





## CHAPTER FIVE

# Counter-Mapping and the Death of Cartography

Presentation may inject the map into its culture, but this does *not* obligate the culture to accept it, not without a fight at least, no matter how it's dressed, no matter its credentials, no matter the weight of the authorities from which it's issued. While I hasten to add that most maps *are* accepted—and accepted as unproblematic pictures of the real—this is *not* the fate of all maps; and while there are cases of maps being rejected as early as the 16th century, as we cruise into the opening of the 21st not only are maps being rejected with increasing frequency but a whole culture of *counter-mapping* has emerged. Rooted in map art practices that date to the early 20th century; in the mental maps movement of the 1960s; in Indigenous and bioregional mapping and critical cartography and Parish Mapping; with all kinds of fusion, interbreeding, and boundary crossing; and fueled by a widening perception of global injustice, it is counter-mapping that shows us where mapping is headed. While the hype focuses our attention on the new technologies with their satellites, their gazillion miles of optical fiber, their computer hardware, and their miraculous software (that is, on their extraordinary capitalization), it's the new attitudes, visions, and radical philosophies of the counter-mappers that are really taking maps and mapmaking in a whole new direction, a direction with the *potential* to free maps at last from the tyranny of the state.

It's easy to overstate this. Although the next four chapters will trace the evolution and very real achievements of the counter-mapping culture, I should acknowledge immediately how marginal and fragile it is. Yes, Google Earth has its ludic dimension—and we should revel in it—but it also has its military applications, and Google Earth merely hints at the insane apparatus of surveillance and control that the official world of maps and mapmaking has mutated into. If counter-mappers can make gateau out of technological crumbs, it's as well to admit that they're essentially unfunded, working in the refuge corners, and reaching small if growing audiences. Yet counter-mapping practices played an essential role in the creation of the Territory of Nunavut where the Inuit became the first Indigenous peoples

in the Americas to achieve self-government in recent times; and counter-mapping fuels the beating at the heart of the horrible situation in Palestine. It's not a practice to ignore.

These examples imply that counter-mapping is played out over long stretches of time—the counter-mapping that led to the creation of Nunavut began in the early 1970s, that of Palestine in the 1920s—but it doesn't have to be. Some maps elicit an almost *instant* counter-map, one of which at least bears the official name, *protest map*, that characterizes the class with which I begin. I'll follow the motives driving protest maps into "critical cartography," which, after having sketched the interests that "professional cartographers" have had in *marginalizing* mapmaking's critical past, I'll trace from its origins in the 16th century to the present. I'll then turn from this more or less "internal" critique to one mounted by "outsiders," outsiders including bioregional planners, Indigenous mapmakers, community mappers, Green mappers, and Common Ground's Parish Maps Project. In the next chapter I'll look at so-called Public Participation GIS and go on to describe the *effective* public participation geographic information systems mobilized by Guy Debord and the Situationists, Bill Bunge and the Detroit Expedition, and Jake Barton and the City of Memory. The chapter after that takes up the history and practice of map art. The concluding chapter is a case study of how counter-mapping has played out in Palestine.

## Protest Maps

Intriguingly enough, protest maps appear in three registers: that of the office, that of the streets, and that of the press. In the official register are the maps made to establish, advance, or illustrate . . . *official protests*. These protests are often, if not always, about other maps. In Hillsborough County, Florida, for instance, a "protest map" is attached to a "protest," where a protest is an official form on which objections can be raised to flood risk designations proposed by recently resurveyed flood maps.<sup>1</sup> Residents of Austin, Texas, are being encouraged to file similar protest maps, as indeed is anyone who feels ill-served by the maps of the National Flood Insurance Program that are being updated as part of the Map Modernization Program of the Federal Insurance and Mitigation Administration (FIMA). FIMA has even prepared *A Guide for Community Officials: Appeals and Protests to National Flood Insurance Program Maps* that describes the form that protest maps must take.<sup>2</sup> On the other hand, in Stillwater, Oklahoma, protest maps are prepared by city staff to help planning commissioners prepare for public hearings on proposed Street Improvement Districts. These protest maps are of properties whose owners are protesting inclusion in the proposed districts. Such usages of "protest map" are widespread.

In the register of the streets are maps *of* or *to* protests. That is, these are maps that let you know how to *get to* protests. As a genre they seem to have come into their own during the Republican National Convention of 2004 in New York when it seemed like every newspaper and blog carried maps not only of the convention sites, but of the sites for protests too. These rapidly became known as protest maps, so that invitations such as this have become common: "If your group wants to be represented at the event (table, leaflets, protest maps, etc.), please get in touch with



us.” The etymology is apparent in: “I would like to invite you to attend our protest. Maps of campus are available and protesters are asked to arrive at the mall by 12:45 because, while Bush is inside, the event media will have nothing to cover except the protesters outside”; and also as in, “Hi everybody. There is a protest on the Balnagown estate of Mohamed Al Fayed on Sunday 27th April at 12 noon. This is because of Mr. Al Fayed’s continued vociferous opposition to land reform. Dubbed the ‘Big Red Ramble’ because of him describing the Scottish Parliament as ‘communist’ (!?), all are invited for a peaceful protest. Maps provided. We will cause no damage and leave only footprints.”<sup>3</sup>

Many times protests like these are planned with sufficient publicity to give governments opportunity to respond; or with experience governments develop policies for dealing with protests.<sup>4</sup> Often these result in maps posting the sites where protests are *acceptable*—official protest sites<sup>5</sup>—and it happens (imagine!) that these then provoke the production of maps protesting the locations of the acceptable protest sites.

A protest in essence is a solemn declaration of opinion, usually of dissent, and this sense is nicely focused by the official protest maps with their need to be “certified by a registered professional engineer or a licensed land surveyor,” unless derived from “authoritative sources” (such as the Bureau of Land Reclamation or a state department of highways and transportation). The process is formal, carefully framed, and the maps that resolve the protests have the force of law. These maps are members of a whole class of documents in an enormous system of dispute resolution that runs from the complaint counter of your neighborhood big-box retailer up through the appellate courts. But protests may also be registered in such dramatic, typically collective forms as strikes, boycotts, rallies, and marches and may even involve violence; these are the sorts of protests the maps on the table with the leaflets are directing people to. What we’re referring to as the register of the *press* includes maps that, like *official* protest maps, are actual protests (not merely of or to them), but that at the same time are distinctly *unofficial* (often *anti-official*) and partake of the noisy, public, self-consciously rhetorical character of *street* protests, oriented more toward ferment than resolution.

Doubtless there are earlier protest maps in this press register, but perhaps the most famous is “The Gerry-mander: a new species of monster, which appeared in Essex South District in Jan. 1812” (Figure 5.1). With a few strokes of the pen, the map transformed a recently configured Massachusetts electoral district into a kind of winged salamander, with a name that combined that of the lizard with that of Massachusetts governor Elbridge Gerry. Engraved by Elkanah Tisdale for the March 26, 1812, issue of the *Boston Gazette*, the map was widely reprinted—broad-sides appeared immediately—by Federalist sympathizers protesting the redistricting scheme that gave Gerry’s Republicans, if not Gerry himself, a decisive advantage in the upcoming state elections.

Tisdale’s map is sometimes regarded as a metaphorical or satirical map, but then satire—trenchant wit, irony, or sarcasm used to expose and discredit vice or folly—is a frequent companion of protest. Heavier on the sarcasm but playing in a related key is McArthur’s Universal Corrective Map of the World. Stuart McArthur, an Australian, was a 12-year-old when a teacher told him it was wrong to orient a world map he’d drawn south up. He was 15 when, an exchange student in Japan, he was ridiculed by his fellow American exchange students “for com-

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A new species of *Monster*, which appeared in *Essex South District* in Jan. 1812.



"O generation of Vipers! who hath earned you of the wrath to come?"

**FIGURE 5.1.** The original 1812 gerry-mander map. This map transformed a recently configured Massachusetts electoral district into a kind of winged salamander.

ing from the bottom of the world." He was 21 when he published the map that fulfilled the vow he'd taken in Japan to set things right, protesting with his map not only the usual north-up orientation, but people's prejudice against the south: "Never again," a text on his map declares, "to suffer the perpetual onslaught of 'downunder' jokes—implications from Northern nations that the height of a country's prestige is determined by its equivalent spatial location on a conventional map of the world."<sup>6</sup>

### Maps in Protest

In a world dominated by maps oriented north up, it may happen that *any* map with south on top comes to be taken as a kind of protest against the hegemonic point of

view, but protest usually involves an awareness not only of what it's in favor of (south up), but of what it's opposed to (north up). In fact, protest is *often* clearest about what it's against. (When "protest" is used affirmatively, as in a phrase like "protested his innocence," it's always in the face of denial or doubt.) What makes McArthur's Universal Corrective Map of the World a protest map is the "Corrective" in his title, which inescapably brings to mind the view being corrected, just as the "Gerrymander" brings to mind the shape of electoral districts less easily transformed into lizards. It's rarely that facts are being contested in protest maps in the press register, as they always are in the official register. Instead it's the way the facts are framed. "Gerrymander" does not question the shape of the new electoral district. It insists that we look at it askance. The Corrective map does not propose a new world. It asks that we look at the old world anew.

Here's another example. In a discussion paper of 1971, the Detroit Geographical Expedition published a map it had compiled of the "Citywide Pattern of Children's Pedestrian Deaths and Injuries by Automobiles." The map displayed the deaths and injuries as dots on a background of Detroit streets. It also indicated the location of the city's black population with a meandering dashed line. It's not hard to see that most of the kids killed by cars lived in black neighborhoods, but this is a conclusion someone looking at the map has to draw. A couple of pages further on, the Expedition zoomed in to give us a map that drew the conclusion for us: "Where Commuters Run over Black Children on the Pointes-Downtown Track" (Figure 5.2). There's no mistaking the protest here. The map no longer displays a "pattern" but locates crime scenes, and the deaths are no longer caused by automobiles but by drivers specifically characterized as commuters. Any Detroiter would have known that these commuters were white and on the way between their work downtown and their homes in the exclusive Pointes suburbs to the east. That is, this is a map of where white people as they rush to and from work run over black children. That is, it's a map of where white adults kill black kids. It's a map of racist infanticide, a racial child murder map.

Again, "Where Commuters Run over Black Children on the Pointes-Downtown Track" proposed no data that hadn't been on the less inflammatory "Citywide Pattern of Children's Pedestrian Deaths and Injuries by Automobiles." It did, however, ask that we think about the data differently. Gwendolyn Warren wrote about this difference in an article that accompanied the maps:

The way the city is situated, there is the central place downtown and then there are rings which go outside of that and the big ring right outside downtown Detroit is the Black community. All the area about a mile going out from downtown Detroit is one-way traffic and runs right through the heart of the black community. And on one specific corner in six months there were six children killed by commuter traffic. But, naturally, these deaths of the children or the injuries or whatever it happened to be were disguised as something else. They never said that a certain business man who was working for Burroughs downtown who was on his way to Southfield went through the Black community by way of this commuter traffic and killed my people—Black children. Even in the information which the police keep, we couldn't get that information. We had to use political people in order to use them as a means of getting information from the police department in order to find out exactly what time, where, and how, and who killed that child. The fact that it actually establishes a pattern proves it is not "accidental."<sup>7</sup>







below it; the Americans likewise. "Containment" has been a mathematically proven bankruptcy for almost twenty years.<sup>9</sup>

By dramatically reframing simple truisms like these, *The Nuclear War Atlas* gave people whole new grounds for protesting nuclear weapons.

If the poster edition of *The Nuclear War Atlas* had been self-published and largely distributed by its author, Kidron and Segal's 1981 *The State of the World Atlas* was a whole other story. The initial object of their protest was the state: "It is our contention that the destructive aspects of the state have come crucially to exceed the constructive ones," they wrote in the atlas's introduction.<sup>10</sup> Their maps documented the way states have proliferated and expanded into the remaining nonstate areas of the planet. Their maps documented the military preoccupation of states and their squandering of resources on war. Their maps documented the unequal distribution of state resources, and the impact of the state on labor, society in general, and the environment.

The maps made no pretense about being neutral, and if the first edition's maps framed their subjects with titles like "The State Invades the Sky," "Arms for the Sake of Power," "Bullets and Blackboards" (mapping the ratio between soldiers and teachers), "Slumland," "Fouling the Nest," and "The Dying Earth," the second edition added incendiary subtitles for any who might have missed the point.<sup>11</sup> For example, below the title, "Scourges of the State"—a map of prisoners, capital punishment, state assassinations, and torture—the second edition now appended: "All states are armed against their citizens. Many states use exceptional methods to terrorize them." A quarter of the volume was taken up by notes about Kidron and Segal's data sources. One of these commenced, "The morally repulsive priorities of the state can be illustrated in many ways; but perhaps nowhere more eloquently than in the comparison between expenditure on preparations to promote injury or death and expenditures to heal and sustain life." It is always possible to disagree with Kidron and Segal, *but it is never possible to mistake their point*, which, after all, was the purpose of their reframing.

Maps in this register do not have to be literally run through a press, nor of course do they have to be protesting the state of things in the world. Maps of this type have become ubiquitous on the Web where often they're protesting other maps. I've already discussed the mapping and counter-mapping of the results of the U.S. presidential elections of 2000 and 2004, but protest maps can also concern themselves with lesser if no less inflammatory issues. In 1931 Harry Beck made a sketch in an exercise book of a map of the London Underground.<sup>12</sup> Beck's ambition was to make the system intelligible by reducing its routes to vertical, horizontal, and diagonal lines; by increasing the scale of its route-dense center; and by eliminating surface detail except for an equally stylized Thames. Beck's map, many times revised and issued in uncountable forms and numbers, in time became an icon, not only of the London Underground, but of modern design. In 1992 the conceptual artist, Simon Patterson, produced a lithograph called *The Great Bear*.<sup>13</sup> Except for its title, which is a common name for the constellation Ursa Major, the print reproduced the then contemporary version of Beck's map except, when you looked closely, you realized that Patterson had replaced the station names with those of philosophers, actors, politicians, and others whom we sometimes think about as "stars." For example, Patterson renamed the stops on the Bakerloo line after engineers, those on one branch of the Northern line after musicians, and those on the other branch after

movie stars. The Fra Angelico station stands where the Saints line crosses the Italian Painters line; and Geoff Hurst, on the Footballers line, is only a stop away from William Randolph Hearst on the Louis line. Patterson has worked in an equivalent fashion with paint chips, the periodic table, electric circuit diagrams, slide-rules, air traffic route maps, constellations, and *The Last Supper* (for example, *The Last Supper Arranged According to the Flat Back Four Formation (Jesus Christ in Goal)*). "I like," Patterson says, "disrupting something people take as read."<sup>14</sup>

*The Great Bear* soon became an icon in its own right (a copy hangs in the Tate), and it attracted its own imitators: there was the *London Undergrub* (all the stations named after food), the *Undergroans* map (an "impolite" version), the *Untergrund* map (in German), an Anagrams map (in which anagrams had been made of all the station names), *The Company Sponsored Map* (with the names changed to match, or nearly match, the name of well-known companies), an upside-down version, and one on which the Underground lines had been flipped over the Thames so that south London now had most of the lines.<sup>15</sup> In 2005 Thomas David Baker produced the *Moviemaker Tube Map*: "I liked *The Great Bear*," Baker wrote, "but I didn't like the way when a station was both on the Artist and the Footballer line that the replacement person was just an Artist or a Footballer, but not both. Doing it for movies—using Director, Actor, Cinematographer, etc. for the lines—meant I could make sure that each individual representing an interchange had done the job represented by each line that goes through that station." In early 2006 the *Musical Map* appeared in *The Guardian*, with each line named for a type of music (soul, reggae, pop, etc.) and each station after an artist of that type (The Four Tops, Peter Tosh, U2, and so on). Artists at intersecting stations had to fall into the mixed genre of the intersecting lines (and so Prince where the Funk line intersects the Pop line). This map prompted the creation of still other versions.

Geoff Marshall, a tube fanatic (and holder of the world record for going round the entire system in the least amount of time), decided to gather these maps together into a folder, "Silly Tube Maps," on his website.<sup>16</sup> In addition to maps on which the names had been changed, Marshall posted a score of others (a map of stations with toilets, a map showing travel times between stations, a map on which dotted walk lines connected stations less than 500 meters apart), and links to still others, including the London Tube Map Archive with its three dozen versions. Marshall made variations of his own, including *The Real Underground* that showed which portions of the Underground *were* underground, and a map on which the station names had been omitted, which became the basis for further variations on the part of others (the *London Undergrub* had in fact been inspired by Marshall's site). In March 2006, a lawyer representing Transport for London (TfL), which owns the Tube Map, threatened to shut Marshall's site down unless Marshall removed "ALL images which infringe my client's intellectual property [by] midnight on Monday 13 March." Marshall immediately posted the threat, which stirred a storm of controversy and finally . . . a protest map.

