# Mapping and Its Discontents

"The origin of the map," says John Noble Wilford, "is lost to history."

But so's that of yodeling, punk rock, and skateboarding. We can run the origin of *anything* back into the primordial muck, back through this stage and that to ... the Big Bang.

Scott McCloud does this with comics, well, not to the Big Bang but back through the codices of the Aztecs, Mixtecs, and Zapotecs, back through the Bayeux tapestry and Japanese scrolls, back though Trajan's column and Greek vase painting to ... the tomb painting of the Egyptians beter than three millennia ago. At which point McCloud says, "I'll gladly admit that I have no idea where or when comics originated. Let others wrestle with that one ... But there is one event which looms as large in comics history as it does in the history of the written word. The invention of printing," though it's not until the maturation of color lithography and the daily newspaper in the last decade of the 19th century that, as McCloud says, "the comics we call comics began to appear." ii

In the history of mapmkaing it's the maps that we call maps that are historically significant—that matter—and the invention of printing looms as large in their history as it does in that of comics. So the fifteenth century is also a good place to start the history of maps, better actually, since while comics don't really take off until the 20th century, maps took off right away.

Of course printing was hardly the only thing that happened in the 15th century, and the emergence of the modern nation-state was every bit as important to the emergence of mapmaking. Probably the way to think about it is as the emergence of a *complex* of functions all of which depended on, all of which *reinforced* each other: the modern nation-state, the map, the spread of printing, movable type, the voyages of Zheng He and Christopher Columbus, a lot of things, all over the world ...

## And the Map Is ...

Like most humans artifacts – like cars, tables, belt buckles, spoons – maps are more readily exemplified than defined. You point to one. "This is a map," you say. What a map most is becomes apparent in use.

This has stopped no one from trying to *define* maps, at least not since the seventeenth century, when simultaneously in places as far-flung as England, Russia, New Spain, and Japan, maps and mapmaking first became common. A content analysis of hundreds of definitions of maps makes it plain that maps are supposed to be "representations of a part of the earth's surface." Now this way of thinking about maps *naturalizes* them, and naturalizing them *universalizes* them. Both obscure the map's origins in the rise of the state.

Naturalizing the map helps ... *pass over* ... the map's role in the establishment and maintenance of social relations in societies where maps are common. It conflates maps and mapmaking with universal human, even with *animal* abilities ... like orientation, wayfinding, and other aspects of spatial intelligence.

This conflation of maps with fundamental cognitive abilities makes it a slur on a population, a denigration of its cognitive or cultural capacities, to deny that it makes or uses maps. Therefore it's claimed that *everyone* uses maps and *always has*.

But just as people long lived and as many continue to live without writing – nonetheless carrying on a rich human life – so people have long lived and *many continue to live* without maps. People create maps only when their social relations call for them, and the social relations that most insistently call for maps are those of the modern nation-state, wherever in the world.

## The Development of the Map Discourse Function

People make maps to discover their minds and to connect themselves. These are also the reasons people talk, so where talk serves, maps are rare. But when talk becomes inadequate, either because the discourse gets too complicated, or there are too many people, or they are separated by too great a distance or too much time – as

invariably happens with the emergence of modern states – people develop alternative forms of communication.

For the past thirty thousand years people have been making artifacts that anticipate the sorts of things that today we call ... badges and genealogies and inventories and almanacs and histories and itineraries and maps, "anticipate" because the distinctions we draw among these very different discourse functions took a long time to evolve, and in many cases have often only recently achieved their current forms. Paleolithic peoples bundled these discourse functions together on incised bones. We've been pulling them apart ever since.

Elaborating on Paleolithic achievements, people have constructed an ever-widening repertoire of cultural forms – clothing, ritual, pottery, painting, sculpture, architecture, drawing, writing, books, prints, film, blogs – within which they've encoded ever more-elaborate communications. Paralleling the proliferation of forms has been a comparable expansion in the powers of sign systems – gestural, sculptural, pictorial, pictographic, symbolic, numeric, syllabic, consonantal, alphabetic, and others – often overlapped and mixed up in rich syntheses of functions, forms, and meanings.

