

REFEREED PAPER

Mapping and Contemporary Art

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If mapping is our most common operational metaphor today, there has been a related increase in the use of maps in art and attention from outside the art world is growing with new publications also on the rise. This article reviews aspects of this decades-long history and discerns patterns to the reception of this theme, suggesting that some revisions are needed – in particular a call for a wider cultural account than is often the case. Shifting epistemologies that consider art useful to cartography or science are discussed. This article therefore grapples with notions of what mapping in art has been and can be, opening out a history of definitions that have created expectations as well as regrettable limits, looking at who is mapping, and what is being mapped today, via contributions from artists.

Keywords: Contemporary art, art exhibitions, mapping, cartography, maps as art, thematic exhibitions, art curating, Alighiero e Boetti, Autogena and Portway, Experimental Geographies, critical cartographies, actor-network theory, art theory, Aboriginal Art, Öyvind Fahlström, J. Brian Harley

INTRODUCTION

From the 1980s onwards, curators of contemporary art have been able to bring together an impressive number of artists whose work uses maps or mapping processes in their artworks. These exhibitions took place from Sydney to Zagreb, Indiana to Antwerp, and the mapping theme continues to generate substantial exhibitions (for example, *Experimental Geographies*, touring multiple venues in North America, 2008–2009). There has been an explosion of maps in art recently, despite regular exasperation on the part of curators who think the subject ‘has been done’: ‘the map is dead, long live the map!’¹. One purpose of this article is to review aspects of this decades-long history and discern some patterns to the reception of this theme. Many of these exhibitions proceed without much reference to their predecessors and overviews of the emergence of these exhibitions and changing roles of maps in art are overdue. Another concern of this article is to examine the mindset and expectations of artists, curators and external commentators working with maps and mapping today, who are as varied in origin, concerns and approach as could be expected from an increasingly global arts and information scene. In relation to the contemporary mindset, a shift away from ‘the map’ towards ‘mapping’ must be examined, and there will also be a call for a more culturally expanded notion of mapping in art, beyond the Western tradition as a universal concept (even if it has near worldwide distribution).

Some artists today are more engaged with geographers’ notions of mapping than others, this too needs investigation: what happens when one discipline uses the languages

or tropes of another, and what are the contributions that each could make to the other as well as to groups beyond either field? Some speculative ground will be presented for discussion, including the notion that some aspects of Aboriginal art have been too long overlooked within these histories². This article therefore grapples with notions of what mapping has been and can be, opening out the history of definitions that have created expectations and limits on what actions are seen to count as cartography – in other words, looking at who is mapping, and what can be mapped today, via contributions from artists.

THE RISE AND RISE OF MAPS IN ART

At the end of this article is a list of 24 exhibitions of contemporary art from 1977 to 2009 which have taken cartography as their main focus. The list is not exhaustive; the aim is only to indicate the prevalence of the mapping theme in this time period via these exhibitions³. Some of these exhibitions’ catalogues are reproduced here to underline the frequency of this theme. If the use of maps in art is now commonplace, it is worth remembering that such a similar list is not possible in the first half of the twentieth century or before and reasons need to be explored for this rapid rise of the map in art⁴. Some contributing factors are considered below, although this subject has been addressed in several of the exhibition catalogue essays, most notably in Moritz Kung’s sumptuous, essay-rich catalogue for *Orbis Terrarum: Ways of Worldmaking*.

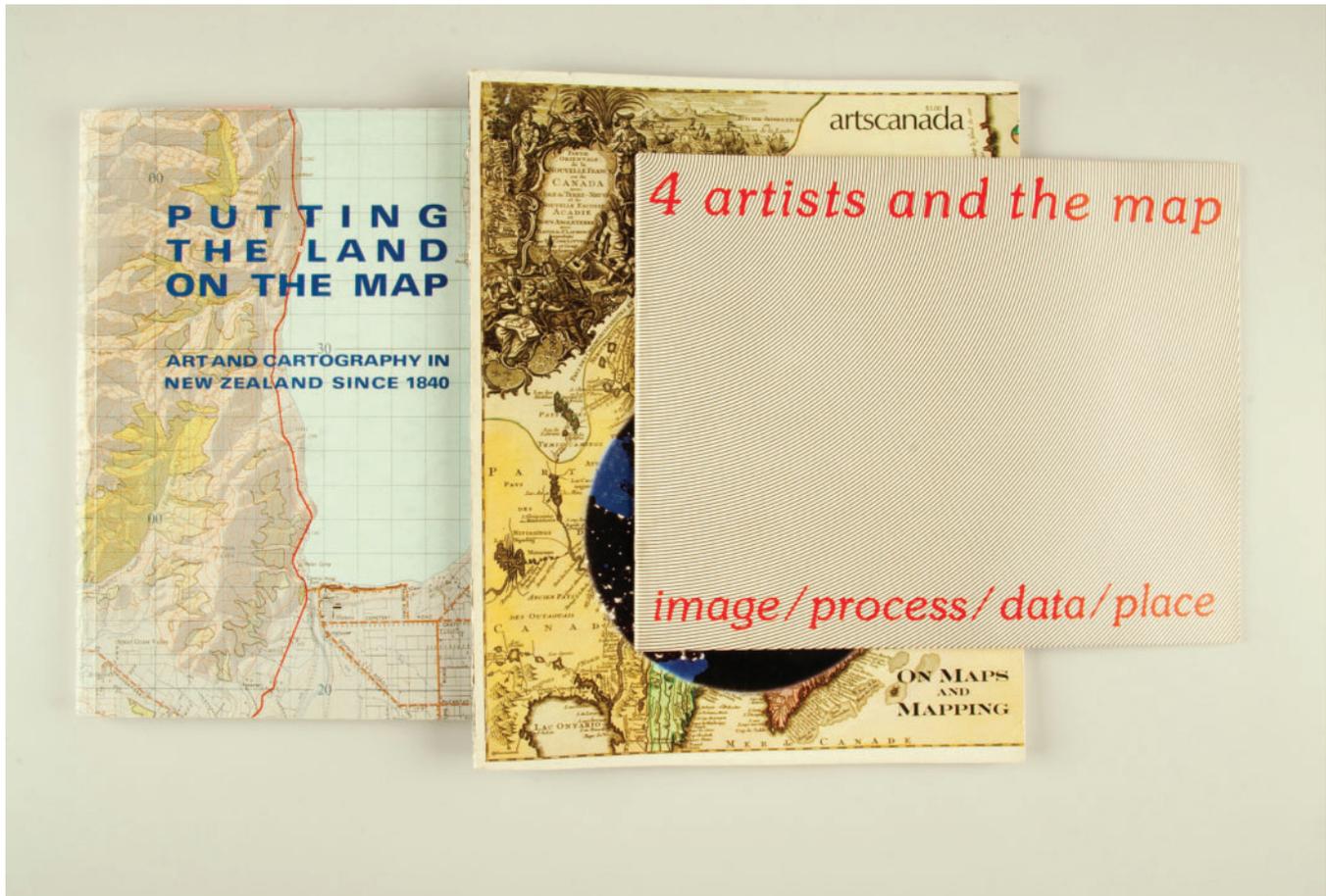


Figure 1. Three early publications (left to right): Curnow, W. (1989). *Putting the Land on the Map: Art and Cartography in New Zealand since 1840*, Govett-Brewster Art Gallery and national tour, New Zealand. ArtsCanada Special Issue. (1974). *On Maps and Mapping*. Smith, R. (1981). *4 Artists and the Map: Image/Process/Data/Place*, Spencer Museum of Art, Lawrence, KS, USA

The list of exhibitions should also be considered alongside the contributions made by writers and curators, from scholarly volumes such as *Art and cartography: Six Historical Essays*⁵ or *Terra Infirma: Geography's Visual Cultures*⁶, early journal issues such as the 1974 *ArtsCanada On Maps and Mapping*⁷ to more recent compendiums such as *The Map As Art: Contemporary Artists Explore Cartography*⁸. Philosopher Edward S. Casey has also extended his work on place to include artistic explorations, in his book *Earth Mapping: Artists Reshaping Landscape*⁹. Outside this English-dominant list, French philosopher Christine Buci-Glucksmann's *L'oeil cartographique de l'art* springs to mind¹⁰. Cartographers have also contributed to this field, with a special issue of *Cartographic Perspectives* in 2006 featuring Denis Wood, whose earlier book *The Power of Maps* has been cited by many artists¹¹. The presence of these volumes speak to an even broader engagement with mapping and art as they permit investigations beyond those achievable by galleries and institutions, arguably limited by international freight and insurance costs in the movement of objects around the globe (which is a polite way of addressing the not yet foregone issue of parochialism).

These books have also shaped the arguments within which much of the art has been positioned, with few exceptions from Euro- or Amero-centric points of view¹².

