internet, media *spaces* are to a certain extent ‘invisible’ other than what is manifest on the screen and keyboard (what December classifies as the media instance). This is not necessarily one space but may constitute many media spaces including a whole set of servers and protocols ‘behind the scenes’. A desktop computer is unlikely to access all online media spaces. For example, a desktop computer may access the web, but

may not be enabled to access Java-defined content. These constitute two separate yet overlapping media spaces.

The *experience* unit of analysis takes place at the level of an individual's experience as a result of her engagement with the media space. For example, an individual surfing the web may be frustrated when accessing a web page that remains blank because her desktop computer is not Java-enabled.

This classification of the Internet which December extends to any ICT is helpful because of his inclusion of the level of media experience. It can be extended to the case of the online art world in three ways:

1) It opens up the possibility of observing the offline institutional power relations that constrain and enable an individual's role when engaging with an online media space such as an individual's art world reputation. An ICT network as a space is partly 'virtual' but it is also a physical installation made up of cables and hardware that exist in the 'offline' world. Tactical engagement on the part of the artist-user with an online art world space is often represented as being located online inside the computer screen. But extending this analogy to include an individual's offline experiences of the media space where flesh and blood meet screen and key board, it is possible to gain a better understanding of how the role of artist as user is socially constructed and of how the offline and media spaces construct and influence each other and the practices within them (Couldry and McCarthy 2004).

2) It allows an exploration of the ways in which an individual at the level of experience may not only be able to access the space as a user but also as a producer of the space (Allon 2004, p.257) – in this case, the online media space. 'Producing media space' is defined in the present context as being involved in the selection of the affordances (Ginsburg & Smith 1993, Norman 1999) or perceived technical limits and conventions for accessing the media space.

The Internet and other online media spaces are formed by affordances which constrain the possibilities of how they can be used and produced even before conventions take root. As in the case of the white cube, it is possible to: a) accept the

conventions and affordances of a media space, b) contest them by challenging them and/or uncovering unseen affordances, and c) circumvent the space entirely in an attempt to produce new conventions and/or affordances. None of these options make the production of an art work impossible, nor are they mutually exclusive. They can be understood to constrain and enable production or use in different ways.

An analytical model for the study of the online art world that only observes the *use* of a media space is limited in the same way as models that assume that art must be appreciated from within the confines of the white cube as the art world space. When the potential for production is acknowledge, the analysis of the artist's work in online art worlds is considerably enriched.

3) It permits an analysis that goes beyond the frame of an individual's engagement with the online media space to explore its use and production by groups of individuals and organizations. The danger of focusing on tactical engagement by individual users is that the level of experience is understood in terms of a single person, alone in front of the computer screen with a keyboard, experiencing the online art world space from a desktop without organizational or institutional support. Organizations with influence in the contemporary art world, great supporters of the white cube such as the Tate Museums in the UK for example, engage the online media space as users. The Tate produces and maintains a website (<http://www.tate.org.uk/>) with access to more resources than those available to an individual artist, but the website operates only a tactical engagement with the strategies of artists.

These aspects of the connection between media space and media experience can be utilized to understand an artist's role in an online art world. The conditions at the level of the media experience can be investigated to show whether they enable an individual or group of individuals to assume the role of artist as producer rather than artist as user of ICTs. This may clarify the nature of some of the institutional rules and resources, such as funding structures or academic traditions that mediate artists' engagement with media spaces (Sewell 1992). A specific case in which an individual or group of art world actors is examined in the following section to demonstrate the potential for artists to engage with the online media space as producers.