Needless to say, it's in the style of Beck's tube map. However, here the stations have been renamed "in," "March," "2006," "Transport," and so on, to create the sentence, "in March 2006 Transport for London's lawyers suddenly took offence to tube maps designed in the style of the Great Bear by Turner Prize nominated artist Simon Patterson being hosted by world record holding tube enthusiast Geoff Marshall and used legal bullying to force their removal. We think the people respon-

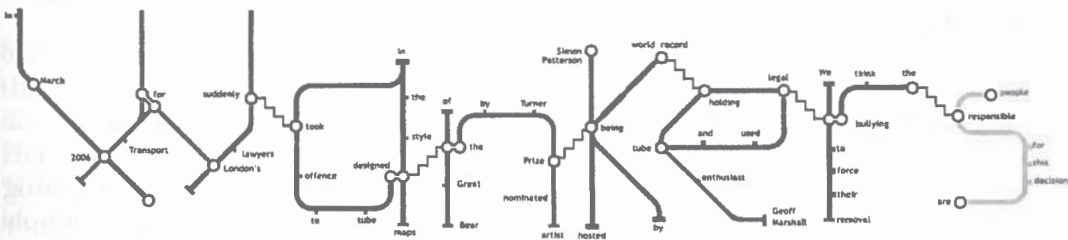
sible for this decision are,” and here you have to pull back to see the larger pattern made by the lines and stations which reads, in Harry Beckese, “Wankers” (Figure 5.3).<sup>17</sup>

The *Wankers* map embodies everything we have come to expect of a protest map. Its creator, who wishes to remain anonymous, spelled out his motivations for me:

I read Geoff's blog on the subject, and I thought, “what a colossal waste of public money” or words to that effect. Nothing he was doing was harming TfL, if anything, it was the reverse, and here they were, setting the packs of highly paid lawyers on to him, with my [expletive deleted] money. Particularly as it was just after the *Guardian* had published a map with musical artists, and made a big fuss of it. I think that's what inspired some people to create other maps—I saw some of the less functional maps as artistic endeavors. TfL knew he couldn't afford to defend himself; it seemed like corporate bullying, and it just stuck in my craw; even if you put the most benign view on their actions, they show a great misunderstanding of the internet and the difference between commercial websites, and personal sites; Geoff doesn't even carry any advertising, even though he gets a whole lot of traffic. At the time, I think it was Saturday 11 March, I had a fair amount of free time, and not much else to do, so I set about with a graphic package designing it. I thought it might cheer Geoff up a bit.

The map also makes it clear how hopeless the categorization of maps is. More than enough ink has been spilt already over whether or not Beck's original *Underground* map is a map, but only pedants refer to it as “the Diagram.” What type of map it is, however, is another question. Helen Wallis and Arthur Robinson may have regarded it as a “Route map,” whereas Erwin Raisz would have been more likely to call it a “Transportation map.” It's possible that none of these would have thought Patterson's *The Great Bear* was a map at all. Certainly none of them had a category for art maps, much less art map parodies (or parodies of a parody, for whatever else it is *The Great Bear* is certainly a parody).

Thinking about the *Wankers* map as a protest, however, gets at its motivation as well as its content and form, and motivation in the end is what really matters about all these maps. Like the anonymous creator of *Wankers*, their makers were all moved by a perception of injustice: to people who don't think they live in floodplains, to the voters of Massachusetts, to Australians, to the black children of Detroit, to the inhabitants of an earth threatened by nuclear holocaust, to victims of the state system, to Geoff Marshall. Thinking about these maps from the perspective of motivation gets at aspects of them that other ways of thinking about them can't, and it



**FIGURE 5.3.** The *Wankers* map. This map uses its very form to mount its protest and in an unmistakable way. Its author wishes to remain anonymous.



points up their critical take on the maps they're responding to, from flood maps, through the usual maps of nation-states, to property rights in maps of the Underground.

### Critical Cartography

But then, given their propensity to undergird the status quo—to instantiate the “real”—maps have been *critically* regarded from their very beginnings, though when critical cartography is usually thought about, it's thought about as something . . . recent. Actually it began in the 16th century.

The *standard* story is that critical cartography developed during the late 1980s and early 1990s in opposition to the hegemonic description of mapmaking as a progressive and value-free transcription of the environment. Included in this standard story is the 1986 “deconstruction” of the North Carolina state highway map that Fels and I did and that, revised, you're just read in Chapters 3 and 4; the 1987 publication of the first volume of Brian Harley and David Woodward's monumental reconstruction of the history of cartography; a series of polemics by Harley, especially the 1988 “Maps, Knowledge, and Power,” the 1989 “Deconstructing the Map,” and 1991's “Can There Be a Cartographic Ethics”; the first of a number of papers by Robert Rundstrom, in 1990, reassessing mapping among First Nations peoples; John Pickles's 1991 “Geography, GIS, and the Surveillant Society”; the 1992 Power of Maps exhibition I curated for the Cooper-Hewitt National Museum of Design and the accompanying publication of the original *The Power of Maps*; David Turnbull's 1993 critique, *Maps Are Territories*, from the perspective of the sociology of scientific knowledge; Doug Aberley's 1993 *Boundaries of Home: Mapping for Local Empowerment*; the 1994 Smithsonian edition of *The Power of Maps*; Jeremy Crampton's 1994 “Cartography's Defining Moment: The Peters Projection Controversy”; and Pickles's 1995 collection, *Ground Truth*.<sup>18</sup> Binding this stuff together was the nature of the critique, which was less about ferreting out bad maps or making better ones than about trying to lay bare, understand, and question the presumptions of professional cartography, “professional cartography” here embracing academic cartography, official mapmaking, and the mapmaking of the dominant map houses.

As a story about the origins of a now pervasive critique of the assumptions and practices of professional cartography, the standard story has undoubted merit: the decade did witness an unprecedented attack on the fundamentals of cartographic history, theory, and practice. But construing critical cartography in this narrow beam forecloses an awareness of both a precedent history of critique within the profession of cartography itself, and a much longer history of critical thinking in mapmaking as a whole.

### Cartographers Intentionally Foreclosed This Awareness

It's an interesting question, in fact, why we think about mapmaking as something . . . scientific . . . in the first place. Most of the examples we've just looked at imply that mapmaking is a lot more like talking, like writing. You want to direct protesters to a protest, you draw a map. You want to draw people's attention to where white

commuters kill black kids, you make a map. You want to help people navigate the Underground, you draw a map. Certainly there was nothing “scientific” about any of the maps in the early history of mapmaking, which were, in fact, *precisely* a kind of writing. At the moment I’m thinking about the *circa* 1407 map of Inclesmoor, West Riding, in Yorkshire, that was made in the course of a lawsuit<sup>19</sup>—and plenty of early maps were made in such cases<sup>20</sup>—but now I’m thinking about the duc de Lesdiguières suggesting to Henry IV that “Your majesty will understand much better than I can set it out in writing, if [you] will look at the map of Dauphiné with the Piedmont border.”<sup>21</sup> Nor do my examples have to be so idiosyncratic: *no* early surveying or cadastral mapping was scientific, no matter how systematic it may have been (though rarely was), any more than the mapping done by “cartographic” heroes like Mercator or Saxton or the Blaeus was. Actually, maps comprise what is in fact a literature and, like literature, has been a subject of criticism from the beginning.

Mitigating against *any* vision of this critical past, however, has been the conflation of *cartography*—a comparatively recent *professionalization* of mapmaking dating to the first third of the 19th century that was *itself* critical of earlier mapmaking practices—with the whole of mapmaking, most of whose history had preceded the emergence of cartography, and the rest of which paralleled it until cartography’s demise in the 1990s.<sup>22</sup> What professional cartography wanted was to be accepted as an academic science, one that progressed from the solution of one problem to that of another (as cartographers imagined other sciences), and to this end cartographers recast the past of *mapmaking* as an almost seamless accumulation of knowledge and technique, and renamed it . . . the history of *cartography*.

Important in this move was the work of Max Eckert, dating from the later 19th and early 20th centuries, work explicitly directed *toward the establishment of cartography as an academic science*, originally “to complement the traditionally practical and handicraft cartography,” but ultimately to supplant it.<sup>23</sup> Strategic here was Eckert’s effort to articulate mapmaking around a self-consciously hegemonic vision of timeless principles, what Arthur Robinson would later call “The Essential Cartographic Process.”<sup>24</sup> While, as we’ll see later, these principles were largely concerned with *design*, essential to Eckert’s program was the division of maps into two overarching categories: *general-purpose* (or *reference*) maps and *special-purpose* (or *thematic*) maps. This division isolated and so raised the visibility of a practice of small-scale, often statistical mapmaking that could be justified *as a subject in a university curriculum*, especially since it emphasized a division of labor between *technicians*, concerned with “practical and handicraft cartography” who were responsible for the reference (the topographic, the base) maps, and *scholars*, who created the thematic (the special purpose, the applied) maps.

The typification of maps actually emerged early in the history of mapmaking, but originally it was based on differences in scale. On the one hand were maps of the world as a whole, that is, *universal* or *general* maps. On the other hand were *particular* maps, that is, maps of continents, regions, countries, or even smaller parts. Here, for instance, from his *Dictionarium Britannicum* of 1730, is Nathan Bailey: “Universal maps, are such as exhibit the whole surface of the earth, or the two hemispheres. Particular maps are such as exhibit some particular part or region thereof.”<sup>25</sup>

This scale-based typology served from the 16th century into the 19th when

*geographers*, hoping to exploit mapmaking in their own struggle to get geography into the scientific academy, began distinguishing what they called “applied” from what they relegated to “geographic” mapmaking.<sup>26</sup> Here they were inspired by the examples of Carl Ritter and Alexander von Humboldt, and they showcased the high-quality maps of climate, hydrography, vegetation, anthropology, ethnography, and the like that Hermann Berghaus was making, along with such later distillations and revisions as those made by A. K. Johnston and others. As the century wore on, “applied maps” such as these were increasingly distinguished from less narrowly focused “geographic maps” at every scale. Eckert, who was indeed a geographer, refined these map categories in his 1908 paper, “On the Nature of Maps and Map Logic,” where he distinguished geographically *concrete* maps that “reproduce facts as they exist in nature, such as the distribution of land and water and of heights and depressions” from geographically *abstract* maps that “present, in cartographic form, the results of scientific induction and deduction and in most cases, can be traced back to the study of the scientist.”<sup>27</sup> The distinction, flattering to geographers, took hold, and in 1925 Eckert expanded on it in the second volume of his 1,500-page *Die Kartenwissenschaft*: “The applied map design is done at the desk of a scholar, because the practical cartographer has done enough in drawing a perfect base map,” Eckert wrote. “Only seldom does the real cartographer proceed to the field of applied cartography. It is generally known that he has other work to do. Moreover he has no time to care about scientific problems and their translation into cartographic form which is a full-time occupation, because he is already totally occupied with his manual, but nevertheless scientifically guided work.” As Eckert concluded, “The matter of applied map design is the very task of a geographer.”<sup>28</sup>

In the first cartography textbook in English, the *General Cartography* of 1938—that’s how recent all this “cartography” stuff is—Erwin Raisz distinguished between a pair of related categories that he called *general* and *special*, further refining the distinction in both a second edition of 1948 and a 1962 revision he called *Principles of Cartography*.<sup>29</sup> By 1962, however, Nikolaus Creutzberg had rechristened this *special* category as *thematic* (in fact in a paper of 1953), and Raisz incorporated this new term in his revision: “Maps,” Raisz now wrote in 1962, “are of many kinds. Perhaps the most important difference is between serial and individual maps. Large-scale topographic maps and charts come in sets and are usually made in government offices with highly specialized equipment and broken down to jobs with rather rigid standards. In the second class we have maps often on smaller scale which the individual can design and draw. In the first, the technical training is the more important; in the second, the knowledge of geography and certain ability in graphic expression.”<sup>30</sup> Marking the growing importance of this second, now “thematic” category was the simultaneous publication of Eduard Imhof’s *Thematische Kartographie* and other texts that soon followed: Erik Arnberger’s *Handbuch der Thematischen Kartographie* in 1966, Werner Witt’s *Thematische Kartographie* in 1967 (with a second edition in 1970), and Sylvie Rimbart’s *Leçons de Cartographie Thématique* in 1968.<sup>31</sup>

Implicit in the new classification was a narrative about the genesis of maps. Initially there were three steps. For example, Raisz had written in his 1938 text: “The process of revealing the Earth’s pattern has three phases: The surveyor measures the land, the cartographer collects the measurements and renders them on a map, and the geographer interprets the facts thus displayed.”<sup>32</sup> The problem with this



version was that it minimized the role of the cartographer, and Arthur Robinson soon collapsed the three phases into two. In his 1953 *Elements of Cartography*—which through its six editions would become the defining textbook for Anglo-American cartography in the second half of the 20th century—Robinson reconceived the process as follows: “The entire field of map making is usually thought of as consisting of two distinct phases. The first is concerned with the detailed large-scale topographic mapping of the land or charting of the sea. The remaining large proportion of cartographic activity is less clearly defined, being usually thought of merely as smaller-scale, special cartography, or simply as *not* the first mentioned.”<sup>33</sup>

That is, Robinson aggregated Raisz’s *surveying* to topographic mapping and Raisz’s *geographic interpretation* to what Creutzberg was rechristening thematic mapping. “Topographic mappers,” Robinson went on, “make maps from field or air survey and are concerned with such things as the shape of the earth, height of sea level, land elevations, and exact and detailed locational information. Generally speaking, this group, which includes the great national survey organizations, national land offices, and most military mapping organizations, makes the basic maps from which the other group starts.”<sup>34</sup> This “other group” did not make maps from surveys but “using the detailed maps, compiles from them the basic data required and then proceeds to add relationships, generalizations, and a host of other kinds of material. To this group belong the geographers, historians, economists, and many others of the social and physical sciences who are seeking to understand and interpret the social and physical complex on the earth’s surface.”<sup>35</sup>

Actually, this cartographic genesis creates three, not two, groups of mapmakers. In the first, as we’ve seen, are those responsible for topographic mapping. Typically government employees, these work with highly specialized equipment at carefully defined tasks including surveying, drafting, engraving, and printing. That is, these mapmakers are technicians, manual laborers, though an adherence to strict standards results in precision and accuracy. The second group uses the first’s data to interpret social and physical patterns. These mapmakers are scientists, university people, professionals, mind workers. However, because this intellectual work is based on the careful labor of the topographers, it inherits the accuracy and precision of these technicians. Everyone else—that is, you and me and very many mapmakers—falls into a third group *that is neither trained nor educated in mapmaking*.

Valorized this way at our own and the topographer’s expense were university cartographers and what was soon universally known as the thematic map. As it brought the thematic map to prominence, this typology also created a novel map type, the base map, rarely catalogued yet highly prominent in the literature. The base map was what university cartographers compiled from the technical work of the topographers: “All special-purpose maps are made on the foundation of a base map,” Robinson wrote in his first edition, where the base map was the subject of an entire chapter. “This base map is compiled first, and the accuracy with which it is made determines in large part the accuracy of the final map.”<sup>36</sup> The base map fails to appear in cartographic typologies, however, because once the university cartographer has performed his interpretative magic, the base map disappears, though as a ghost it has long haunted cartographic theory.

Now, classifications are systematic segmentations of the world. Ideally, they’re consistent, clearly demarcated, and complete; in other words, they obey unique classificatory principles, consist of mutually exclusive categories, and have slots for

everything in their purview.<sup>37</sup> It may be true that no classification has ever fully satisfied these requirements, but the schemes of Eckert, Raisz, Robinson, Imhof, Arnberger, and the others fall *wildly* short of the mark. Furthermore, the attendant story of how maps are produced is almost wholly untrue. Historically, it is simply false. I mean, it must be obvious that *none* of the maps made in the centuries prior to the inauguration of large-scale topographic surveys could have been based on them; but neither were the vast majority of later maps that were rooted in earlier mapmaking traditions, and these include most urban cadasters, railway maps produced by houses like Rand-McNally, early highway maps, small-scale thematic maps in atlases of the 19th and early 20th centuries, maps of diseases at large and small scales, Sanborn insurance maps, most planning maps, illustrative and advertising maps of all kinds, *ad infinitum*. Indeed, it is hard to say to what extent even today this genetic myth has much validity.

