

**RE-ANIMATING THE PLACE OF THOUGHT: Transformations of
Spatial and Temporal Description in the Twenty-First Century**

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ROUGH DRAFT ONLY

1. Communities of Practice

I am afraid that my take on the issue of communities of practice will appear to too many here to be an oblique one, founded in the generalities of social theory and without a sufficient footing in empirical work. So I will begin this paper by explaining my interest in the communities of practice approach and how it has transmuted into something rather different: a symptomatic reading of why such approaches have become current and popular.

My interest in this approach has arisen from four different but related projects. One such project has been a longstanding interest in theories of situated practice, which, in my case, has transmuted into a project called non-representational theory which is concerned with trying to outline a different style of doing politics (Thrift, 1996, 2005, 2007). The second project has been my interest in the history of management knowledge: in this history, communities of practice figure as one in a series of means of refreshing management practice, as so called management fads (Thrift, 2005). Communities of practice, as a means of producing distributions of enthusiasm, has proved to be a more or less effective shuttle in this milieu, just like any other management fad¹, not least because it proves very difficult to disentangle the notion from many other such notions working themselves out across organizations in locally-specific forms. The third project has been a history of clock time in England that I have been writing with a colleague for the last few years (Glennie and Thrift, 2007), in which the concept of communities of practice was used *in extenso* as a means of approaching the sheer heterogeneity of use of clock time (clock time as used by astronomers and astrologists, for example, as opposed to clock time as used by seafarers) – with mixed results. The concept worked well for relatively small and well-drawn communities like those already mentioned but produced mixed results for any other kind of community. In particular, the most interesting thing – how novel practices of clock time travelled, or did not travel, between communities of practice and became general – proved to be no more illuminated by this notion than by many others.

The final project - and the one I want to concentrate on in this paper - is my work on the way in which increasingly we are able to see a different model of space being rolled out by various agencies, one in which tacit embodied

¹ It counts as closer to the academic/business school end of the spectrum than some fads (being similar to more recent fads like open innovation) but it is a moot point whether it is therefore more effective.

knowledge is being assisted and augmented through the design of animated environments that allow continual rehearsal and feedback, so allowing all manner of passionate interests to bubble up. In other words the re-design of interaction that has taken place over the last twenty years (Moggridge, 2006) has allowed all manner of communities of practice to be founded and thrive in a way that would have been very difficult before. As I will show, the background to the redesign of these environments is the circulation of a repertoire of ideas-cum-methods-cum-constructed realities like communities of practice that are understood as attempts to produce rapid presence and authenticity by building instant ways of life calling on theories and, more particularly, methods drawn especially, although not exclusively, from the social sciences (Thrift, 2004, 2005, 2006). So, for example, the communities of practice idea is both a means of making systematic knowledge tacit and a means of systematising tacit knowledge: propositional knowledge (knowledge of what, usually presented in systematic form in storage devices and requiring contemplative involvement) increasingly stands as a companion to prescriptive knowledge (knowledge of how, of technique, usually presented in embodied form), rather than as different moments set to one side (Mokyr, 2002). What seems certain is that it is impossible to understand the communities of practice idea without attending to how the spatial environment has been re-designed: increasingly, they imply each other and the more general project of the construction of a different kind of place; what I will call worlding.

I would go further. For it seems to me that the evolution of notions like communities of practice is intimately linked with a general spatial turn which can be found occurring in all walks of life. Academe can be taken as symptomatic of this turn. I do not believe that it is a coincidence that there is a revival of academic interest in space and place at this point in time. Wherever one looks now in the humanities and social sciences – in anthropology, in archaeology, in architecture, in economics, in education, in history, in law, in philosophy, in politics, in sociology and social policy – it is possible to find the signs of what might be called spatial life: place recurs more and more often as both a problem and as a solution. Indeed, I believe that we are living through a remarkable revival of academic interest in place, comparable to and probably surpassing the burst of interest at the turn of the nineteenth century when environment, diffusion, crowd formation, imitation, and similar topics formed a common spatial problematic in and between many areas of knowledge.

But this is not just a revival of interest in place, it is a revival of interest in a particular kind of place-in-process, in what I will call animated place, a dynamic, volatile form of place which is less concerned with stability and more concerned with movement, interactivity, and continuous birth. It is a place that expresses a continuous generation of being ‘in a world that is not pre-ordained but incipient, forever on the verge of the actual’ (Ingold, 2006, p12). At the same time, it is a means of producing re-involvement, surely a key moment in the communities of practice literature, with its emphasis on generating enthusiasm, through relating propositional and prescriptive knowledge² (Mokyr, 2002), as part of a more general practice of worlding. In other words what is occurring is a confluence of academic communities of practice pursuing what Gabriel Tarde, the turn of the nineteenth/twentieth century sociologist, called a ‘passionate interest’ in a particular form of space which will allow their involvements to become even more passionate by moulding the world in their image.

At the same time, and more generally, this kind of depiction of movement-space de-stabilizes a mode of thinking which has been prevalent in Western thought for a considerable period of time. As Sloterdijk (2005) points out, prevalent Western ideas of space tend to be based on a materialization of the ‘hothouse’ model of an organism and its environment, understood as a glasshouse containing a series of specimens each forming their own domain: the organism is therefore enclosed and contained by a determinate environment. Indeed, turn-of-the-century biology, from which so many subsequent impulses have flowed, often likened the environment to a house. A good example is provided by von Uexküll’s revival of the Kantian a priori. In Von Uexküll’s words, the environment is a soap bubble: ‘each of us carries this soap bubble around with himself his whole life long, like a sturdy shell. It is tied to us, as we to it. Within our soap bubbles, our suns rise and set for each of us. These suns are very variable’ (cited in Harrington, 1996, p41). Indeed, Von Uexküll’s term for this bubble, *umwelten*, was appropriated from sociological analysis to describe a milieu.

² It is important to note that, in using these terms, Mokyr is not trying to resurrect the old distinctions between science and technology or theory and empirical knowledge. Rather propositional knowledge (episteme) consists of ‘what’ statements of knowledge contained in living person’s brains or storage devices. It includes a good deal of what might be thought of as practical knowledge, therefore. One of the main problems with propositional knowledge has been the simple one of accessing it, thus bringing in, amongst others, an important spatial dimension. By contrast, prescriptive knowledge (techne) consists of ‘how’ designs and instructions on how to carry out activities, and the competence necessary to carry it out can be taught didactically, through personal contact and imitation, and so on. An addition to propositional knowledge is a discovery and can be right or wrong. An addition to prescriptive knowledge is an invention and can only be successful or unsuccessful.

