

## Harley and Friday Harbor: A Conversation with John Pickles

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During the Association of American Geographers meeting of 2014, we interviewed John Pickles to document his memories of J.B. Harley (1932–1991) and the time period of the early to mid-1990s when the subfield of GIS and Society took form, including the November 1993 meetings at Friday Harbor and the publication of the edited collection *Ground Truth* (Pickles 1995). What follows is a jointly edited version of our conversation.

WILSON: Do you recall your first encounters with spatial analysis, computer modeling, or even GIS?

PICKLES: I was an undergraduate at Oxford, which in the 1970s was a relatively traditional program. Spatial analysis at that time was stronger in Bristol and Cambridge and in America. At Oxford in human geography, social, political, and regional geographies were more central, and my interests were focused on these, particularly of Africa, as well as geomorphology. So it was really first in geomorphology that I encountered spatial analysis. After Oxford, I went to South Africa and was involved in a completely different set of debates and issues under apartheid. I was trying to think through some of the politics of doing research in segregated societies – South Africa – around questions of state planning, around land use and access in conditions in which the state was moving people very violently. The question of mapping was always part of what I did. You can't carry out research in South Africa and not think about maps. So the question about the role of the map and the relationship between the state and social actors was crucial, but it was always part of a broader set of political questions about spatial practices and violence.

At Penn State, where I studied for my PhD, one similarly couldn't but be involved in debates about spatial analysis, technocracy, and the question of maps. Roger Downs's and Peter Gould's books on maps and space had a huge influence on me, everyone read *Spatial Organization* by Abler, Adams, and Gould, and I was intrigued by the then slow emergence of early GIS and computer cartography and what they might mean for the organization of

everyday life. Mapping and theories of space were everyday present in the program, and most of my PhD cohort wrote their dissertations on related topics. Some did write about mapping and cartography, but I was more interested in broader questions of what Jürgen Habermas was then calling knowledge, power, and interests. The old cyclostyled issues of *Antipode* and the *Newsletter of the Union of Socialist Geographers* were more important to me than spatial analysis and cartographic issues, but mapping and cartography were always part of our day-to-day practices, whether with Roger Downs on cognitive mapping, Peter Gould on Q-analysis and topology, Peirce Lewis on cultural landscapes, Lucky Yapa on statistics and development, Greg Knight in alternative energies, Rodney Ericson on metropolitan growth, or Fred Wernstedt's early morning gatherings in his office while he finished off coloring what we called his stained-glass cartography. Maps, cartography, and spatial analysis were just part of the conversation, part of the framing as to how we thought about the field. It was also the time that saw the beginning of rapid investments into computerized cartography, about which Tony Williams, Ron Abler, and Lucky Yapa were variously excited.

The 1978–1984 period for me was very much about the way in which the discipline was beginning to project a certain future based on possibilities of this technology, which – at the time – were not really evident. You had to believe in the promise, what Walter Benjamin called “the wish image.” And most importantly for me, and for many, not just me, the discussion and belief alone were transforming the investment relations in the field and changing the relationship between the field and other kinds of communities. How those investments were shaping the way in which we could practice geography in the departments, and how the discipline was being drawn into different kinds of correspondences, communities, and discussions, was of some concern. It was happening quickly, yet we seemed not to have good conceptual tools to deal with what was happening. Nearly all of my Penn State

cohort were somehow engaged between Geography and the Philosophy Department and its Interdisciplinary Program in the Humanities, trying to think these issues through in various ways; I worked with the philosophy of science, especially phenomenology; others were fascinated with logical empiricism, Wittgenstein, Vico, or Hegel. Toward the end of my program, my friend and neighbor Mark Ridgeley started sharing with me his copies of Denis Woods's *samizdat* writings on cartography; these were eye-opening, much as my first reading of Bill Bunge's expeditionary papers had been, and it was probably there, and with the enormously difficult *Birds in Egg/Eggs in Bird* and related writings of Gunnar Olsson, and the constant conversations with Roger and Peter, that – not only the political violence cartography wrought – but the theoretical significance of mapping began to become clearer to me.

