Cultural hybrids, post-disciplinary digital practices and new research frameworks: Testing the limits

Jenny Wolmark
Hull School of Art and Design, University of Lincoln
Eleanor Gates-Stuart
Australian National University, Canberra

Abstract
Discipline boundaries are currently undergoing considerable redefinition, and the process of forging new frontiers results in both theoretical and practical challenges that require exploration. New and hybrid forms of interdisciplinary research not only test existing disciplinary limits, they also produce new objects for study which, in turn, require new methodologies. This paper explores the impact on current research cultures of the blurring of discipline boundaries and the emergence of cultural hybrids. One of the key arguments in the paper is that the capacity to move reflexively between cultural practices and across discipline boundaries is central to the development of a more expansive research culture.

As boundaries continue to erode, the post disciplinary practices that are tentatively emerging are porous, fuzzy-edged and indeterminate. Post disciplinary practices are cultural hybrids, and as such they are well placed to refuse to accept hierarchies of knowledge that are offered as repositories of universal values. As cultural hybrids, post disciplinary practices retain knowledge of the specificities of disciplines and of their histories, but they are also inherently transgressive and capable of operating outside the limitations imposed by those disciplines. Feminist theory has already pointed out that, if the disciplinary space is defined as autonomous and ahistorical, then the social relations of power and dominance that are inherent in that space remain unacknowledged. The paper argues that post disciplinarity is emerging in the context of an evolving cultural narrative in which the notion of situated knowledge is emphasised.

Digital technologies make a particular contribution to the erosion of discipline boundaries, and practitioners in new media are often ahead of the thinking in the disciplines themselves. While this can produce a fluid and intellectually exciting environment for research, it doesn't necessarily generate a shared and commonly accepted critical language. This is a situation that can create real difficulties for academics and students alike as far as recognition of, and funding for, research is concerned. Since an increasing amount of research is also collaborative, there are also unresolved issues to do with authorship and ownership. The gap between accepted and familiar boundaries of research

territories and new and emergent conceptual boundaries and territories clearly affects the development of future research agendas. This paper will discuss some of the implications of an evolving post disciplinary and digitised environment for research practices in art and design, in the context of the on-going tension between the objectification of knowledge on the one hand, and innovation and creativity on the other.

Summary
Redefined discipline boundaries produce new and hybrid forms of interdisciplinary research that test existing disciplinary limits, and produce new objects for study. Digital technologies have a particular contribution to make to the evolving cultural narrative in which post disciplinarity and the significance of 'situated knowledge' are increasingly recognised

Dr Jenny Wolmark
Hull School of Art & Design
Faculty of Art, Architecture and Design
University of Lincoln
Queens Gardens
Hull
HU1 3DQ

Tel: 01482 311552
Email: jwolmark@lincoln.ac.uk

Eleanor Gates-Stuart
Australian Centre Arts & Technology
Australian National University
Peter Karmel Building 121
Childers Street
Canberra
ACT 0200

Tel: + 612 6125 4830

Email: eleanor.gatestuart@anu.edu.au

In this paper, we discuss the impact on current research cultures of the blurring and redefinition of discipline boundaries and the subsequent emergence of cultural hybrids. We suggest that the capacity to move reflexively between cultural practices and across discipline boundaries is central to the development of a more expansive research culture. Digital technologies make a particular contribution to the erosion of discipline boundaries, and practitioners in new media are often ahead of the thinking in the disciplines themselves. While this can produce a fluid and intellectually exciting environment for research, it doesn't necessarily generate a shared and commonly accepted critical language. As far as recognition of, and funding for, research is concerned, this is a situation that can create real difficulties for academics and students alike. Since an increasing amount of research is also collaborative, there are also unresolved issues to do with authorship and ownership. The gap between accepted and familiar boundaries of research territories and the emergence of new conceptual boundaries and territories clearly affects the development of future research agendas. In view of the theoretical and practical challenges that are posed by this situation, we suggest that it is increasingly useful to define research as a post-disciplinary practice. The paper will discuss some of the implications of an evolving post-disciplinary and digitised environment for research practices in art and design, in the context of the on-going tension between the objectification of knowledge on the one hand, and innovation and creativity on the other.