Ideas like this became so popular, and so firmly anchored in everyday discourse, that they have now reached something like the status of common sense. Indeed, a whole doctrine of living has evolved, which contained both root ideas (such as the concept of ‘environment’) and the practices for reproducing it, most notably new spatial layouts like the suburb which provided perfectly calibrated circles of compatibility within which these practices could survive and prosper. These houses of being, to use a Heideggerian³ term, were the compass of the world.

But under the new vision of place, the environment no longer surrounds the person like a bubble. Rather it is an ecology, a domain of entanglement from which beings issue forth along the lines of their relationships. It is, in other words, not simply an occupation of a space but an inhabitation, a terraforming. Ingold (2006, p14) puts it well as he struggles to describe a world of tribes and peoples whose view of the world has suddenly become relevant again;

... we must cease regarding the world as an inert substratum, over which living things propel themselves about like counters on a board or actors on a stage, where artefacts and the landscape take the place, respectively, of properties and scenery. By the same token, beings that inhabit the world ... are not objects that move, undergoing displacement from place to place across the world’s surface. Indeed the inhabited world, as such, has no surface. Whatever surfaces one encounters, whether of the ground, water, vegetation or buildings, are in the world, not of it. And woven into their very texture are the lines of growth of its inhabitants. Every such line, in short, is a way through rather than across. And it is as their lines of movement, not as mobile, self-propelled entities, that beings are instantiated in the world.

The current revival of interest in space and place is often portrayed as a theoretical rediscovery. Certainly that has been a powerful element in the story. But, in contrast, I want to argue that it equally stems from the application of different methods of understanding space and place by many and various communities of practice inside and outside academe. Over time, or so I will argue, the application of these methods has been producing a

³ As Sloterdijk points out, Heidegger was one of the first to use the notion of environment, and he used it enthusiastically.

new kind of placeness which is just as complex and variegated as what went before but equally forms a new kind of landscape with its own forms of experience which approximates the world that these communities are trying to form. Once we finally get away from the idea that methods are not just reports back from the found and uncorrupted reality of what is there but are themselves parts of the development of the situation so we can start to see the full richness of this new prospect. It is something of the sweep of this prospect that I want to outline in this paper and the kinds of organs that are becoming possible as a result (Thrift, 2005). In effect, what I will be trying to outline is a fundamental transformation in the description of objects and communities, akin to that which occurred in the eighteenth century (Wall, 2006) which constitutes a shift in what we know and what we want to know, enabled by how we know, one occasioned, exactly as in the eighteenth century, by a set of uncannily similar major cultural changes;

experientially, [by] technologically new ways of seeing and appreciating objects in the ordinary world through the popular prostheses of microscope, telescope, and empirical analysis; economically, [by] the expansion of consumer culture in the increasing presence and awareness of things on the market, in the house, and in daily life; epistemologically, [by] the changing attitudes toward the general and the particular, the universal and the individual; and, narratively, [by] the perception and representation of domestic space (Wall, 2006, p2).

The paper is therefore in three parts. In the first part of the paper, I will draw my compass relatively narrowly by outlining the qualities of the sweep of a new generation of research methods that are now being applied to space and place by various, often remarkably tightly drawn, communities of practice. This proliferation of research methods, as marked by seemingly endless compendia and book series – for example, the Sage Advanced Quantitative Methods in the Social Sciences is up to Number 146 while the Sage Introducing Qualitative Methods in the Social Sciences series is at Number 21 - is itself part of the process I want to examine. I will argue that these methods are making places into what I will call dynamic laboratories, animated environments which constitute laboratories in the field (combining the qualities of both) which are simultaneously engines that allow the production of truths. Animated environments produce linked sites of permanent learning by redefining the situatedness of place, taking the laboratory – understood as a generic ‘placeless’ place (the ‘laborastory’) in

which systematic knowledge is generated - out into the field. Landscape and labscape merge, so to speak (Kohler, 2002), producing a new kind of authenticity in which the field is used in a laboratory-like way. It is this latter quasi-didactic project, in which formal knowledge and tacit knowledge is merged as a result of a re-definition of space and place that I particularly want to concentrate on in this paper. Whilst we should not be surprised by this development – it has been a feature of Western societies since at least the industrial revolution, as access to knowledge of either kind has become increasingly easy to achieve – what is interesting now is the sheer scale of the development, and the way it is producing a makeover of Western thought at several levels, a makeover which can be thought of as a kind of re-animation. Appropriately for a geographer, this project requires a redefinition of place, what place is and what it does: place is caused to move and respond. However it is also necessary to understand where the impulse to redefine place and what place does is stemming from. I argue that, in large part, it arises from the discovery of new methodologies that have arisen from research methods communities of practice distributed across the social sciences, but in turn reflecting wider social impulses. It is these wider social impulses that I want to turn to next.

In the subsequent part of the paper, I will therefore argue that these methods are not just internally constructed by these communities of practice but also arise from wider social pressures. I will fix on one of these pressures, the rise of individualised consumption and its socio-spatial correlate, a new kind of worlding, one through which new kinds of inhabitation are being produced. Following on from the work of Lazzarato and Sloterdijk in particular, I will outline how, driven by the demands of individualized consumption, a new kind of spatial atmosphere is being created which allows different kinds of subjects, objects and worlds to come into existence through the construction of what I will call the ‘inhabitable map’. In making this argument I will not be arguing that research methods communities of practice are simply producing methods as an affirmation of prevailing values; methods are a means of exploring and interrogating the world with their own agency. They are not only a social construction, therefore, but an active presence in their own right. But I will also argue that moves afoot in the various methodological camps to produce greater attention to place and to values like recursivity, reflexivity and participation cannot be seen as simply emancipatory. In part, they are also an element of and driven by a more general zeitgeist of the generalized interrogation of subjects and

objects and the construction of flow spaces that will allow that interrogation to, quite literally, take place.

Of course what exactly this all might mean for us – do these developments signify the emergence of a new kind of digitalised Palladian landscape⁴ or the construction of a new outer circle of Hell? – is still opaque. In the third part of the paper, I will top the discussion off by turning to these political questions, since they are not just about how our environment is able to attain grip on our lives but also about how our environments are becoming our lives so that grip has itself become an inadequate term because it implies one thing operating on another rather than a melding of the two - or the creation of a third term. In turn, I will suggest that what is needed politically is a project of what Peter Sloterdijk calls ‘ventilation’ or ‘air-conditioning’ in which spaces are loosened up so that they provide resources for political thinking and responsiveness. However, I will also point to the need to temper the rhetoric that currently circulates about the abundance of knowledge produced by new forms of community of practice by showing how hole shadow worlds of knowledge exist which are unable to be accessed.