WILSON: Do you recall in the 1980s reading Jerome Dobson's "Automated Geography" or Terry Jordan's newsletter column on GIS as AAG president in 1988?<sup>1</sup>

PICKLES: Not at the time. I did not train in cartography, never have. I've always been intrigued with and interested in what in *A History of Spaces* I called the magic of the cartographers' craft. Almost everywhere I've been, cartographers have become close colleagues. I have always had the utmost respect for the craft cartographers I have known. But it has not been, for me, or for them, the technical practice of cartography that interests me. I'm interested in cartography as a particular kind of social practice that produces worlds for us in various ways and shapes the possibilities and some of the limits within which we can think about the world.

Some of the first things I wrote in this area were about propaganda. I saw it as a way into a critique of representationalism in geography. I wrote something on the Peters projection, and then I started writing on propaganda maps and trying to use propaganda maps as a way of arguing against a kind of literal reading of mapping, as a critique of representational thinking.<sup>2</sup> I was similarly drawn to hermeneutics as a methodology for opening up a way of critiquing correspondence theories of truth. So in that sense for me that was part of a broader critique of logical positivism and empiricism. It was part of a turn to hermeneutic phenomenology, to provide a much broader critical resource for dealing with the representational logics, not just in cartography and the way in which propaganda maps were used, but around some of the claims being made about spatial analysis and around economic geography at the time. It was only later, in the *Professional Geographer's* revisiting of Dobson's essay, that I was asked to write a short commentary.<sup>3</sup>

CRAMPTON: Was it in *Writing Worlds* that you first encountered Brian Harley's work?

PICKLES: No, I encountered his work earlier, but it was around the situating of our two essays side by side that

we started to correspond. Perhaps that is where he first encountered my work. I met him in 1991 after he had moved to Milwaukee. I'd given a presentation at the AAG annual conference on the question of mapping and hermeneutics, which was, maybe not quite the same paper that came out a little bit later in *Writing Worlds*, but on those kinds of issues.<sup>4</sup> He was involved in that session, and afterwards we started talking about the correspondence between his work and his interests around cartography and some of the things we were both working on. Both of us were particularly exercised by the question of the rise of technoscience and, in geography, GIS. At the time, the classic form of locational analysis was being repackaged into a GIS world – all knowledge in one place at the same time, the ability to catch and render the object through complete control of spatial knowledge, and an incredible commitment to the veracity of spatial data. It was having a real impact in departments and on the discipline. We spoke primarily about how we might combine the critique of cartography that he was developing with the kinds of questions I was asking to engage what we both thought were the more exaggerated forms of hubris then being demonstrated in the grand claims for GIS, claims that were reviving claims about social utility, social engineering, and disciplinary importance made by spatial analysis 10 years earlier. As I remember, we were interested in how we might think together about these limits – or what we thought were limits, or challenges, or at least questions. At the time, Brian was particularly interested in the contemporary effects of the emergence of GIS on cartography and the history of cartography. And so for both of us, we were talking about something that was a little bit distant from us and in a sense outside our own fields of expertise, but something that was having important effects and to which we wanted to respond. After the AAG session I think the goal was to start with the simplest thing, which was to pull together the people who were asking those questions and to see if we could create a conversation.

CRAMPTON: So how did the Miami session come about? Your paper was titled "Technology, Knowledge, and Democratic Practice."<sup>5</sup>

PICKLES: Mark Monmonier organized it. My paper was an experiment to bring together my work on science studies with work I had been doing at Ohio University with the Institute for Democratic Education. Through that institute I had revisited my earlier Oxford and South African interest in radical pedagogy, particularly the work of Paulo Freire, Ivan Illich, and the deschooling movement, as well as Bunge's expeditionary geographies. In the institute and its related conferences in critical pedagogy, such as the Bergamo conference in Curriculum Theory, there were a group of colleagues including George Wood, Henry Giroux, Peter McClaren, and Bill Eyers asking parallel questions to those we were, but from a very different set of fields.

CRAMPTON: So Mark knew both you and Brian, then?

PICKLES: That's right, but I don't remember how the panel was convened. Mark would have known the others on the panel since they were each involved directly in cartography or the history of cartography. Patrick McHaffie had been a professional cartographer and was then a graduate student at Kentucky. He participated in Initiative 19 of the NCGIA (National Consortium of Geographical Information Analysis) on "GIS and Society." I had met Sona Karenz Andrews a little earlier at Minnesota. It was at the panel that I met Brian for the first time.

CRAMPTON: So you met him in 1991, which is of course the year he died.

PICKLES: Yes, that's right.

CRAMPTON: He died in December 1991. You only met in Miami.