At midcentury, however, as university cartographers struggled to justify their positions on university faculties, none of this mattered. As students of classification have long observed, among other things classifications are about struggles for professional authority. Foreclosing one labeling option as they preset others, categories valorize *this* point of view at the expense of *that*. Valorized by the map types constructed by Eckert, Raisz, Robinson, Imhof, and the rest were academic mapmakers like themselves and the *thematic maps* they alone made, maps that were shifted by this academic sleight of hand from a completely marginal position to stage center.

Thematic cartography took over fast. Robinson had not used the word "thematic" in the 1953 edition of his textbook, but Imhof, Arnberger, Witt, and Rimbert had all published their thematic cartography texts by the time Robinson published his third edition in 1969. Dispensing with efforts to classify map types ("To attempt to catalog with precision the infinite number of kinds and uses of map is an impossible task"), Robinson immediately launched into a history of cartography. Where in the first edition this history had moved from "The Beginnings of Cartography" through "The Early Modern Period" to "Twentieth Century Cartography," in the third edition it moved from "The Beginnings of Cartography" through "The Dark Ages," "The Renaissance," and "The Early Modern Period" to . . . (*Ta da!*) "The Rise of Thematic Cartography." "In addition to the nautical chart and the topographic map," Robinson now declaimed, "a third great class, the thematic map, was added to the repertoire of cartography by the early nineteenth century." Noting that in the past the thematic map had been called the "special purpose map," Robinson claimed that "its main objective is specifically to communicate geographic concepts such as the distribution of densities, relative magnitudes, gradients, spatial relationships, movements, and all the myriad interrelationships and aspects among the distributional characteristics of the earth's phenomena." At that point in his text Robinson recapitulated the substance of his earlier "two phase" description of the field, but when he reached the second, dependent phase, he now added, "The other category, which includes thematic cartography . . ."<sup>38</sup>

By the time of his text's fifth edition in 1984, the positions Robinson had promoted in his third had solidified.<sup>39</sup> Among other things, Imhof's textbook had gone into a second edition in 1972; Arnberger had supplemented his *Handbuch* with his *Thematische Kartographie* in 1977; in 1979 Barbara Bartz Petchenik had provided psychological justification for the claims of thematic mappers in her "From Place to Space: The Psychological Achievement of Thematic Mapping;" and in 1982

Robinson himself had published *Early Thematic Mapping in the History of Cartography*.<sup>40</sup> This last meant that a map type that had existed *only since 1953* now had a history, which, in a mind-boggling burst of retrospective reclassification, relegated *most* of the history of mapmaking to "The Development of the Base Map," even as it hitched the history of *thematic* mapmaking to the prestigious history of science. The following year the first edition of Borden Dent's *Principles of Thematic Map Design* was to appear with its definitive opening: "Maps are graphic representations of the cultural and physical environment," Dent intoned. "Two subclasses of maps exist: general-purpose (reference) maps and thematic maps. This text concerns the design of the thematic map."<sup>41</sup>

Wow!

Can it be surprising that in 1984 Robinson finally felt empowered to risk a classification of his own? While continuing to acknowledge that the variety of maps was unlimited, there were, he now ventured, "recognizable groupings of objectives and uses for maps, which permit us to catalogue them to some degree." He discussed these under three headings: scale, function, and subject. Scale varied, Robinson noted; and there was no limit to the possible subjects of maps; but when it came to function, there were three classes: general maps, thematic maps, and ocean charts. General maps were typified by the portrayal of "things such as roads, settlements, boundaries, water courses, elevations, coastlines, and bodies of water." Thematic maps, which now could be large- as well as small-scale, "concentrate on the spatial variations of the form of a single attribute, or the relationship among several." Charts remained segregated in a separate class to serve the needs of nautical and aeronautical navigation.<sup>42</sup>

The triumphant progress of the thematic map continued. In 1987 Arnberger's *Thematische Kartographie* went into a second edition, and Dent's *Principles of Thematic Map Design*, now called *Cartography: Thematic Map Design*, went into second (1990), third (1993), fourth (1996), and fifth editions (1999).<sup>43</sup> There were, of course, dissenting voices. In his *Cartographic Design and Production* of 1973, J. S. Keates noted that the "expression 'thematic' does suggest that the subject-matter deals with a particular theme or subject, but as this is true of all maps it is not particularly helpful in determining a category."<sup>44</sup> In his later *Understanding Maps* of 1982 (and its second edition of 1996), Keates also argued that cartography had arbitrarily limited its scope with its emphasis on the thematic map.<sup>45</sup> John Campbell acknowledged the reference/thematic distinction in his *Introductory Cartography* of 1984, but he also observed that the "problem with dividing maps into reference and thematic types is that there is no clear-cut dividing line between the two."<sup>46</sup> Philip Gersmehl echoed this sentiment in his *The Language of Maps* of 1991 when he noted that "the distinction between reference and thematic is thus more than a little blurry."<sup>47</sup>

Despite such blurring and polite internal discussions about things like Judith Tyner's special-purpose maps,<sup>48</sup> the orthodoxy of the reference/thematic distinction, and the history and the production hierarchy it entailed (including cartography positions on university faculties), seemed secure as the 1980s closed when it was unexpectedly assailed not only by those soon to be called critical cartographers, but far more massively by Geographic Information Systems (later, in its own attempt to court academic respectability, *Geographic Information Science*). GIS software, particularly once it spread to personal computers and then the Internet, made it possible for anyone with access to a computer to make almost any kind of map, and



since the software embodied most of the intellectual capital of academic cartographers as presets and defaults, it all but made Everyman and Everywoman the functional equivalents of professional cartographers; except that, with no need to justify positions in the academy, neither Everyman nor Everywoman found much utility in the reference/thematic distinction that, consequently, is *fast* disappearing. Cynthia Brewer's 2005 *Designing Better Maps*, for example, rarely uses "thematic" and never defines it; and John Krygier and I entirely omitted "thematic," "reference," and "base map" from our 2005 *Making Maps*. Nor do books like Schuyler Erle, Rich Gibson, and Jo Walsh's 2005 *Mapping Hacks: Tips and Tools for Electronic Cartography* or Janet Abrams and Peter Hall's 2006 *Else/Where: Mapping*, even allude to the concepts.<sup>49</sup> The Age of Cartography (RIP) would seem to be over.

I mean . . . *map mash-ups!* True, maps have always been mash-ups (though more pretentiously cartographers called them "compilations"), but it's beginning to feel as though the cozy world of cartography dreamed up by Eckert and built by Raisz, Robinson, Imhof, Arnberger, and others, never existed at all!<sup>50</sup>

### Early Critique in the History of Mapmaking

What's so interesting about this history is how . . . *typical* . . . it is of the history of mapmaking in general which, far from being a linear progression from one triumph of exploration and access of accuracy to the other, has been more like the history of writing, of poetry, of the novel, a continuous accumulation, *sans doute*, but one marked by one fad after another, and so one marked as well by wave after wave of "reformation." In fact, mapmaking has been perpetually transformed, all but dialectically, by *successive critiques*. Not all may have been critiques in the sense inaugurated by Immanuel Kant, but critiques they emphatically were, embedded as often as not in novel *ways* of making maps (for example, new projections), novel map *subjects* (for example, those of the early 19th century that Eckert would retrospectively call thematic), or both.<sup>51</sup> The classic example is the world map published by Gerard Mercator in 1569 and the projection implicit in it. This was not, as it is so often portrayed, the acclaimed solution to an urgent problem (as demonstrated by its initial rejection and the *two centuries* it took to become widely adopted), but neither was it merely a novelty.<sup>52</sup> It was, however, *deeply* critical, both of the conical Ptolemaic projections popularized by Renaissance scholars and of the plane charts (*portolanos*) then used by mariners.

This is not something we have to ferret out. Mercator spread his critique across his map in 15 polemical texts. About the Ptolemaic maps, for example, Mercator fulminated that "indeed the forms of the meridians as used till now by geographers, on account of their curvature and their convergence to each other, are not utilizable for navigation; besides, at the extremities, they distort the forms and positions of regions so much, on account of the oblique incidence of the meridians to the parallels, that these cannot be recognized nor can the relation of distances be maintained." About the mariners' charts he fumed that "the shapes of countries

Traditionally staged as “a paradox of advances and retrogressions” in the drama, *The Progress of Cartography*, Mercator’s map is praised for its ingenuity and condemned for the “cartographical mistakes” it disseminated.<sup>54</sup> In fact, both the map’s form and its content are more usefully approached as embodiments of Mercator’s critical engagement *with his sources*. Not only did nautical charts disagree with each other, as did the maps of the scholars, but the two kinds of maps were especially difficult to reconcile, a compelling problem for Mercator whose life work consisted in compiling maps from the maps of others. “I had to wonder,” Mercator had written his friend, Antonie Perronet, years earlier, “how it could be that ship-courses, when the distances of the places were exactly measured, at times show their differences of latitude greater than it really is, and at other times on the contrary, smaller. . . . [T]he matter caused me anxiety for a long time, because I saw that all nautical charts, by which I was hoping especially to correct geographical errors [that is, errors on the maps of the scholastic geographers], would not serve their purpose.”<sup>55</sup> As he admitted to Perronet, “The more carefully I examine, the more errors I find in which we are enmeshed.”<sup>56</sup>

“When, blinded [by tradition],” Mercator wrote, “we attempted to harmonize the irresolvable difference between the old and new, we denounced both the ancient and more recent descriptions; in addition, by means of small adjustments, we undermined the current proportions of the coasts as well as the findings the ancient geographers had achieved through great effort.”<sup>57</sup> Confrontation like this with conflicting reports brings the problem of knowledge to the foreground in an inescapably critical fashion, raising the contingent nature of knowledge before even unwilling eyes. Ultimately, Mercator’s critique of the *portolanos* and the Ptolemaic conics would take the form of his eponymous “projection,” a spatial frame that was no sooner published than it became the subject of critiques that continue into the present.<sup>58</sup> Among those first objecting to the projection were the mariners for whom it was expressly designed but who, thanks to its poleward increase in scale, found it hard to understand; and it is this characteristic that has sustained the most extended critique. In 1772 in a veritable counter-projection, J. H. Lambert shrank what Mercator had stretched to maintain *areal proportions* instead of *compass bearing*, and his cylindrical equal-area projection became the first of a number of rectilinear projections reacting against the Mercatorial world. Among its progeny were projections created by James Gall in 1855 and Arno Peters in 1967.

Gall attacked precisely Mercator’s commitment to navigators, writing in 1855 that “Mercator’s projection sacrifices form, polar distance, and proportionate area, to obtain accurate orientation for the navigator; whereas to the geographer, form, polar distance, and proportion of area are more important than orientation,” which, while reversing it, perfectly recalls Mercator’s critique of the Ptolemaic conics popularized by the scholastic geographers.<sup>59</sup> Peters, on the other hand, critiqued the Mercator for being “the embodiment of Europe’s geographical conception of the world in an age of colonialism.” Though, in common with Lambert and Gall, Peters was *not* a cartographer (Lambert was a physicist and mathematician, Gall a clergyman, Peters an historian), Peters had no hesitation about critiquing cartography for clinging to a “closed body of teaching which has developed into a myth.”<sup>60</sup> Embattled *cartographers* defended themselves by condemning *all* rectilinear world projections—an hysterical overreaction that reflected the seriousness of the wound Peters’s critique had inflicted—a laughable position, were it not so sustained, that continues into the present.<sup>61</sup>

## Critique within the Profession of Cartography

As we know, not all critique originated with “cartographic” outsiders such as Lambert, Gall, and Peters. Though some *internal* critique did echo that of outsiders, especially that about the use of the Mercator, much more was directed toward turning cartography into precisely the closed body of teaching that Peters would attack. Thus, while Eckert’s *Kartenwissenschaft* did oppose—and vehemently—the use of non-equal-area projections in geography (*especially* the Mercator), Eckert’s book was really about map *design*; and whereas broadly traditional in his goals—who ever could have disagreed with Eckert’s demand that maps be “correct, complete, appropriate, clear and distinct, readable, and handsome”<sup>62</sup>—the route Eckert proposed for reaching these goals was both novel and hermetic: *the application of psychology to map design*. “The question,” Eckert wrote, “whether an economical map should demonstrate the distribution of only a single phenomenon or of a lot of them will not bring anyone to confusion if his thinking is logically based and if the designer has paid regard not only to the scale and to the purpose of the map, but also to the visual capability of the human eye and to the receptivity of the human brain,” adding that, “It would be an extraordinary progress if a scientific cartographer and a psychologist could jointly proceed to empirical tests clearing up by which map charge the human eye and the human brain will be overcharged.”<sup>63</sup>

Since it may be doubted that Eckert’s concern had ever brought many into confusion—who, making a map, or any communication, would want to “overcharge” the human brain?<sup>64</sup>—Eckert’s program has to be understood first and foremost as a bid for academic respectability; yet in fact it also constituted a critique of the practices of his peers, a critique arising from what one of Eckert’s memorialists has referred to as “Eckert’s rage against overcharging maps with signs.”<sup>65</sup> The *multiple objectives* of Eckert’s effort to “scientifically” validate his Apollonian preferences appealed to enough others that from the 1950s on, academic cartography became *heavily* invested in the psychological testing of map readers’ abilities of—almost exclusively—thematic maps. Robinson’s *Elements of Cartography* especially encouraged the practice.<sup>66</sup> While acknowledging that cartography was not a science, Robinson’s third edition (1969) stressed that cartography “employs the scientific method in the form of reason and logic in constructing its products . . . [and] has its foundations in the sciences of geodesy, geography, and psychology,” a claim that, while profoundly delusional, had lasting effects on the academic training of mapmakers.<sup>67</sup> Arnberger’s *Handbuch der Thematischen Kartographie* also followed Eckert in attempting to impose order on the “wild branch that has grown untended and unpruned on the trunk of the topographic map” by formulating a theoretical framework for the establishment of cartography as a *Wissenschaft*.<sup>68</sup>

It was in part what became an unrelenting focus on how undergraduate students read various arrangements of graduated circles, line widths, and color schemes—undergraduate students were the invariable subjects of the “psychological” tests—that prompted the countervailing internal critique of the profession that would come in the 1980s, that together with (1) the profession’s ludicrous division of the field into general reference and thematic mapping, (2) its delusional construction of mapmaking as a science, and (3) its bogus construction of its history as a progressive and value-free transcription of the environment. I, Fels, Harley, Woodward, Rundstrom, and Pickles, whether or not we’d call ourselves cartographers (Fels cer-



tainly would, Woodward would have), were all professionally involved with cartography, and our critique aimed at overturning the paradigm of Eckert and Robinson by shifting attention away from the *form* of the map—with which cartography was obsessed—to its *meaning for behavior*. Instead of asking whether the brain was overcharged by the density of symbols, *we asked how the body of the subject was constructed by the map*, that is, how the map controlled, oppressed, subjugated, and otherwise impinged on people.