An alternative is Wistan Curnow's 1989 exhibition and catalogue *Putting the Land on the Map: Art and Cartography in New Zealand since 1840*, which combined European-based mapping and map art alongside that of Maori mappings of the landscape, with a catalogue essay that was still international in scope. Another was the 1999 Djamu Gallery/Australian Museum exhibition *Mapping Our Countries*, which included 36 Aboriginal artists from multiple locations within Australia as well as non-Aboriginal Australian artists, and artists from other countries¹³. While still having to engage with dominant conventions in discussing 'international' art, this article is an attempt to modify their claims to universality and provide some perspective on them by suggesting that some aspects of indigenous art and Aboriginal art in particular hold a more central place in any discussion of art and mapping. 'Aboriginal art' is an overall term that can be problematic, describing the works of multiple indigenous peoples and language groups living in Australian urban and non-urban environments. Although it has not always been the case, most of their visual productions are now easily classified as art and included in art galleries, not just museums of ethnography¹⁴. Their topographical content also varies in form, intent and accessibility, but to extend the term mapping to them is not inappropriate, especially when



Figure 2. Koscevic, Z. (1997). *Cartographers: Geo-Gnostic Projections for the 21st Century*, Museum of Contemporary Art, Zagreb. Taçon, P. and Watson, J. (1999). *Mapping Our Countries*, Djamu Gallery/Australian Museum, Sydney, NSW

considering definitions extended to Western artists¹⁵. Co-curator of *Mapping Our Countries* Paul Taçon wrote: 'Maps may have scientific or mythological characters but they always do the same thing – they tell stories of relationships to geographic locations that are important to the individuals and groups doing the story telling. They are artefacts that embody, reaffirm and publicize the personalisation of place. Without maps we would exist in totally different, unimaginable ways'¹⁶. This would apply to a lot of work described either as maps, or map art.

In Western countries, mapping is currently a ubiquitous and dominant operational metaphor. It has superseded other metaphors derived from other fields; for example, today we rarely 'chart our position', 'give an outline of ...', 'offer a perspective on ...', 'lay out the field of ...', and so on; we now prefer to suggest something is being mapped, or mapped out. This metaphorical use has not gone unnoticed by cartographers; eminent cartographic scholars Arthur Robinson and Barbara Petchenik offered this explanation: 'Everything is somewhere, and no matter what other characteristics objects do not share, they *always* share relative location, that is, spatiality; hence the desirability of equating knowledge with space, an intellectual space'¹⁷. This 'spatial turn' in the presentation of thinking may be aligned with the rise of the ocular, as visualisation is largely predicated on (at least the illusion of) dimensionality, a characteristic less important in the oral/aural transmission of information¹⁸.

This is speculative; more concrete contributions to the increase are the important changes in linguistic use of the term that were occurring within the very different fields of genetics and mathematics. In genetics, the position of a chromosome is not metaphorical: its physical place in a sequence is crucial, so mapping a genome is a fair description of the process. This linguistic adoption by genetics seems to have taken place predominantly in the

1960s as the field picked up pace with the advent of computing¹⁹. Mathematical adaptations are more important, however, as 'mapping' was extended to describe more abstract relationships (or correspondences) between elements of two disparate sets. This shift freed mapping from its origins in geography ('writing the Earth') to become available for other tasks, which now seem innumerable. What isn't being mapped today? A mathematical tone was adopted by cultural theorist Fredric Jameson for his notion of 'cognitive mapping', a tool for understanding and interrogating the present and leading to new analysis and action²⁰. Jameson's work was widely discussed through the 1990s as part of the early theorization of post-modernism and this certainly contributed to the dissemination of the term in realms outside the strictly geographic.

Contributing origins of the mapping metaphor do not fully explain its current ubiquity, or the use of cartography in art. In the 1960s and 1970s, laying the ground for the relative explosion of map imagery in the decades afterwards, many artists from North America and Europe used the map as a recurrent visual trope in their work, including Alighiero e Boetti, Marcel Broodthaers, Agnes Denes, Nancy Graves, Öyvind Fahlström, Jasper Johns, Richard Long, Robert Smithson and many more²¹. Western artists at least were much more exposed to maps in popular culture than those working before them. War has long relied on maps, but the Second World War had extended the use of mapping as the geographic reach and knowledge of terrain were stretched beyond those of former eras; both maps and film were indispensable in this process²². Popular culture reflected this cartographic turn in films such as Charlie Chaplin's 1940 film *The Great Dictator*, or 1942's *Casablanca*, both films suffused with contemporary wartime concerns²³. The Korean War and especially the Vietnam War – televised, with its images broadcast inside people's living rooms – were current for many of the artists listed above who came

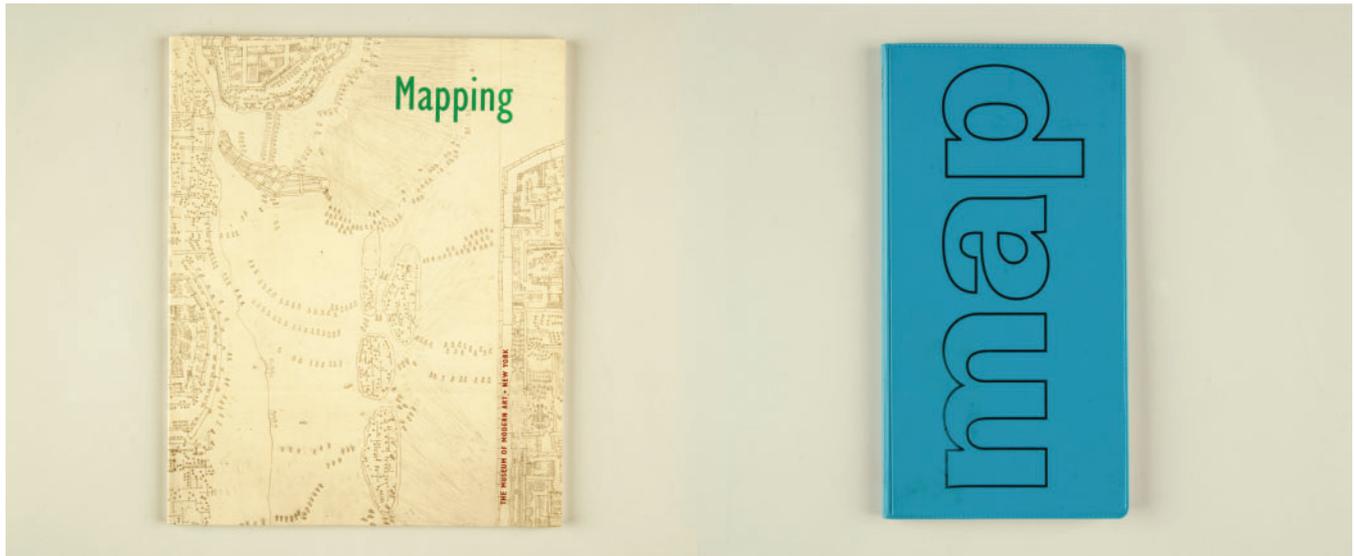


Figure 3. Storr, R. (1994). *Mapping*, Museum of Modern Art, New York. Levy, D. and Tawadros, G. (1996). *Map*, Institute of International Visual Arts, London

to use maps as a major part of their imagery. *The Fog of War*, Errol Morris' documentary on Robert McNamara, US Secretary of State during the Vietnam War, featured much archival footage that was map related although this could also reflect the time in which the film was made, 2004²⁴. Map imagery was transforming into a common visual tool, accessible and readable by many, including newspaper and magazine illustrators, science fiction illustrators, and artists²⁵.

Maps in common visual representations alone were not a sole factor in the rise of mapping in Western art – it still needed a major epistemological shift to change the way artists saw maps and mapping processes. Consider the gauntlet thrown down by American art writer Kim Levin in her influential 1979 article 'Farewell to Modernism'²⁶:

*If the grid is an emblem of Modernism, as Rosalind Krauss has proposed – formal, abstract, repetitive, flattening, ordering, literal – a symbol of the Modernist preoccupation with form and style, then perhaps the map should serve as a preliminary emblem of Postmodernism. Indicating territories beyond the surface of the artwork and surfaces outside of art. Implying that boundaries are arbitrary and flexible, and man-made systems such as grids are super-impositions on natural formations. Bringing art back to nature and into the world, assuming all the moral responsibilities of life. Perhaps the last of the Modernists will someday be separated from the first Postmodernists by whether their structure depended on gridding or mapping.*²⁷

Levin made this statement just as map use in art was on the rise and she locates it squarely as a fundamental practice within a newly forming canon. The map's centrality to post-modernism has not been universally shared by all commentators; for some, this theme has just been either a curiosity or another available subject in the rise of the curated group exhibition with its concomitant star curator, itself something of a post-War phenomena. But the prevalence of the

mapping impulse in contemporary art can also be seen not only by its most obvious exponents (one of whom will be discussed in greater depth below), but in the parade of well known artists in the map exhibitions who, although famous for quite different kinds of art, nevertheless found the map a necessary tool. This surprising list includes Elsworth Kelly and Claes Oldenburg, Guillermo Gomez-Peña and Joseph Beuys, Ilya Kabakov, Robert Indiana, Fischli and Weiss, Laurie Anderson, Gerhard Richter and On Kawara; Ben, Maurizio Cattelan, Nam June Paik and Yoko Ono²⁸.

Many artists used the map as a set of abstractions to be manipulated or produced as a tool for action. Modernism's striving towards ideal forms and its pure abstractions were left behind; the map had (and still has) its hands dirty with matters of the world²⁹. It became recognized and accepted, as were the multitude of new subjectivities revealed by the post-modern examination of identity, as complicit actors in a socially, politically mediated world³⁰. This approach was also explored by historian of cartography J. Brian Harley in an influential series of articles from the late 1980s, one title giving a clear indication of some of the theoretical framework that lay behind the new interrogations, 'Deconstructing the Map'³¹. Each aspect of map production (who made the map, for whom, and for what purpose) and construction (choice of projection, other representational choices such as decoration) became contestable fields and this method is normative in the study of maps today, even if these concerns are more closely aligned with the work of Michel Foucault than of Jacques Derrida. A discourse around these themes known as 'critical cartography' has subsequently arisen and some of its key writers have recently engaged strongly with the subject of the map and art, which I shall return to in the third section.