2. The Rise of Place-Based Research Methods Communities

It is often argued that space and place have been rediscovered in academe because of the strong theoretical push of the so-called ‘spatial turn’ that has tracked across most of the social sciences and humanities. Certainly, it has, I think, become clear that the old categorical ways of thinking which simply aggregated populations up into general classes which were distributed across space in varying proportions are no longer adequate. In part, this is because these categorical ways of thinking are echoes of a bygone form of discipline which is now being superseded by much more individualised forms of discipline which take in many more variables in characterising character (for example, increasingly, various indicators of biological well-being) (Hacking, 2006). These individualised forms of discipline which arise out of a mixture of technique, changes in the nature of commodity production (Zuboff and Maximin, 2003), and shifts in the mode of subjectivity, have highlighted the importance of place understood as more than context in that they make it much easier to see its operation once individuals become more than the sum

⁴ After all, it was Repton who argued that ‘a knowledge of arrangement or disposition is, of all others, the most useful’ (cited in Wall, 2006, p6).

of their parts. Place is then no longer seen as an incidental correlate but as a crucial element in human flourishing. Place is in us all. Thus, for example, place is clearly an important factor in how happiness and health is constituted (Marmot, 2005). Certainly, these changes have been one of the prompts to a more general theoretical reconsideration of place which has arisen out of dissatisfaction, amongst other impulses, with categorical ways of proceeding which make it difficult to discuss the generative powers of place as being anything other than a by-product, a generalised prefix with no powers of its own. This theoretical reconsideration has arisen from a successive mixture of phenomenological, poststructuralist, and latterly posthuman perspectives (Thrift, 1999) and has positioned place in a quite different way. So, for example;

This is a quite different way of thinking about humans as ‘in place’, in which we discover ourselves as being in place, not only in virtue of a social role, but in virtue of our being placed as processes of being in a processual web of natural, social and cultural life. This sense of place as mobile, processual, creative, and as inter-related and intersubjective, of course reintroduces an ethics. It is the semiotic ethic of responding: both responsibility and responsiveness (Wheeler, 2006, p156).

The point is that place is now seen as a process, not a static frame, but capturing this process is by no means an easy task for it signifies a shift in what counts as relationality, since all entities are portrayed not only as in constant flux but also as having different capacities to endure within this flux. Instead of one time signature, there are many, and the endurance of these signatures depends on the kinds of spaces each of them can capture.

Whilst this theoretical recasting has clearly been important, its impact has perhaps been overstated compared with the more general empirical recasting of the world which has brought place to the fore. In particular the sheer mobility of the contemporary world, signalled by phenomena like the rise of logistical knowledge and the prominence of migration, which mean that places have become coupled together and that one place is always shadowed by others, coupled with a more and more complex spatial environment (as indexed by, for example, the rise of so-called super-diverse places (Vertovec, 2005)), buttressed by a general increase in a place awareness (as indexed by, for example, the sheer number of publications on places, let

alone the expansion of environmental concern)⁵ has surely been as important in foregrounding place.

However, much neglected in this recasting has been the role of specific research methods communities of practice. Research methods, understood as nothing more and nothing less than a series of technologies, may arise from particular theoretical backdrops but they cannot by any means be reduced to them. It is the proliferation and profusion of place-based or place-sensitive methods that I therefore want to examine. In a sense, I want to argue that the boys (and girls) in the back room have been as responsible for the production of descriptions of the modern world as any theorist.

Gieryn (2006) has noted that there are many ways in which researchers can build methodological relationships to place and to the people in them, and these have varied over time. Thus the Chicago School of urban studies - arguably the first modern School of place-based research - deployed three main 'shuttles' in order to demonstrate that it was constructing a 'truth spot' which guaranteed both the knowledge it was producing and Chicago as a laboratory within which knowledge could be produced and guaranteed, namely 'found and made', 'here and anywhere', and 'immersed and detached'. These shuttles constituted oscillations which also constituted means of authority. Thus 'found and made' described the oscillation between the city as found in a natural state and the city as a laboratory specimen, 'here and anywhere' described the city as a singular location and yet as having a general story to tell, while 'immersed and detached' described the way in which the researcher is positioned as both immersed in the city (and thus as open to surprise, emotion, vulnerability and empathy) and yet also able to distance themselves from its circumstances when necessary. As I shall point out, the nature of these shuttles is changing. The city is now naturally a laboratory, continually being put to the question. Its inhabitants are in a state of perpetual survey and assume that this is a part of life. Because of the high degree of all but instant linkage between locations and people occasioned by the media, each part of the city is likely to contain traces of itself: it is naturally both singular and general. And the city has been the object of myriad self-conscious exercises in place-making which have forever muddied a distinction between observer and observed (Sheringham, 2006), not only in the guise of travellers' tales but also in the

⁵ As Gitelman (2006, p17) puts it: 'global media help to create a world in which people are not local only because of where they are or where they are from but also because of their relationships to media representations of localism and its fate'.

form of the kinds of orientations that can be adopted, whether these are faux-realist or lost but with style (as in that strand of work that stretches from the earliest situationist experiments to the latest artistic commentaries which mix method technology and place in unholy ways). Indeed, with the rise of the internet, this kind of observation is - to an extent at least - being democratized, with myriad observers constantly reporting back on places.

What I want to do first in this section is to briefly survey the shifting landscape of social science methods, understood as a series of communities of practice retailing technologies for not only understanding the world but operating on it. In doing this, I want to show how the shuttles that guarantee knowledge of truth and place now assume quite different relationships between 'home' and 'field' than was current at the time of the Chicago School, producing a quite different form of inquiry which presupposes a world of places and communities which has not existed in the same form before. This does not seem to me to be about the old and hackneyed divisions between qualitative and quantitative methods, or synchronic and diachronic approaches, or other such oft remarked-upon contrasts, important though these may still be to their proponents. Nor is this a matter of the undoubted differences in research cultures, given that these are often extreme, between different bands of social researchers⁶. Rather, I want to show that this shift is a part and parcel of a more general change in the character of methodological study whose ambitions are only now becoming clear. These ambitions are concerned with producing inhabitable maps which will continuously report on themselves as they evolve. In other words, both data and research methods increasingly work at levels which allow place to have a say.