3 Videoconferencing Art World Performances

A series of art world experiments took place in 2002 using an ICT configuration called 'Access Grid', over a high capacity network, as part of a research project called Navigating Gravity (Dipple 2002). The project included creative works coordinated by a performance artist, Kelly Dipple, who organized a series of collaborations between the University of Florida and the University of Manchester. Some aspects of the work that led to these artwork-performances help to illustrate how the spatial analogy elaborated in section 2 can be applied. The characteristics of this media space as an online/offline set of conventions are described, followed by a discussion of how these were incorporated into art world conventions. The focus is on the interactions between the artist and members of Manchester University's Computing Department who worked with the artist during the project. The analysis is based on interviews conducted by this author with the artist and members of Manchester Computing as well as analysis of the field diaries maintained by the artist.¹

The artist's interest in the project was concerned with networked performances particularly with respect to dance. Having worked extensively in Australia and the United Kingdom, she was invited by the Computing Department to work with them as part of her own research project funded by the Australia Council for the Arts. The director of the department was familiar with her previous work at an arts organization in Sheffield and had previously invited her to speak as a professional artist at a conference. These earlier encounters enabled her to approach the Computing Department as an artist with expert knowledge who might be trusted to take on the role of producer. The collaboration was intended to focus on the use of Access Grid as a platform for the creation of multi-sited online dance performances.

Access Grid (AG) offers a good example of an online and offline relationship because it was initially conceived as an immersive space for videoconferencing and online collaboration by groups (Stevens et al. 2004). In the mid-nineties, the US-based Argonne National

¹ Interviews with the two representatives of Manchester Computing were conducted at the University of Manchester on the 5 March 2007. The interview with Kelli Dipple was conducted on 11 May 2007 in London. The artist's field diaries covered the period from 11 April 2002 to 8 September 2002 and were posted online as part of her research project into the potential use of AG for artistic performances (Dipple 2002).

Laboratory, in collaboration with universities, began developing an online videoconferencing application that would enable researchers to collaborate online in real time and with great flexibility (Childers et al. 2000, Stevens et al. 2003). The result was an open source collection of applications designed to allow individuals or groups to connect via online rooms, each equipped with multiple video and audio streams and with software applications available for collaborative use in real time. For example, a digital slide presentation could be run simultaneously with a videoconference. This AG was initially located within a particular academic institution, specifically, computer science, where it served as a tool for exchanges and experimentation to support scientific academic research. These rooms, in AG jargon designated as ‘nodes’, can be found today in university departments across the world (Access Grid 2007).

The specific technical characteristics, such as its use of multicast², limit the AG use since those outside academic or research organizations without access to a high bandwidth academic network cannot make use of it. (For details on ‘bridging’ to the AG space, see: <http://www.agsc.ja.net/services/multicastbridge.php>)

Although the AG can be set up on a desktop computer, AG as a media space was conceived with spatial conventions from an offline space in mind: those of a conference room. Those who have attended conferences will be familiar with this type space: long tables, chairs distributed along their sides, oversized paper note pads, a blackboard, and the digital projector and large screens. In some cases these rooms will be small, accommodating a handful of participants while, in others they will be larger with theatre-style chair arrangements and a podium. AG is an online extension of the conventions of the conference room which creates a network of conference rooms enabling research communities to collaborate using grid computing (Foster et al. 2001). The offline arrangement of an AG node is dependent on the model of conventional conference rooms as the size and layout vary with the scale of the conferences for which it is used (see <http://www.accessgrid.org/agdp/guide/building-an-access-grid-node/2.4.6/html/c60.html>)

² Multicast, rather than enabling the transfer of a file from one individual to another individual (unicast) as is the case with most activity online, enables the transfer of files from one individual to many specific individuals without indiscriminately transferring files (broadcast).

At the time of the Navigating Gravity project implementation in 2002 videoconferencing applications were not as widely available as they are today. But AG also allegedly had certain characteristics which made it seem more attractive to the academic research community than other available videoconferencing applications. As one of its members described:

The big benefit about Access Grid is that it's extensible. You can add to it. You can do fancy things with it so it's great for the research community. Someone gave me a great analogy that I'd never heard before, actually: it's like the difference between having a toaster and a grill. You know, with a toaster, you can make toast. It's pretty easy to do because you just flick it down, it does it. It does it pretty quickly, and you've got toast. With a grill, you can also make toast. It takes a little bit longer and you have to turn it over half way through... But you can also do fish, and you can do sausages, and you can do lots of other things with it as well. So, I just thought what a great analogy that is. So that's the difference between Access Grid and something like Skype or Access grid and video conferencing. (Interview with Mike Daw, Manchester Computing)

Extensibility was perceived by some to explain why AG offered a wider variety of technical choices with respect to how to set up the online and offline aspects of a networked collaborative environment. Control over these choices allowed the members of the Manchester University Computing Department to take on the role of a producer of the space by fine tuning the connection, adding functionalities or modifying the audio or video signals. This was reported as helping to give members of the department a sense that they could do more than simply use the space, but also produce it (Suchman 1999).