Alongside these new critiques, a parallel emergence of the study of subjectivities may also hint at differences in approach by artists using maps as post-modernism unfolded. There has been (preceding post-modernism?) a thread of artistic use in which the map is a metaphoric site



Figure 4. Silberman, R. (1999). *World Views: Maps and Art*. Frederick R. Weisman Art Museum, Minneapolis, MN. Küng, M. (2000). *Orbis Terrarum: Ways of World-making*, Museum Plantin-Moretus, Antwerp

for personal investigation, often referencing notions of ‘the journey’ or exploration, but I find this problematic as a methodology as the power relations of the map are usually glossed over (exploration’s successor, colonisation, is not as easily ‘metaphorised’). This tendency sits uneasily with uses that open out the description of and engagement with actual sites or social issues, beyond the walls of the art gallery. The map is increasingly used in contemporary art as a political tool for commentary and/or intervention, a topic that will also be discussed later. In 1987, French philosophers Gilles Deleuze and Felix Guattari perhaps best represented the newly forming approach to maps: ‘The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation’³². It could be argued that many artists had already realized this, that Deleuze and Guattari’s comment looked back to the preceding decade at least as much as it still well describes much of today’s artistic mapping practices³³.

THE MAP OVER THREE DECADES: THE *MAPPA* OF ALIGHIERO E BOETTI

As mentioned, the 1960s and 1970s produced several artists for whom the map was an important visual trope. One artist in particular, Alighiero e Boetti (1940–1994), appeared many of the exhibitions and writing on the theme of art and cartography. The reception and positioning of his work over the 1970s through to the 1990s may function as a synecdoche revealing changing patterns in the use of maps in art generally³⁴. This I hope will be a more interesting way of exploring shifts of mapping in art rather than creating a catalogue of instances of maps in art, as is often done in exhibition catalogues and some recent publications on the subject.

Boetti was one of the post-War Italian *Arte Povera* artists who used materials and methods that broke radically with Italian pre-War art³⁵. Like many of his peers, Boetti frequently employed pre-existing images or industrially made materials; alongside his use of commercial ballpoint pens, the format of the rug, using stamps, envelopes or the patterns of camouflage, the map was just another of these everyday items. While living in Kabul (from 1971, staying there two times a year until the Soviet invasion in 1979), Boetti began his renowned series of works, each titled *Mappa* (some are titled *Mappa del Mondo*). Hand embroidered by local craftswomen, these rectangularly formatted, large-scale world maps show each country’s flag within the political borders of the landforms on the map. As the series – nearly 150 works – ranged from 1972 until the year of his death, 1994 (with some produced posthumously), political changes can be seen within the series itself, such as the emergence of flags for Namibia and Greenland. Each map in the series is framed by a border of text, sometimes in Arabic script – in either Dari or Farsi – probably contributing to their increasing interest in a post-9/11 world.

Since their inception, Boetti’s map works have generated some grand and occasionally hyperbolic claims, at times related to the artist’s own suggestions. Referring to *Mappa* of 1972/1973, Boetti wrote that it was: ‘A work of cosmic dimensions which sees every nation represented in the geographical form of its existence and in the joyfulness of the colours of its flag. [...] It is a familiar form wherein we can increasingly identify as citizens of the world’³⁶. This 1970s ‘hands-across-the-waters’ version of globalism resulted in more than one writer using the term ‘supraethnic’ in relation to his work³⁷. Museum of Modern Art curator Robert Storr in 1994 wrote of Boetti’s map/flag works as ‘philosophical souvenirs of global consolidation and countervailing nationalist separation’, but admitted that was a retrospective attribution³⁸. In the 20 year gap between these two comments, the world map had become a symbol for globalisation; how ever that notion is



Figure 5. Boetti, A. (1979) *Mappa*. Embroidered cloth, 122.9 × 174.9 cm. Courtesy Gladstone Gallery, © DACS 2009

construed³⁹. In Boetti's case, his use of the world map and other motifs has been proposed to represent his 'moral imperative as an artist to cut loose from the framework of little Europe' even if, as Edward Casey and J. B. Harley have pointed out, the cartography represented by Boetti's choice of world map is a bastion of Eurocentrism⁴⁰. It is notable that the female Afghani embroiderers employed on the *Mappa* series were unfamiliar with the image of the world in this format when Boetti began working with them⁴¹.

The *Mappa* series' method of production has aligned them with later, post-modern questions around authorial signature. Nevertheless, it has only been relatively recently that the actual 'others' making the work have been recognized as co-contributors, which is a shift from the simple recognition of the removal of the artist's hand. These topics have been discussed in an uneven fashion. Post-colonialist writer and critic Sarat Maharaj, in a 1996 article titled 'A Falsemeaning Adamelegy: artisanal signatures of difference after Gutenberg', made no comment upon the artisanal signature, even when the stitching was central to his claims for Boetti's work as 'in-between': 'Stitchery takes charge and we are drawn into the unreadable non-place'⁴². Is 'non-place' a locational equivalent of 'supraethnic'? In Boetti's statement about the flags and nations, quoted in the paragraph on globalisation, the square brackets contained the following sentence: 'It is a piece which hails from a desire to approach another culture

and be integrated therein'⁴³. In a recent book on Boetti, dedicated to the *Mappa* series, some 15 detailed pages are given to the subject of Afghanistan and the method of the maps' production. Contrast this with a comment (written before the events of 11 September 2001) that would not be uncharacteristic of most previous interest in the production method: 'We barely know or really care about the names of those who critically manufactured and even conceived the details of the *Kilims* and the *Maps*, even if we suspect they all enjoyed doing it'⁴⁴.

Deconstruction, another dominant theme of the last 20 years, was liberally attributed to Boetti's oeuvre. Although he was very much a man exploring concerns of his time, combining a love of the cabala as much as conceptualism, of dualities and binaries as a means of escaping unitarianism – of loving disorder as the other side of order, of being shaman and showman – many commentators have presented his work as if he studied Derrida with avidity. 'His project is a deconstruction, an unmaking of signs and meanings', says one author in 1995 and, chiming in with this, another lists his sources as 'from every field of knowledge: signs, numbers, letters, accounting, poetry, history, geography, geometry, the sciences, the news, and philosophy' or 'characterized by its obsession with systems – of language, of logic, of mathematics, and of representation'⁴⁵. These claims about some of his work are not inaccurate; it is just that the cabala, chance, beauty, and a



Figure 6. Mogel, L. and Bhogal, A. (2007). *An Atlas of Radical Cartography*, The Journal of Aesthetics and Protest Press, Los Angeles, CA. Thompson, N. (2008). *Experimental Geography: Radical Approaches to Landscape, Cartography and Urbanism*, Independent Curators International, New York

strong interest in Eastern religions and mystic traditions are missing from these lists.

Boetti's map works would not, however, seem to address one major theme of the last few decades – that of the body itself – and there were other artists working with maps who could be proposed as doing so, such as Guillermo Kuitca or Mona Hatoum. Argentinian artist Guillermo Kuitca painted maps onto mattresses, which are then hung vertically in the gallery. When you stand in front of these works, the map seems to be a substitute for the body, anyone's body, not just that of the artist. These 'roady' maps from the bedroom mix the public and the private in a somewhat disturbing way⁴⁶. In 1994, London-based Palestinian artist Mona Hatoum made *Corps étranger*, with fibre optic-generated footage taken from inside the body. Presented as circular video projections on the floor inside a smallish, cylindrical room that you enter to view the artwork, audiences see a body in motion – pulsing, releasing fluids, draining, contracting and expanding. It is a busy, self-contained world, not usually present to our eyes, very much a foreign place⁴⁷.

With that thematic exception (although the absent body of the actual makers is a possible sub-theme), that the *Mappa* series was regularly aligned with the art world's concerns of the day is testimony to their ongoing relevance across time. Even if his extraordinary works have engendered readings not entirely synonymous with the artist's intentions, they have become iconic and, as such, could be said to transcend their original conception. This section was not intended to either reify – or limit – responses to Boetti's work but to suggest that some of what has been written about it reveals as much about prevailing themes in contemporary art as the work itself.

I MAP, YOU MAP, WE MAP: RECENT ACTORS AND NETWORKS

Some readers may take issue with the choice of Boetti for the reason that it minimizes the importance of the Land Artists of the 1960s in the development of mapping's role in recent art. Some writers have already given Robert Smithson in particular a central place in this story, but it may be more useful to consider his and the other Land Artists use of the map as precursor to some of today's artistic practices that seek to engage with the land or geographies beyond the gallery walls⁴⁸. Today's artists are, however, motivated by some quite different theoretical frameworks and cultural concerns than the Land Artists, not the least being changed ecological attitudes. Although not attractive to all artists using maps, French curator-critic Nicolas Bourriaud's 'criterion of coexistence' for artwork and his related term, relational aesthetics, have been influential in expanding notions of participation in the wider sphere of contemporary art⁴⁹. Minimalists and their critics had long noticed the role of the viewer in the completion of a work of art, but Bourriaud repositioned the importance of the viewer from that still contemplative role to one of an active participant in the full realisation and, at times, the actual creation of the artwork. There are now many instances of contemporary art using cartography that have shifted towards these new methodologies that, generally, represent a generational shift away from the map (and associated problems of the image and representation) towards mapping as a process, with a concomitant focus on action and activism (in some instances, returning to a primacy of content)⁵⁰.