These changes in the character of methods depend on a dialectic between data and methods. Most importantly, data has expanded its reach both quantitatively and qualitatively and this expansion arises out of a convoluted and sometimes unpredictable interaction between data and methods; new methods generate new data and vice versa. Thus, first of all, there is the sheer amount of data that is now available to be operated on, whether this is quantitative or qualitative in nature which is, simultaneously, redefining what is counted as primary or secondary information (as in the growing

⁶ I am struck by how few commentators have likened these differences to the kinds of difference in scientific culture that are now routinely observed in social studies of science and which seem to me to be both extreme and likely to make it impossible to provide general groundings in research methods as if methods were just some kind of cookbook. But see Porter and Shaw, 2003.

vogue for ‘netnography’ which uses blogs and personal websites freely available on the web, or interventions into various discussion groups or web communities as means of creating various kinds of listening posts). The sheer amount of data available on places has been particularly pushed by the growth of the commercial domain, with some of these data now entering the public domain (as in the case of some Experian data; see Webber, 2007). Second, datasets have also become more complex, containing more information which can be related in more and different ways. These data sets often arising out of the ability to use various government and other data in ways which heretofore would have been difficult. A good example is provided by the use by economists and geographers of schools and health service data to consider issues like segregation or the outcomes of particular government policies (eg Burgess and Johnston, 2005). Third, datasets often involve much more complex orientations to time. Thus, more comprehensive longitudinal datasets have arisen around the world, datasets which have often become multinational (as, for example, in work on time use or world values or labour force involvement). These datasets are a continuous investment, often mutating slightly with each pass as new questions are added. In them, data are either continuously collected or are linked over time. Fourth, the rise of new kinds of methods is leading to an extension of the sensory registers that are worked in. For example, most commonly, visual methods of all kinds have proliferated, often in line with technological advance. For example, the ubiquity of cameras has allowed visual research methods to be extended in all kinds of ways: allowing respondents to use small disposables, the use of camera phones, the use of small video cameras, and so on. But, increasingly, other registers are also being invoked. Thus sound, taste, touch and various kinaesthetic information (like gait) are now being sought, often taking a leaf out of work done in the humanities, as a means of capturing forms of experience like emotion which constitute primary forms of data in modern life. As one dancer put it, ‘feelings are facts’ and the challenge has become how to represent them as data. Fifth, the parallel turn to material culture has produced a wide variety of data sets which did not exist before or were simply not considered to be operable data. Thus, not only has a host of consumer data become available but museums and galleries can now be viewed as sources of social science insight. Sixth, datasets increasingly contain place-bound information as more than simply an illustration of variation. More and more datasets either systematically build in place or start from it. And finally most methods are no longer, if they ever were, just the preserve of academic researchers. To the extent that this has ever been true, it is quite clear that research methods

now exist in a web of use which stretches from academe and government through to business and civil society. There are thriving methods communities in areas like market research and political consultancy, for example⁷. To summarize, new methodological ambitions have become possible because what counts as data has changed, not least because new hybrid classes of objects can be created out of these ambitions such as objects that were heretofore regarded as impermanent and/or highly localised - for example, goods for sale, in transit or in storage, vehicles on the road, events, discarded items, pollution, weather – and also because it is more and more possible to obtain data on ‘individuals’. Knowledge of these things expressed as methods and data both redefines what counts as objects and individuals and by making them visible alters their relationship to us.

These changes in data are both driven and being driven by technological change. Thus, the ability to record and transcribe has been speeded up by all kinds of technological aids. Similarly, the ability to permanently archive data cheaply and in a form that it can be easily re-used is at least in sight. Importantly, these changes do not only produce more speed and memory. They also extend analytical range. Thus, calculations that would have heretofore been impossible become attainable. Again, it becomes possible to use simulation as more than a tool but as an instrument in its own right. And increasing store and speed also allows text, pictures, and other image information to be presented and analysed in ways not before dreamt of, and to be integrated with each other. The result is a plethora of possibilities, many of which are only beginning to be explored as the social sciences begin to intersect with performance. For example, it seems clear that, so far as grid computing is concerned, one of its main uses will turn out to be the construction of vast archives of text and visual data of the kind currently used predominantly in the humanities to exactly consider place-based phenomena like landscape and site.

As I have pointed out, the generation of new data has proceeded in lockstep with the invention of new methods. There is no space here to review each and every new area of social methodology: all that needs to be said is that they are multiple and multiplying. Rather, I want to suggest that most new methods – from the new work in ethnomethodology to recent advances in sequence analysis – share some common aspirations. If we were to describe

⁷ An interesting study would be to look at the commerce between these different communities and how, in particular, methods move between them.

these ambitions, rather than their rougher and readier reality, then I think we would have to pull out five main characteristics. First, these methods are reactive. That is, they are no longer understood as an end point but are cross-sections of a continuing process, pulled out to infinity. They can be repeated, though often with alterations. Second, they are historical, in the sense that they acknowledge path dependence and emergence. They are tracks over time, rather than fixed point analyses. Third, they are increasingly technologically driven by software. Software can be used to order and analyse ethnographic transcription, to understand turn-taking and the patterns of conversation, to focus on the key moments in focus groups, or to zero in on where visual attention is being directed, as well as to run laboratory tests or make multilevel modelling or methods imported from genetic sequencing into something even unskilled researchers can grapple with. Fourth, they can be used to maintain and repair data. Thus, new techniques have made it easier to utilize particular kinds of data that heretofore would have been opaque to analysis, brush up data that would have been too incomplete to use, link data that are of different types, use data that would have been thought not to constitute a proper sample, and so on. And, finally, they acknowledge complexity. That does not mean that the methods can always describe the vagaries of that state but it does mean that they understand that the world is complex and cannot be reduced. Instead the ambition is to understand emergent patterns, playing to the idea of a generative social science (Epstein, 2006).

There is also a much more relaxed approach to what these methods are achieving. The wave of critiques of positivism in the 1960s and 1970s, the postmodern critiques of the 1970s and 1980s, the ethnographic absolutisms of the 1980s and 1980s, have, or so it seems to me, dissolved into something more forgiving. There is a general emphasis on rigour but not at the expense of a narrow sectionalism. There is a general emphasis on sophistication, but not at the expense of appropriateness. Though methodological approaches do still clearly differ, still there are also much greater commonalities. For example, economists are no longer ashamed to be caught mining extensive datasets. Anthropologists are willing to countenance redefining ethnography so that it can include objects that cannot answer back, and need to be approached at an angle, as in various para-ethnographic excursions (Riles, 2006, Marcus, 2005). Sociologists and geographers have become interested in the insights that can be gleaned from work in performance. In other words, the world is increasingly recognised to be a dappled one (Cartwright, 1999). This is not an age for truth fanatics, even though the dividing lines

between methodological communities of practice are often still well-defended.

The renewed interest in place does not just emerge, then, from place suddenly getting its just desserts. It also emerges from a change in how methods themselves are being thought of, the result of theoretical changes in how methods are conceived of (Abbott, 1999) which make place easier to understand, the rise of new and speedier technologies and a slow but sure redefinition of what counts as truth, resulting from the methodological history of the last forty years.

But the tendency towards considering place has also clearly been boosted in four ways. First, there is intensive mapping on a scale never before seen. Thus Cosgrove (2005, p149) points out that;

[Large North American cities] are some of the most intensively mapped spaces in the history and geography of the planet: every square metre is geo-coded by government and private or commercial agencies for purposes ranging from environmental protection, public health, and safety, efficient transportation and transportation to property insurance, marketing, political persuasion and religious evangelism. Maps have played a critical role in shaping their physical spaces and land uses, and continue to control the daily lives of citizens through zoning ordinances, zip codes, and the myriad territorial regulations that shape urban daily life.