This shift in commitments, doubtless rooted in more general shifts inaugurated during the 1960s, first surfaced clearly for all to see in differences over the Peters Projection and over Peters's explicit outsider's critique of cartography's political, indeed colonialist, even racist, dimensions. Most professionals, and the official professional organs, pretended either to outrage or to bemusement, wondering how a projection—after all only a mathematical formula!—could be political in the first place, though they nonetheless took the trouble to swipe at Peters's projection for being ugly, for not being Peters's own (it's identical to Gall's), or for being otherwise inappropriate (world projections should never be rectilinear). The internal *critics* of cartography, on the other hand, not only understood but in their various ways empathized with Peters's project. By 1994 Jeremy Crampton had characterized this battle as “cartography's defining moment,” and in 2003 I claimed that it had been, “in its way, the death knell of the profession,” for the fact was, *no one* had paid the *slightest* attention to any of the official professional pronouncements.<sup>69</sup>

### The Outside Critique: Indigenous Mapping

As we can see, then, criticism has long come from within and without the profession, but the *recent* criticism of outsiders in tandem with that of the critical cartographers has been genuinely foundational, attacking nothing less than the *privilege* claimed by the profession to speak authoritatively about maps. Though Doug Aberley, a bioregional planner, published *Boundaries of Home* only in 1993, it brought to widespread attention mapping that had been going on for a while, and in the case of First Nations mapping, for quite a while. Significantly, First Nations, or Indigenous, mapping offers a critique of official mapmaking with respect to its prerogatives, its form, and its content, at the very time that it proposes to undo—or at least to complicate—many of the historical achievements of official mapmaking.<sup>70</sup>

The origins of this contemporary movement may be traced to the early 1970s, with diffuse and complicated roots spreading through the widespread decolonization that followed World War II, the U.S. civil rights movement, and the contorted history of the relationship between modern nation-states and their Indigenous inhabitants.<sup>71</sup> Among other things, the examples of Gandhi, Ho Chi Minh, Fidel Castro, Martin Luther King, Jr., Malcolm X, and others helped to inspire the 1966 founding of the Black Panther Party and what would become the Brown Berets and the 1968 founding of the American Indian Movement.<sup>72</sup> The 1969 occupation of Alcatraz—the year, not coincidentally, that Vine Deloria published *Custer Died for Your Sins* and N. Scott Momaday won the Pulitzer Prize for *House Made of Dawn*—gave the Red Power movement both credibility and enormous visibility. Distinguishing the Red Power movement was its insistence on revisiting Indian “domestic dependent nations” status in search of alternative configurations of political power, including self-determination, self-government, and, by no means least, land.<sup>73</sup>

Many Indigenous peoples were energized, both inspiring and inspired by these and related events. In 1967 Frank Arthur Calder and the Nisga'a Nation Tribal Council brought an action against the Province of British Columbia for a declaration that aboriginal title to specified land had never been lawfully extinguished.<sup>74</sup> In 1973 the Canadian Supreme Court found that there *was* an aboriginal title,<sup>75</sup> and one that dated to a Royal Proclamation of 1763.<sup>76</sup> In light of this decision, the Canadian government adopted a policy of trying to extinguish such titles by negotiating treaties with the peoples who had never signed them; and beginning in 1974 it offered financial support for work that could lead toward such negotiations. The Inuit Tapirisat of Canada accepted funding to study Inuit land occupancy in the Arctic as a first step.

This study resulted in the landmark publication in 1976 of the three-volume *Inuit Land Use and Occupancy Project* that pioneered the use of individual map biographies.<sup>77</sup> In these, "hunters, trappers, fishermen, and berry pickers mapped out all the land they had ever used in their lifetimes, encircling hunting areas species by species, marking gathering locations and camping sites—everything their life on the land had entailed that could be marked on a map."<sup>78</sup> The work drew on an evolving tradition of applied anthropology, especially participant observation; and on a precedent history of the use of sketch maps in ethnographic research in anthropology and geography that dated to Franz Boas.<sup>79</sup> During the 1960s this was being transformed by the mental maps movement in geography and planning,<sup>80</sup> and in anthropology by programs like Evon Vogt's Harvard Chiapas Project with its interest in mapping and aerial photography, and Harold Conklin's work in the Philippines that would result in the publication of *The Ethnographic Atlas of Ifugao*.<sup>81</sup>

The "map biographies" were unlike anything that had existed before, and they inaugurated a new trajectory in the history of mapmaking.<sup>82</sup> Hugh Brody, who had worked on the *Inuit Land Use and Occupancy Project*, described collecting a map in a study he carried out later with the Beaver Indians in northeast British Columbia:

Joseph had his own agenda and his own explanations to give. He stood by the table, looked at the map, and located himself by identifying the streams and trails that he used. Periodically he returned to the map as a subject in its own right, intrigued by the pattern of contours, symbols, and colors and perhaps also by his recognition of the work that had brought us to his home. . . . As Joseph Patsah told his story, he searched the map until he found a particular bend in a river. . . . He sought the exact place where, in September or October, it is easy to catch fat rainbow trout. He traced the length of a trail that each year he and others used to travel from a spring beaver-hunting camp to the trading post at Hudson's Hope. He satisfied himself that we understood the exact distance between the Reserve and the best of his winter cabins. . . . In the course of talking . . . Joseph had shown his hunting, trapping, and fishing areas on the map; had marked, with colored felt pens, all the places he had lived during a long life.<sup>83</sup>

It was in this and other equally intensive ways that the maps that fill the third volume of the *Inuit Land Use and Occupancy Project* were made, and today variations of this process are in widespread use around the world.

In light of cartography's self-construction as a value-free transcription of the environment, doubt about the scientificity of these map biographies was almost reflexive. "Anticipation of possible challenges to the Indians' maps is defensive and may seem unnecessary," Brody would write in 1981, "But to refuse to anticipate

criticism amounts to a more general rejection of social-scientific concerns," particularly the claim that "research done as part of a political process can actually be conducive to the most reliable results." From a critical perspective, this is key:

The Indians of British Columbia made maps, explained their system, gave detailed information about their economy, and took us into the bush with them. They did so because they believe that knowledge of their system will result in an understanding of their needs, and that this will in turn help establish and protect their interests. . . . The Indians' maps, like their explanations of them, are clear representations of their use of the land. The clarity comes from a wish to have others see and understand. There may be oversimplifications—lines and circles on 1:250,000 topographic sheets can scarcely do justice to the intricacies of which they are a distant overview. But they represent a reality and have an integrity that social science can rarely achieve.<sup>84</sup>

The maps' accuracy was attested to by appealing to hunting peoples' well-established preoccupation with the truth, by internal consistencies across numerous dimensions among maps produced independently by large numbers of individuals, and especially by the fit of separate communities' aggregated maps, both with each other and the terrain.<sup>85</sup>

The maps *were* scientific, and if not in the vein of geodesy, geography, and psychology as Robinson had fantasized, then in that of ethnography (the practice has been called a kind of ethnocartography<sup>86</sup>), and the Inuit maps went on to play a key role in the negotiations that enabled the Inuit to assert an aboriginal title to the 2 million km<sup>2</sup> of Canada today known as Nunavut. In settling the claims, the Inuit would surrender their aboriginal title for financial compensation, exclusive ownership rights over a large part of Nunavut, and decision-making power in the management, and royalties from the resource exploitation of all of Nunavut.<sup>87</sup> Because the *Inuit Land Use and Occupancy Project* maps were insufficiently detailed for the negotiations (they were too small-scale, lacked any indication of *intensity* of use, and took no account of wildlife),<sup>88</sup> and subsequently published maps were at once too rich with information and too large-scale,<sup>89</sup> in 1985 the Tungavik Federation of Nunavut began the Nunavut Atlas Project, publishing the *Nunavut Atlas* in 1992.<sup>90</sup>

This substantial volume is, in its way, as monumental as Conklin's *Ethnographic Atlas of Ifugao*, capturing as it does—in six foldouts of Owned Lands, and in 27 Community and 118 Land Use and Wildlife Maps (these heavily annotated)—archeological sites, campsites, domestic and commercial fishing sites, outpost camps, major travel routes, intensity of Inuit land use, a host of wildlife information, and the Nunavut Settlement Boundaries. As in the Inuit Land Use and Occupancy Project, field workers interviewed hunters and elders in their homes, asking each to describe his land use directly on the maps, which were then, in consultation with hamlet councils and hunters' and trappers' associations, aggregated into the published maps. The result is an extraordinary portrait of Inuit land use in Nunavut, and it provided the basis for the detailed negotiations that transformed the agreement-in-principle of 1991 into the final agreement of 1993. In 1999 the new Territory of Nunavut was created, the Inuit of the former Northwest Territories thus becoming, as I've already noted, the first Indigenous peoples in the Americas to achieve self-government in recent times.

The role of Indigenous mapping in this process was lost on no one. Beginning in the 1970s, similar mapping projects were initiated among the Inuit, Settlers, and

Naskapi-Montagnais of Labrador, the Beaver and Cree along the Peace River in northeastern British Columbia, the Dene of the Mackenzie River Basin, the Indians of the Yukon, and the Inuit and Cree of northern Quebec, among others.<sup>91</sup> Without question the 1976 publication of the *Inuit Land Use and Occupancy Project* was an important landmark; but Brody's publication in 1981 of *Maps and Dreams*—which continues to be in print in a bewildering number of editions—was of crucial significance, laying out the methods as it did in an evocative and persuasive text. Another benchmark was the 1992 publication of *The Nunavut Atlas* and the identification that same year, at the United Nations Rio Summit, of community-based mapping as a key research, community-building, and planning method.

By 1992 projects were under way in Asia, Africa, and Latin America. In an effort to raise the visibility of the Indigenous peoples of the Caribbean coast of Central America, Mac Chapin began working with Bernard Nietschmann, Peter Herlihy, and others on a map published by the National Geographic Society in 1992 as *The Coexistence of Indigenous Peoples and the Natural Environment in Central America*.<sup>92</sup> A large, handsome map in the usual National Geographic fashion—that is, poster on one side (gorgeous pictures and brief country-by-country capsules), map on the other (“Indigenous territories” against five categories of vegetation plus three large insets tracking deforestation and one of pre-Hispanic Panama)—*Indigenous Peoples* was bilingual, as though intended less as a supplement to the Society's journal, *Research and Exploration*, than as a *pronunciamento* to be displayed in offices throughout the region. Chapin, an anthropologist, was new to the mapping game, but Nietschmann and Herlihy were both geographers, and soon all three of them had initiated projects modeled on the Inuit Land Use and Occupancy Project as transmitted through Brody's *Maps and Dreams*.<sup>93</sup> First with Cultural Survival, then as Rights and Resources, and finally as Native Lands, Chapin organized projects in the Mosquitia of Honduras (with Herlihy) in 1992, in Panama's Darién in 1993, among the Guarani of the Izoqog in the Bolivian Chaco in 1995–1996, in the West African Republic of Cameroon in 1998–1999, later in Suriname in South America, and most recently in Papua New Guinea.<sup>94</sup>

This worldwide wave of Indigenous mapping was substantially driven by the interests of granting agencies and philanthropic foundations. The World Wildlife Fund, the Nature Conservancy, World Resources Institute, the World Bank, USAID, the Ford Foundation, the Rockefeller Brothers Fund, and so on, frequently with conflicting motivations, all supported, indeed initiated, Indigenous mapping projects.<sup>95</sup> For example, the Indigenous mapping that spread throughout Indonesia beginning in the early 1990s, best known for the mapping among the Dayak of West Kalimantan, was heavily supported by the Ford Foundation through the World Wildlife Fund, as well as by USAID through its Biodiversity Support Program. The Biodiversity Support Program also supported much of Chapin's work and, through the Philippine Association for International Development, an extensive program of Indigenous mapping in the Philippines and neighboring countries, again beginning in the early 1990s.<sup>96</sup>

During this period Indigenous mapping spread throughout southern Asia and reasonably widely in Africa, with other projects initiated in China, Vietnam, Thailand, Nepal, India, Australia, New Zealand, Jordan, Kenya, Tanzania, the Congo Basin, South Africa, and Ghana.<sup>97</sup> Publication of the special issue of *Cultural Survival Quarterly: Geomatics: Who Needs It?* in 1995 with its examples of ethnocartogra-



phy from around the world<sup>98</sup>; Nancy Peluso's articulation of countermapping, also in 1995<sup>99</sup>; an updated and markedly superior National Geographic map, *Indigenous Peoples and Natural Ecosystems in Central America and Southern Mexico* in 2002<sup>100</sup>; and the 2003 publication of a special issue of *Human Organization* on the participatory mapping of Indigenous lands in Latin America,<sup>101</sup> were other signal moments. The 1998 establishment of the Aboriginal Mapping Network marked a coming-of-age for the movement. In 2003, some 120 Aboriginal mappers from across North America and as far away as Panama, Taiwan, and Malaysia met for the Aboriginal Mapping Network's third international GIS-mapping conference.<sup>102</sup> In 2004 the Indigenous Communities Mapping Initiative convened the International Forum on Indigenous Mapping, which brought together 200 representatives of Indigenous peoples from 24 countries, and it simultaneously published the sumptuous *Mapping Our Places: Voices from the Indigenous Communities Mapping Initiative*.<sup>103</sup>

As you might imagine, this assault on the presumptions of professional cartography extended into the very signage. "Mapping, and cartographic technologies have progressed immensely over the past decades," Claudio Aporta and Gita Laidler wrote in proposing a project for the International Polar Year 2007–2008:

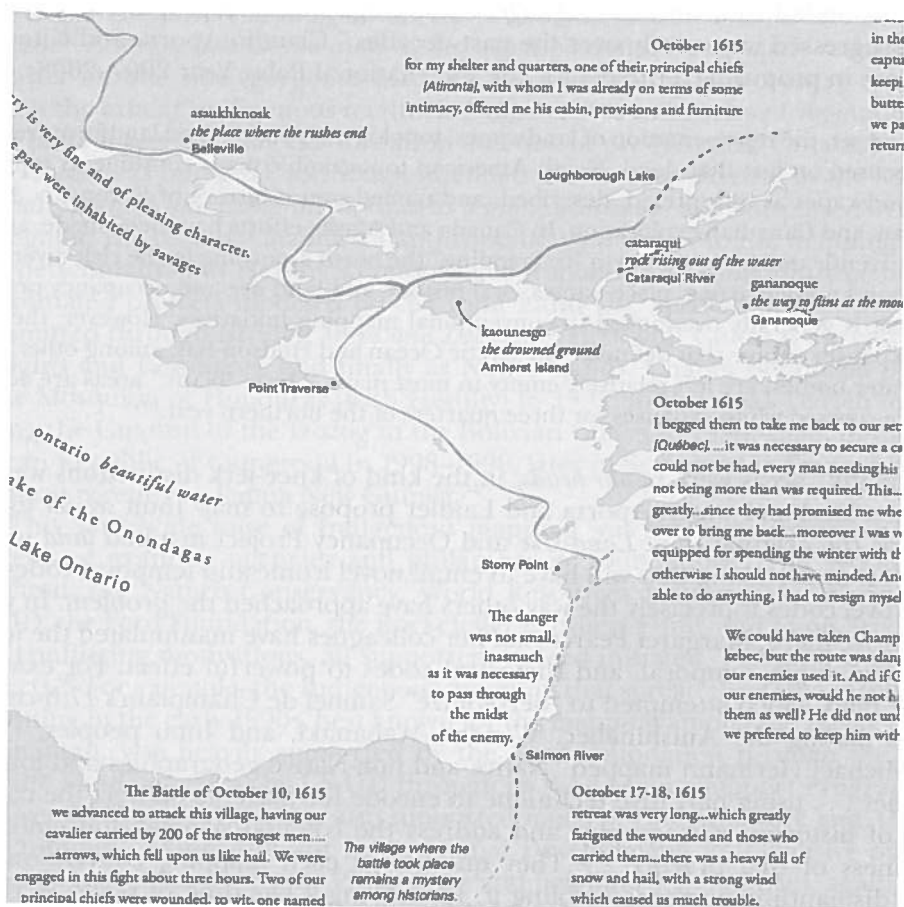
And yet, the representation of landscapes, topology, toponymy, and landforms remains focused on just that—land. North American topographic maps continue to represent landscapes as interpreted, described, and named over a history of European, American, and Canadian exploration. In Canada and Alaska efforts have been made, and are currently underway, to begin "re-mapping" the north according to the rich diversity of Inuit knowledge (e.g. place names, oral history, and land use and occupancy projects) that is generally overlooked in conventional mapping initiatives. However, the large expanses of blue that delineate the Arctic Ocean and Hudson Bay, among other major water bodies, are left relatively empty in most maps. These "blank" areas are actually ice-covered white expanses for three quarters of the northern year.<sup>104</sup>

The "blank" areas were *in our heads*, in the kind of knee-jerk distinctions we draw between land and water. Aporta and Laidler propose to map Inuit *sea-ice use* patterns as the original Inuit *Land Use and Occupancy Project* mapped *land use* patterns, an undertaking that will have to entail novel iconic and temporal codes.<sup>105</sup>

Novel codes is precisely the way others have approached the problem. In wildly innovative maps, Margaret Pearce and her colleagues have manipulated the iconic, linguistic, topic, temporal, and rhetorical codes to powerful effect. For example, in one map, which attempted to "decolonize" Samuel de Champlain's 17th-century travels among the Anishinabec, Wendat, Wabanaki, and Innu peoples, Pearce and Michael Hermann mapped "Native and non-Native geographies and journals together . . . using narrative technique to encode for place, to subvert the conventions of historical cartography, and address the colonial silences and emotional emptiness of that practice."<sup>106</sup> They questioned each mapping convention they used, dismantling and reassembling it. Identifying a blending of scales in Champlain's experiences, they embedded small-scale overview maps in their title and mapped Champlain's travels as a whole at a larger scale; but within the latter they stretched *sequences* of insets whose scale varied as needed, and whose *color* changed to evoke *emotional* changes. In one sequence of a drowning in the Lachine Rapids, the chaotic shifts in color, direction, and scale attempt to mimic that of the drowning itself.