In the case of the Navigating Gravity project, the visiting artist was not invited to modify the online aspects of the space but rather to use it in new or different ways:

But some of the stuff that, you know, that [the artist] did, for example, in [the performance], well, you know, she changed the background of the Access Grid so that it wasn't black, and that it was changing. So you had different pictures as a sort of background. And she'd move the windows around so that they formed interesting patterns. And there were different things going on there with different sizes and so

on. And she didn't do any manipulation really – there wasn't any coding involved – but there was playing around with the Access Grid environment. And you just couldn't do that with anything else. (Interview with Mike Daw, Manchester Computing)

In order to 'play', the artist's access to the node was dependent upon the good will and support by the academic partners who maintained the AG node. Modifying the online space was not offered as an option and the artist's control over the offline space was limited as well:

[C]ameras in the vid con room at [M]anchester are attached to the wall, not free standing / so - I found the best place to be to avoid clutter is the very centre of the room (find a chair without arms if you can - its easier) its just a matter of zooming them in on you... (I will talk this through with you both on the first link session. there really are not too many choices about where you can be in that room... I would like to move the tables away from the centre of the room (as they are setup for traditional conference/meeting). (Kelly Dipple's field diary)

Although she was given the authority to make choices about the use of resources and to designate tasks, her interventions were not permitted to be so invasive as to permanently change the properties of the space. The artist was regarded as a visitor rather than as a presence in the department or in the AG media space. Time available to experiment directly with the technology by occupying the space was limited. This restriction put pressure on the logistics of organising the online dance performance:

Attempting to get rehearsal and presentation time simultaneously in more than one venue / space is always problematic. Dealing with a range of performers and crew in different time zones is also always tricky. It is not difficult to confirm interest from different venues and people, however coordinating their availability simultaneously is. Even if venues are not in different time zones, they may have different opening hours. (Kelly Dipple's field diary)

Once given access to the node, the artist was invited to sit in on some of the AG activities. Nevertheless, she regarded her engagement with the space as a producer, albeit as an

outsider. Her dissatisfaction with the conventions of the AG Space were informed by her lack of understanding of its use and production by the computer scientists:

Some [of my ideas] were blatantly obvious, like, that the very first time I went into the Access Grid I sat in the corner and very nervously, with a bunch of scientists talking about god knows what, I have no idea, it all went straight over my head. And there were three or four university sites in discussion and straight away I just kind of thought: "I can't tell who's talking!" There was no "cinema" to it, there was no cameraman. You know, you watch a film and it's showing you well before the time, it's pre-empting you. There was no narrative. It was all totally flat. And there was some sort of technician who was just sitting there and seemed to be randomly resizing images without really any clear understanding of the power of cinematic conventions to aid communication. And equally to hinder communication. To get the instance where all of a sudden the technicians are making the boxes move all over the place. (Interview with Kelly Dipple)

However, it was by assuming the role of producer of some aspects of the space that she was able to introduce conventions from other art world spaces into the AG node. Part of her work involved testing what she could and could not do as a producer; to see whether her own desire to work with certain conventions could be achieved. This process was the result of a continuous negotiation between the artist and the members of the department:

[...]it's the way [artists] look at it completely differently. [...] so she came into the Access Grid node and she looked at it and she said: "Right, I want to get rid of these fluorescent lights. We need some better lighting. You know, more ambient lighting." You know lots of soft lighting lamps and have those pointing down and spot lights and something like that. And she said: "I want to get rid of the desks." You know, things like this. The whole environment was changing. And I'd never even thought about it before. But you know the way that we have the meetings, people line up the windows of an Access Grid node. And it's all a straight line. She said: "I want to get rid of that. I want things overlapping." And it was really disruptive. It was really shaking things up. (Interview with Mike Daw, Manchester Computing)