Art with this (broadly defined) activist intent is the main focus of exhibitions such as *Experimental Geographies* and *An Atlas*, with its appealing catalogue *An Atlas of Radical*

*Cartography*⁵¹. Two exhibitions featuring new work of this sort were both initiated by an artist and an independent artists' space, rather than curators: Ursula Biemann's 2003 exhibition *Geography and the Politics of Mobility*, and *Mapping a City: Hamburg-Kartierung* by the Galerie für Landschaftskunst, also in 2003/2004. The title of a recent mapping exhibition in Denmark, *The Map is not the Territory*⁵², did not use the famous quote to explain simulacra and related problems of representation, but signified an interest in the territory itself, freshly and expansively construed to themes beyond the solely geographic. Some of the artists in these shows have been motivated by affecting some kind of social change, using art's distribution strategies as one means of getting their work/word out. Although the idea may annoy, there is clearly a utopian streak to some of this work.

Such art exists alongside increasing, user-oriented technologies within mapping practices generally, as cartographic theorists Jeremy W. Crampton and John Krygier have noted recently⁵³. Crampton and Krygier describe the effect that this end-user technology has had upon the contemporary discipline of cartography itself and, at the same time, suggest that artists also have a role to play in the new constructions of mapping. It has been a long time since an artist was considered to be able to contribute in more than just an *ad hoc* manner to a field long considered as a science⁵⁴. This shift to the end-user, combined with contemporary art's current focus on participation and interactivity, continues to erode notions of the individual artist as a sole creator—genius, acting from either inspiration or the need to express themselves: the new artist is a conduit, at times a facilitator of events or environments that seek to engage with new audiences, employing terms familiar to most users. Whether or not this is by definition a radical practice, it is part of a wider shift in subjectivity in part due to the world's now massive populations – doubled since the time of the land artists – and how we aim to communicate with each other within that world. Bourriaud's offerings may just be the art world's footnote to much larger propositions, such as Bruno Latour and others' actor-network theory or ANT (which posits human and non-human agents, ideas and related technologies as a single network), which seek to describe and engage with this new world in a productive fashion.

Precursors for today's activism in art using maps are not hard to find, with Öyvind Fahlström and Mark Lombardi being worthy candidates. During the mid-1960s, Fahlström made work with a counter-cultural intent and his awareness of international political issues culminated in some important map works. In 1972, he made his *World map*, originally distributing it in a left-wing journal, *Liberated Guardian*, in an edition of 7000 copies. Fahlström wrote in 1975 that '... most of it is about the third world: economic exploitation, repression, liberation movements, USA: the recession economy. Europe is represented by a Swedish manual for diplomat's wives ... the shapes of the countries are defined by the data about them. It is a medieval type of map'⁵⁵. This world map is also very comic-book-like; Fahlström admired the work of American cartoonist Robert Crumb and the pre-Columbian art of Mexico and South America. Fahlström's use of comic imagery contrasted the

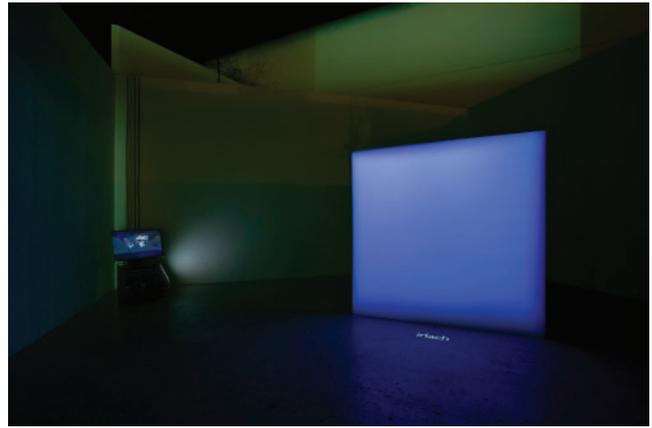


Figure 7. Autogena, L. and Portway, J. (2006). *Most Blue Skies*, Installation view, Kwanju Biennale

American Pop artists who 'transformed' their sources into art; Fahlström used methods from popular culture to critique and question cultural assumptions about finance, power structures and their representations⁵⁶.

American artist Mark Lombardi was concerned with and preceding many of the same corporate governance issues raised by Mike Moore's 2004 film *Fahrenheit 9/11*. Lombardi's maps are diagrammatic and network-like, pertinent to the new era of interconnectivities implied by the computer age. Works such as *George W. Bush*, *Harken Energy*, and *Jackson Stephens* are pencil drawings, a simple 'DIY' method many artists are returning to. New versions of the drawings were made, being updated as new information came to light. Much of Lombardi's work was concerned with tracing connections between global money laundering, corporate bad-doings and international terrorism, although in more specific ways than most artists then or now are comfortable doing: Lombardi named names⁵⁷. Australian artist Louisa Bufardeci also works with statistics and data to create her work. In 2003, she made a suite of digital prints titled *Governing Values: Military Expenditure per Capita*, showing a graph dotted with coloured landforms, each represented to scale related to the expenditure⁵⁸.

Several map exhibitions included Situationist Guy Debord's maps of Paris; these maps took the often reifying aspects of mapping and used them against themselves, for a 'renovation of cartography': 'the production of psycho-geographical maps may help to clarify certain movements of a sort that, while surely not gratuitous, are wholly insubordinate to the usual directives'⁵⁹. Knowing what constitutes a 'usual directive' becomes moot; not all unusual maps or methods such as using open-source mapping and distribution are necessarily radical⁶⁰. At times, artist/activists work outside the art institutions bypassing the commercial gallery system and reaching their audiences by 'direct' communication, via the Internet or other media. An oft-discussed, more contemporary American example is 'Routes of Least Surveillance' map of Manhattan, created by the 'Institute for Applied Autonomy, with Site-R' and made between 2001 and 2007. The map marks the sites of CCTV surveillance cameras and can then be used for avoiding them. An associated website allows you to enter your starting point and destination, and will generate the safest 'path of least

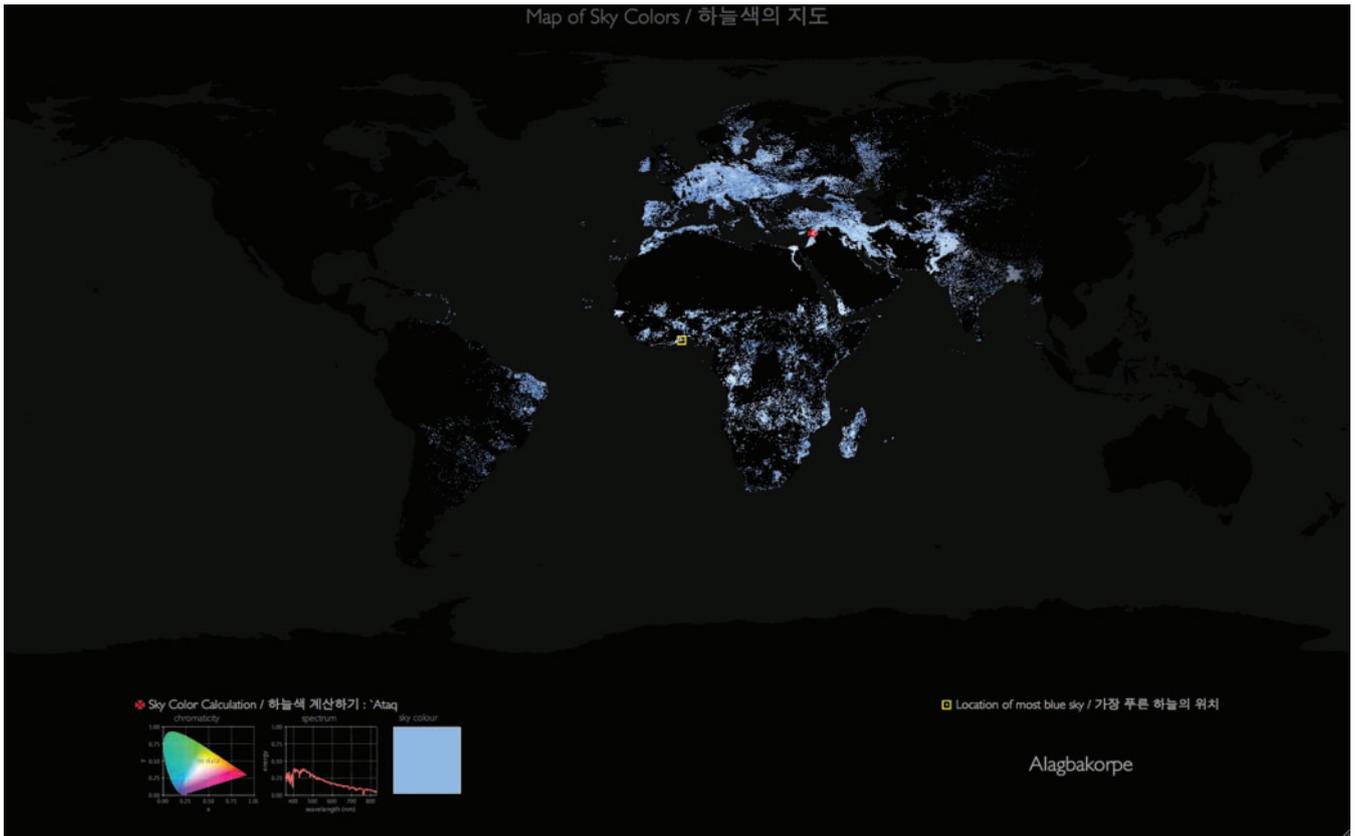


Figure 8. *Most Blue Skies*, detail of monitor. Images published with the permission of L. Autogena and J. Portway

surveillance' between these two points⁶¹. The role of politics in relation to these new, artistic mapping practices does not always indicate a greater degree of political activity or awareness on the part of artists, but reflects a shift in the role of such acts or attitudes within contemporary art practice itself. There have also been corresponding changes in curatorial practice that at times seek to facilitate such actions or activities, and even become involved with them.