Among these syntheses ... the map is comparatively novel. Most English speakers use "map" in a straightforward way to describe an artifact, still commonly printed on paper if increasingly taking electronic form, that selectively links places in the world (*theres*) to other kinds of things (to *thises*), to taxes, for example, and to voting rights, to species abundance, and to the incidence of rainfall. They do this to underwrite the reproduction (or the contestation) of the social relations of power.

That is, maps are more or less permanent, more or less graphic artifacts that support the descriptive function in human discourse that links territory to other things, advancing in this way the interests of those making (or controlling the making) of the maps.

These maps have comparatively shallow roots in human history, almost all of them having been made since 1500. In fact almost all the maps ever made have been made during the past hundred years, the vast majority in the past few decades. So many maps are made today, and they are reproduced in such numbers, that no one any longer has *any* idea how many. The maps printed annually by no more than the world's newspapers easily number in the billions.

In contrast, the maps surviving from everywhere in the world for all of human history prior to the rise of the modern nation-state number, in a very inclusive definition of the map, in the very low thousands, as if all the humans on the planet had made a single map each year – one here, another there – across the preceding couple of millennia.

Paralleling the explosion in map *numbers* has been a corresponding *penetration* of the map into ever deeper recesses of our lives. If there *is* some sense

in which maps may be said to have existed in the ancient and medieval worlds, they were confined to sporadic large-scale property-control, and rare small-scale cosmological-speculation functions.

This is to say that starting around 2300 BCE, Babylonian scribes made large-scale drawings of temples, houses, and fields that might have been related to property transactions; that during the eighth century CE, Japanese scribes made large-scale drawings of paddy fields to document ownership during a period of intense landholding consolidation; that from the twelfth through the fifteenth centuries CE, English scribes made large-scale drawings of monasteries, cathedrals, and fields, invariably for planning and legal purposes. And so on.

That is, a very large-scale, graphic, property-control function can be documented prior to the emergence of the modern state, sporadically and discontinuously, in various places around the world, but there is no suggestion that they participated in *anything* like a broader mapmaking tradition.

For example, there were no connections to the rare, small-scale cosmograms that can also be documented from equally disparate times and places: to the so-called "Babylonian World Map" of c. 600 BCE, for example; to medieval European *mappaemundi*; or to the Buddhological world maps such as the Japanese Gotenjiku Zu of the fourteenth century. Again, nobody doubts that these drawings participated in local traditions of cosmological speculation, but the lack of *any* connection to the large-scale property-control tradition makes it hard to maintain that there was any sort of overarching *mapmaking* tradition to which these drawings could be tributary, much less a mapmaking tradition that penetrated to any degree at all the lives of ordinary men and woman.

Contrast this, now, with the radically different situation that dawns with the sixteenth century when vast swaths of territory were increasingly subjected to systematic surveys by newly self-conscious states:

- In 1559, for example, the Hapsburg emperor, Philip II of Spain, commissioned a detailed survey of his possessions in the Netherlands, in 1566 of those in Spain, in 1575 of those in southern Italy, and in 1577 of those in New Spain.
- In 1591, the Japanese hegemon, Toyotomi Hideyoshi, ordered all daimyo to submit summary cadastral records and maps for the construction of a country-wide cadaster, and the shogun Tokugawa leyasu ordered the submission of a second set of cadastral and cartographic documents in 1604.
- In 1663 Louis XIV's minister for home affairs, Jean-Baptiste Colbert, commissioned the collection of surveys and maps to cover all of France.
- While in 1666 the governor of Siberia commissioned the mapping of the territories under his control.

In fact, *most* early modern states initiated projects like these.

If not all were completed as initially hoped – for example, Philip's of New Spain wasn't, returns from Hideyoshi's request were spotty – the efforts did lay the ground for increasingly comprehensive and intrusive surveys, including the nineteenth century inauguration of national topographic mapping programs which were widely completed during the twentieth century; as well as the production, to give *one* example, of fire and insurance atlases that not only posted the ground plans of individual homes but included the construction details of heating systems.