Despite the infusion into the academic environment of a healthy postmodern scepticism about the adequacy of totalising narratives, universities and funding bodies continue to maintain a commitment to disciplinarity. Although the shifting knowledge base of many disciplines means that there is increasing overlap, it could be argued that the alliance between education and business has reinforced discipline boundaries. Adherence to those boundaries creates considerable difficulty for anyone working in cross-disciplinary areas when it comes to definitions of research and the articulation of the object(s) of knowledge. Women's Studies, for example, has been a recognised academic field for many years, yet it was not included as a legitimate research category in the 2001 Research Assessment Exercise (RAE) conducted in the UK. Such fields of study are considered to be problematic because firstly, research is approached from a multidisciplinary perspective, making it difficult to place research outcomes into a designated subject category, and secondly, the emphasis is placed on shared authorship.

As long as discipline boundaries remain broadly intact, so, too, does the relationship between authorship and ownership. As research and resources are closely linked in a globally competitive environment, this relationship is clearly crucial. However, the extent to which research can continue to be determined by, and dependent on, narrowly discipline-specific thinking is debateable. After all, new and hybrid forms of interdisciplinary research not only test existing disciplinary limits, but also produce new objects for study which, in turn, require new methodologies.

There is an obvious tension, then, between the objectification of knowledge on the one hand, and innovation and creativity on the other. This tension largely derives from an essentialist conceptual framework which asserts that things can be known in and of themselves. Thus, while shared conceptual characteristics across disciplines can be acknowledged, they do not dispel disciplinarity, with the result that creativity and innovation are recognized as taking place only within 'agreed' limits. Postmodern scepticism not withstanding, this reinforces the notion that some forms of knowledge are more authentic and appropriate than others. In art and design, knowledge hierarchies continue to provide a rationale for the use of familiar models of research, drawn from science, the humanities and social sciences, to define acceptable research methodologies. Although there is considerable debate about the appropriateness of models of research in which practice, process and production are seen as separate activities with separate outcomes, research funding still tends to follow the protocols established by these models. In the UK, for example, the Arts & Humanities Research Board (AHRB) mainly provides funding for research with clear outcomes, whereas the Arts Council is more concerned with funding creative practice. While the notion that 'practice' can, and should, be regarded as a legitimate research outcome has gained a lot of ground, it has yet to become a broadly accepted principle.

Generally speaking, there is little indication that the erosion of familiar categories and hierarchies of knowledge is being actively welcomed. Although there is generous funding available to those who are working across disciplines such as science and art, for example, it remains questionable whether or not such collaborations can fundamentally challenge the structures and relations of power that inhere in all forms of knowledge. An emphasis on the separateness of a discipline base enables knowledge to be decontextualised, and once this happens, it can be removed from the social and cultural relations within which it is embedded. Once particular knowledges are provided with an autonomous and ahistorical space, research itself can also be defined - and limited - by that environment. Research that appears to exist 'outside' the disciplinary space can be discounted, therefore, on the grounds that it is socially and culturally contingent and so inherently unreliable.