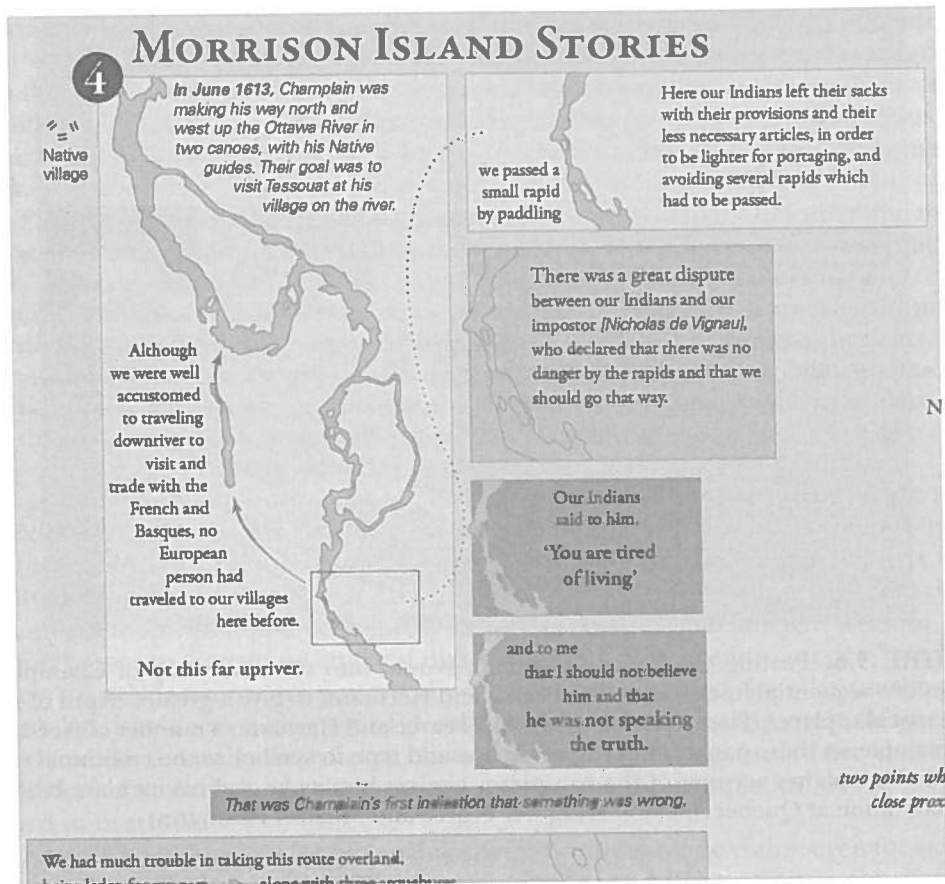
Because Champlain's journeys made sense neither as a line nor in frames, Pearce and Hermann developed a ribbon-form (Figure 5.4) that narrows and expands, even dissolving when Champlain becomes lost. Eschewing directional arrows, Pearce and Hermann permit their readers to create individual understandings of the journeys by reading the associated texts. These encode three distinct voices: those of Champlain, the Indigenous peoples, and the cartographers in a mix of typefaces and colors (Figures 5.5–5.7). In this way, Pearce and Hermann say, they “present a new way to map Indigenous voice, but also demonstrate that place can be defined by multiple voices. A voice that contradicts does not disrupt place but, rather, lends meaning to that place by showing the many dimensions from which it can be interpreted.”<sup>107</sup>

Wholly different was the approach taken by the makers of *Maya Atlas: The Struggle to Preserve Maya Land in Southern Belize*, where the Toledo Maya made maps



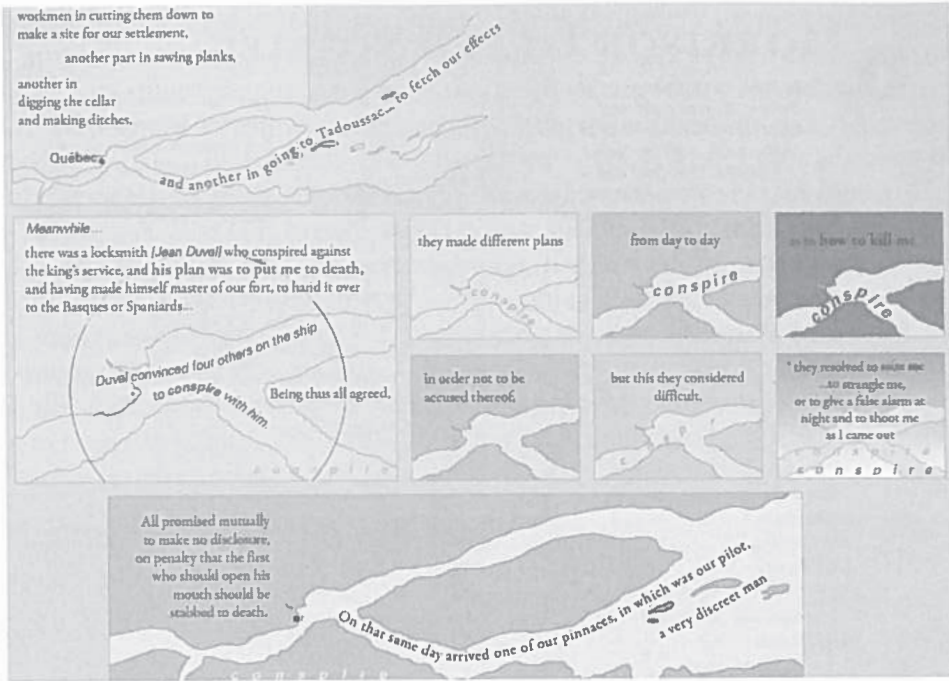
**FIGURE 5.4.** Champlain's journey as a ribbon. To symbolize the characteristics of Champlain's multiple journeys through the map, Pearce and Hermann depicted his route as a ribbon, without arrowheads or directionality. This ribbon narrows or expands with the contracting and widening of Champlain's travel experiences, and dissolves when he is lost; without arrowheads, the reader must use the narrative to interpret the direction. (Source: Margaret Pearce and Michael Hermann)



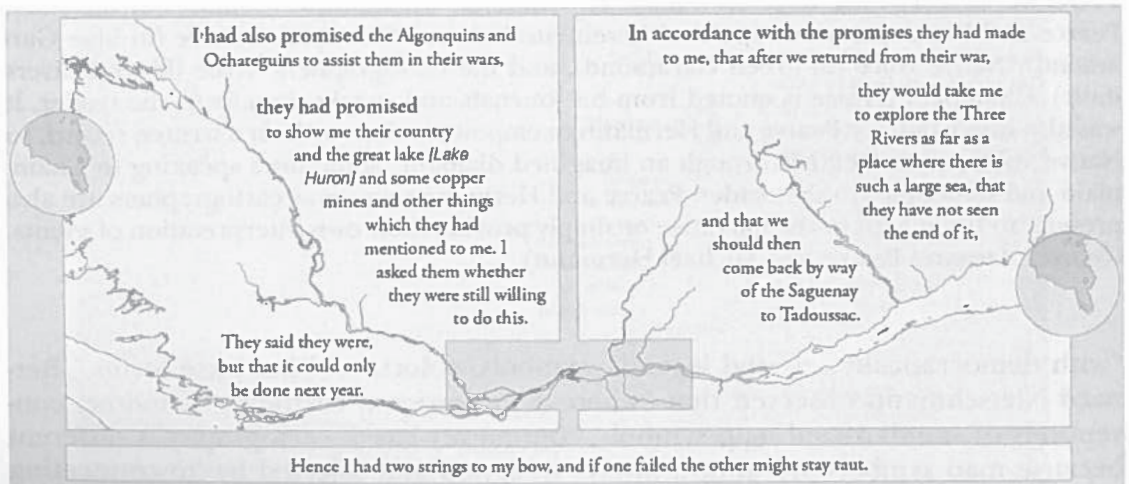


**FIGURE 5.5.** Posting voice on a map. To symbolize the multiple identities of the story, Pearce and Hermann used type to differentiate between Champlain’s voice (in blue Garamond), Native voice (in green Garamond), and the cartographers’ voice (black Univers italic). Champlain’s voice is quoted from his journals and speaks directly to the reader. It was also important for Pearce and Hermann to empower voices without a written record, so Native voice is represented through an imagined dialogue, sometimes speaking to Champlain and sometimes to the reader. Pearce and Hermann’s voices as cartographers are also present, to fill in gaps in the narrative or simply provide their own interpretation of events. (Source: Margaret Pearce and Michael Hermann)

“with democratically selected legends, symbols, colors, and land use terms.” Bernard Nietschmann observed that “whereas professional cartography follows conventions of standardized map symbols, community-based cartography is different because map symbols are almost always designed and selected by ‘town meeting democracy.’”<sup>108</sup> Nietschmann was an important catalyst for much of the work of this second wave of Indigenous mapping. It was Nietschmann who penned the endlessly quoted, “More Indigenous territory has been claimed by maps than by guns. And more Indigenous territory can be reclaimed and defended by maps than by guns,”<sup>109</sup> as well as the even pithier, “Maps are power. Either you will map or you will be mapped.”<sup>110</sup> In 1996 Nietschmann created GeoMap with a small group of young



**FIGURE 5.6.** Posting emotion on the map. Woven into the main map of Champlain's routes are sequential insets that allow Pearce and Hermann to give a greater depth of story for particular places. The sequences also allow Pearce and Hermann a number of freedoms; for example, in these panels, they are using hue and type to symbolize the emotional qualities of Champlain's account of the conspiracy against him as he and his men are building the habitation at Quebec. (Source: Margaret Pearce and Michael Hermann)



**FIGURE 5.7.** Posting dream geographies. The sequential insets also gave Pearce and Hermann the freedom to insert dream geographies. James Bay was a place Champlain yearned to reach, though no one ever took him there in his lifetime. Pearce and Hermann inserted it as a dream map, in saturated yellow and orange, to appear whenever Champlain believed he was nearing the realization of his dream journey. (Source: Margaret Pearce and Michael Hermann)

cartographers to provide mapmaking training and skills to Indigenous peoples and local communities. Working first with the Miskito in northeastern Nicaragua to help them map their traditional sea and coral reef territories,<sup>111</sup> and then with communities in northeastern Costa Rica, GeoMap's third project was the ambitious and inspirational *Maya Atlas*, released in 1997 as an oversize, full-color, mass-market book.<sup>112</sup>

The beautiful 150-page atlas is crammed with colorful maps of individual municipios made by the municipio residents themselves. Nietschmann claimed that

the *Maya Atlas* is the first community-made atlas. All other atlases are made by professional mapmakers who most often live and work far from the places on the pages. This atlas is made by the people who live in the maps, in the text, in the photographs. The task was to create a way that people who live in their geography could make maps of it; that is, to make their geography visible and accessible.<sup>113</sup>

This is, of course, not entirely true. *Maya Atlas* could never have been made without Nietschmann and his GeoMap cartographers, to say nothing of the publisher, North Atlantic Books, a leading purveyor of alternative health, martial arts, and spiritual titles. Given that North Atlantic's mission "is to affect planetary consciousness, nurture spiritual and ecological disciplines, disseminate ancient wisdom, and put forth ways to transmute cultural dissonance and violence into service," perhaps it wasn't *just* Nietschmann's powers of persuasion that landed the atlas on the publisher's list, but it was a big part of it. Although, while more than most, *Maya Atlas* actually walks the walk, the roles of Nietschmann, of GeoMap, and of the University of California at Berkeley in the conception let alone the completion of the project, is hard to overlook.<sup>114</sup>

Nietschmann's *reason* for advancing the community-made claim, even for *embroidering* it—he added that “the *Atlas* maps, writing, and illustrations were done by people who live in thatch-roof, wooden houses they made themselves and who eat food they grew themselves. They got up early in the dark morning hours to make wood fires to cook tortillas and warm coffee before walking to their *milpas* to cultivate corn and beans, and then mapped their fields, rain-forest hunting grounds, traditional medicine places, and ancient ruins”<sup>115</sup>—was because he believed that “a map can only be challenged by another map, and the effectiveness of the challenge is based on the geographic authenticity of the mapmakers. A map of homelands or homewater automatically makes all other maps—be they antecedent or subsequent—subject to suspicion because they are made by the occupier's cartographers,” adding that a people that uses a map it's made for itself is far ahead of a people who have to locate themselves on the occupier's map.<sup>116</sup> An Indigenous people's map, Nietschmann concluded, “helps to authenticate traditional territory, calls into question a central government's assertion that indigenous people don't have a land or sea territory, and serves internationally to promote greater self-determination.”<sup>117</sup>

Whether *any* of this turns out to be true remains to be seen, but little of it is true now, and there are reasons for doubting that much of it ever will be. Power, as I said back in the first line of this book, is a measure of work, and work is the application of a force through a distance. The work of maps is to apply social forces to people to bring into being a socialized space. The forces in question? *Ultimately*, I said, they are those of the courts, the police, the military; but what maps are really good at is replacing, *reducing the necessity for*, the application of armed force. For



armed force, I went on, maps substitute the force of the authority of the map, *but the map's effectiveness cannot be separated from that of the state that backs it up*. This was precisely the point of my drawing attention to the fact that, however attendance zones had been redrawn in the wake of *Brown vs. the Board of Education of Topeka*, Eisenhower still had to call in the National Guard before black kids were able to get into those still-white schools.

It's not, contra-Nietschmann, that maps *are* power but that they *wield* power or, more precisely still, are *used* to wield power. The inspiration drawn from the Inuit's success in forging the Territory of Nunavut may therefore also have been misplaced, for here was a government—the still young Liberal Federal government of Pierre Trudeau, eager to recover from an initial misstep in Indian affairs—that was all too willing to heed the Supreme Court's ruling in *Calder* and admit that Aboriginal peoples may have had more rights than the government had heretofore been willing to acknowledge. Within months the Canadian government had set in place the policy under which claimant groups, like the Inuit, would receive rights, compensation, and other benefits in exchange for relinquishing their Aboriginal title.<sup>118</sup>

That is, before the land use and occupancy mapping had even begun, Canada had already committed itself to some kind of serious land claims settlement. *This* was the force behind the three waves of land use and occupancy mapping, the in-principle boundaries of 1991, and the final land claims settlement of 1993. Contrast this with what's followed the publication of *Maya Atlas* which has been . . . *hard to say*. Why? Ultimately, I would argue, because "authenticity" by itself isn't much of a force. A force is an action that one body exerts on another to change the state of motion of that body, and whereas the Inuit had the Canadian government behind it (and no province in between either), the Toledo Maya had . . . a pretty book? Authenticity? International goodwill? In fact, the year the atlas was published, the Toledo Maya filed a lawsuit against the government in the Supreme Court of Belize arguing that logging concessions infringed on Maya community-protected property rights. The government responded that, not being Indigenous, the Maya had no such rights, and the Supreme Court effectively ignored the suit. Following a 2004 ruling from the Inter-American Commission on Human Rights favorable to the Toledo Maya—which Belize again ignored—the Maya filed yet further lawsuits with the Supreme Court, which finally in 2007 ruled in their favor, ordering the government to "determine, demarcate and provide official documentation of Santa Cruz's and Conejo's title and rights," though negotiations have yet to begin.<sup>119</sup>

In the Nunavut case it was at precisely this point in the process that land use mapping *began*, yet this is not to say that *Maya Atlas* was in any sense a waste of time. There is no simple algorithm for solving problems in the calculus of public opinion, and a claim might be advanced for the atlas-mapping process as one that galvanized critical energies among the Toledo Maya, or one that added to the pile of evidence that finally weighed in their favor in the 2007 decision, which, it bears repeating, may yet lead nowhere. Contrariwise, it's not easy to *demonstrate* that *Maya Atlas* had any positive effect at all, while it is comparatively easy to point to negative impacts, albeit unintended. Joel Wainwright and Joe Bryan, both actively involved in Indigenous mapping in Belize—Wainwright was part of the *Maya Atlas* team—have pointed to problems that have arisen with respect to: (1) the differential empowerment of those involved, both within the Toledo Maya and between it and the legal teams,

fundlers, government agencies, and Berkeley mapmakers; (2) boundary construction, which has led to conflicts with neighbors, a decrease in transcommunity collaboration, and a reinscription of state power; and (3) a kind of deflation following the realization that any achievement so far has been—and one hates to say this—*merely* moral.<sup>120</sup> That is, actual power remains firmly in the hands of the state.