Today we map the weather in something approaching real time, the locations of sex offenders, the historical ecology of Upper Penitencia Creek, school attendance zones, atmospheric ozone, the conversion of rainforest to farm land, street vendors in Ho Chi Minh City, regularly-updated locations of roadblocks in the West Bank, reported instances of the West Nile Virus, the tribes of San Francisco, the locations of tomorrow's highway-construction delays, Zagreb's Green Horseshoe, cell phone towers, the tax value of homes, bus routes, bike paths, prison expenditures in Brooklyn by census block, consumer preferences by ZIP code –

Is there *anything* we *don't* map? So pervasive and taken for granted are maps that it is hard to accept the *recency* (and the continued relative isolation) of their general use, or to appreciate the seventeenth century *explosion* in their numbers that we continue to experience today.

# There Were No Maps Before 1500

Okay, okay, so this is obviously hyperbole and it probably would have been better say there were no maps before 1400, but I'm desperate to arrest the course of the insane idea bruited about – often by people who know *nothing* about it – that maps are this universal human construct; that they've been around since before recorded time (*since before writing*); that they stand outside history. Now I'm *not* saying maps had *no* role in human affairs prior to 1500, but that after 1500 maps began to play the role they continue to play today.

The decision to draw the line here is like Ian Hacking's drawing the line for the birth of statistics at 1660. It's not that there hadn't been all kinds of precursors – the tossing of Sumerian knucklebones, dice throwing by Marcus Aurelius, ninth century Indian theorizing about probability – but that, "We do not ask how *some* concept of probability became possible. Rather we need to understand a quite specific event that occurred around 1660: the emergence of *our* concept of probability." Why? Because for Hacking the search for preconditions is more than an an effort of historical exploration: "I am inclined to think," he's said, "that the preconditions for the emergence of our concept of probability determined the very *nature* of this intellectual object," and, therefore, the very *nature* of ... quantum mechanics, statistical inference, and inductive logic.

I think this is as true of maps. The point is not to know that some twelfth-century monk was able to make a plan of his monastery – humans have had the capacity to do this since they were humans – but rather why no one felt it was worthwhile to follow up his idea, to make a plan of the fields outside the monastery, a plan of monastic holdings, a plan of the route from Canterbury to Southwark, why the idea died; unlike the idea which, when developed in the sixteenth century, didn't die but rather flourished in the most astonishing fashion.

What I'm saying is that for all intents and purposes, before 1500 – okay maybe 1400, and maybe 1200 in the case of China – *people didn't make maps*. And that *that's* why uncontested maps more than five hundred years old are rare at any scale from anywhere in the world.

Now there are *some*, but the significance of the data is obvious: human societies didn't need maps and got on handily without them for hundreds of thousands of years. Yet during the last two or three millennia BCE, larger, more complicated societies including China, Babylonia, Egypt, perhaps the Indic societies centered on Mohenjo-Daro and Harappa, began to articulate graphic notation systems, sporadically and apparently independently, but among and continuous with other indigenous textual productions – memorial inscriptions, memory aids, almanacs, genealogies, inventories, histories, and descriptions of routes and territory (in mixtures of sculptural, pictorial, pictographic, syllabic, consonantal, and/or alphabetic forms) – that linked location with rights and obligations (as in the large-scale property maps) and with speculative attributes of the larger environment (in the cosmographical diagrams). Similar graphic notation systems filling related social functions emerged *fitfully* in other ancient civilizations, again apparently independently, even acknowledging the extensive trade and other connections among these groups, and the cultural exchange that undoubtedly took place.

The articulation of similar notation systems in so many of these societies strongly supports the notion that map discourse functions of this character inevitably emerge in societies whose increasing size and complication call for them, of which, again, the best example is China.

But the *sporadic* nature of this articulation no less strongly suggests that at the size and degree of complication reached by most ancient civilizations, the map discourse function *as it has come to evolve* could be satisfied by other, betterestablished discourse functions (generally scripted and/or numeric); so that the map discourse function *failed to establish itself* no matter how many times it was seeded. The map discourse function is *nowhere* well-rooted until the rise of the early modern state (which in China may mean the Song), with which it co-evolves as an instrument of polity, to assess taxes, to wage war, to facilitate communications, and to exploit strategic resources.