Curator of *Experimental Geographies*, Nato Thompson, distinguishes the new approach as 'operating across an expansive grid with the poetic-didactic as one axis and the geologic-urban as another'⁶². In keeping with a new generation's fearlessness regarding modernist structures, Thompson happily references the grid, binaries and the graph. His claim nevertheless describes much contemporary art and his pairings of 'poetic didactic' and 'geologic-urban' therefore deserve closer examination⁶³. An evocative example of the 'poetic-didactic' might be the work of the collaborative pair Autogena and Portway, whose work *Most Blue Skies* is a mapping of the sky – using elaborate data processing techniques to determine where in the world at any given time is the 'most blue'. Their website links the two tendencies in its description of the work: '*Most Blue Skies* combines the latest in atmospheric research, environmental monitoring and sensing technologies with the romantic history of the blue sky and its fragile optimism'⁶⁴. The work has been shown in the Kwangju Biennale, from where these images are derived, but is to be remade for the exhibition *Rethink*, curated to accompany the 2009 United Nations Climate Change Conference in Copenhagen.

Thompson's 'geologic-urban' axis has arguably even more exponents today, as artists return to place and space with new agendas. Some land artists of the 1960s were discovering the world outside the gallery for the first time and their interventions have been well celebrated; today's artists are more comfortable with accusations of cultural tourism, acknowledging that it can be an inescapable state. Many artists are either working with scientists in pursuit of their goals or actively engaging in scientific research. *Experimental Geographies* features the work of collaborative groups such as the Centre for Land Use Interpretation (CLUI), the Centre for Urban Pedagogy (CUP) and the We Are Here Map Archive (a website that shows the work of a range of international artists, designers and activists) as examples of crossover ventures. This is a tendency that can only increase, as awareness of ecological issues is becoming a mainstream concern.

The geologic-urban is just one arena in which non-Western indigenous artists are often sadly missing from the record: few if any appear in the recent journals on this topic, perhaps even less than under the previous reigning paradigm (IVA London's exhibition *Map* included contemporary Aboriginal artist Gordon Bennett, and the MCA Zagreb's *Cartographers* included Native American Jimmie Durham; the aforementioned exhibitions *Mapping Our Countries* and *Putting the Land on the Map* could be precedents of this culturally varied sort). Given that mapping and art making are activities not confined to small sections of the world's population, there is little reason for this particular topic to remain so confined to European or

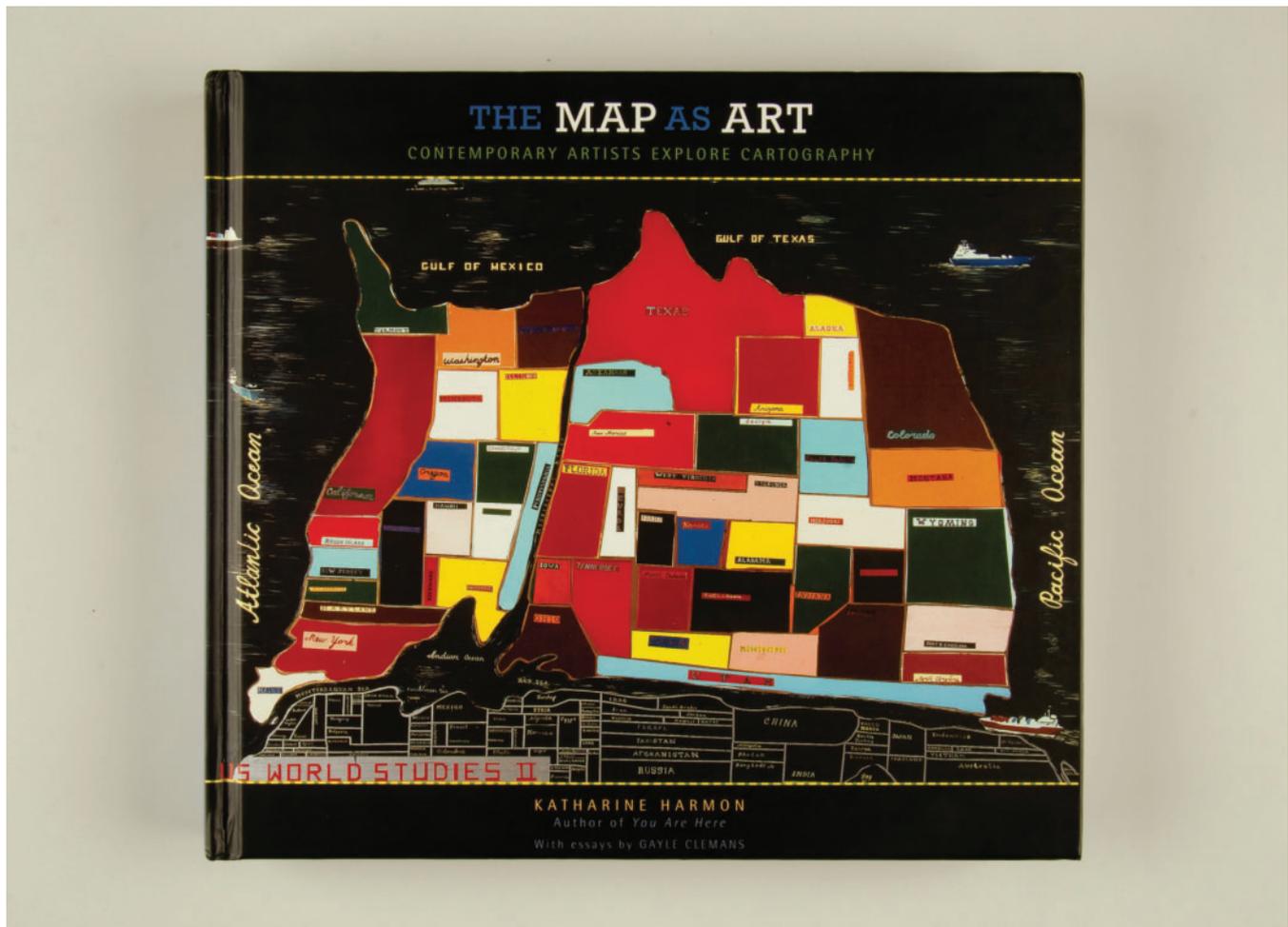


Figure 9. Harmon, K. (2009). *The Map As Art: Contemporary Artists Explore Cartography*, Princeton Architectural Press, New York

American models and practitioners⁶⁵. This is an opportunity here to fully develop a truly international perspective on the art/mapping theme and theories such as ANT and its related material-semiotic method (the examination of relations between objects and concepts that form a network) would seem to support a more expansive version than our current model. ANT networks are transient and need to be reinforced by repeated actions by contributing actors, with humans as just one example among many. The model, among other aims, breaks down some longstanding hierarchies between differing kinds of labour and the objects affected by this labour, with a range of performative agents and networks being invoked⁶⁶.

Access to information about mapping has changed in the last decades, with concomitant expectations for artists and contemporary scholarship. The writing of scientists and map theorists is more easily available via the Internet; the bibliography of *Experimental Geographies* features much more of this literature than actual art, Robert Smithson being one exception. Nevertheless, there is still room for misunderstanding between what have long been separate discursive cultures. One instance is artists' often unquestioning acceptance of mapping structures such as map projections or the uses of technology, justifying their lack of engagement as an artistic strategy of the readymade, or 'the

given' (an artistic strategy derived in part from Marcel Duchamp in the early twentieth century). At the same time, some scientists or map theorists overlook how any particular map artist fits within the wider schemes or conventions of contemporary art. Yet both artists and cartographers are increasingly sharing approaches based on contemporary philosophies and, for better or worse, often sharing a similar, information-drenched, user-oriented world.

Long comfortable with landscapes of insecurity, the map often appears at the boundary of the certain and the uncertain, trying to push us in the direction of certainty. But older definitions of the word map reveal a less stable past: to map once meant to confuse or bewilder⁶⁷. I am often concerned that the map or mapping are still taken as authoritative givens – whether by artists or scientists – and not often in themselves interrogated as methodologies, even when being used to question some other site or concern. This is an area in which hearing from contemporary practitioners of other cultural artistic/mapping traditions could be illuminating.

A NEW MAP?: CONCLUDING COMMENTS

This essay offers an outline of the map in art from the second half of the twentieth century to today. In doing this,

it updates some commentaries in the considerable number of catalogues associated with the exhibitions listed in the Appendix of this article. It also repositions the importance of some usually stated themes or contributors as outlined in earlier accounts, such as that of the land artists. Cultural shifts in relation to maps and mapping as impacting upon its rise in artistic use have been suggested. This is different from many accounts that often propose a fascination with maps, signs or the politics of the representation of place as the reason for artistic usage. If the rise of maps in art is located historically, it has often been presented as if pioneered by the land artists, with perhaps a few precursors. Although Boetti is another of the art world's 'usual suspects' in relation to this theme, he is not positioned here as a primary exemplar; instead, his *Mappa* series has been used to investigate how the reception of his work can reveal how the response to maps has changed over time. His *Mappa* series should not necessarily be made to fit some of the categories that have been proposed for it and, as mentioned, there is an extensive literature around his work that does not reduce it to prevailing theme *du jour*. The third section looked at some of the more contemporary examples of how mapping is being used in art today, which include a shift away from the image of the map towards the map as evidence of other investigations, often politicized in attitude if not automatically in final result. Today's art practices range from using very elaborate technologies or incredibly simple DIY methods, but all embody a new emphasis on the author as user, similar to his/her/their audiences. Artist and public are coming closer together – communicating with each other more directly even if, at times, what is being mapped is not necessarily a good news story.