PICKLES: We met in Miami, and the outcome was the discussion I just mentioned and the decision to try to do something together. We agreed that I would draft up a few pages to reflect our discussion for a book proposal. I did that and sent it to him sometime in the summer. Shortly after that he died. I think his secretary, or maybe someone in his family, wrote to me that they'd found my letter and outline in his papers and asked if I wanted it back. And that was the conversation. It was very short. It was really just that period and that exchange; we went back and forth only a couple of times discussing it.

CRAMPTON: Paul Laxton mentions in the preface to the posthumous collection of Harley's essays that Harley had been working on a book proposal called *The Map as Ideology* since 1984.<sup>6</sup> Would that be the same book?

PICKLES: Maybe a different book. Ours was to be an edited book pulling together essays thinking through the question of GIS and its impact. We outlined it on the back of a bar napkin, jotting down some key issues and geographers we were aware of working on them; obviously, Michael Goodchild and Peter Taylor were important, Howard Veregin had just published or was about to publish something that fit very well, along with Pat McHaffie's work on public cartography from the same session, with Michael Curry on privacy. I think later I became aware of Jon Goss's work on geo-demographics, Sue Roberts and Rich Schein's interest in mapping and critical geopolitics, and Trevor Harris, Richard Levin, Dan Weiner, and Tim Warner's work on GIS and apartheid agrarian landscapes.

CRAMPTON: Did you correspond with Brian prior to meeting him?

PICKLES: No. I knew of him, but I hadn't met him before at all.

WILSON: But you had read his writing.

PICKLES: Yes, a little, but at the time I wasn't really aware of the larger History of Cartography Project that was in

process at Milwaukee and Madison. I had read three or four of his better known essays, but as I said, I have not thought of myself as a scholar of cartography. It is something I have slipped into. I'm interested in maps and mapping but in a different way than he was. Our discussion at the time was certainly based on what I think were common interests and commitments. Our ideas seemed to resonate back and forth; he was drawing on certain texts of Derrida and Foucault. I was, at the time, fascinated with Foucault but only just encountering Derrida, both of whom – in time – have become increasingly important in my own thinking. But, at that point, my ideas were more directly rooted in Husserl, Heidegger, Merleau-Ponty, and Gadamer. I think that it was these resonances that started the interesting conversation.

WILSON: There was a memorial session for Harley?

CRAMPTON: Yes, at the Atlanta 1993 meeting. Harley had died in December 1991; too soon to organize anything for the 1992 meeting, so it was held over until 1993. Did you give a paper there?

PICKLES: No. I could not go to that meeting for some reason. I think at that point I was overseas, because in 1993 I was doing a lot of work in South Africa. So I was away for all or part of that semester.

CRAMPTON: Matthew Edney gave a talk, Anne Godlewska, Denis Wood, David Woodward, and myself.

PICKLES: Oh yes, yes.

WILSON: So after his death, how did the conversations on GIS and the map as ideology lead toward Friday Harbor?

PICKLES: The conversation Brian and I had was certainly part of a whole series of similar and broader conversations occurring at the time in the discipline. The question of GIS and critical cartography was always located for me – and I think for many of the people I interacted with at Friday Harbor – in bigger questions of instrumentalism and discipline. In one way or another, the initial arguments between colleagues like Peter Taylor and Stan Openshaw were taken up by a wide range of geographers who were interested in what was then being referred to as post-positivist epistemologies, whether Marxian, hermeneutic, feminist, realist, or relativist. I have mentioned the Penn State group. There were others. One important group was assembled around Eric Sheppard and others at Minnesota, including Michael Curry, Trevor Barnes, and many more. Eric and Michael, in particular, were central to the Friday Harbor meeting.

WILSON: What's your sense, then, of Peter Taylor's 1990 critique, which was responded to in 1991 by Openshaw, and Neil Smith's "Real Wars, Theory Wars" in 1992 and Bob Lake in 1993?<sup>7</sup>

PICKLES: These were all part of that. Peter's essay is strong and maybe a little overstated, and the Openshaw

response is just remarkable! “In the end we can do it, it’s all going to be in here. All knowledge in one place; all problems solved, one this day, another the next.” It’s the most remarkable and clearest statement of exactly what I think many of us thought was worth taking on as a challenge, as a question.

WILSON: But at that same time the 1993 special issue of *The Professional Geographer* on the 10-year retrospective on Dobson’s “Automated Geography” includes you and Sheppard as well as Goodchild. That’s interesting.