# The Rise of Mapmaking in the Early Modern State

It comes down to this: few *if any* of the graphic notations produced in ancient or medieval civilizations would be considered maps today. The things we now recognize as maps gained currency only in the last four or so hundred years, and within this period only in relatively stable states with entrenched, centralized bureaucracies and well-established academies.

That is, in 1400 few people used maps, but by 1600 people around the world found them indispensable. There is a divide here that is impossible to evade. The dates at which maps *really* begin to appear in the historical record is indicative:

- Islamic maps may date to the tenth century, but they don't become common until the *fifteenth* and *sixteenth* centuries;
- the oldest surviving map of China may be from the second century BCE, but maps aren't common until the twelfth and only become abundant in the seventeenth century;
- large-scale Japanese maps may survive from the eighth century, but national and provincial maps only begin appearing in the late *sixteenth* century and are not common until the *seventeenth*;
- the oldest surviving Hindu globe is from the *fifteenth* century;
- Vietnamese and European maps become plentiful only in the *fifteenth* and *sixteenth* centuries;
- Mesoamerican maps survive largely from the sixteenth century;
- Malay maps from the *sixteenth* century.

Again and again we find large, centralized societies, everywhere in the world, inaugurating mapmaking traditions as part of their transition to the early modern state (again, a transition China may have begun in the Song).

Why? What was it that happened after 1400 that called people to start making maps?

The canonical answers, with their focus on so-called "scientific" mapmaking and their dependence on the presumption of a European exceptionalism, obviously can't account for the precedent developments in China or the parallel ones in Japan and elsewhere.

But they're largely irrelevant even for Europe.

These canonical accounts have always focused on the small-scale mapping of the world and the heroic growth of European knowledge, a story that accounts for *none* of the eruption of large-scale mapmaking that produced the vast bulk of the new maps in Europe, for example that of the northern Italian plains. There, extant maps predating the fifteenth century, can be counted on the fingers of one hand, but

in the sixteenth century mapmaking for border control, for water management, for treaty negotiations, and other such uses ... *explodes*. There's no other word for it.

- In the case of Venice, less than a single percent of the *ten thousand maps* archived by the Venetian state predates 1565.
- In the case of Florence, only a dozen maps among the *ten thousand* archived by the Florentine state predates 1565, and the bulk of them, devoted to property control, dates from the seventeenth century.
- The offices commissioning most of the vast Milanese archive of over 76,000 maps were all founded in the sixteenth century.

Identical accounts can be given for the Papal States and for Naples: *minuscule* numbers of maps before 1500, but afterwards ... a cornucopial abundance of mostly large-scale administrative maps.

And identical accounts can be given for the rest of Europe, and outisde Europe, in Russia, China, and Japan, where by the late seventeenth century, as Mary Elizabeth Berry has put it, literally thousands of Japanese maps covering, "virtually every domestic subject and in virtually every format," had issued from government offices and commercial presses.

The explanations for this explosion in mapmaking vary from place to place; but the general implication that mapmaking emerges as a rationalizing tool of control during periods of relative or increasing prosperity in early state economies is broadly supported, where the signal ability was that of the map ... to perform the shape of statehood.

It's important to remember that if the map was a novel function during the fifteenth, sixteenth, and seventeenth centuries, so was the state.

Although today we take the state for granted – exactly as we do the map – nothing like the modern state existed in earlier periods. Doubtless there were earlier polities that resemble the modern state in many ways – the Greek *polis* does, the Roman Empire does, China does under the Tang – but they differ from the modern state in *essential* ways, and in any case the modern state did not derive directly from any of them.

Although – again like the map – the state is more readily exemplified than defined, experts on the state can point to a number of characteristics that states invariably possess, among which the development of more or less permanent, more or less impersonal political institutions is paramount.

Evolving from a period in which in loyalty had been offered to ones lord, to ones immediate community, and to ones family; and that was typified by a powerful sense of mutual obligations among face-to-face acquaintances, this *new* political structure with its *impersonal* institutions and ultimately *abstract* character required new forms for its embodiment.