Every Indigenous mapping project raises unique problems, but Wainwright and Bryan point to similar problems that have arisen in Nicaragua; among others, Jefferson Fox, Peter Hershock, Dorothy Hodgson, Pauline Peters, Albertus Pramono, Richard Schroeder, and Peter Walker have identified similar problems in Malawi, Thailand, Tanzania, East and West Kalimantan, Cambodia, and elsewhere, including Canada where the Nunavut achievement remains unparalleled.<sup>121</sup> Central here is the fact that since *maps are instruments of the state*, trying to use maps against it is like spitting in the wind. Once this is acknowledged, much of the excitement about Indigenous mapping begins to sound like no more than . . . excitement. For example, Nietschmann's "A map of homelands or homewater automatically makes all other maps—be they antecedent or subsequent—subject to suspicion because they are made by the occupier's cartographers," begs the question, *suspicious in whose eyes?* Not in the eyes of the occupier, certainly, who rather looks with suspicion on Indigenous maps and . . . *whose eyes matter?* Since in almost every one of these cases mapping is advanced as part of a land claims strategy, ultimately the only eyes that matter are those of the state.

This is broadly acknowledged in project after project where, no matter the backward-leaning efforts to make maps that are authentically Indigenous, it's always acknowledged that the results have to be able to play in state court systems and therefore have to look, feel, and taste like state-sponsored maps. *Which in fact they are! Almost all of them.* For beneath the antistate rhetoric run the veins and arteries of one government agency after another. The Inuit Land Use and Occupancy project, after all, was paid for by the Canadian government, and so was so much of the rest of the mapping in Canada. And as we've seen, the second wave of Indigenous mapping has been substantially supported by USAID, whether through its Biodiversity Support Program, through the Philippine Association for International Development, or some other front—that is, by the U.S. agency on whose website one can read, "U.S. foreign assistance has always had the twofold purpose of furthering America's foreign policy interests in expanding democracy and free markets." Peter Herlihy's recent work in Mexico has been supported by . . . *the U.S. Army.*<sup>122</sup> That is, all this supposed counter-mapping is not only *state* mapping but deeply colonialist, thoroughly imperialist!

From the perspective of the history of mapmaking sketched in Chapter 1, this is scarcely worth noticing. After all, the map has been worming its way into every conceivable nook and cranny for the past 500 years, and from this perspective Indigenous mapping is no more than a further penetration of the map into minute cracks from which it has heretofore been kept. The ironies, of course, are that today the "victims of the map" are the ones doing the mapping. Promised that people using maps they've made themselves are ahead of people who have to locate themselves on the invader's maps, Indigenous mappers find that in the end they have to locate themselves on the invader's map anyway, for, to say it again, it's only in the invader's courts that their land claims can be heard where, win or lose, *their mere presence validates the state's claims to authority.*

This contradiction plays itself out in the bizarre claims made for the maps

themselves that they are at once Indigenous and not Indigenous. The claim to indigeneity, to the *authentically Indigenous*, is of the essence, for it is solely their claim to speak in the People's true voice that warrants their denial of official cartography's privilege to speak authoritatively: "You claim this," the Indigenous maps say to the state's existing maps, "but we who live here speaking in our authentic voice claim otherwise." As Nietschmann understood, this is powerful, and it has led to what can only be characterized as an *indigeneity race* as succeeding projects raise the indigeneity ante, from the field workers (such as Brody) who with Indigenous interpreter-guides interviewed elders and other hunters in the Inuit Land Use and Occupancy Project, to the training of Indigenous field workers à la Chapin and Herlihy, to the town-meeting democracy mapping of the *Maya Atlas*, with its tortillas and wood fires.<sup>123</sup> Here's Marcus Colchester writing about his Guyana work of 1994–1997:

What was innovative was not that it aimed to end with a detailed map of the land use of the Upper Mazaruni based on indigenous knowledge, but that this was achieved by a team of indigenous technicians from the area itself. This team was provided with training by outside experts but then left to carry out the actual data gathering themselves, in their own languages, without external technical assistance until it came to the last stage of entering field data into computers and generating the final map.<sup>124</sup>

And there's the rub, at the very end there, where everything the Indigenous technicians have gathered is seized by the outside experts and dumped into their computers. You know, despite the genuinely good intentions, and the hard work to implement them, there is about all these assurances of indigeneity something inescapably patronizing, a whiff of amazement that monkeys can be trained. *What? Indigenous technicians can't be taught to use computers too?*<sup>125</sup>

And yet this last step, this final turn to the computer, is every bit as critical as the claims of indigeneity, for unless the end product is a map in the eyes of the court—that is, it looks like other maps that lawyers and judges have grown up with—it might as well not have been made. That is, the Indigenous peoples might as well have come to court with Indigenous forms of land claims, with songs and chants, with dances, with other forms of Indigenous expression.<sup>126</sup> The insistence that Indigenous peoples bring maps—and I mean *maps* as the state has nurtured maps for the past 500 years—comes from outside interests, from anthropologists and geographers, from lawyers, from courts, and state governments. Used to thinking through maps, used to conducting business with maps, these demand maps from those doing business with them. If Indigenous peoples had made maps indigenously—and again, *maps*, not Indigenous forms of land-claims making, however legitimate and expressive—what would be the need of outside experts coming in to interview them, to train them in the first place?

These peoples, not forming states, never had any need for maps, and it is precisely their lack of maps that calls for the intervention of the experts and the transformation of Indigenous knowledge into the kind of knowledge that state courts can recognize. Asked what it could mean to "train" mappers if the knowledge is already in peoples' heads, and whether mapmaking alters the way Indigenous peoples see things, Chapin has said:

No, it does not alter their views. It is technical cartographic training—how to represent space. It takes their knowledge (in time traveled, for instance) and teaches them how to



represent scale—just technical stuff. They are very good artists, they just need to know how to make maps. We did not want to give them base maps to fill in, since the product would not be their own map. Some maps are messed up on distance, but they use aerial photographs to correct them.<sup>127</sup>

Coming from an anthropologist, this is inexcusable. If you gag at, “No, it does not alter their views. It is technical cartographic training—how to represent space,” you positively have to throw up when you come to the reduction of Indigenous knowledge to “time traveled,” of the cartographic *épistémè* to “just technical stuff,” and of who knows what kinds of differences to “messed up on distance.”<sup>128</sup>

If Chapin is just being disingenuous it's bad enough, and if he really believes these things he needs to return his Ph.D.,<sup>129</sup> but the real problem is that no matter what the worldview and space–time conceptions of the people in question, they *have to be bent* into the worldview and space–time conceptions of the court or risk being dismissed as . . . *unintelligible*. Of course, bending them this way means taking on board all of professional cartography's spatial epistemology, including its commitment to discrete boundaries, especially since these tend to be bundled into available GPS and GIS technologies. In contradistinction to Nietschmann's 1995 insistence that an Indigenous map made with computer technology, “will have transcendental powers because it can easily be translated by everyone everywhere; it transcends literacy; [and] it is visually comprehensible,” came Walker and Peters' caution six years later that “the job of mapping should not end with the drawing of boundaries; where social scientists assist social groups to draw maps, it is crucial that they also document and communicate *what these boundaries mean for local people*.”<sup>130</sup> The questions Peluso asked in 1995 still *have not been answered*: “The key theoretical questions about the impacts of counter-mapping on resource control,” she wrote, “are to what degree new notions of territoriality reflect older ones; how the reinvention of these traditions benefits or works to the detriment of customary practice, law, and resource distribution; and how the intervention of NGOs . . . affect the villagers' access to and control over . . . resources.”<sup>131</sup> Whatever maps have, it ain't “just technical stuff,” and it sure ain't transcendental powers either.

Whatever maps have *they carry with them*, no matter who's doing the mapping. The problem with Indigenous mapping, therefore, is that it's simultaneously cooperative and reactionary, first forcing Indigenous peoples to adopt a technology of those who used that very technology to seize Indigenous lands in the first place; and then enmeshing Indigenous peoples in a kind of schoolyard name-calling—“You map me, huh? I map you!!”—that leads *only* to the principal's office. When the result is heightened dignity, enhanced security, and greater access to resources, doubtless this is one way to go, but Nietschmann was twice wrong when he insisted that “a map can only be challenged by another map, and the effectiveness of the challenge is based on the geographic authenticity of the map makers.” A map's effectiveness is a function of the social forces the map is able to put into play, and maps can be challenged—and have been for 500 years—by military action, armed revolt, varying degrees of resistance, political action, actions at law, and even stories, songs, and other expressive behavior, as the Gitxsan and the Wet'suwet'en demonstrated when they entered the Gitxsan *adaawk* (a collection of sacred oral traditions about their ancestors, histories, and territories) and the Wet'suwet'en *kungax* (a spiritual song or dance or performance tying them to the land) into evidence in the suit they brought against British Columbia and Canada in 1987.<sup>132</sup>

Ten years later, in *Delgamuukw v. British Columbia*, the Supreme Court of Canada found that forms of evidence like these had to be accepted in Canadian courts. Chief Justice Lamer observed that, “notwithstanding the challenges created by the use of oral histories as proof of historical facts, the laws of evidence must be adapted in order that this type of evidence can be accommodated and placed on an equal footing with the types of historical evidence that courts are familiar with, which largely consists of historical documents.” Concurring, Justice LaForest added that “it is self-evident that an aboriginal society asserting the right to live on its ancestral lands must *specify* the area which has been continuously used and occupied. That is, the general boundaries of the occupied territory should be identified. I recognize, however, that when dealing with vast tracts of territory it may be impossible to identify geographical limits with scientific precision. Nonetheless, this should not preclude the recognition of a general right of occupation of the affected land. Rather, the drawing of exact territorial limits can be settled by subsequent negotiations between the aboriginal claimants and the government,” which would be, in the Nunavut case, at precisely the stage in negotiations when the Inuit were compelled to initiate the Nunavut Atlas Project.<sup>133</sup>

A few years after *Delgamuukw*, the Martu Aboriginal people presented an Australian court with a *dish of sand* from their country, on the understanding that it would be returned once a determination of their native title claim had been made. The court accepted the sand, acknowledging that the “symbolic gesture was a demonstration of the claimants’ strongly-held belief in their ownership of their traditional territories.”<sup>134</sup> The Aboriginal people of Fitzroy Crossing won their right to appear in court after presenting Australia’s National Native Title Tribunal with a painting known as *Ngurrara II*: “Frustrated by their inability to articulate their arguments in courtroom English, the people of Fitzroy Crossing decided to paint their ‘evidence.’ They would set down, on canvas, a document that would show how each person related to a particular area of the Great Sandy Desert—and to the long stories that had been passed down for generations.” The tribunal accepted the painting, one member commenting that the painting was “the most eloquent and overwhelming evidence that had ever been presented” to them.<sup>135</sup> In the end, maps *were* made, though the court came close to expressing regret about the necessity: “Although the Court has to set boundaries in order to define the area of a native title determination, it is a fact that in the extremely arid region of the Western Desert boundaries between Aboriginal groups are rarely clear cut. They are very open to human movement across them. Desert people define their connection to the land much more in terms of groups of sites, thinking of them as points in space not as areas with borders.” Notwithstanding this concession, the long lists of coordinates setting the boundaries concluded the decision.

Yes, *of course!* The claims will *always* be mapped—that’s how map-immersed nation-states do it—but the resulting map will be just another state map; there’ll be nothing Indigenous about it, not in any conventional sense of Indigenous. Yet having been challenged by a song, a dish of sand, a painting, *no state map can ever again be quite the authoritative thing that it was*. And this in the end has to be the systemic contribution of Indigenous mapping to cartographic critique—no matter its manifold contradictions—that of calling into question the authority of the state’s maps. Unless the contribution lies in the very contradictions, cracking open, the way they do, the shell of the map as they remake it.

## The Outside Critique: The Parish Maps Project

Parish Maps proffer their critique in a very different way. For one thing their makers unapologetically acknowledge their citizenship in nation-states, England and Italy mostly, though projects are underway in Poland and Spain, so they're not only *immersed* in a 500-year-old tradition of mapmaking, they can draw from its entire span. And they do.

Then, since title's not an issue, there's no imperative for the maps to assume any of the formalisms required for an appearance in court. This frees them to take on a variety of forms, and some of these are as far removed from the world of maps as the sand of the Martu, the painting from Fitzroy Crossing, the *adaawk* of the Gitksan, or the *kungax* of the Wet'suwet'en.

Taken together, the two considerations free Parish Maps from the grip of the academy as well. Academics have written almost nothing about these maps that better than 2,500 English parishes have made since the mid-1980s, made, it's worth noting, with no help from NGOs.<sup>136</sup> The maps are made by people acting in their own interests with no direction from above. The maps are all about self-initiated local action.

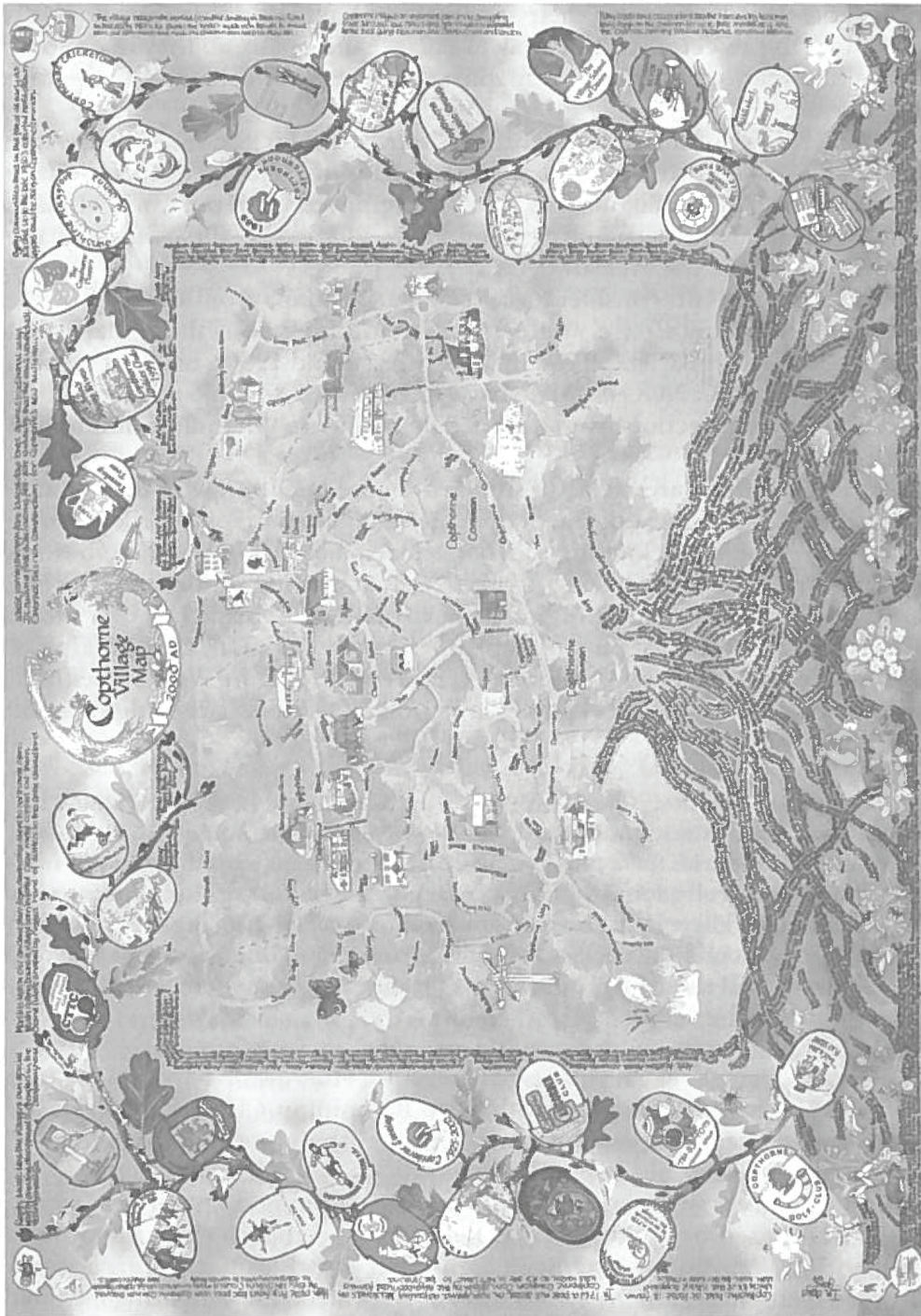
At the same time there are plenty of similarities. For one thing it would be bootless to ignore the fact that most of the people making Parish Maps are Indigenous, not merely in the sense of "belonging to a particular place by birth"—though that's not dismissible—but in that of "having originated in and being produced, growing, living, or occurring in a particular region or environment." This is sort of a theme that runs through a number of parish maps where at the moment I'm thinking of the map made by the village of Copthorne (Figures 5.8, 5.9) in West Sussex that its makers constructed as an oak rising from a tangle of roots consisting of 1,400 Copthorne family names:

The dominant oak tree design was chosen as a natural feature of the local landscape, as well as a symbol of strength, in our case the strength of community spirit. Roads, footpaths, and boundaries form the branches. Within the roots are family names from the current electoral rolls, for as with roots that give life to the tree, so its people sustain the community. There is an acorn, the fruit of the tree, for each organization born from village life. Around the roots and branches are the wildlife that share the local woodland, heath, and common. The map was produced from over 150 original paintings and drawings.<sup>137</sup>

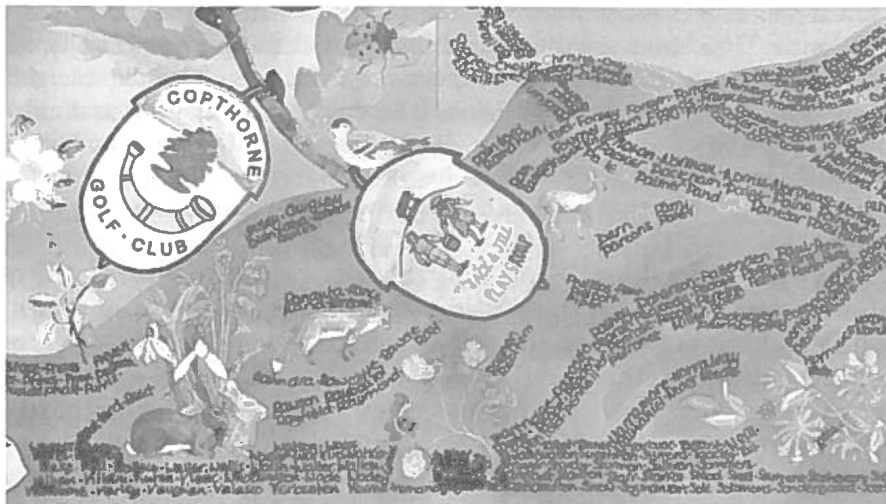
Within the acorn format, each village organization—there are 34 of them (the Jack and Jill Play Group, the Copthorne Village Badminton Club, the Copthorne Players)—was free to describe itself as it wished, and the paintings were done by people as young as 3 and as old as 80.

Looking at this attractive map of the village with its common, the schools where the village has educated its children since 1842, and the church the community's attended since 1867, we find it easy to imagine that Copthorne dozes in a world wholly divorced from that of the Nisga'a Nation or the Toledo Maya fighting for their land, but in fact Copthorne is locked in a battle every bit as serious for its way of life. While in 1803 Copthorne mobilized its own "Home-Guard" against a threatened Napoleonic invasion, today it fights "the very different threat of slow strangulation through the combined vested interests of commercial profit and political ambition





**FIGURE 5.8.** Cophorne village map, 2000. The mapmakers chose the oak to symbolize the strength of their community spirit. The village is posted as the tree's leaves, the villagers as its roots. (Source: West Sussex County Council)



**FIGURE 5.9.** Cophthorne village map detail. In this detail you can see the villagers' names forming the roots of the oak, and in the acorns village organizations. (Source: West Sussex County Council)

which has no concern for our culture and way of life.” The Cophthorne Preservation Society sees its “intact village culture” under intense threat from “becoming the rat run for traffic using the M23,” from “becoming a major waste industrial center through the development of the Clay Hall Lane Waste Site,” and from “losing our Common Land to unwanted housing development.”<sup>138</sup>

Cophthorne always spilled across the border between Sussex and Surrey counties, but England’s local government reorganization of the 1970s really messed up Cophthorne’s borders. Christine Cheesmur, who worked on the map, complains that the overlapping boundaries “endlessly complicate our lives when it comes to council matters, schooling, and everyday things like bus passes and postal addresses.” It was this that really drove the mapmakers who “wanted to show what the village meant to them as a community in its own right, to record their existence as a village, *as their home*—not just a buffer village between local authorities and most certainly not just a part of a merged Gatwick conurbation at the mercy of planners, developers, and big business.”<sup>139</sup> If *title* is not an issue in parish mapping, *place* is; and because *title*’s not an issue, the commitment to *place* that’s submerged in Indigenous mapping’s concern for territory can swarm to the fore in Parish Maps.

And that is precisely the role envisioned for Parish Maps back in 1985 when Common Ground first proposed the idea. Sue Clifford and Angela King had created Common Ground in 1983 as a nonmembership charity and lobby for what they thought about as *local distinctiveness*. Clifford has written that:

In forging the idea of *Local Distinctiveness* Common Ground has been working on liberation from preoccupation with the beautiful, the rare, the spectacular to help people explore what makes the commonplace particular and to build ways of demonstratively expressing what they value in their everyday lives. We contend this should be an inclusive process, encouraging local people to debate what is important to them as well as luring the experts to appreciate a broader view.



Local distinctiveness is about the conspiracy of nature and culture to intensify variegation and it is about anywhere. It is about detail, patina, authenticity, and meaning, the things which create identity. Importantly it focuses on locality (neighborhood, street, parish), not the city or the region. It is about accumulations and assemblages, about accommodation and change, not about compartmentalization and preservation. It must include the invisible as well as the physical: symbol, festival, legend, custom, language, recipe, memory may be as important as street and square.<sup>140</sup>

It was obvious to Clifford and King that these were things that could never be known or even described from the outside, and so "better to ensure that local culture has sufficient self-knowledge and self-esteem to be confident in welcoming new people and new ideas." To this end they floated a slew of proposals and campaigns: Trees, Woods, and the Green Man; New Milestones; Save Our Orchards; Apple Day; Tree Dressing Day; and ABCs.

The ABCs are typical: all you do is make an alphabet of locally distinctive things. Here, this is from a Shaftesbury ABC in progress: "Abbey . . . 'Ancient Lights' . . . King Alfred 888 CE . . . Byzant . . . Beech Trees . . . Badgers . . . Bimport . . . Butt's Knapp . . . Carnival . . . Cnut . . ." and so on. You could do this individually, but Common Ground encourages you to form a group, or to make it a project for an existing one. What will it be for, Common Ground asks? Local interest? Initiation for newcomers? Tourists? As an agenda for local action? What form will it take? Will it be a poster? Will it be verbal? Or illustrated? With line cuts? Or photographs? Or all three? Or something else? Making an ABC focuses attention on the near-at-hand and underfoot so easily taken for granted, and so, easily *overlooked*, and so, easily *lost*. Creating an ABC also "liberates us from classifying things as rare or beautiful to demonstrate what we care about in the everyday. It is useful in that it levels everything, it reshuffles things and juxtaposes them in ways that surprise and make you think." As with every Common Ground initiative, "This can change what we see, disperse our complacency, make things we take for granted seem new to us, and encourage us to action."<sup>141</sup>

To turn an idea like the ABCs into a practice, Common Ground prints leaflets, brochures, booklets, gives talks, commissions exemplars, mounts exhibitions that it tours, collects examples, assembles these into exhibitions, publishes books filled with them, and maintains websites. This is exactly what they did with Parish Maps. By "parish" they hoped merely to convey a useful sense of the local:

the smallest arena in which life is played out. The territory to which you feel loyalty, which has meaning to you, about which you share some knowledge, for which indignance and protectiveness is easily roused, the neighborhood of which you have the measure, which in some way helps to shape you. . . . It is in this sense of a self-defined small territory that Common Ground has offered the word parish, implying people and place together.

Because they needed examples to show people what they were talking about, in 1986 they commissioned 18 artists—among them some big names (Anthony Gormley, Helen Chadwick)—to map places toward which they felt a particular attachment.<sup>142</sup>

The maps traveled around the country in a 1987–1988 show called *Knowing Your Place* (accompanied by a leaflet); the maps illustrated articles; and the maps



appeared in Common Ground literature. A detail from David Nash's *A Personal Parish (Blaenau Ffestiniog)*, for example, decorated the cover of Common Ground's 1991 *Parish Maps* brochure; Ian Macdonald's *Echoes of Change (Cleveland)* took up most of the brochure's centerfold; and a detail from Simon Lewty's *Parish Map (Old Milverton)* concluded it.<sup>143</sup> A larger detail from Lewty's map, in full color, wrapped around the cover of Common Ground's *from place to PLACE: maps and Parish Maps*, where two of the artists, Lewty and Balraj Khanna, wrote about their maps.<sup>144</sup> Six of the maps were turned into postcards, including Conrad Atkinson's *Cleator Moor*, where Atkinson grew up "amidst Blake's dark Satanic mills." Today Cleator Moor is dependent on the nearby Sellafield Complex, with its nuclear power plant (currently being decommissioned) and two nuclear fuel reprocessing facilities. In daubs of color across an Ordnance Survey map of Cleator Moor, Atkinson has scrawled "strontium," "leukemia," "ruthenium," "invisible presence," "residues of power," and similar phrases in a kind of graphic dirge.

At the same time a few parishes began making maps. Jane Whittle recalls starting work on the Redlynch (Wiltshire) map in 1986, a large embroidered quilt that took two years to make (and another year to complete the *Redlynch Book* and footpath guide).<sup>145</sup> That same year mappers in Buckland Newton (Dorset) painted a series of maps of the geology, the roads, the field names, the trees and woods, on so, on the inside gable end of their village hall.<sup>146</sup> In Uplyme (East Devon) the idea was seeded when Lexie Sumner saw a piece about Parish Maps on television. This turned into a nine-month project, 100 questionnaires, a 5- by 6-foot map, and a poster the sale of which has brought the parish thousands of pounds.<sup>147</sup> Ten years later when Common Ground published *from place to PLACE*, over 2,000 Parish Maps had already been made.

Among these maps was one of Charlbury in Oxfordshire that Kim Leslie describes as "a very modern and richly decorated parish map":

Steeped in detail through delicate pictures and text, it vividly brought to life this little Cotswold town and its surrounding countryside. And it wasn't made by professional mapmakers, but local and very talented people who clearly had great affection for where they lived. Maps like this stir the imagination, they urge visits.<sup>148</sup>

It was only by chance that Leslie had come across a copy of this map as he was dipping into the map collection of the University of Sussex, but he was so taken with it that he made a point of visiting Charlbury and meeting its makers who told him about Common Ground and The Parish Maps Project. Fired by the idea, Leslie proposed a Parish Maps project to West Sussex County Council when it began casting about for a way to celebrate the then forthcoming millennium. As inspired as Leslie by the Charlbury map, the council approved and authorized the start-up money that let Leslie give talks all over the county, produce a fact sheet, organize a conference, and launch a newsletter. Elizabeth and Miles Hardy, who had led the Charlbury team, came down from Oxfordshire to share their experience, and of course Common Ground contributed.

Parish after parish made maps: Aldwich, Apuldram, Arundel, Balcombe . . . Haywards Heath, Henfield, Highbrook, Hunston . . . Pulborough, Rogate, Selsey, Shipley . . . West Hoathly, Woolbeding and Linch, Yapton and Ford. By the time Leslie put an exhibition together in 2001, 87 parishes had made maps of which the Worthing Museum was able to hang 66, most of them originals. Over 2,000 volun-

teers had contributed to the making of the maps and, whether artists, calligraphers, gatherers of information, organizers, or fund-raisers, all had given freely of their time. The money, from a variety of sources including local business sponsorships, treasure hunts, plant sales, and grants of various kinds, largely went to the production of prints and postcards of the maps and the maps' professional mounting to costly conservation standards. The sale of these has raised surprisingly large sums of money for a range of parish projects. The Worthing exhibition was accompanied by a smart, full-color catalogue that has helped to spread the word.<sup>149</sup>

With the passing of the millennium, the word was dropped from The West Sussex Millennium Maps Project but the project has continued, producing an atlas that is in its way as inspiring as the *Maya Atlas* and as monumental as the *Nunavut Atlas*. Leslie's *A Sense of Place: West Sussex Parish Maps* is an oversized, 300-page, hardbound, full-color collection of 75 West Sussex Parish Maps, each reproduced in full along with any number of details, together with a text by Leslie or by members of the team that made the map. Dedicated to Clifford and King, *A Sense of Place* is without much competition the most simply beautiful collection of maps I have ever seen.

There are those for whom being beautiful is less than a recommendation. A recent visitor flipping through the atlas—what else to call it?—shut the book with the complaint, "I can't believe them. They're too pretty to take seriously." Another, finding it open on my desk to pages 82–83 asked, "Where's Monty Python when you need them?" I could see what he was getting at. On the left-hand page are five lovely watercolor details from the Easebourne map arranged around some text: "Cowdray—the Tudor ruins," "Village shop," "Easebourne Primary School," "Easebourne Priory," and a fawn; on the right-hand page, three gorgeous watercolor details and a close-up of an inset map from the—and this was part of his problem—Elsted with Treyford cum Didling map. "I mean," my friend continued, ". . . *what kind of a name is that?*"

Okay, picking on the name is *not done*, but a causal flick through the atlas does reveal a kind of cuddly uniformity, and David Crouch and David Matless have raised questions about the linkages of politics and aesthetics in Parish Maps generally. About the very map of Charlbury that so attracted Leslie, they write that the map

appears as an exercise in comprehensive realism but its imagery is carefully selected. A particular iconography of the place is set up: older buildings, a flora and fauna denoting a settlement in harmony with its parish land, a landscape written over by layers of history. The making of a map "like an old painting" is also bound to a particular social aesthetic: "we wanted the map to be interesting to look at, and council houses are not pretty." One-third of Charlbury housing is council-owned and yet nothing of the large estate appears on the map. The image of the map as a place's "wedding photograph" would seem to entail cropping-off part of the family.<sup>150</sup>

There's no way of excusing this—it's like the yearbook at a high school where I once taught simply leaving out all the Special Ed kids—but the problem of selectivity cuts every direction. For example, Crouch and Matless fail to point out that Atkinson's map of Cleator Moor, which they describe as "a document of angry attachment, a lament rather than a celebration," while certainly not posing as an exercise in comprehensive realism, has nonetheless also carefully selected its imagery and set up a

particular iconography of place, and indeed it's hard not to notice that Crouch and Matless's criticism is itself bound to "a particular social aesthetic."<sup>151</sup>

But that being said, they have a point, if one better caught by my friend's "too pretty to take seriously" than their "appears as an exercise in comprehensive realism," for whatever "comprehensive realism" may be, it's something few Parish Maps seem to be striving for. If anything they seem more interested in looking like the "100 aker wood" of Ernest Shepard, an illustrator who, unsurprisingly, lived adjacent to Easebourne in Lodsworth, whose beautiful Parish Map appears on pages 152–155 of *A Sense of Place*. But the problem with dismissing maps like those of Lodsworth, Easebourne, and Elsted with Treyford cum Didling as too pretty to *believe* is that Lodsworth, Easebourne, and Elsted with Treyford cum Didling are actually too pretty to *exist*. Nonetheless they do. Easebourne's map may even achieve comprehensive realism, for the place is the heart of the great Cowdray Estate, all 17,000, carefully managed, premier polo-playing, highly profitable acres of it, with its magnificent views to the Downs, its mile-long avenue of sweet chestnuts, and its ancient oak once visited by Queen Elizabeth in . . . 1591. That is, the land itself is as likely to be bound to "a particular social aesthetic" as the map (Figure 5.10).