The link to changes in mapping technologies themselves – home and car GPS, open source mapping softwares, geocaching, the impact of Google maps (three-dimensional or otherwise) comes in tandem with changes in art, and have encouraged a greater crossover between fields than has been the case for centuries. There will be a crossover of roles also, of scientists more comfortable with the creative aspects of their work and artists who understand that they can contribute beyond the gallery. Contemporary philosophy is providing a basis for this, not only in the deconstruction or declassification of old epistemological edifices but in the construction of new methods of working and acting, in relation to each other and to objects and meanings. Critical cartographies and counter-mappings have a strong role to play in ensuring that our rush to map does not become a form of entrapment.

There is a significant limitation in what has been discussed thus far. Mostly American and European practitioners, theorists and sources have been used and if they were not born there, usually work in either arena. This is a problem that reflects but also simultaneously reinforces conventional versions of history and the politics of reception and dissemination of information. Old models of centre-periphery relations are supposed to have broken down as the art world celebrates new famous names from Cuba, Peru, Thailand or China, but most of this work is still filtered through the main economic portals of the art world, New York and London. There is a profound irony to this;

one would think that the subject of the map or mapping would be uniquely placed to foreground this discussion and even encourage greater boundary crossings than many other themes. Yet the majority of the exhibitions on the list in the Appendix or in recent publications predominantly follow the pattern discussed above. Aboriginal art of Australia has not yet been accorded a central place within this traditional hierarchy, although its duration easily outstrips the post-War rise of mapping by Westernised artists. This lack of acknowledgement and understanding is all the more unusual given so much Aboriginal art is presented today via painting and sculpture; furthermore, much of its topographically-relevant content at times takes performative form, arguably making it even more pertinent to newer discourses in contemporary art.

A new history of the map in art needs to be written that upends the usual suspects from their comfortable nodes on a one-sided cultural map (hardly a model of any new cartography). At the same time, this future map should not just repeat the old patterns in new locations; a Chinese artist using maps is not automatically an innovator, nor is the employment of open-source software a guarantee of an alternative perspective. The art world has frequently asked what is outside its own paradigms, but we could also usefully ask: what is currently outside the mapping paradigm? This may strike a utopian note, but if transdisciplinary acts and methods are to increase, welding together European philosophical traditions with post-colonially-infused theories of subjectivity and location might be a good place to start. That brave, cobbled-together world needs a new map.

BIOGRAPHICAL NOTES



Ruth Watson is an artist who has worked with cartography since the early 1980s. In 2005, in conjunction with the Research School for Astronomy and Astrophysics at the Australian National University, she made the largest map of the universe to date (12 metres diameter). Her work has been included in international Biennales including Sydney (1992), Korea (1995), surveys of New Zealand and Australian art including 'Paradise Now: Contemporary Art from the Pacific' (Asia Society Gallery, New York, 2004) and featured in some of the exhibitions, books and articles mentioned in this article. She studied in New Zealand (BFA, 1984) and Australia (MVA, 1999, PhD, 2005) and has received many awards, including the 2005 Walter W. Ristow Prize for an essay in the history of cartography. She writes occasionally on art and began teaching at the Elam School of Fine Arts at the University of Auckland in 2006, where she is a senior lecturer. Ruth Watson is represented by Two Rooms Gallery, Auckland, and some of her work is visible online at: <http://www.tworooms.org.nz/>

NOTES

¹ At the 2009 Venice Biennale curated exhibition **Fare Mondi/Making Worlds** and the attendant on- and off-site national pavilions, a range of maps and mapping strategies were to be seen, from older works by Öyvind Fahlström, to Belgian artist Jef Geys or the intriguing pieces of Venezuelan Daniel Medina, among the most notable. Regarding ‘the map is dead ...’, see Wood, D. (2006). ‘Map art’, **Cartographic Perspectives**, 53, p. 11. The increased use in art is in tandem with an interest from outside the field of contemporary art by either geographically-based commentators like Wood, or a rising number of non-experts in either field.

² See Morphy, H. (2007). **Becoming Art: Exploring Cross-cultural Categories**, Berg, Oxford and New York, or Sutton, P. (1998). ‘Icons of country: topographic representation in classical aboriginal traditions’ and ‘Aboriginal maps and plans’, both in Woodward, D. and Lewis, G. M. (1998). **The History of Cartography: Cartography in the Traditional African, American, Arctic, Australian and Pacific Societies**, Vol. 2, pp. 353–384 and 387–413, respectively, University of Chicago Press, Chicago, IL. Smith, T. (2001). ‘Public art between cultures: The “aboriginal memorial”, aboriginality and nationalism in Australia’, **Critical Inquiry**, 27, pp. 629–661.

³ The Appendix is not a scientific survey of prevalence but I cannot think of another theme engendering, on average, one major exhibition per annum for 30 years across a variety of countries. More exhibitions than are presented here are likely as the list is largely restricted, with some exceptions, to Western Europe and the USA.

⁴ A sixteenth century idea that maps were art was lost as cosmography’s successor, cartography, become a science during the Enlightenment. A broad contrast with the nineteenth century is instructive as it is hard to think of examples other than paintings of explorers or monarchs with maps or globes depicted as directive, often literal information on the sitter’s sphere of interest, or employed as part of the *Vanitas* tradition. In the first half of the twentieth century, examples are scanty but these are well covered in some of the art catalogues (*Mapping, Cartographers, Orbis Terrarum ...*) and recent articles such as Wood, D. (2006). ‘Map art’, **Cartographic Perspectives**, 53, p. 11.

⁵ Woodward, D. (1987). **Art and Cartography: Six Historical Essays**, University of Chicago Press, Chicago, IL.

⁶ Rogoff, I. (2000). **Terra Infirma: Geography’s Visual Culture**, Routledge, London.

⁷ Society for Art Publications. (1974). ‘On maps and mapping’, **Artscanda**, Vol. XXXI, no. 1, Issue nos. 188/189, Toronto. A full journal focussing on map-related themes and artworks, combining articles by geographers as well as artists.

⁸ Harmon, K. (2009). **The Map as Art: Contemporary Artists Explore Cartography**, Princeton Architectural Press, New York, preceded by Harmon, K. (2004). **You Are Here: Personal Geographies and Other Maps of the Imagination**, Princeton Architectural Press, New York.

⁹ Casey, E. (2005). **Earth Mapping: Artists Reshaping Landscape**, University of Minnesota Press, Minneapolis, MN.

¹⁰ Buci-Glucksmann, C. (1996). **L’œil Cartographique de l’Art**, Éditions Galilée, Paris; German translation. (1997). **Der Kartographische Blick der Kunst**, Merve Verlag, Berlin.

¹¹ Wood, D. (2006). ‘Map art’, **Cartographic Perspectives**, 53, pp. 5–14. Wood, D. and Fels, J. (1992). **The Power of Maps**, Guildford Press, New York, was written with John Fels.

¹² See Harley, J. B. and Woodward, D. (1987–ongoing). **The History of Cartography**, University of Chicago Press, Chicago, IL, for a rich exposition on the mapping traditions of non-Western cultures.

¹³ The exhibition also included a significant number of works by Aboriginal artists whose names are not known. **Mapping Our Countries** (see Appendix) regrettably did not have an extensive catalogue, although it does contain a short essay by co-curator Paul Taçon (see note 16 below).

¹⁴ For an introduction on the changing status of Aboriginal art, see Morphy, H. (2007). **Becoming Art: Exploring Cross-cultural Categories**, Berg, Oxford and New York; Mudine, D. (2008). ‘An aboriginal soliloquy’, in **They are Meditating: Bark Paintings from the MCA’s Arnott’s Collection**, ed. by Michael, L., Museum of Contemporary Art, Sydney, NSW, or Jones, P. (1988). ‘Perception of aboriginal art: a history’, in **Dreamings: Aboriginal Art of Australia**, ed. by Sutton, P., pp. 143–180, Viking/Asia Society Galleries, New York.

¹⁵ Some accounts of indigenous mapping have been concerned to maintain categorisations and differences rather than similarities. Rundstrom, R. A. (1991). ‘Mapping, postmodernism, indigenous people, and the changing direction of North American Cartography’, **Cartographica**, 28, pp. 1–12.

¹⁶ Taçon, P. and Watson, J. (1999). **Mapping Our Countries**, Djamu Gallery/Australian Museum, Sydney, unpaginated.

¹⁷ Robinson, A. and Petchen, B. (1976). **The Nature of Maps: Essays toward Understanding Maps and Mapping**, p. 4, University of Chicago Press, Chicago, IL.

¹⁸ John D. Barrow describes the visual turn in science as being more recent than the last three decades. Barrow, J. D. (2008). **Cosmic Imagery: Key Images in the History of Science**, p. xiii, The Bodley Head, London.

¹⁹ Although the OED registers the first instance of ‘mapping’ in genetics in 1935, the pace accelerates in the 1960s. For mathematics, two instances earlier than 1935 are registered, and the increased use seems to be from the late 1950s onwards.