Contemporary scholarship is unanimous that the map possessed an all but unique power to give the elusive idea of the state concrete form. As Martin Brückner argues about the young United States, "The image of the national map was one of the few visual artifacts demonstrating what many perceived to be either an abstract or even untenable fiction, namely that there could be a national union between disjointed regions and politically disparate people." iv

At the same time the maps also spoke to outsiders, as in Qing China where Laura Hostetler has argued that, "Using scaled maps ... was an effective way to stake out claims of empire to an encroaching Europe; the Kangxi atlas defined what China was territorially to the rest of the early modern world;"v as also in the case of Britain, whose imperial maps sought, Brückner insists, "to persuade the maps' readers on either side of the Atlantic of British ownership rights regarding the North American continent."vi Similar conclusions have been reached with regard to early modern – and even much later – mapping programs in France, Thailand, and elsewhere.

The most striking feature about all these assertions is their persuasion that the map was an artifact that *constructed* the state, that literally *helped* to bring the state into being. It's almost as though it were the map that in *a graphic performance* of statehood conjured the state as such into existence: out of the disjointed rabble of the American colonies, out of the far-flung possessions of Chinese emperors, out of the territories of the recently warring daimyo of Japan, out of the disparate peoples of tsarist Russia, out of the ... *jungles of British Guyana*.

Thongchai Winichakul has termed this map-made construct the *geo-body* and has characterized the emergence of Thailand's geo-body as "a victory of mapping." The geo-body is produced by mapping in three distinct but interdependent ways:

- 1) Mapping requires that the state be something mappable, that is, a *thing*, with edges, a geo-body.
- 2) When mapped these borders establish a shape, the nation's visual form; and this rapidly becomes iconic, totemic.
- 3) Through the map's presentation of the state *as an existent thing*, its origins *in history* are obscured. This promotes rhetoric about the inviolability, and so the necessity of defending borders, which returns us to the first way maps produce the geo-body.

Large-scale property mapping may seem far removed from these sorts of national considerations, but the fact is that large-scale property mapping, state and province-scale mapping, and small-scale regional and world mapping were reciprocally supportive.

In Japan, for instance, Hideyoshi conceived of mapmaking as a localized and incremental program which, while an undoubted expression of state control, was more importantly, *an instrument of conversion* through the collaborative, ongoing

labor of mapping itself. As Mary Elizabeth Berry put it: "Precisely because union was fractious and unfamiliar, cartography served the conquerors by instilling a fugitive idea of cohesion, not by reflecting any palpable reality ... In this way Hideyoshi and his successors not only normalized a nascent polity but invented, and instructed countless participants in the very imagining of 'our country'."

In Russia, too, the unabashedly local maps made during litigation over property represented, in Valerie Kivelson's words, "the authority of the central state in the provinces. They exhibit[ed] the skill of the central state apparatus at extending its influence and bringing its routinized practices and language to the local arena. The interests of center and periphery intersect[ed] in the use of the maps." ix

While large-scale, local mapping invokes the state's authority, small-scale mapping allows the state to emerge with sharper focus against the images of other states in a world context. In Japan's case, Jesuit maps brought about a heightened consciousness of "our country" by depicting alien worlds, or, as Berry has it, "A 'Japan' assumed its strong cartographic profile as attention to the globe and lands that were 'not Japan' reoriented the geographical imagination." And in the cases of Russia and China, Kivelson and Hostetler have both stressed the mutual awareness that maps helped provoke.

Examples of this sort of cross-scale reinforcement of the "reality" of the state can be multiplied almost endlessly as states proliferated in the nineteenth and twentieth centuries. In India, for example, and Israel – states scarcely sixty years old – identical patterns of map use can be found.

#### As Maps Affirm the State, the State Affirms the Map

What cannot be overlooked is what gave maps their ability to embody this novel entity in the first place. Since scholars are unanimous that maps helped to bring the state *into being* – that maps helped *construct* the state – it certainly can't be the map's putative ability to "represent a part of the earth's surface." After all, it was the maps that *conjured up* borders where none had existed (especially well documented for the United States, Russia, Thailand, and colonial British Guyana); the maps that *summoned* unity from chaos (as we have seen for Japan, Russia, and the United States); the maps that *enrobed* the shapeless (as in the case of China); that is, the *maps* that endowed *with form* what from the beginning had been no more than a dream, (the dream of every early modern state).