Cultural hybrids and postdisciplinary practices

Despite these difficulties, discipline boundaries have become more flexible and claims for the exclusivity of fields of knowledge and their concomitant truths are increasingly disputed. Significant challenges to such claims have emerged within feminist and postcolonial theory, for example, from where it had been pointed out that exclusivity requires selective exclusion in order to create otherness. The question that remains, however, is whether or not research agendas should be constrained by the control that discipline boundaries exert over definitions of research and articulation of the object(s) of knowledge. If it is the case that, as Katherine Hayles has argued, 'knowledge is useful to us because, not in spite of, the fact that it is limited, partial, and perspectival', (1996: 233) then the emergence of cultural hybrids and post-disciplinary research practices is highly significant. They challenge academic definitions of disciplinarity, and in so doing they raise the possibility that research agendas and objectives might more appropriately be established by the same people who are undertaking the research. Research in this context is not driven by the compulsion to provide definitive answers and outcomes: as a consequence, it has the capacity to be open-ended, dynamic and self-reflexive. In his discussion of the self-reflexive capacities of culture, Terry Eagleton has argued that cultures are 'porous, fuzzy-edged, indeterminate, intrinsically inconsistent, never quite identical with themselves, their boundaries continually modulating into horizons.'(2000: 96) As boundaries continue to erode, the post-disciplinary practices that are tentatively emerging are equally porous, fuzzy edged and indeterminate. Their significance lies in the fact that they are cultural hybrids, and as such they are well placed to challenge hierarchies of knowledge that are offered as repositories of universal values.

As cultural hybrids, post-disciplinary practices retain knowledge of the specificities of disciplines and of their histories, but at the same time they are also inherently transgressive and capable of operating outside disciplinary limits. There are plenty of examples of hybrids already functioning in this way, such as Gender Studies, Science Studies, Cultural Studies, and Visual Studies. The new electronic spaces and places of information technology have also generated the extraordinarily heterogeneous field of related studies known as cyberculture **(1)**, which focuses on cybernetics, information technology and the embodied consequences of technology. Cyberculture constitutes a new discursive space in which the relationship between the real and the virtual can be redefined, and as such it can be considered to be what bell hooks has described as a site of 'radical openness'. (1990) It offers new creative opportunities to explore the intersections between any number of cultural forms, as demonstrated in the proliferation of multimedia texts, performances and installations, in both digital and non-digital environments. If the distinction between and across digital and non-digital practices has become increasingly

unsustainable, then other binaries can also be questioned. Indeed, one of the most interesting features of post-disciplinary practices is that the debates that are generated by such transgressions are not drawn entirely from the academy, and they certainly extend beyond it. Contemporary art and design practice, for example, consistently blurs the boundaries between popular culture, aesthetics and academic disciplines. By blurring distinctions between cultural categories, these hybrids challenge the legitimacy of the concept of an overarching and normative culture. Cultural hybrids disrupt and destabilise the regulatory characteristics of such a concept of culture precisely because they are never entirely outside it. Such hybrids have an interestingly partial existence that is consistently informed by their position within the materiality of the medium, but which also generates a notion of culture as plural, flexible and subject to change. Under such circumstances, sedimented disciplinary definitions and knowledge outcomes inevitably become less fixed and more heterogeneous.

In this context, then, it might be useful to think of research as a cultural practice that is generated by and through the intersection with other cultural practices, and following from this, knowledge can be better understood as 'situated'. Situated knowledge in the sense in which Donna Haraway uses the term is embedded in an intricate network of social and cultural relations that produces 'partial, locatable, critical knowledges'. (1991: 191) This view undermines the notion that knowledge can exist in a closed loop, in which the object and outcomes of the research are largely determined by the research model itself. Notions of objectivity and truth, as forms of dis-embedded and disembodied knowledge, are also fundamentally undermined by the more flexible notion of situated knowledges. Conceptualising both knowledge *and* imagination as situated involves recognition of the cultural complexity of the intersections between seemingly discrete practices and forms of knowledge.

We have argued elsewhere **(2)** that an interesting model for thinking about research as a cultural practice can be found in technoscience, the field of studies that has emerged from the erosion of boundaries between science and technology. As a portmanteau term that signals the increasingly impossibility of maintaining existing discipline boundaries, we have found it to be useful in thinking about the imploding relationship between digital technologies and creative practices in art and design. Haraway has argued that technoscience is a 'generative matrix' (1997: 50) that is embedded within the complex social and cultural structures within which it occurs, and by which it is shaped. It is also a cultural hybrid, embodying a recognition that the interrelation between 'things' means that it is increasingly necessary to work across discipline boundaries and in collaborative ways. The significance of technoscience for our discussion is that, in escaping from the confines of the discipline, it has moved away from a notion of knowledge as a series of partial perspectives located within fixed discipline boundaries. It offers an alternative model of knowledge in which culturally differentiated points of view, such as those