²⁰ Scientific in tone but utopian in intent, Jameson first introduced his term in 1988 in his essay ‘Cognitive mapping’ in **Marxism and the Interpretation of Culture**, ed. by Nelson, C. and Grossberg, L., University of Chicago Press, Chicago, IL. The influence of the term largely arose after the publication of his 1991 book **Postmodernism: The Cultural Logic of Late Capitalism**, Duke University Press, Durham.

²¹ Each of these well-known artists has many monographs to their names, both in their own time as well as posthumously in some cases. Robert Smithson brought together the story by Jorge Luis Borges and Lewis Carroll’s maps from **The Hunting of the Snark** and **Sylvie and Bruno Concluded**. Smithson, R. (1968). ‘A museum of language in the vicinity of art’, in Holt, N. (Ed.). (1979). **The Writings of Robert Smithson**, pp. 67–78, New York University Press, New York. Jasper Johns’ work mostly uses

the outline of the United States, with the exception of his large-scale 1967 work titled **Map**, based on Buckminster Fuller's dymaxion projection (now in the Museum Ludwig, Cologne).

²² See Hodsdon, B. (1996). **The Dawn of Cinema: 1894–1915**, pp. 49–50, Museum of Contemporary Art, Sydney, NSW, on the subject of film in the First World War.

²³ In **The Great Dictator**, the eponymous hero was shown with a globe which he courts, tenderly caresses, jostles, cajoles, toys with and manipulates in a reverie of world domination. In 1942's **Casablanca**, a 1 min opening sequence of map and globe imagery, combined with voice-over and film footage, indicated that the film was to be no everyday domestic story but one set within a geo-political context of global relevance. See Conley, T. (2007). **Cartographic Cinema**, University of Minnesota Press, Minneapolis, MN, for a fuller discussion of the global context this sequence contributes to the film.

²⁴ Morris, E. (2004). **The Fog of War: Eleven Lessons from the Life of Robert S. McNamara**, Columbia TriStar Home Entertainment, Culver City, CA. I am not suggesting that the use of maps for the persuasion or informing of local populaces about war efforts is unique to the mid-twentieth century, but that such usage was increased and popularized.

²⁵ Denis Cosgrove's discussion of the pictorial maps of Charles Owens was an overdue contribution to this field. Related to this, the impact of the representation of the world in science fiction illustration upon artists is not well covered in the literature. Cosgrove, D. (2005). 'Maps, mapping, modernity: art and cartography in the twentieth century', **Imago Mundi**, 57, pp. 35–54.

²⁶ Levin, K. (1979). 'Farewell to modernism', in **Theories of Contemporary Art**, ed. by Hertz, R., (1993), Prentice Hall (originally published in **The Arts Magazine**, 1979, 52, p. 90). Levin's reference to Krauss is based on her October article of the same year titled 'Grids' and her exhibition of the same name and year at New York's Pace Gallery.

²⁷ This leaves aside the complication that some, including artists, actually conflate the grid with the map. True, a map graticule often appears grid-like, especially at close scales, and may indeed have longitudes and latitudes that cross at right angles for certain projections. But to equate the two is a reduction of the complexity of the map as well as disregarding the history and methods of map construction.

²⁸ See the Appendix for exhibitions written in short form here. Kelly was included in **Mapping**; Oldenburg in **Mapping and World Views**, Gomez-Peña and Beuys in **Map**; Kabakov and Indiana in **World Views**; Fischli and Weiss, Laurie Anderson, Gerhard Richter and On Kawara in **Orbis Terrarum**; the rest were all in **Cartographers**.

²⁹ Some would say that this is the opposite of the post-modern drive, which they see as severing the link between signifier and signified. Even if that were the claim of all postmodernists, which is disputable, saying that the relationship between sign and signifier is arbitrary does not imply that it is either random, or without power.

³⁰ An example of the deep-seated impact of cartography in daily life studied by geographical researchers Thomas Saarinen, Michael Parton and Roy Billberg. In 1996, they conducted an international survey of 'mental mapping',

asking 2488 first year geographical students to draw from memory a world map, labelling each country with its name and any other features of interest. What they found intriguing was not only that most people over-exaggerated the size of their home continent, but that all students overestimated the size of Europe and underestimated the size of Africa. They conclude: 'This Mercator effect is so powerful that it overcomes the ethnocentric effect. As a result, in Africa and South America and Australia, even local map sketchers draw their home continents smaller than the actual size of these landmasses'. Saarinen, T., Parton, M., Billberg, R. (1996). 'Relative size of continents on world sketch maps', **Cartographica**, 33, p. 46.

³¹ Harley's contributions were all the more remarkable for his background being not in critical theory, but the study of the British Ordnance Survey maps. Harley, J. B. (1989). 'Deconstructing the map', **Cartographica**, 26, pp. 1–20. This and other articles such as 'Maps, knowledge and power' are reprinted in Laxton, P. (Ed.). (2001). **The New Nature of Maps: Essays in the History of Cartography**, John Hopkins University Press, Baltimore, MD.

³² Deleuze, G. and Guattari, F. (1987). **A Thousand Plateaus: Capitalism and Schizophrenia**, p. 12, University of Minnesota Press, Minneapolis, MN.

³³ Arguably, Deleuze and Guattari's engagement with Foucault on the subject of geography may also have contributed to the spread of mapping terminologies within cultural studies and academia, at least in the Anglophonic world. See Fall, J. (2005). 'Michel Foucault and Francophone geography', in **EspacesTemps.net**, <http://espacestems.net/document1540.html>

³⁴ This approach has its problems; Boetti was surrounded by a robust critical dialogue that saw his map works in the context of his overall oeuvre. Some of his most perceptive commentators include such art world notables as Germano Celant, Achille Bonito Oliva, Jean-Christophe Ammann, and more.

³⁵ The literature on Boetti is extensive and many of his catalogues have good bibliographies, for example, (1999). **Alighiero e Boetti**, Whitechapel Art Gallery, London, or Christov-Bakargiev, C. (1999). **Arte Povera**, Phaidon, London. Boetti is so well thought of one writer referred without pause to 'Boettology' and, one page later, '... there is no custodian of some sort of Boettian orthodoxy'. Salerno, G. B. (2006). 'An infinite impromptu dialogue', in **Alighiero e Boetti**, pp. 6–7, Studio Giangaleazzo Visconti, Milan.

³⁶ Di Pietrantonio, G. (1993). 'Alighiero Boetti: united colors', **Flash Art**, 168, p. 73.

³⁷ Curator André Magnin used this phrase, quoting Angela Vettese's 1993 catalogue for the Grenoble Centre National d'Art Contemporain exhibition. **Alighiero e Boetti: De Bouche à Oreille**. Magnin, A. (1995). 'Detached thoughts on a basic exhibition', in **Worlds Envisioned: Alighiero e Boetti and Frédéric Bruly Bouabré**, ed. by Cooke, L. and Magnin, A., p. 27, DIA Centre for the Arts, New York.

³⁸ Storr, R. (1994). **Mapping**, p. 15, Museum of Modern Art, New York.

³⁹ This is a relatively new use for the world map that needs further examination. Denis Cosgrove's book *Apollo's Eye* discussed the image of the Earth and did consider maps, but this is largely a historical study culminating in the Apollo photographs from space. Cosgrove, D. (2001). **Apollo's**

Eye: a Cartographic Genealogy of the Earth in the Western Imagination, Johns Hopkins University Press, Baltimore, MD. Boetti was by no means alone in referencing the brave new worlds opening up in the 1970s; some works by Jasper Johns, Öyvind Fahlström, Agnes Denes and Alfredo Jaar – some of whom were also regulars in the map exhibitions – at times directly invoked such notions.

⁴⁰ Rosenthal, N. (2001). 'Recognising Alighiero recognising Boetti', in **Alighiero e Boetti**, p. 7, Gagosian Gallery, New York. For the following claim, see Casey, E. (2002). **Representing Place: Landscape Painting and Maps**, p. 194, University of Minnesota Press, Minneapolis, MN. For Harley, see multiple entries in the index for Eurocentrism and ethnocentrism in maps in **The New Nature of Maps: Essays in the History of Cartography**, John Hopkins University Press, Baltimore, MD.

⁴¹ Cerizza, L. (2008). **Alighiero e Boetti: Mappa**, p. 31, Afterall Press/Central Saint Martins College of Art and Design, London.

⁴² Maharaj, S. (1996). 'A Falsemeaning Adamelegy: artisanal signatures of difference after Gutenberg', in **Jurassic Technologies Revenant: 10th Biennale of Sydney**, ed. by Cook, L., pp. 45, 47, Biennale of Sydney Publications, Sydney, NSW.

⁴³ Di Pietrantonio, G. (1993). 'Alighiero Boetti: united colors', **Flash Art**, 168, p. 73. Boetti's openness to other cultures was one motivation behind the exhibition and catalogue with Ivorian artist Frédéric Bruly Bouabré (see note 36).

⁴⁴ Rosenthal, N. (2001). 'Recognising Alighiero recognising Boetti', in **Alighiero e Boetti**, pp. 7–8, Gagosian Gallery, New York. The book dedicated to the maps alone is Cerizza, **Alighiero e Boetti: Mappa**, p. 31, Afterall Press/Central Saint Martins College of Art and Design, London. 'Kilims' refers to works made for Boetti's 1993 exhibition, **De Bouche à Oreille**.