But then, thinking about the map as a representation had always been a mask, a cloak, a way of making the *creative* aspects of mapmaking ... disappear. From their inception it had been essential that states appear as facts of nature, as

real enduring things, things like mountains; and at all costs to obscure their recent origins in violence and their tenuous holds on tomorrow.

And maps were able to grant this precisely because maps too had been constructed as facts of nature: "We no more than show what exists," said the maps (even today they say this about the borders between Pakistan and India, Israel and Palestine, India and China). What maps thereby *avoided* saying was, "Exists, yes, but only on these maps which, in fact, create and affirm their existence," even as the maps created and affirmed ... *their own existence*, most effectively by hiding their own recent origins ... *in the state itself*.

In effect, maps are systems of propositions, where a proposition is nothing more than a statement that affirms (or denies) the existence of something. As such, maps are arguments about existence. And if they began by arguing for the existence of paddy fields, long fields, and manor lands; the nation-states the fields came to compose; and the world composed by the nation-states, *maps have gone on to a long career rich in the affirmation of the existence of a bewildering variety of things*, the island-continent of California, for instance, the Great American Desert, and the open polar sea.

What these have in common with geologic strata, frontal weather systems, and the hole in the ozone is that they're all *very hard to imagine* without the creative intercession of the map. It's salutary to remember that this too is what nation-states once were, *very hard to imagine without the creative intercession of the map.* How did Brückner put it? "The national map was one of the few visual artifacts demonstrating what many perceived to be either an abstract or even untenable fiction, namely that there could be a national union between disjointed regions and politically disparate people." By arguing for the nation's existence with all the facticity at its command, the map turned the fiction ... into a fact.

## Maps Unleashed

But as systems of propositions, maps are necessarily composed of signs (the propositions are embedded in signs), where signs are unions of signifieds (the subject of the proposition, say the *state*) and signifiers (the marks put down on the paper, say the *lines* supposed to be the borders). The signifieds and the signifiers are united by a code. In school we're taught to look for this code in the legend – a star means a capital – but the legend only displays the top part of the code, the part of the iceberg above the water.

All the submerged part, *that* part of the code is taken for granted: the way locations on the map refer to locations in the world, the way the words work (words and letters themselves are signs), the way the lines work (and that they work in different ways, the lines *around* the map in one way, the lines *on* the map in others).

These relationships, between the signifieds and the signifiers, are wholly conventional – essentially arbitrary – so that the connections between signifieds and signifiers are, for all their taken-for-granted quality ... never secure.

And from the beginning the signifiers have been slipping their moorings.

What this has meant has been that from the beginning they could have a life of their own ... *independent* of the needs of the state or the interests of property, or even of a commitment to represent the world. And they began to live it immediately.

For example, as early as 1516 a map of an imaginary island was published as the frontispiece to Thomas More's Utopia, and over the next five hundred years the use of maps to lend credence to *imaginary* places exploded too. With the publication in the middle of the seventeenth century of Madeleine de Scudéry's Carte de Tendre the door was opened onto the instantly popular world of allegorical maps (the "Map of Tenderness," the "Map of the Realm of Love," the "Map of Marriage") and with this ... imaginary and allegorical maps proliferated together. In the later seventeenth century Johann Baptist Homann made maps of the utopian Schlaraffenland. A couple of decades later Matthaus Seutter was mapping an "Attack of Love." In 1726 Jonathan Swift famously published *Gulliver's Travels* with its maps of Lilliput and Houyhnhnms Land, as famously Robert Louis Stevenson published his map of Treasure Island in 1883. In the twentieth century the *allegorical* map stream dwindled – though it very much trickles into the present – but on the other hand, the mapping of imaginary places swelled into an Amazon at flood. The potent examples of E. H. Shepard's maps of the "100 aker wood" and Toad Hall, and especially J. R. R. Tolkien's maps of Middle-earth in *The Hobbit*, and his son Christopher Tolkien's maps in *The Lord of the Rings*, inspired everyone with a pen – or a mouse – to start making maps of imaginary worlds, maps which turned into game boards (see Dungeons and Dragons) which in turn evolved into map-based video games, like Grand Theft Auto, and so into massively multiplayer online role-playing games like World of Warcraft, that is to say ... into an enormous industry.