PICKLES: Yes, I think there are some very key figures in that debate. Eric is one representing the strong claims for social analysis and Mike Goodchild another representing the strong claims for an innovative and adaptive GIS. In both cases there’s a deep commitment to the field and to the discipline and to thinking about it very carefully. So while each has very strong views both are very open intellectuals. Both were (and I think still are) very supportive of the kind of debates we were having. There were lots of disagreements, but the importance of creating venues for those debates wasn’t in question. So “Automated Geography” was part of that – and stimulated one set of debates.

CRAMPTON: And your own essay on GIS as a surveillant technology prior to Friday Harbor?<sup>8</sup>

PICKLES: That’s right. I gave that at the Applied Geography conference. It was received a little differently by teachers and students. Among GIS academics the reception was one of suspicion. But among practitioners in the field and graduate students training in GIS programs the reception was positive. Every time I presented work like this it was usually the graduate students and young assistants that were most interested and showed an excitement and openness to some of those issues. I saw it as a kind of generational move that was afoot for all sorts of reasons. It was also why we always tried to include students and younger scholars in the Friday Harbor and subsequent meetings.

WILSON: You moved to Kentucky in 1990. What’s your recollection of how Friday Harbor came to be?

PICKLES: When I arrived at Kentucky these questions were being asked in the discipline in several venues; discussions like that in *The Professional Geographer* around “Automated Geography,” Neil’s incendiary, the Openshaw–Taylor debate, and the things Eric Sheppard, Michael Curry, and I were writing. Out of this broader context, and specifically out of discussions at the National Science Foundation (NSF), emerged the NCGIA Project Initiative 19. The NCGIA had been funded by the NSF with many years of funding in three centers: Santa Barbara, Buffalo, and Maine. It revolved around three to five or six key figures, including David Mark at Buffalo, Harlan Onsrud at Maine, and Michael Goodchild and Helen Couclelis at Santa Barbara. It was an exciting project, funded for a whole

series of initiatives to do a lot of fundamental conceptual and technical work for the development of GIS.

Eric Sheppard was one of the reviewers for the NSF proposal. As I understand it, he insisted that while this was an important initiative for the NSF to support, it should – as it had claimed it would in the initial program proposal – include a social dimension to the work. The project was so grand in scope, this social component needed to be integral to the broader question of what was happening as GIS developed. I think by Initiative 14 or 15 that hadn’t emerged, and at some point the NSF stepped in asking for something to be done. This was Initiative 19, “GIS and Society.” It has a longer name, but that’s how we referred to it. Friday Harbor was either the precursor or the outcome, I’m not exactly sure now. But essentially it was to bring together what later became popularly referred to as the “critics” and the “GISers.” Those were not our terms; I don’t think we ever said it that way. It was really people who were interested in GIS but were trying to open up the social questions, and the economic and political questions, and those who were in the initiative, of which by then there were quite a lot of people. David Mark, Michael Goodchild, Harlan Onsrud, and Eric Sheppard were the key figures directly pushing the initiative. I think each had different reasons, but each of them really saw some advantages in doing so. David Mark in particular took a lead role with Michael Goodchild in Friday Harbor. There were about 15–20 of us. Stan Openshaw was at either the first or the second of the meetings, along with University of Washington colleagues who were the main organizers and hosts, particularly Tim Nyerges and Nick Chrisman. My recollection is that Friday Harbor led to Initiative 19, and that, in turn, led to several years of projects around questions about the social and geographical implications of GIS. There were several component parts, including work on a history of GIS project. Pat McHaffie, for example, did research on the Harvard Graphics Lab. David Mark studied GIS involvement in terrain mapping and cruise missile technology. Jon Goss continued his work on geo-demographic modeling, and Michael Curry on issues of technology and privacy. Other projects focused more on the social impacts of GIS use (such as the West Virginia group working on South African land-use change), while others focused on public-participation GIS (PPGIS) (such as Sarah Elwood and Nadine Schuurman).

WILSON: What’s your recollection of the meetings? Were they a kind of standard series of papers with responses? Were they contentious at times? Was there much back and forth?