⁴⁵ Anthony Appiah, K. (1995). 'Script reading', in **Worlds Envisioned: Alighiero e Boetti and Frédéric Bruly Bouabré**, ed. by Cooke, L. and Magnin, A., p. 11, DIA Centre for the Arts, New York, followed by Magnin, A. (1995). 'Detached thoughts on a basic exhibition', in **Worlds Envisioned: Alighiero e Boetti and Frédéric Bruly Bouabré**, ed. by Cooke, L. and Magnin, A., p. 23, then Michael Govan in the 'Preface', p. 5. The list covered Bruly Bouabré as well as Boetti, but Boetti's work encompassed even more mystical or coincidental themes.

⁴⁶ Lipschutz-Villa, E. (1994). **Guillermo Kuitca: Burning Beds: A Survey, 1982–1994**, Contemporary Art Foundation, Amsterdam; **The Map as Art** has a section on his work.

⁴⁷ For Hatoum, see Edward, W. (2000). **Mona Hatoum: the Entire World as a Foreign Land**, Tate Gallery, London, or Archer, M., Brett, G. and de Zegher, C. (1997). **Mona Hatoum**, Phaidon, London.

⁴⁸ Tiberghien, G. (1994). **Land Art**, Princeton Architectural Press, New York. See also Bann, S. (1994). 'The map as index of the real: land art and the authentication of travel', **Imago Mundi**, 46, pp. 9–18.

⁴⁹ Bourriaud, N. (2002). **Esthétique Relationelle**, Les Presses du Réel, Dijon. Interestingly, Bourriaud interviewed Boetti for 'Afghanistan', in **Documents**, Paris, no. 1, October 1992.

⁵⁰ After Robert Storr's 1994 exhibition 'Mapping' at MoMA in New York, the following year artist Peter Fend curated 'Mapping: a response to MoMA', at American Fine Arts. Fend argued for mapping as an activity in art, as distinct from Storr's upfront concerns for the representational features of the map, yet a significant number of artists in either exhibition could have fitted into both categories as defined by Storr or Fend.

⁵¹ Mogel, L. and Bhagat, A. (2007). **An Atlas of Radical Cartography**, The Journal of Aesthetics and Protest Press, Los Angeles, CA.

⁵² (2008–2009). **The Map is Not the Territory**, Esbjerg Kunstmuseum, Esbjerg. The original remark was made by philosopher Alfred Korzybski in 1931 but reinvigorated by Jean Baudrillard in the 1980s.

⁵³ Crampton, J. and Krygier, J. (2006). 'An introduction to critical cartography', **ACME: An International E-Journal for Critical Geographies**, 4, pp. 11–33, <http://www.acmejournal.org/vol4/JWCJK.pdf>

⁵⁴ The art/science dichotomy in cartographic debates is well discussed in Cosgrove, D. 'Maps, mapping, modernity: art and cartography in the twentieth century', **Imago Mundi**, 57, pp. 35–54.

⁵⁵ Appropriately for a medieval map, neither Australia nor New Zealand appeared in Fahlström's world. Fahlström, Ö., Wallerstein, I. and Rolnik, S. (2001). **Öyvind Fahlström: Another Space for Painting**, p. 258, Museu d'Art Contemporani de Barcelona, Barcelona.

⁵⁶ Fahlström spoke at least four languages: he had a Norwegian father, Swedish mother and was born in Brazil, in 1928. During a trip to visit family to Sweden when he was 10 years old, the Second World War broke out and he was stranded there. Biographical information is crucial to understanding his art, based on the experience of belonging to different cultures and a politicized relationship to internationalism. In the 1950s, he began exhibiting around Europe, moving between Stockholm, Paris and Rome and eventually settled in New York. Another important work using map imagery was **Garden – A World Model** from 1973. This work followed his **World Map's** emphasis on economic data about companies, money and the world economy. Fahlström's use of the map to express his interest in global political issues seems as prescient as his innovative methods of display. See <http://www.fahlstrom.com>

⁵⁷ For an account of each state of the drawing, see Lin, T. (2003). 'Following the money', **Art in America**, November, pp. 145–149.

⁵⁸ http://www.annaschwartzgallery.com/works/news?a_serial=36&c=m

⁵⁹ Debord, G. (1955). 'Introduction to a critique on urban geography' quoted in McDonough, T. (1994). 'Situationist spaces', **October**, 67, p. 62.

⁶⁰ Dodge, M., Perkins, C. and Kitchen, R. (2009). 'Mapping modes, methods and moments', in **Rethinking Maps: New Frontiers in Cartographic Theory**, pp. 226–227, Routledge, London and New York.

⁶¹ See <http://www.appliedautonomy.com/isee/info2.html>

⁶² Thompson, N. (2008). **Experimental Geography: Radical Approaches to Landscape, Cartography and Urbanism**, p. 14, Independent Curators International, New York.

⁶³ A precursors to the 'poetic-didactic' is Alfredo Jaar's 1989 work *Geography=War*. In this large-scale installation, light boxes with Peters projection world maps on them are placed near petroleum barrels filled to the brim with dark liquid. More light boxes are suspended above the liquid, their images reflected on its bright surface. The Peters world maps show global tanker routes and the suspended light box images are of people from a town in Nigeria where other countries had dumped toxic waste. The people are shown standing by the waste. This is clearly a didactic work, it tells you what it thinks; yet the dark liquid has a real presence in the gallery space and the way the images float upon its surface complicate simple meanings for the work.

⁶⁴ See <http://www.mostblueskies.net>

⁶⁵ This is particularly noticeable in the recent literature, especially that not emanating from the art world. For anyone unconvinced of mapmaking as a human activity, refer to the **History of Cartography** series, bearing in mind at times other cultures' mapping practices are still discussed from a Eurocentric point of view (for example, the entry on mapping in New Zealand focuses on map drawings by Maori at the time of encounter with European explorers, but not the locational devices embedded in the older traditions of recitation of genealogies).

⁶⁶ One of the founding theorists of actor-network theory, Bruno Latour, regularly combines art-science collaborations in exhibitions and this model is increasingly contributing to these current, transdisciplinary methods of working. Latour, B. and Weibel, P. (2005). **Making Things Public: Atmospheres of Democracy**, ZKM Centre for Art and Media, Karlsruhe, with the Massachusetts Institute of Technology, Cambridge, MA. Their essay-rich, 1072-page catalogue accompanied the eponymous exhibition.

⁶⁷ Oxford English Dictionary online; see *map v²*: to bewilder.

APPENDIX: THE MAP IN ART: EXHIBITIONS FROM OVER 30 YEARS

- Kardon, J. (1977). **Artists' Maps**, Philadelphia College of Art, Philadelphia, PA.
 Smith, R. (1981). **4 Artists and the Map: Image/Process/Data/Place**, Spencer Museum of Art, Lawrence, KS.

- Frank, P. (1981). **Mapped Art: Charts, Routes, Regions**, Colorado Art Galleries, Boulder, CO, with Independent Curators Incorporated, New York.
 Calabrese, O. (1983). **Hic Sunt Leones: Geografica E Viaggi Stradordinari**, Centro Palatino, Rome.
 Curnow, W. (1989). **Putting the Land on the Map: Art and Cartography in New Zealand since 1840**, Govett-Brewster Art Gallery, New Plymouth.
 McDaniel, C. and Robertson, J. (1992). **Exploring Maps**, Turman Art Gallery/Indiana State University, Terra Haute, IN.
 Edlefsen, D. (1994). **A World of Maps**, Anchorage Museum of History and Art, Anchorage, AK.
 Storr, R. (1994). **Mapping**, Museum of Modern Art, New York.
 Fend, P. (1995). **Mapping: A Response to MoMA**, American Fine Arts, New York.
 Kelly, L. (1996). **Langage, Cartographie et Pouvoir**, Galerie Nikki Diana Marquardt, Paris/Orchard Art Gallery, Derry.
 Levy, D. and Tawadros, G. (1996). **Map**, Institute of International Visual Arts, London.
 Bianchi, P. and Folie, S. (1997). **Atlas Mapping: Künstler Also Kartographien, Kartographie Als Kultur**, Kunsthau Bregenz and Offenes Kulturhaus, Linz.
 Koscevic, Z. (1997). **Cartographers: Geo-Gnostic Projections for the 21st Century**, Museum of Contemporary Art, Zagreb.
 Taçon, P. and Watson, J. (1999). **Mapping Our Countries**, Djamu Gallery/Australian Museum, Sydney, NSW.
 Silberman, R. (1999). **World Views: Maps and Art**, Frederick R. Weisman Art Museum, Minneapolis, MN.
 Küng, M. (2000). **Orbis Terrarum: Ways of World-making**, Museum Plantin-Moretus, Antwerp.
 Biemann, U. (2003). **Geography and the Politics of Mobility**, Generali Foundation, Vienna.
 Berg, S. (2003/2004). **Die Sehnsucht des Kartographen**, Kunstverein Hannover, Hannover.
 Galerie für Landschaftskunst. (2003/2004). **Mapping a City: Hamburg-Kartierung**, Kunstverein Hamburg, Hamburg.
 Moss, K. (2004). **Topographies**, San Francisco Art Institute, San Francisco, CA.
 Mogel, L. and Bhogal, A. (2007–2008). **An Atlas**, University of Illinois at Chicago, Chicago, IL.
 Lehn, A. (2008). **Zoom and Scale**, Institute for Art and Architecture, Vienna.
 Thompson, N. (2008–2010). **Experimental Geography**, Touring multiple venues in North America, in conjunction with the Independent Curators International, New York.
 Esbjerg Kunstmuseum. (2008–2009). **The Map is not the Territory**, Esbjerg Kunstmuseum, Esbjerg.
 Kruger, L. (2009). **Envisioning Maps**, Hebrew Union College/Jewish Institute of Religion, New York.