It's true, of course, that an interesting map of the Cowdray Estate might be made that posted the Mexican oil fields; the impact on Mexico of the first Lord Cowdray's support for Porfirio Díaz; the railroads, dams, tunnels worldwide; and all the rest that in 1909 permitted Cowdray to buy the estate from the Earl of Egmont—it would explain a lot about the almost breathtaking picturesqueness of Easebourne today.<sup>152</sup> Their absence from the Parish Map of Easebourne not only recalls Edward Said's complaint about the failure of 19th-century British novels to represent the sources of the colonial fortunes that underwrote so many of them—Sir Thomas Bertram's, for instance, in Austen's *Mansfield Park*, or Rochester's in Bronte's *Jane Eyre*—but also recalls the world map on which Franco Moretti posted



**FIGURE 5.10.** The Heyshott Commons, one of the finest remaining heathlands in West Sussex, is another part of the great Cowdray Estate. Lord Cowdray himself is a regular sight cycling through the parish. This lovely map hangs in the Village Hall. (Source: West Sussex County Council)

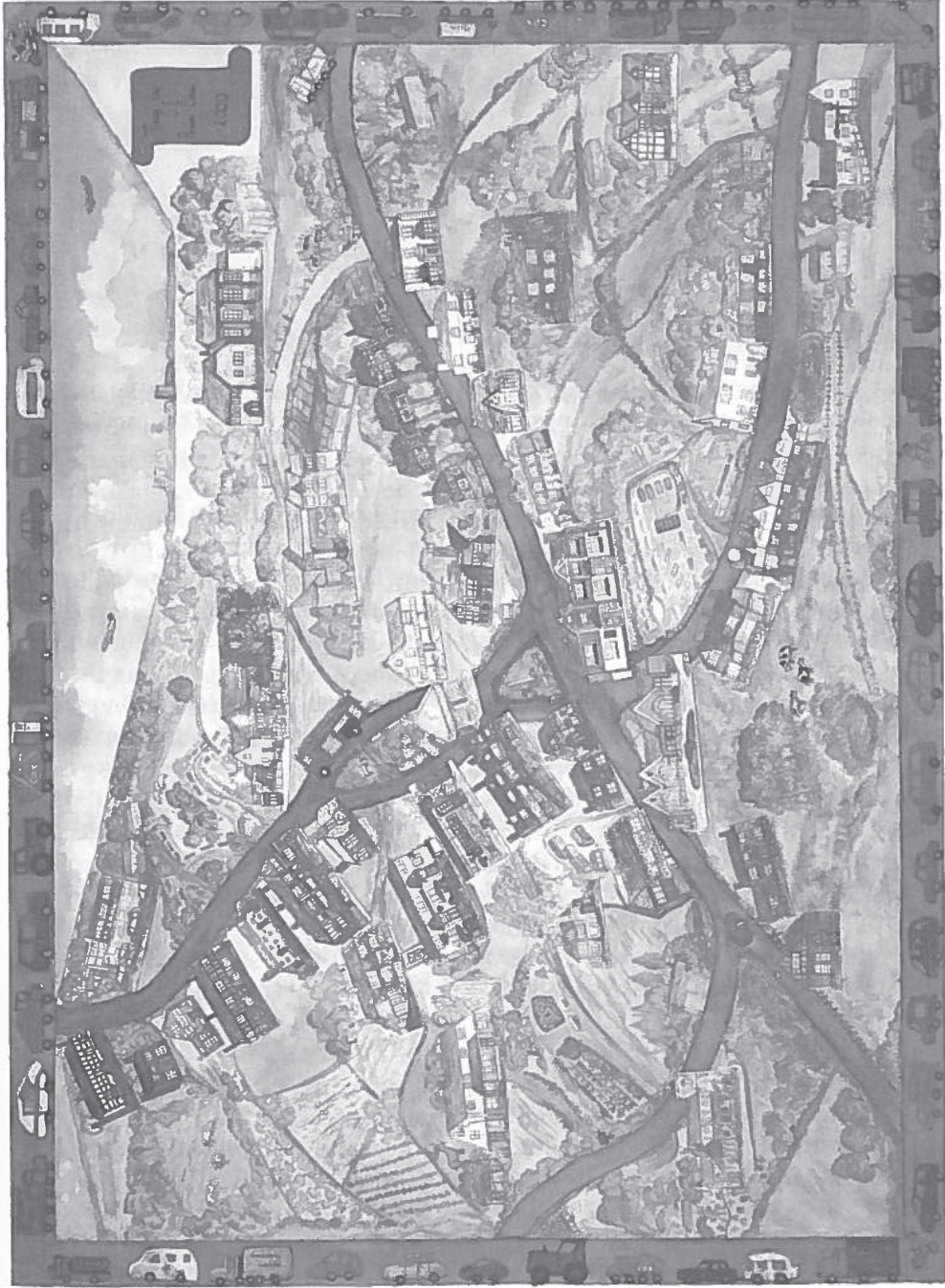


the locations of colonial sources of wealth in British sentimental novels, here in the Caribbean, South America, there in Africa, India, the South China Sea.<sup>153</sup>

What's ultimately interesting, though, is the way Parish Maps can draw these sorts of considerations out as Ordnance Survey sheets, for example, can't; this is unquestionably a tribute to the heightened expressivity of Parish Maps. Whatever distinctions Ordnance Survey sheets might allow you to draw between, say, Cleator Moor and Easebourne, they would wholly fail to capture the differences that the simplest Googling brings to light where, for example, on the opening page for Cleator Moor, I find a YouTube video, *The Devil Made Cleator Moor*. This turns out to be a drive down its main street with titles overlaid—"Fear," reads one, "Lawless," "Despair," "Abandon Hope All Who Enter," "Misery," so on. The YouTube comments are dominated by cracks like "Cleator Moor biggest shithole on earth! In all my life I never lived in such a dead, boring dull town," "They should spray the entire town in Burberry colors then drop a bomb on it," which is immediately followed by, "It really isn't as pleasant as that," "Hahaha! Fantastic! I used to live in Cleator Moor. . . . Hated it with a passion," or, on the upside, "cleators not that bad i live in egremont cheist man give it sum slack."<sup>154</sup> Other Cleator Moor videos feature drinking, falling down, throwing up, and the old folks dancing at The Knight Club. Over in Easebourne, meanwhile, the most popular video—and there are only a couple (including one made by a student for his media studies coursework)—is of the reroping of the flagpole on the spire of St. Mary's Priory.

Okay, you can't *read* these differences from the differences between Atkinson's *Cleator Moor* and the Easebourne Parish Map, but you can sure anticipate them. Atkinson loved Cleator Moor. He has three huge sculptures in its market square (they're his memorials to the town's mining past), and he's furious about the town's condition. The Easebourne mappers love Easebourne, and they feel privileged to live there (as given the prices for real estate they should). Atkinson, meanwhile, lives in Davis, California, where he's a professor at the University of California (although when he made his map he was Artist in Residence at Edinburgh University). Can this be a surprise? "Leukemia," "ruthenium," "cancer causal relationship"—*What? He should have stayed? Are you kidding?*

The differences between the maps, then, are demonstrably attributable to their figuring of Cleator Moor's, of Easebourne's local distinctiveness; and closer attention to the West Sussex maps reveals a lot of this beneath their mostly superficial similarities. At first the Turners Hill Parish Map looks like the maps around it, with its decorative fringe wrapping a sweet map drawn in an almost childlike fashion, except, *whoa!* there's nothing but cars in the fringe, cars and trucks, 52 of them! (See Figure 5.11.) And two jets in the sky, *jets!* Okay, that's easy, Turners Hill must be near Gatwick (it turns out to be only 5 miles away) and, okay, then the cars must mean Turners Hill has already become the "rat run" Copthorne's afraid of turning into. And rather than being *childlike*, the map turns out to be the only one in the collection wholly made by kids, the students of Turners Hill Church of England Primary School (see Figure 5.12), at the time under its apparently amazing head, Anne Mudd (the school has an awesome website, and a wind turbine, and a garden, and chickens). Every day 20,000 some vehicles surge through the village, so "It is with some feeling that [the kids] show more wheels than buildings," Leslie notes, though when they do show buildings they concentrate on the village center, the school itself, the fire station across the street from it, The Crown at the crossroads,



**FIGURE 5.11.** Turners Hill. The map was made by the students of Turners Hill Church of England Primary School. Note the cars and trucks growing around the frame. (Source: West Sussex County Council)





**FIGURE 5.12.** Turners Hill detail. Kim Leslie writes that “It is with some feeling that the [students] show more wheels than buildings.” (Source: West Sussex County Council)

and some cottages built in 1919 for the workers on Lord Cowdray’s Paddockhurst Estate. This lies to the west of the village, creating a buffer against the growth that has afflicted its neighbors, Copthorne and Crawley Down, but the kids don’t show the estate anymore than they do Alexander House to the east, ancestral home of the Bysse family and now luxurious spa hotel. It’s the village that the kids map, with its unbearable traffic, not its lineage or its claims to fame. It’s an amazing map!

Wholly different is the map of Walberton and Binsted. Again there’s that fringe wrapped around the map, but check out the map proper: it’s crisp and clean, there’s a legend, a graphic scale built into the alphanumeric index, and a 500-meter grid. It turns out that the Walberton Action Group has been making maps for a while, first one of house names to help guide postmen around the unnumbered properties, but then to help the police and ambulance drivers; another of local bus routes; six for a series of village walks; and so on. Inspired by the 1992 Rio Summit’s injunction that we all have parts to play in saving the planet, the Walberton Action Group’s map is only part of its initiative: there are its conservation program, the Churchyard Heritage Project, and its Parish Hedgerow Survey. In 1997 it carried out a Valued Features Survey, and its Parish Map has spawned the Walberton History Group with its projects to reproduce and interpret 18th- and 19th-century parish maps.

Then there are the parishes that aren’t immune to the charms of the past but are just as interested in acknowledging the present. Lyminster may bracket its map between the historic castle of Arundel and Knucker—the water dragon that used to live there—but between the two you can find reproductions of modern road, Travel Inn, and McDonald’s signs. “What will all this roadside clutter look like when the next parish map is made in years to come?” Leslie wonders. “What will survive? This type of detail makes these present-day maps a significant record for the future.” Acknowledging that “What we take for granted today will be the history of the future,” Felpham’s team, too, believed the map should be as much about the present as the past, and in addition to mapping every house, phone, and even letter box, has included images of buses, bus shelters, traffic signs, recycling bins,



and the mobile library. The team that mapped Selsey has anointed it with suitable historicity, but also acknowledges the housing developments and enormous trailer parks that blanket the old fields above the beaches, “immortalizing,” as the local paper put it, “Selsey’s past and present.” While working on the map, the Selsey Parish Map Group began mapping vegetation for its Biodiversity Action Plan, and feeding information to the Sussex Wildlife Trust’s hedgerow survey.

Beneath their superficial similarity the maps are often *startlingly* different. The map of St. John’s Street in Chichester, aside from being that of a street instead of a parish, was constructed exclusively from photographs laid down along the spine of the street (the map’s 8 feet long); the map of the Whyke neighborhood, also in Chichester, was composed around an air photo (as was Arundel’s); Chidham’s map embraced fabric painting, embroidery, and appliqué (and if St. John’s Street and the Whyke neighborhood each took in less than a parish, Chidham’s map took in much more); and Cocking’s map consisted of 48 low-relief bronze panels spiraling down a 15-foot column weighing three-quarters of a ton to a pair of bronze maps at the bottom (and it only took the team six years to make). What most of them *shared* was an extraordinary inclusivity, a great deal of anxiety about the future, and a beauty that is sometimes astonishing.

The inclusivity almost always involved making sure everyone got at least a questionnaire soliciting input, as well as a canvassing of clubs, schools, and churches by the group making the map. Here’s the protocol followed in Lavant:

In the best tradition of maps, this one is loaded with local knowledge and prompts the curious to find out even more. Michael Burton’s team of mapmakers, led by Robert Tedman and John Farren, tried to involve as many as possible to achieve this result. After sending a detailed questionnaire to every household in the whole parish asking what they wanted to include, a group of over twenty was formed, made up of artists, researchers and those with detailed knowledge of the village. They involved the young people from both the schools, the village primary school and independent Lavant House Rosemead, whose pupils contributed the wildlife illustrations of birds, animals, trees, and plants.<sup>155</sup>

Haywards Heath, one of the few large towns to make a map for the project, and 10 times the size of most of the participating parishes, could scarcely hope to involve everyone, but on its release the map was hailed “as the town’s first ‘democratic map’—the first to be made by the people for the people,” and the opening words in its credit line read, “Produced by local artists from local knowledge.” Just above the credits there’s a frieze of small drawings of groups of people: “Preschool,” “Schools,” “Youth Groups,” “Churches,” “Sports,” “Music, Art, & Drama,” “Advice & Support,” “Over 60,” “Social Clubs,” “Professions & Business,” “Gardens & Allotments,” “Ex-Service.”<sup>156</sup>

Haywards Heath has grown fivefold since the 1930s, and growth like this is what fuels the anxiety the maps express. Tangmere, whose unusual map has a Spitfire in flight filling half of it, was a small rural parish until World War II when the Royal Air Force built an important air station here. As this base dwindled in importance during the 1960s, Tangmere began to rethink itself as a rural parish, only to face a threefold increase in population as the former airfield was developed into acres of greenhouses (most of England’s peppers are grown here) and housing for the Chichester market. Both old-timers and newcomers seem to feel that

this has worked *so far*, but they're anxious to maintain their identity and distance from Chichester and not devolve into nothing more than the suburb implied by the names of two recent developments, Chichester Business Park and City Fields. They want to remain Tangmere in their own right. This is Cophthorne's desire, and that of Coldwaltham, Watersfield, and Hardham, that of Felpham, Crawley Down, Turners Hill, indeed West Sussex generally, which like it or not is very much part of London's commuter belt.

The prosperity this means has been generally welcomed, and it's one reason so few of the maps turn their back on the present, but further growth too often threatens not merely the identity but the physical reality the identity translates into: open views of the coast and downs, spreading oaks, small schools, and then all the things the Parish Maps Project was intended to surface—the sound of church bells, the cows on their way to the milking parlor, the ancient Saxon church, the secret gardens behind the houses, the neighbors, a street's homeliness, the cowslips, the rabbits, the footpaths along the river, the flint, the chalk, the sandstone, the silver band, the brass, the school fête, the twitten in the Hornet, the gravel-pit lakes, the yew forest, the pigs.

The love the mappers feel for these things suffuses their maps with an aureate beauty. Everyone of these maps is so attractive, often in manifold ways, that it's almost invidious to single any out. But I find myself pulled to look again and again at the colors and textures of Chidham's large fabric map—incredibly lush!—at Cophthorne's green-blue spreading oak, at the seductively detailed map of Fenhurst, at the moody painting of Heyshott's downlands, at the infectious liveliness of the map of tiny Highbrook, at the kids' beautiful map of Turners Hill, and at the complicated richness of mingled techniques in the ethereal map of Washington.

As much as their democratic construction, it's the maps' beauties that call into question the ability of professional, academic, and commercial maps to make useful, or even reliable sense of our current situation; and doubtless it's the ability of Parish Maps to do precisely this that accounts not only for their immense popularity in England,<sup>157</sup> but their growing presence in Italy where they're being promoted—as *mappa de comunità*—through the ecomuseum movement.<sup>158</sup> Donatella Murtas, of the Istituto di Ricerche Economico Sociali del Piemonte (in Turin), who had come to see the Worthing Museum exhibition, later held exhibitions of a selection of the Sussex prints in Turin and Pietraporzio. Kim Leslie in turn made presentations about the Sussex project in Turin, Biella, Genoa, and Argenta—Common Ground was also involved—and this has led to an expanding network of exchanges.<sup>159</sup> It's a kind of marriage made in heaven because ecomuseums are explicitly about place and place identity, they're all about local participation, and they're committed to enhancing the life of their local communities.<sup>160</sup> Through the rapidly expanding ecomuseum network, the Parish Maps idea is spreading around the world.<sup>161</sup>

It's hard to say, of course, what with the deafening din of Google Maps and dashboard-mounted GPS units that—*gasp!*—talk to you, how many will really hear the call sent out by Indigenous mappers, by Parish Mappers, but it's perfectly clear that it's they who are pointing to the future, while the electronic wayfinding machinery is doing nothing more than automating the past.

A couple of days ago an acquaintance said, "I don't understand why people need to make maps anymore. They've got Google Earth."

When I pointed out that Google Earth didn't provide a lot of names he said, "You just click on the 'Show Map' button on the toolbar!"

I said, "Wait a sec," and brought out Leslie's *A Sense of Place*.

He flipped through the pages for a couple of minutes, stopping now and then to take a closer look. "Oh," he said.

And then, "You know, we could make one of these for the neighborhood."