PICKLES: Friday Harbor was a gathering. We met in “town hall” fashion, first with agenda-setting comments from one or another of the participants, followed by extended discussion. We then broke up to caucus in smaller

groups. In other sessions, we arranged a series of short presentations. There was time for discussion and a lot of breakout time. It was a very productive churning of ideas. The goal was to ask, “What kind of conversation is possible?” Or “Is there a possibility of conversation, and in what directions would it go?” So it was more like a workshop, a productive workshop. We subsequently had a series of meetings from Friday Harbor and, through Initiative 19, at Santa Barbara, Buffalo, and Minnesota. They took much the same form. They were remarkably uncontentious, open, engaged, and serious. At first there was suspicion, obviously. Stan Openshaw, Nick Chrisman, and Tim Nyerges were characters with strongly felt views but born of deep experience and commitment to the discipline. I am sure, at times, that their level of frustration with social theoretic arguments about knowledge and interests, uneven access among users, and open-access GIS seemed at times at a high level, but my recollection is that the discussions were always vigorous but congenial.

WILSON: In your recollection did Harley’s writings figure very strongly in Friday Harbor discussions, or was it more the kind of Smith, Taylor, and Openshaw interventions that lingered more recently in memory?

PICKLES: Well, I think that Peter’s, Stan’s, and then Neil’s essays were extremely helpful, but they were polemical and they fueled suspicion among different groups working from different epistemological perspectives. If you read the sort of things Eric wrote then or shortly afterwards, it’s a very different way of approaching the issues. Initiative 19 was more about opening and sustaining dialogue, rather than staking out positions. The idea was to open up a conversation, not to close it down, not to presuppose the kind of conflictual, oppositional logic. I think the Taylor, Openshaw, and Smith essays – and I had also written something that people found polemical and offensive – were important in pushing some issues onto the table. I don’t think they were particularly well discussed later. In part, the participants found that each of us was struggling with parallel concerns, albeit mobilizing different theoretical resources to do so. When you initially asked me this question, I said that Brian’s work wasn’t really discussed directly. But, having gone back to some of my papers, I think that was not accurate. Many of the participants were certainly aware of his work and were interested in how critical cartography might help in thinking critically about GIS, particularly his essays written around the period that “Deconstructing the Map” was published.<sup>9</sup> In this context, we had long discussions about what happened to knowledge when it was processed as binary information, about the effects of Turing machines and the possibilities of three-figured logics, about the politics of pixelated binary data and statistical categories. Could we envisage a GIS-2 that would be open-source, more inclusive of the kinds of information it incorporated, and available for new forms of expeditionary geography

and community activism? What are the effects of specific forms of categorization on the outcome of land-use/land-cover analyses? And many more ... These were all influenced by the kind of path-breaking work Brian had done for cartography, particularly around categorization, selection, and ideology. You’ll remember Barbara Belyea’s<sup>10</sup> 1992 critique of Harley’s engagement with Derridean deconstruction and Foucauldian genealogy, where she argues that he still held to a representational epistemology, adds a socio-political dimension to map reading, but that his was not a fundamental rethinking of mapping practice. While that kind of discussion was raised only in passing in the daytime meetings, politico-epistemological discussions of these issues were the center of long evenings afterwards.

CRAMPTON: Was there an ongoing impact of Friday Harbor?

PICKLES: Well, that’s interesting. The legacy of Friday Harbor is Initiative 19. I think that’s the historical trajectory. And the outcome of Initiative 19 is Varenus. Varenus is the next phase that the NCGIA took to the NSF for funding. It was essentially, as far as I understand it, more or less the NCGIA reworked, but Varenus had a slightly bigger set of issues. I think it was at that time that Michael Goodchild was beginning to argue that geographers can’t possibly be at the center of GIS but need to be more reflective, and that he coined his term “GIScience” in 1992.<sup>11</sup> His argument was that GIScience needs to be more theoretical, more conceptual, and more abstract in framing the conditions in which practitioners, software developers, and others will use the technologies for concrete forms of analysis and practice. Geography or GIScience needs to lay claim to a different kind of relationship with the practice of GIS. That became the basis for Varenus. You can imagine what the NCGIA was doing in the first instance; it was really developing a lot of the very pragmatic issues around categories and different kinds of parts of what became the sort of expanded field of GIS. Varenus was trying to develop GIScience and also had some very strong social reflective moments in it. I wasn’t involved in Varenus. It seemed to take a different turn, and I think by then I was doing other things. Eric Sheppard continued to work with the project for some time, as did Dan Weiner and Trevor Harris at West Virginia.