Even as these heterodox uses of maps were expanding *others* were evolving that on occasion refused to exploit even the propositional character of the map, uses that were capable of consuming maps whole, almost as *free signifiers*. This was the world of map art, initially unleashed by the spirit and practice of collage in the years following World War I as Dadaists and Surrealists began to use maps in their work. Since then Lettrists, Situationists, Pop artists, Earth artists, Conceptual artists, Fluxus artists, and others in ever growing numbers have found in the map a congenial object, a fruitful subject, and/or a productive method. Today it's hard to keep track even of map art exhibitions so numerous have they become, and art about maps, of maps, and resulting in maps, fetches insane sums at auction.

Whatever all this is about – and it's about many things – it's clear not only that it makes a mockery of the traditional claim that maps are in any sense "a

representation of a part of the earth's surface," even as it illustrates, indeed illuminates, the map's propositional character; but also that it makes a mockery of any idea that the state and its interests so monopolize the map that it cannot, and has not been released to other functions.

Just as the characteristic alibi of the map *to be an aid to navigation* obscures its use in framing the state, bounding jurisdictions, and controlling property, so the idea that it does *nothing else* obscures the map's use as ... something to tuck under a dresser to keep it from wobbling. It's bootless to pretend that the map grew to its contemporary prominence for some purpose other than underwriting the reproduction, if increasingly the contestation of the social relations of power; and it would be stupid to overlook the prominence *of* the state in many of the map's alternative roles. It's hard, for instance, to miss the state in More's *Utopia*, in Swift's *Gulliver*, in Marvel's Universe, or for that matter in much of the map art that was created during the twentieth century; nor is it hard to argue that playing with mapped states only *strengthens* the authority of states on the normative map.

But it would be equally stupid to pretend that the state's stranglehold on the map isn't weakening. Cartography, the state's apparatus for training and constraining mapmakers, is certainly dead, and it doesn't look as though the professionals and academics are going to be able to repeat the "cartography" trick with GIS, computer, and Internet mapmaking. That genie seems to be very much out of the bottle, even when it has also to be confessed that much of it amounts to little more than sticking pins onto Google Maps. Even so, it's astonishing how many people are taking to mapmaking and the things they are mapping. And many of the maps they're making are extraordinary and powerful.

The map was *not* founded in some primal instinct, as Wilford imagined, "to communicate a sense of place, some sense of *here* in relation to *there*," vi but in the needs of the nascent state to take on form and organize its many interests; but the relationship between signified and signifier is ever precarious, and what meant one thing in the beginning can mean its opposite today, or nothing, or everything. People are at play in the field of map signs and the latent power of the map is waiting to be unleashed.

The map is dead! Long live the map!

Modern China (University of Chicago Press, Chicago, 2001), p. 80.

- vii Thongchai Winichakul, *Siam Mapped: A History of the Geo-Body of a Nation* (University of Hawai'i Press, Honolulu, 1994), p. 129. The following discussion of the geo-body is entirely derived from Thongchai.
- viii Mary Elizabeth Berry, *Japan in Print: Information and Nation in the Early Modern Period* (University of California Press, Berkeley, 2006), p. 79.
- ix Valerie Kivelson, *Cartographies of Tzardom: The Land and Its Meaning in Seventeenth Century Russia* (Cornell University Press, Ithaca, 2006), p. 54.
- x Berry, op. cit., p. 58.
- xi Wilford, op. cit., p. 6.

John Noble Wilford, *The Mapmakers: Revised Edition* (Knopf, New York, 2000), p. 6. Scott McCloud, *Understanding Comics* (Kitchen Sink Press, Northampton MA, 1993), pp. 9-16, quoted from p. 15 and 18.

iii Ian Hacking, *The Emergence of Probability: A Philosophical Study of Early Ideas About Probability, Induction, and Statistical Inference* (Cambridge University Press, Cambridge, 1975), p. 9.

iv Martin Brückner, *The Geographic Revolution in Early America: Maps, Literacy, and National Identity* (University of North Carolina Press, Chapel Hill, 2006), p. 121. v Laura Hostetler, *Qing Colonial Enterprise: Ethnography and Cartography in Early* 

vi Brückner, op. cit., p. 56.