These kinds of developments have only been underlined by the advent of mass satellite surveillance over the last five years which makes the city visible and, of course, provides a powerful new source of data and methods as well a means of isolating more detail than was ever possible before.

Second, the rise of geodemographics and geographical information systems more generally, has produced a generic series of spatial technologies which are also means of social analysis. Socio-spatial analysis has become a norm, backed up by all kinds of spatial statistics that have been developed since the 1960s which have been at the very least sensitive to the problems of space and place (eg the ecological fallacy, scale, autocorrelation) and which, more recently, have been developed, at least in part, with the contextual properties of space partly in mind (eg multilevel modelling, geographical regression). Third, properties that are often considered place-like, such as, for example,

materiality, emotion, and the like have become easier to capture and represent as all manner of new spatial metrics have been invented. Fourth, at the same time, place itself has been changing its character. It is a cliché which still holds some truth that places are increasingly about movement and many modern technologies of data-gathering have been formulated precisely to track a world of fast-moving people and objects which depict place as a network of relations rather than a set of fixed points. This generalised logistical model has increasingly become apparent in all corners of everyday life: it is how (quite literally) things turn up (think only of the growing availability of satellite navigation systems, GPS receiver, and the like, often incarnated in devices as simple as a mobile phone or PDA). Further, as various forms of tagging become increasingly effective (see, for example, Thrift, 2004 on RFIDs) so what hoves into view is a world in which everything can be tracked. Indeed, recent papers on tracking mobile phone users may become simply the beginning of a major shift in social science methodology as it becomes possible to track and record individuals in something approximating real time. Further, these systems of mass movement are now generating their own effects. For example, supply chains can suffer from amplification in which what is detected as a variation is amplified further down the supply chain, thereby producing larger and larger errors (Economist, 2006). Similarly, in-car navigation systems are now producing flocking effects wherein as cars using satellite navigation systems take congestion avoidance action so they produce alternative centres of congestion.

In turn, a series of important methodological developments have occurred as all of these developments have bedded in. In particular, the emphasis on properties of emergence means that these methods can increasingly be seen as buzzing, lively tools, rather than solitary research interventions, and these are tools for building worlds – a point to which I will return in some detail. Thus, methods like microsimulation and agent-based modelling, understood as part of a more general attempt to produce a generative social science (Epstein, 2006), are attempts to demonstrate alternate worlds and emergent effects as well as simply tools for tracking policy. Similarly, the emphasis that place drives on methods that are able to cope with many co-varying factors simultaneously becomes important as a means of isolating more and more detail. Next, these methods are increasingly interactive, that is they are part of a process of constant revisiting. Increasingly, this means more than simply an ambition to produce repetition, through repeat surveys or certain other forms of recursivity. Rather, one of the goals is increasingly to involve

respondents in the process of research. That has, of course, been a favourite meditation of ethnography, which has often discussed the role of respondents and the exact responsibilities of researchers towards them. It is central to much work that involves devices like focus groups. It has blossomed in studies of vulnerable people. It is a cardinal point of feminist research methods. It has become a mainstay of the burgeoning experimental apparatus of psychology and behavioural economics which is now moving out into other disciplines. And it is, of course, the preserve of a mushrooming ethics industry. But, increasingly it also means the deployment of deliberative approaches, such as the use of citizen juries. It might even mean the vagaries of participatory research, in which the respondents take a hand in dictating what the research problems are, and may even take a part in the research process themselves, thus completing the circle and underling my point that we can all be researchers now⁸. Then, places are allowed to become performative. Performative approaches, in which a toolbox largely derived from the humanities is deployed, are becoming increasingly important as a means of performing events as a means of research in their own right. By acting out⁹, it is possible to produce understandings that are not easily achieved in any other way. Importantly, much of the force of this research comes exactly from trying to understand the exact force of space in producing events. In turn, this research is part of a burgeoning effort intent on creating more interactive spaces which spans subjects as different as information technology (and especially the study and creation of interfaces), architecture (Bullivant, 2005), performance art, installation and site-based art, and film. And finally places are no longer seen as simply about people: they are also seen about all manner of other things, from objects through nonhuman life to the grip of the contours of the land (architects), in multiple combinations. This ability comes in particular from the ability to apprehend and map objects that were formerly regarded as intangibles, such as markets¹⁰ or emotions or equations so as to be able, for example, to produce ‘archaeologies of the present’ in which methods originally applied in archaeology which are purely about the object domain are transferred into the contemporary moment (Büchli, 2005; Jacobs, 2006). These new forms of representations of objects are becoming a crucial

⁸ Indeed, I know of at least one research methods helpline for specialised social work communities, and I can see this principle being extended to the general public in time.

⁹ Similar events are happening in the historical domain where it is realized that reconstruction and re-enactment must be seen as more than the preserve of hobbyists and can yield valuable information not able to be gained in any other way.

¹⁰ Thus markets can increasingly be represented at a considerable level of complexity, from the constant of traders’ screens, spewing out data, to devices like Map of the Market.

element of what objects are, representations which, in effect, are forming an air traffic control system for objects (Sterling, 2006), one which challenges extant representational technology¹¹.

Let us now come back to Gieryn's three shuttles in the light of all these developments. What we can see is that place has been re-located, re-placed if you like by methods communities of practice. Thus the first shuttle, back and forth between found and made, is much more difficult to deploy. The idea of a city as a laboratory understood as a strict scientific analogue was always a difficult one to deploy. Now it has become impossible. Rather, a more general experimental and performative turn has become apparent in which places become dynamic laboratories without a stable point of reference. Then, the shuttle back and forth between here and anywhere has transmuted as many different stories have become possible about just one place and as places have become linked in ways which mean that stories about one place are always and automatically about other places or chains of places. Finally, the shuttle back and forth between immersed and detached has become more and more complex. By some accounts a state of detachment is simply impossible. In any case the myriad accounts of reflexivity have destabilized the idea that detachment is a necessary goal. To summarize, place is being re-described through a battery of data, technologies and methods. Of course, this act of almost epic re-description has an internal dynamic but I want to turn now to considering some of the larger social forces that underpin the processes of worlding¹².

3. New Worlds and New Worldings

¹¹ Think, for example, of the 'weather' maps evolved to depict the state of telecommunications networks.