It was around these issues that Openshaw and I had a kind of coming together, positively. At one point in one of the Friday Harbor sessions he leaned forward and said, “Oh, so what you’re arguing is that people should participate!” And that *was* the argument, yes, that there should be a democratic strategy, ways in which, if we’re developing GIS, there should be forms of mediation, discussion, against these kinds of more technocratic usage. Our question was certainly one about the kinds of participatory GIS that might be possible. One model we discussed was an activist one, an expeditionary or community mapping model for GIS. This emerged as PPGIS, and discussion

focused on how such approaches might align with the needs and questions of particular publics. Another related model was more focused on technical concerns and circled around opportunities for opening up GIS platforms to not only new kinds of users but different forms of knowing and different types of information, much in the way the Internet has itself emerged in recent years. More abstractly, some of us were more interested in the broader challenge that Gunnar Olsson had posed earlier in arguing that spatial analysis was inherently conservative because of the ways in which it depends for its future projections on spatial data and assumptions rooted in existing material conditions. For me, the geographical inference problem Gunnar had posed remained the critical core of my engagement with GIS and cartography throughout this period.

We were trying to think of ways in which, as the technology develops, it can become much more open to different kinds of archives, different kinds of practice and publics. Superficially, these are the kinds of things you can do on Google now, all the things we can now do: maps with embedded imagery, with narrative, with local histories, and that might allow different kinds of users and communities to participate in their production. It wasn't that we were against information systems, never that. It was always Bunge's argument, that "I can bring a technology, but you have the questions, you bring the information, and we'll work together." And I think that kind of expeditionary logic was always behind our thinking. And that's where Openshaw suddenly realized, and says, "So what you're talking about is GIS-2!" Yes, that's what we're talking about, GIS-2, a more open platform for different kinds of publics. But it was to turn a few years later into PPGIS, and, in a way, that logic got captured by a particular kind of "outreach" GIS. That was important, and I still review many papers coming out on exciting new work in this area, but it wasn't what I was directly interested in. It also turned into a kind of rampant commercialization of these kinds of consumer-friendly products, perhaps Google being the clearest example. At Friday Harbor we talked about the library and the nineteenth-century production of the library and the condition of the industrial working class and what that meant then for certain kinds of organizing. So what could we do with GIS to avoid it becoming proprietary, in such a way that it could become more a kind of library? The key was not to empower GIS to extend its reach, or to commercialize user input, or to develop it as a tool for community or indigenous mapping (an important thing to point out with the recent revelations about the Bowman mapping expeditions), but to develop a thorough-going ideological critique of the role and place of technology and social engineering in society. I think that was where Brian's legacy had a particularly strong resonance and real effects in the discussion.

WILSON: What's your sense of the timing around the tool-versus-science back and forth with Dawn Wright, James Proctor, and Mike Goodchild?<sup>12</sup>

PICKLES: That's right, that was the essay in the *Annals*? Well, history's not a linear process; it's more like waves on an ocean, or Vico's cycles. In that context we'd been working with Initiative 19, with the NCGIA, but every now and then circumstances seemed to call for more defensive manoeuvres; perhaps that essay was one of them. It seemed to me to be the kind of extreme set of claims that Barry Moriarty and Dobson had made years earlier, claims that ought to be questioned particularly because of the way they reinscribed some of the very things we'd been talking about for a number of years in these initiatives. The editor of the *Annals* must have felt similarly. Several of us were asked to respond. I think in the responses we basically tried to reassert some of the arguments we had been making for a number of years. A few years after that exchange, Michael Goodchild asked me to write a paper on these issues for the "big book" of GIS.<sup>13</sup> I framed it as "Arguments, Debates, and Dialogues: The GIS-Social Theory Debate and the Concern for Alternatives." I think at the heart of the "debate" (if one still exists) is how we frame the debate. There were (and are) firm commitments to particular notions of science or empiricism and firm commitments to different epistemologies on both sides. I frame them as a post-empiricist critique of empiricism, a critique of logical positivism. From their perspective there remains a strong commitment to that mode of spatial analysis. So there's a kind of generational issue at work, and I think in some ways it probably got in the way. I don't see that in people like Sarah Elwood and others. I don't see the issues being framed in quite those ways now. So it's probably a sign of that 1980s group and the way that we came to it.

WILSON: What's your recollection of the organization of *Ground Truth*?<sup>14</sup> Was that something you discussed prior to Friday Harbor, prior to the meetings or at the meeting?