As the artist was ‘shaking things up’, her intrusion was regarded as having its uses by the Computing Department. By collaborating with the individual artist, the department, as an organisation, sought to tap into knowledge that stemmed from her institutional background:

One of the things that I thought artists were doing that was very interesting was accepting the fact that these networks were imperfect, they introduced delay, they introduced jitter, there was a possibility of breakdown in communication. This is part of the artistic process. But artists are trained to do that, scientists are not.(Interview with John Brooke, Manchester Computing)

And it’s amazing really because you don’t even think... you don’t even think that you’re doing things in a certain way. You know, you just think: “I’m doing what I want.” You know. [...] So that’s the job of an artist probably, isn’t it? To break things up and to make you look at things in a different way. And that’s what she did. She just came in and said: “Let’s get rid of that, let’s get rid of that, let’s change that, let’s change that, it’s far more interesting if it does that. Can I put video in?”(Interview with Mike Daw, Manchester Computing)

The artist reported that she understood the benefits she was providing for the Department by collaborating with them:

And it was these things that I noticed that I think [the director] went: “Ok, that’s really relevant and interesting, and valuable to what we’re trying to do.” Because he wasn’t looking at it from quite the same perspective as the scientists were using it. He was looking at it in terms of development and computer science research and how to improve the technology. (Interview with Kelly Dipple)

In this case, the department appeared to have temporarily ceded some of its power over the production the AG space as a means of better understanding its researchers’ engagement with the space as both producers and users. The artist’s engagement with the space remained tactical, but by leveraging her institutional resources and negotiating with those who controlled the space she was able to temporarily gain the power to produce some aspects of the space. On the basis of this brief discussion, we may conclude that access to the AG

media space online and offline was institutionally mediated in a variety of ways and that certain conventions were indeed challenged through the artist's, albeit limited, producer role.

4 Conclusion: Media Spaces as Mediated Conventions

The foregoing suggests how *institutional power relations can both constrain and enable the roles of individuals who engage with the media space online and offline*. The individual was able to address the academic department as an artist partly as a result of financial support and recognition received from an artistic funding body and her previous work with recognised artistic organisations. It also suggests that an *individual can construct a role as a producer when engaging with a media space as an art world by altering spatial conventions*. For example, by modifying the physical aspects of the AG node such as lighting, the artist was able to import a set of conventions from a different institutional tradition into the media space and these enabled her to produce an artistic event.

Engagement with a media space can also take place at a collective level. In addition to other artistic contributors and the audience participants, the construction of the AG node as an art world media space involved multiple negotiations and coordinated efforts by the artist and members of the Computing Department.

The analysis in this paper suggests how space, used as an analogy for conventions can be helpful in examining the social and technological power dynamics that can enable and constrain the activities of artists who chose to work in new media environments (Silverstone 1999). The 'tactical' aspects described by Manovich and Galloway (2001, 2004) suggest the *use* of online media spaces and this implies that the artist will be unable to gain institutional recognition or access to institutional authority such as public support for the arts or access to academic researchers and their research tools.

However, as the case described in section 3 suggests, alliances with other institutions may enable the construction of a role for the artist as producer within a space that allows for the reproduction of conventions from other art world spaces, for example, cinema or contemporary dance, into the media space. This suggests, in turn, that the artist may be able

to ‘set the stage’ and to perform as a producer of artworks, in this case, a performance. The analogy of space is helpful in establishing a boundary around the object – the artistic event – so that the conventions and power relations that mediate the space can be observed. As we have seen in this case, the space existing both online and offline can be analysed as the location for the negotiation of power relations which influence the role of the artist as both user and producer.

It appears that it is possible for the artist to challenge existing conventions for the use of ICTs, but that such challenges depend on institutional support and close collaboration with the existing technical producers of such spaces. The spaces enabled by the Internet may from some vantage points appear to be the new white cube with conventions that constrain the artist, but artists also have a role to play in the production of new online media spaces for use in various kinds of creative expression. These observations confirm the importance of understanding innovation processes involving ICT-enabled environments as spaces of both use and production; both processes involving considerable collaboration, negotiations of power relationships, and individual as well as institutional interactions.

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