¹² I think it can be argued that research methods communities of practice increasingly fit with the imperative of generating these worlds. They are an essential element in generating a world which is based on a mass individual logic, if that does not seem too much of a contradiction in terms. Thus, they increasingly bear the marks of the kind of worlding that is now prevalent; as I pointed out earlier they are emergent and reactive and are working in more and more sensory registers. Of course, this progress is hesitant and it is by no means complete. Data sets are still infrequently collected – though there are signs that this is changing, as evidenced by the growing number of longitudinal datasets (especially in the socio-medical domain), the number of datasets that are intended to be comprehensive (as in the proposals in the UK for a national children's database and the many datasets that are found internationally based on using electronic data), and the datasets that can be gleaned from the permanent to and fro of telecommunications and internet systems (though these are still patchy and specific) as well as the proliferation of social network sites like MySpace and FaceBook. Similarly, true recursivity remains something of a pipe dream in many cases.

In the second major section of this paper, I want to outline some of the general social tendencies that I believe are driving the developments that I have briefly outlined and especially the concatenation of the generation of many new communities of practice as well as methods communities, and the new closeness to place. I want to suggest that what we are living through is the time of the production of what I will call an inhabitable map, a time in which space itself becomes a means of conveying information and communication with the goal of approximating the rhythm of thought, rather than simply a material template through which information and communication must be conveyed. Space is therefore transformed in three ways. First, it conveys a cultural understanding of space which relies on a transformative approximation of position rather than absolute geometric coordinates, what I have called elsewhere ‘movement-space’ (Thrift, 2005)¹³. Second, it becomes a communicative mass of quantitative and qualitative signs. The environment becomes utterly semiotic¹⁴. Third, it no longer needs to be overcome. Rather it needs to be designed, prototyped, and rolled out, rather like a semiotic carpet: it is not so much that place is altered on paper or screen and then the vision is built as that space becomes equated with the act of drawing itself and the kernel of thinking such a practice makes possible.

Increasingly, therefore, space is not enclosed in the same way. It is no longer an ensemble of contiguous communities. Rather it is becoming a spatialized matrix of becoming. It is making the move from a means of providing enclosure and material consistency, to the spatialization of different moments in a matrix: the one immutable is mutability so that ‘objects’ become constantly provisional. It has become a spatialisation of time absolutely consistent with the idea that space has become ‘a science of nature in the making’ (de Beistegui, 2004). Even architecture, which has the most invested in the enclosure world-view, is experimenting with surface animation, interactive environments, interconnected spaces, and even fused spaces. Some architects have talked about the death of place, about ‘space becoming a matter of ‘making strategic decisions and experiencing moments at remote and asynchronously related sites’ (Bouman, 2005, p21), about site

¹³ As Turk (2006) points out this cultural understanding of space is not far from those of many non-Western cultures which orient themselves along paths of directions in a dynamic response to features in the environment. The difference is that this new nomadic ability is made possible because of the tight interlocking of absolute geometrical co-ordinates.

¹⁴ This vision is not far from that offered by Seboek (Seboek and Danesi, 2000) and others in which the world is a constant process of biosemiosis, but I want to argue that this vision which they regard as general needs to be historicized. It is a symptom.

as always a set of sites constantly embroidering one another (Spiller, 2002). The information structure and the physical structure would become as one in this convergence¹⁵ culture (Jenkins, 2006). But it might be more correct to say that what was a mundane background has now been able to reach such a concentration of intensity that it is becoming a foreground. If I were looking for an analogy, it would be in the way that in the history of painting what was formerly understood as background, something understood as the cheap stuff, to be inserted by assistants, is foregrounded as landscape painting. The necessary but incidental side panels take to centre stage.

I do not want to go too far. Inevitably this discourse is something of an exaggeration¹⁶. It constitutes an implied space (Wall, 2006), a space of potential. For the driver stuck in a traffic jam, it will seem an absurd goal (but even these drivers increasingly drive cars which have become part of a vast informational space (Thrift, 2004)). For many of the world's poorest people, for example, it will seem nothing but a bitter mockery of their straitjacketed lives (although even they very often have mobile phones). The discourse is an ambition, but it is not without any kind of reality. Thus, it is an ambition backed up by vast resources. It is an ambition which already has some bite and will, I believe, have far more, given the vast number of socio-spatial experiments currently taking place, ranging all the way from the vast number of attempts to create more intelligent spaces, through all the experiments in social networking currently taking place to truly experimental adventures in architecture, performance and art which are both attempts to represent the new reality and interventions in producing it.

I want to argue that the production of the inhabitable map must be seen as part of a much wider tendency and that is the individualization of consumption that has been going on apace since the 1970s and the resultant institution of a 'flock and flow' (McCracken, 2006) consumer economy which has at its heart the generation of passionate interests, these interests being understood in the classical Tardean way as the root of economic psychology and of the generation of markets (Latour and Lépinay, 2007):

¹⁵ Specifically, convergence refers to a process of technological convergence between the different media forms which provide kernels of thought but, more generally and usefully, it indexes a number of parallel but related processes of mediation, including the extension of markets stemming from moving content across different delivery systems, the synergy provided by the ability to own and control these different manifestations, and the franchising opportunities that arise from co-ordinated efforts to brand and market content under these new conditions (Jenkins, 2006).

¹⁶ Talk of collective intelligence or 'we-thought' has itself become something of a fad, as evidenced by the way that Ségolène Royal uses the latter term as a key part of her bid for the Socialist leadership in France.

value is wrested from desires and beliefs combined in a ‘psychological’¹⁷ vector. I think it is unarguable that an important historical process has been taking place since on or around the 1970s and that is the hastening of a process of ‘mass’ individualization and idiosyncratic volatility in the consumer economy which supports and is supported by a new form of psychological individuality and self-determination (Zuboff and Maximin, 2003). The desire to be understood and treated as an individual is now more or less constantly expressed, in particular through the medium of a re-invented consumption which can satisfy three values: sanctuary from the pressures of the working world, various forms of giving voice to self-expression, and social connection¹⁸. ‘In the standard enterprise logic of managerial capitalism, people must adapt to the terms and conditions of consumption set by gatekeeper producers. But the real essence of the individuation of consumption is an inversion of that logic. It requires the agents of commerce to operate in individual space. There they form a relationship with the individual ...’ (Zuboff and Maximin, 2003, pp171-172). That is the real import of current managerial buzzwords like long tail, co-creation, and the like (Thrift, 2006). And it requires that enterprises know much more about their customers and strive to enter into an individualized and dynamic relationship with them: it requires, in other words, nearly continuous survey and interrogation of people who are much more likely to think of themselves as qualified players who enterprises must resonate with.

But it requires something else as well – active intervention - so as to produce spaces in which such relationships can thrive. In other words, the individuation of consumption depends upon a reworking of space and time in contemporary Western societies so that they will support the generation of individualised decisive moments – hot spots, if you like - that can be taken up for profit because they act as a kind of space-time currency. These reworkings – what I will call worldings - do not just depend on raw data. They also depend on a constant recursive survey of spaces produced by a host of analytical methods for characterizing places and the people in them which produce a constant feedback about which of these moments will have bite where. Indeed, they might be thought of as the latest episode in a history of surveillance.