PICKLES: It started in that conversation with Brian. I always think of it in that way, and I dedicated the book to Brian. The book came out in 1995, so it also coincided with the various meetings at and after Friday Harbor. Several chapters came out of Friday Harbor and subsequent meetings, such as the chapters by Jon Goss, Michael Curry, and Patrick McHaffie, as well as others from other meetings, or I recruited them. Rich Schein and Sue Roberts were working on related issues, and their essay on critical geopolitics fit very nicely. Similarly, the Harris/Weiner chapter was developed in the field when I joined them in South Africa. Eric Sheppard had at the time just published a major paper on related issues, and after checking on republishing it in the book, we decided against it. It is a pity; *Ground Truth* should have included Eric's chapter.

WILSON: How about its reception?

PICKLES: Well, I think it was well received, generally. There was a clear need, particularly on the part of young people and people training in GIS. They were desperate for something like that. At the time, they were being given very technical preparation but very little in terms of broader reach and context. So my sense was always that the students who read it enjoyed it. Young faculty members I met always seemed to like it. There was lots of opposition to it, too. There were a couple of reviews that were not so nice. I think Robin Flowerdew, if I remember, wrote a very scathing review. Trevor Harris once told me, that somebody – I don't know who – stood up at an Institute of British Geographers meeting holding the book up in his hands, saying that this is a call to arms [laughs]. So I'm sure there was negative response. I have always found people willing and keen to talk about it. I think for some people it was seen as a reactionary swipe, but it wasn't written that way. It was essentially a work of STS [science-technology-society studies] or of cultural studies, and in that sense I've always thought of it as doing what Brian and I thought it might. It was certainly what Peter Wissoker, the commissioning editor for the book at Guilford, thought of it. I don't think it was written as a polemic, although it was certainly seen that way by some. But by and large the reception was quite good. I wanted to make sure there was a kind of balance across the book. Obviously it was at one level social critique. But I think there was balance, and I have been pleased with its reception and impact.

WILSON: As I look back on this work, *Ground Truth* and the conversations happening around Friday Harbor seem like very North American phenomena. Do you have a sense if there was much of a ripple effect in British geography?

PICKLES: It certainly had some effect in Britain. It was in Britain where it was held up as a portent of evil to come. I think similar discussions were going on in the United Kingdom; I don't think they were very different. The scale at which information technologies were developing, and their application in corporate and state domains, was much more expansive in the United States; the alignment of GIS with capital had – at that time – certainly gone further in the United States (although I am not sure that is still the case), and the impacts of GIS on public debate may have been deeper. I think there was a bigger hubris around both the university participation in these projects and their use in the global society. I think in Britain that simply wasn't quite as strong. Certainly GIS was important in the United Kingdom. It was growing in the universities. So were the debates about funding, direction, and what kind of geography we were doing: that was David Harvey's question – what kind of human geography, what kind of social, what kind of public policy? – and it remained then and still today just as important a question.

WILSON: I just wonder, because the late 1990s and early 2000s saw a new generation of hires in the GIS and Society field, primarily in North America. I don't really know that there were similar hires to Nadine Schuurman, Sarah Elwood, and Rina Ghose in British geography.

PICKLES: Certainly, in the United States Initiative 19 had something to do with that. All of those people came to the meetings and conference sessions that were organized as part of the initiative. The goal was always to create spaces for slightly different kinds of conversations, for those people who were already working through those programs and trainings and who were already committed to the various sorts of research projects with GIS and around GIS. Bringing these people into conversations may have helped frame not only graduate education but also the opening of hiring practices and curriculum in US geography departments. And now they are the ones who are pushing very strongly. I think Nadine was the one who argued against me at times, against my use of epistemological critiques of logical positivism or logical empiricism. Instead, she argued for the necessity of working in and with the technology, and that was an important shift. For the most part, the conversations we were initiating were, from her point of view, on the outside. I think what happens with Nadine and the others is that a much more internal and engaged critique emerges. I'm not sure how productive that's been or how different it's been, but it's certainly a different kind of position that enables new kinds of conversation to take place. So that's the moment that people like me stepped back a little bit. At that level I think our job was done.

WILSON: How did *A History of Spaces* emerge?<sup>15</sup> What kinds of ideas led to that? Is it true you discovered the manuscript, having forgotten it in your desk drawer?