emanating from within art, humanities and science, do not have to be regarded as conflicting or mutually exclusive. Instead, knowledge can be thought of as consisting of a multiplicity of interconnected viewpoints, perspectives, social relations and cultural practices, or 'situated knowledges'. Within this framework, binary models of research, in which one thing is defined by its opposition to another thing, can more easily be challenged.

For our purposes, the implosive characteristics of technoscience provide a preliminary perspective from which to consider the inscription of digital technologies within art and design practice and research. As the boundaries between art and design practices have also imploded in recent years, the emergence of new disciplinary spaces necessitates more expansive and flexible definitions of research than are currently in use. The capacity to move reflexively between cultural practices is likely to become more central to a consideration of the nature of knowledge in practice-based fields. This is arguably already the case in web-based work, which has produced significant cultural hybrids and draws on diverse methodologies and research processes. Collaborative working is foregrounded in web-based work, with the result that hard and fast distinctions between artists and designers, producers and consumers are becoming less clear. The discipline, and disciplining, bases for these distinctions are, in many respects, unenforceable. On-going debates about the relationship between theory and practice can more usefully be subsumed into a broader discussion about the different ways of knowing that are available across a range a cultural practices, not just within art and design. The connections and divergences that are encountered as cultural practices converge is likely to necessitate an increasingly intertextual approach to research that will interrogate familiar ontological and epistemological categories. Such an approach will almost certainly undermine the notion that knowledge is an abstract category that has always to be 'discovered' in its purest form, as some kind of absolute. If, instead, knowledge is regarded as contingent and unpredictable, then research can be thought of as more akin to a process of immersion in which the researcher becomes a participant rather than a determining or controlling force.

Nomadic research

As a response to connectivity, networks of knowledge and convergence in digital art and design practices, practitioners increasingly navigate across disciplinary boundaries in order to use and exploit new technological developments. As a result, creative practice is necessarily becoming a more 'nomadic' activity, as Ringe and Pengelly (2003) have argued. The metaphor of the nomad is often used in academic discourse (**3**) to indicate the shifting relationships of power and authority occurring in postcolonial and transglobal contemporary environments. It also has considerable resonance within the context of imploding discipline boundaries, emergent

practices and new forms of critical thinking. Some consideration can usefully be given to the way in which a more nomadic creative practice redefines the relationship of the artist or designer to research and its knowledge outcomes.

Nomadic creative practices may mean that, increasingly, the artist/designer has to be prepared to relinquish control over final outcomes, and that end results are less important than process. This opens up exciting possibilities for collaborative work and, perhaps more crucially, begins to break down the barriers between artist, designer, technician, producer and consumer. This, in turn, is likely to have an impact on the way in which research outcomes are defined, enabling process and development to be accorded appropriate recognition as self-reflexive forms of knowledge. Many more artists and designers are now either learning to write software themselves, or working more closely with programmers who already have that knowledge. The sharing of knowledge means that the question of who, or what, is the subject or object of that knowledge becomes negotiable rather than predetermined. The blurring of the distinction between artist, designer and technician extends to that between producer and consumer; by extension, the distinctions between expert and non-expert, professional and non-professional become similarly blurred. This is not to suggest that all differences and divergences of opinion are magically dissolved into some kind of bland and amorphous postdisciplinary soup, nor is it to deny the possibility that digital technology could generate a form of technological determinism in which creative practice is not only determined *by* the technology but is all *about* the technology. Although these are legitimate anxieties, the interface with technology is nevertheless producing a new and synergistic space within which different paradigms of meaning can be articulated. To frame this in broader terms, cyberculture itself can be thought of as part of a nascent cultural narrative in which situated, or embedded, knowledge and multiple agency together generate new narrative forms and aesthetic outcomes.