¹⁷ The word ‘psychological’ is in scare quotes because Tarde does not use it to refer to a distinction between interior and exterior but to a more general condition.

¹⁸ Hence the massive increase in social networking sites which allow individuals to contact other individuals.

But there is more to it than this. For the new kinds of active and reflexive space that have been forged from the abundant knowledge landscape enabled by the consequences of modern technological developments also allow consumers to fashion large numbers of collaborative and often highly participative consumer communities of practice, so producing a vast new realm of collective intelligence and innovation based around intensified passions (Chesbrough, Vanhaverbeke and West, 2006, Thrift, 2006). These consumer communities can be mainstream or quirky but they are rarely dull: if they were participants would simply quit them¹⁹. Leadbeater (2006) and other luminaries argue that the generation of so many new communities of practice is the consequence of the ability to be organized without drawing on much in the way of formal organization. Equally, the generation of so many new communities of practice is interpreted as the rise of spontaneous authority in which innovation and creativity become mass activities carried out through blurred and voluntary divisions of labour, rather than being the preserve of elites carried out through structured and involuntary divisions of labour²⁰. Undoubtedly, as I have pointed out, this can all be overdone but equally it points to significant changes – consumers do not want just more choice but more say, consumers do not want just passive consumption but also active intervention in products and services, consumers do not just want operating instructions but also want to be the operating instructions, and so on.

In other words, new spaces have allowed a double-sided process to occur in which consumers react to enterprises who react to consumers and so on. Take the case of media convergence (see Standage, 2006);

Media companies are learning how to accelerate the flow of media content across delivery channels to expand revenue opportunities, broaden markets and reinforce viewer commitments. Consumers are learning how to use these different media technologies to bring the flow of media more fully under their control and to interact with other consumers. The promises of this new media environment raise expectations of a freer flow of ideas and content. Inspired by these ideals, consumers are fighting for the right to participate more fully in their culture. Sometimes, corporate and grassroots convergence reinforce each other, creating closer, more rewarding relations

¹⁹ My current favourite is subversive or guerrilla knitting (see, for example, microRevolt.com).

²⁰ Although they can be called on by enterprises through various processes of open innovation (Thrift, 2006).

between media producers and consumers. Sometimes, these two forces are at war ... (Jenkins, 2006, p18)

To understand the more general stakes of this war of interests, I will draw on the work of two of the most eminent theorists of worlding, namely Maurizio Lazzarato and Peter Sloterdijk. What these two authors have tried to do, and what they have in common, is their desire to show how modern business has moved on from a focus on producing objects to a focus on producing worlds which must also inevitably be spaces. Thus, the business enterprise does not create its object but the world within which the object exists. As a corollary, the business enterprise does not create its subjects (as happened in the older disciplinary regimens) but the world within which the subject exists. Thus, as Lazzarato (2004, p188) puts it:

The company produces a world. In its logic, the service or the product, just as the consumer or the worker, must correspond to this world; and this world in its turn has to be inscribed in the souls and bodies of consumers and workers. This inscription takes place through techniques that are no longer exclusively disciplinary. Within contemporary capitalism the company does not exist outside the producers or consumers who express it. Its world, its objectivity, its reality, merges with the relationships enterprises, workers and consumers have with each other. Thus the company, like God in the philosophy of Leibniz, seeks to construct a correspondence, an interlacing, a chiasm between the monad (consumer and worker) and the world (the company). The expression and effectuation of the world and the subjectivities included in there, that is, the creation and realization of the sensible (desires, beliefs, intelligence) precedes economic production. The economic war currently played out on a planetary scale is indeed an 'aesthetic war' ...

The corporate aim is to produce, most particularly, what might be called decisive moments of semiosis which can be played in to. Such moments have a deeply engrained cultural history, of course. The decisive moment was, in large part, an invention of Renaissance painters trying to depict major turning points in history. They would build up scenes in great detail in which the disposition of every person and object counted as a part of a moment straining towards realisation. The motif was subsequently taken up by photographers, and especially photojournalists. Famously, for Henri

Cartier-Bresson, the decisive moment (the title of his exhibit at the Louvre, the first photographic show ever to be so honoured) was the instant when a shutter click can suspend an everyday event within the eye and heart of the beholder producing a confluence of observer and observed. It is the 'simultaneous recognition, in a fraction of a second, of the significance of an event as well as the precise organization of forms which gives that event its proper expression' (Cartier-Bresson, 19 in). Then, the decisive moment is still very much a mainstay of modern drama. Whole productions have been built around articulating the power of one moment, as in Deborah Warner's ability to focus the whole of Titus Andronicus on the moment where the raped Lavinia comes on stage, having had her hands chopped off and her tongue cut out. Her uncle, coming across this wreck of a woman, seemingly incomprehensibly bids her good day and asks her where her husband is. The moment is often cut from the play by directors as impossibly discordant but Warner made it into a triumph, the key being, as she put it 'doing the right thing at the right time'. Finally, and most obviously, there is film. Cinema can be understood as a series of practical meditations on summoning up decisive moments: 'truth 24 times a second', as Godard (cited in Mulvey, 2005, p15) once put it. Cinema is able to produce not just speed but delay and deferral, preserving the moment at which the image is first registered in a kind of extended present of redefined significance.

Note one other thing about this history of the moment. In each case, these moments have to be revealed by new mechanical methods that can reorder and transform the raw material of passing time and spatial difference - from different painting materials through the lightweight and mobile 35mm camera through particular means of lighting and moving to slow motion and stop frame and the possibilities of digital special effects. In each case too, as has been pointed out many times, they involve a reworking of the relation between the observer and the observed, moving from a tableau-like relationship to one in which the observer attends differently through a sustained attentiveness which is also a 'suspension of perception' (Crary, 1999). This sustained attentiveness is, of course, the mainstay of and precondition for the production of decisive moments.

In practice, the production of decisive moments means the production of spaces that are able to produce and represent decisive moments of all kinds: everyday life becomes a cavalcade of semiotically charged and rapidly changing moments which can be used for profit, realised through more and more carefully designed spaces, designed to elicit particular responses,

designed to unleash speculation and creativity, designed to amplify what counts as the object. That these decisive moments are increasingly produced through conscious spatial design can be seen in the proliferation of work on making space into a conscious asset in generating creativity (as at the workplace), and the voluminous work on generating experience economies.