The materiality of content

At this point, we would like to locate some of the theoretical and practical issues that have been raised in a way that is both more personal and more focussed on the materiality of knowledge outcomes, by looking at the work of the 'gatescherrywolmark' partnership. (**4**) The partnership is collaborative and because it relies on both contingency and synergy, it is in some measure also improvisational. This allows it to be both on-going and archival in nature. The work includes video, digital images, and text, and the 'partnership' consists of a core of three practitioners, to which are added other interim collaborators who have been asked to take over projects at given points in the development of the work. The separate identity and practices of the three original collaborators has not been explicitly referred to in any work that has been published or exhibited, to allow for the element of ambiguity that is integral to the work of

gatescherrywolmark. It has also enabled 'gatescherrywolmark' to become an umbrella description that can include any number of collaborators working within and across disciplinary boundaries.

The elastic possibilities of this kind of collaboration were first explored in the book *Disruptive Signals* (1999), in which gatescherrywolmark artwork and text were given to a designer who 'produced' and thus completed the project through the design decisions that were made. Although the form was familiar and print based, the project was not about achieving a desirable 'look' to the work, so much as it was about moving between research and creative practices in a collaborative way. To our surprise, though not to his, the designer found the idea of collaboration difficult to accept, preferring to see it as a design brief, and the members of gatescherrywolmark found it equally uncomfortable to give away the final decisions about text and image. The issue of 'ownership', then, became less easy either to quantify or to resolve when working with a flexible concept of collaboration. From the point of view of the issues explored in this paper, the most significant aspect of the process was that the knowledge framework - that is, the expectations, roles and tacit 'rules' that are usual in such situations - was undermined from the start. This produced an unstable situation that had to be negotiated by all those involved: as different cultural practices intersected, no single perspective appeared to dominate and the research had the potential to produce an indeterminate number and range of knowledge outcomes. Two things became clear from this particular experience: not only can such intersections be expected to throw up unexpected and unpredictable issues, but also a differently articulated and more flexible kind of knowledge framework is required to deal with them.

The *Disruptive Signals* project led into a further, web based project and also involved an expanded collaboration with a designer who was commissioned to design a website for gatescherrywolmark. The initial intention of the website was that it should document on-going research, so that the 'work' itself consisted of the research process made visible and concrete in a variety of forms, not least through the intervention of the website designer. The binary division between research and finished object was subverted by the way in which the website itself was produced both as 'work' and as research. The project was, by definition, incomplete, open-ended and subject to further intervention. The overall ambition of the project was that it should be put on the web as an interactive piece that blurred the demarcation between producer and consumer by once again 'giving away' ownership. It was envisaged that the work would move freely through the net, and whatever changes made to it could become part of the work itself. It would thus embody both disjunction and continuity, and further research would increasingly be about exploring the nature of the accumulated accretions gathered by the original work. Although the emphasis of the project was on the flux and fluidity that are key characteristics of

web-based work, a further significant dimension of it was that it should also act as an archive and become a register of the shifting contexts for, and definitions of, knowledge. The development of the website brought further changes in the nature of the collaboration. The decision-making process became more diffuse and open-ended than was the case with the *Disruptive Signals* and the website designer stopped thinking of himself as a technical facilitator and recognised himself as part of the collaboration. The technical knowledge that the designer brought to the project intersected with the ideas and content of the work, and decisions about the overall style and appearance of the site were rapidly subsumed into other decisions about how to combine the interactive nature of the site with its archival function.

Not surprisingly, it was impossible to secure funding for the constant monitoring that would be required for such a speculative and open-ended project, and the website has since become purely archival. The presence of such an archive might seem dysfunctional, or, at the very least, paradoxical, in the rapidly changing environment of information technology where the texture of the digital 'has no patina of history' (Boym, 2001:347). We suggest, however, that the visible traces of the past in the present provide the essential material from which to construct new cultural narratives in which to rethink the relationship between ourselves and the material conditions of our existence. This is both a deconstructive and constructive process which gatescherrywolmark has attempted to engage in performatively, by using our own work to explore the possibilities of multiple authorship and to subvert the binary divisions between authorship and ownership, research processes and finished work.

Further stages in the collaborative process involved commissioning the production of a five minute video film using images drawn from the archives of existing work on the website. The film-maker initiated his own collaboration with a phonic artist and added a techno-sound music track. After discussion with, and encouragement from, members of gatescherrywolmark, he re-edited this version and, in a new collaboration with a classically trained musician, added a different sound track. The relationship between the originating artists/makers and the work changed significantly as a consequence of the various collaborations, so that gatescherrywolmark might more appropriately be thought of as directing, rather than owning, the research. The diverse network of collaborations and multiple agencies that has been made visible here indicates some of the ways in which research practices can become increasingly open-ended and hybridised, as can the outcomes of those practices. For gatescherrywolmark, the collaborations have also begun to function as a form of dynamic critique of both the work and the research process itself. As other collaborative inputs occur, we would expect the interrelationships between them to continue to generate unanticipated issues and problems, but also different forms of knowledge that will undoubtedly be 'limited, partial and perspectival'.

The discussion of gatescherrywolmark is intended as a brief narrative about some of the

complex processes that are involved in constructing a research framework in which knowledge outcomes are embedded in the material specificity of the object(s), and also in the network of social and cultural connections within which and by which those outcomes are shaped. When post-disciplinary research is thought of as a cultural practice, it can then be recognised as existing in a state of connection with other cultural practices and practitioners. The knowledge outcomes that are generated within this connective network are both embedded and non-prescriptive, enabling authorship and ownership to be differently configured. The imbrication of digital technologies in post-disciplinary research practices is a key factor in the construction of a knowledge framework that is prepared to validate cultural hybridity, nomadic creativity, chance encounters and unpredictable outcomes as crucial ingredients.

[word count 3863]

Notes

1. For a discussion of cybertheory and cyberculture, see Jenny Wolmark (2003) 'Cyberculture', in Mary Eagleton (ed.) *A Concise Companion to Feminist Theory*. Oxford: Blackwell Publishing.

2. See Wolmark and Gates-Stuart (2002) 'Research as Cultural Practice' in *Working Papers in Art and Design*, www.artdes.herts.ac.uk/res2prac/

3. See, for example, Janet Wolff, (1993), 'On the road again: Metaphors of travel in cultural criticism.' *Cultural Studies*, 7, 2, May, 224-39 and Rosi Braidotti (1994) *Nomadic Subjects: Embodiment and Sexual Differences in Contemporary Feminist Theory*. New York: Columbia University Press.

4. Work by gatescherrywolmark has been shown in the UK, Australia and the USA, most recently at *Siggraph 2003*. The original members of the partnership are Eleanor Gates-Stuart, Jean Cherry, Jenny Wolmark.

References

Boym, S. (2001). *The Future of Nostalgia*. New York: Basic Books

Eagleton, T. (2000). *The Idea of Culture*. Oxford: Blackwell.

gatescherrywolmark (1999). *Disruptive Signals*. Sheffield: gatescherrywolmark.

Hayles, K. (1996). 'Consolidating the canon'. In A. Ross (ed.) *Science Wars*. Durham, N.C: Duke University.

Haraway, D. (1991). *Simians, Cyborgs, and Women: The Reinvention of Nature*. London: Free Association Books.

Haraway, D. (1997). *Modest_Witness@Second_Millenium.FemaleManã_Meets_OncoMouseÔ.* New York: Routledge.

Ringe, S., & Pengelly, J. (2003). 'New topologies'. Unpublished conference paper. Given at 5th Annual Computers in Art & Design Education Conference, Hull, UK.

PLEASE NOTE
Visual material relating to gatescherrywolmark, DVD work : 'Logical Aesthetics'