This is where Peter Sloterdijk's work becomes relevant to my argument. In his Sphären trilogy, Sloterdijk takes Heidegger on dwelling as a root point of reference but then spatializes his thinking by posing the question of being as the question of being-together: 'one is never alone only with oneself, but also with other people, with things and circumstances; thus beyond oneself and in an environment' (Sloterdijk, 2000)²¹. 'Being-a-pair' or a couple precedes all encounters²². In other words, Sphären is concerned with the dynamic of spaces of co-existence, spaces which are commonly overlooked, for the simple reason that 'human existence ... is anchored in an insurmountable spatiality' (Sloterdijk, 2005d, p229).

Continuing on with this spatial problematic, Sloterdijk is concerned with how distances intercalate and produce different kinds of being-togetherness. Sloterdijk identifies three waves of globalization, each with its corollary of new forms of 'artificial' construct. The first wave is the metaphysical globalization of Greek cosmology, the second wave is the nautical globalization of the 15th century on, and the third wave is now upon us. Whereas the first wave created an esoteric geometricism and the second wave created an exoteric cosmopolitanism, the third wave of rapid communication is producing, through the work of 'joining the nervous systems of inhabitants in a coherent space' (Sloterdijk, 2005d, p226), a global provincialism of 'connected isolations', of microclimates in which 'communicative relations are replaced by the inter-autistic and mimetic relations, a world that is constructed 'polyspherically and interidiotically' (Funcke, 2005, p). A certain kind of being-togetherness is thereby threatened. Thus,

At the centre of the third volume is an immunological theory of architecture, because I maintain that houses are built immune systems. I thus provide on the one hand an interpretation of modern habitat,

²¹ Thus Sloterdijk retains Heidegger's radical emphasis on the recently discovered notion of the environment, as circumstances being adjusted to accommodate the entity in their midst.

²² In bringing forward this formulation, Sloterdijk is making a similar move to those approaches based on joint action that have become increasingly common.

and on the other a new view of the mass container. But when I highlight the apartment and the sports stadium as the most important architectural innovations of the modern, it isn't out of art- or cultural-historical interest. Instead my aim is to give a new account of the history of atmospheres, and in my view, the apartment and the sports stadium are important primarily as atmospheric installations. They play a central role in the development of abundance, which defines the open secret of the modern (Funcke, 2005, p).

For Sloterdijk, in other words, the modern world has become bubble/foam, a series of consumerist monads cut off from each other and constantly, even manically, inventing new responses, decisive moments that in truth decide little at all and make us immune to many forms of shared understanding and human flourishing.

Whatever the case (and I think that this vision is too bleak, ignoring, for example, the growth of consumer communities of practice), the point is that space and time are themselves becoming not so much wrappings around the objects of consumption as integral elements in the generation of an individualized mass consumption which revolves around more than the simple commodity: the object is but a part of a larger ensemble, a world which is perhaps best understood as a semiotically enhanced space which allows individualized relationships to thrive (Wheeler, 2006). This is a world perfused with signs sent and read because each environmental niche is always also a semiotic niche. Space and time are no longer something external but a key moment in the design of these myriad semiotically enhanced worlds and this requires a recursive envelope which can transmit sensation as much as information. Thus place mark 2 is both deeper than what came before in that it is loaded up with all manner of signs and shallower in that it depends on the control (or, rather modulation) of the sensation and information they impart. But what is clear is that these places are meant to be more responsive – thinking spaces of a kind. They are semiotic machines which are crucial elements of a new world-modelling system.

4. Conclusions: The Inhabitable Map and its Perils

In this paper, I have tried to weave together the communities of practice literature and contemporary thinking on space, showing how each implies the other, and concentrating especially on how they both imply the

development of new forms of worlding. In particular, I have returned - again and again - to the question of the kind of space that is now becoming prevalent and how we might describe it, showing how it is a part of processes of worlding that are becoming extensive and that reach right into academe. Many of the developments presaged by what I have called the inhabitable map are likely to be positive, providing, for example, new kinds of political ventilation. However, such a vision of worlding also has its downside, and this does not just arise from privacy issues, important as those undoubtedly are. Rather they arise from two other reservations.

One is the more insidious process of control that will be possible. If all objects are going to be able to be tagged, so producing a vast ecology of things bent towards individualized consumption, so, at the same time, they can be tracked and modulated. This vision of a future of spontaneous authority is undoubtedly akin to the society of control that luminaries like Deleuze and Haraway sketched in the 1980s, a society in which an enhanced cybernetics held sway allowing the continual redefinition of the problem and solution in real time (or something close to it) in line with events. But, as Haraway herself (2006) has argued recently, this enhanced level of responsiveness no longer seems quite the right description of how things are. Rather, as I have expounded, the goal now is not so much to track objects as to create whole worlds in which tracking is simply a part of the infrastructure of what objects are and how they relate. In other words, right at the heart of 'experience' will be cookies that do not so much tag every move as become what defines movement itself (Thrift, 2005). Worlds are being intensified, cook-ied up, if you like.

The analogy is an apt one, I think. For it suggests a leap as great as that which occurred when cooking was invented, a technique of altering the environment that allowed food to be primed and intensified in such a way as to produce a new external organ. Subsequently the body itself began to evolve, as energy could be used for activities other than digestion. Similarly, the battery of methods coupled with new technologies now available is beginning to produce a new kind of sensory organ. In previous papers, I have likened this organ to a hand. Perhaps what is being extended is exactly our sense of touch – and objects' sense of touch too (Classen, 2005).

The second reservation provides an even more serious caveat. It may seem as though I have depicted a movement towards an age of abundant

knowledge and an almost unlimited collective intelligence²³. But that is wrong. There are limits. The worlding I have depicted is an umwelt like any other in that it has systematic biases to seeing only certain things. Other things simply do not appear at all. Thus Galison (2004) points to a classified universe which may be as large as the unclassified one and which puts paeans of praise to the liberatory possibilities of open access in perspective. In the United States, for example,

In 2001 there were thirty three million classification actions; assuming (with the experts) there are roughly 10 pages per action, that would mean roughly 330 million pages were classified last year (about three times as many pages are now being classified as declassified). So the U.S. added a net 250 million classified pages last year. By comparison, the entire system of Harvard libraries – over a hundred of them – added about 220,000 volumes last year (about 60 million pages, a number not far from the acquisition rate at other comparably massive universal depositories such as the Library of Congress, the British Museum, or the New York Public Library). Contemplate these numbers: about five times as many pages are being added to the classified universe than are being brought to the storehouses of human learning, including all the books and journals on any subject in any language collected in the largest repositories in the planet (Galison, 2004, p230).

This secret Universe cannot be allowed to persist. It can only warp a process of worlding that is warped enough already. If we are going to inhabit maps, rather than simply use maps as aids to orientation, we need to be sure that the maps include the whole of the landscape.

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²³ Understood as the sum total of information held individually by members of a group that can be accessed in response to a specific question.

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