PICKLES: That's entirely possible! I discovered a manuscript that I'd written some time ago, and I'd forgotten all about it. It was about 70% complete. It's partly the curse of being busy, partly that some writing takes time. My philosophy professor at Penn State, Joseph Kockelmans, once showed me three nearly complete manuscripts "parked" in his filing cabinet and said that "some books are best left to simmer." I'm sure I have lots of manuscripts that should simply be left to go cold! Over the years, I had written a lot of things, very often reacting to other people. So these things you've asked me about, I was asked to comment, and so a lot of these things came out. Although I was responding to something that happened or something somebody else wrote, I thought I needed to center my own ideas and re-situate them in a different context. On matters of mapping and space I hadn't really expressed anything of my *own* thinking that wasn't reacting to others since my book *Phenomenology, Science and Geography*.<sup>16</sup> Partly this was because of my involvement in apartheid/post-apartheid South Africa, then the political economy of post-socialist Europe, and now

increasingly the global economies of apparel research, but partly this was that I felt I was being driven along pathways that were not necessarily my own. *A History of Spaces* was largely an attempt to bring together my own writing and thinking and try to make it a little bit my own voice and create a slightly independent position. It was very much an attempt to link the kind of theoretical philosophical work I was doing – everything from Husserl, to Foucault and Derrida, to Lefebvre, Gramsci, and Althusser, to Stuart Hall – into a political project around the question of knowledge production and its effects; and then mapping, or a history of spaces and mapping became an entry point.

It was the sort of thing I always teach. I'd start the class with my impersonation of Gunnar Olsson. "What is geography if it is not the drawing and interpretation of lines,"<sup>17</sup> the creation of a difference; the inscription of a dichotomy; the production of a category; and the wonderful way he has of unpacking from this line a whole world. That's how I think about the role of mapping. And so cartography is just a part of that, it's not for me the main part, mapping is a lot bigger set of projects. Increasingly over the years, I've become interested in activist cartographies. This was partly about the question of public participation in GIS; I was getting more and more manuscripts to review on it where I felt "this is not really for me, not where I want to go." I wanted to create a kind of different statement. I was increasingly interested in the way in which social movements were interested in mapping. *A History of Spaces* is a part of that; the Counter-Cartographies Collective (3Cs) is another part, as is some of the work I've written more recently. I've just done a chapter for a book in Paris with a series of artists there. These continue a conversation that has now led me into border studies with my colleagues Maribel Casas-Cortés and Sebastian Cobarrubias. Here mapping and the border are two integral parts of migration and border management. Part of that work is asking how cartography is used and deployed in those settings, what the politics of the maps are as they circulate in institutions of differential inclusion, and what possibilities new forms of mapping offer to migrant movements themselves. So *A History of Spaces* came out of that attempt to pull things together.

It also came out of a specific conjuncture. Your question about the lost and found manuscript relates to this. I had virtually finished the manuscript several years prior. In the meantime, I started to reread Lefebvre and Althusser. From Lefebvre I discovered that wonderful question: how many maps would it take to represent the city? From Althusser, the question of overdetermination became an absolutely critical aspect of how I see the world. This is not the Althusser of structuralism but the Althusser of contingency and openness and the way in which overdetermination is always about the complexity of the production of categories, objects, relationships. I wanted to try to take on the one hand a Derridean, deconstructivist

reading of the stabilization of meaning through the infinite chains of signification – this is my "spider logic" of the stabilization of meaning – within a Foucauldian notion of a kind of production of a sort of social formation, if you will, which for me is read very much through cultural studies, and overdetermination from Althusser. So the project was, could I rewrite that nearly finished manuscript in my filing cabinet to engage with mapping from those perspectives?

WILSON: And do you think your interactions with Brian Harley focusing on technoscience as associated with mapping and cartographic production through GIS helped ground or provide a springboard from which to do that project?

PICKLES: In my work on cartography and mapping, the geographers who have been directly influential for me at different stages have been Roger Downs, Peter Gould, Brian Harley, and Denis Wood, and – I would add – Gunnar Olsson for the enormous importance of his work on cartographic reason. Thankfully, the intellectual projects of each continue to grow, and the effects of each are transforming the ways we think about maps and mapping, and about ourselves. They are also transforming the ways in which others beyond geography think about our work. Brian's influence was also of great importance to the many conversations and programs we have been able to run through West Virginia University, the University of Kentucky, and the University of North Carolina. Particularly at the University of Kentucky, Brian's work was an important part of a broad series of conversations with John Paul Jones, Wolfgang Natter, Ted Schatzki, Sue Roberts, Rich Schein, and the many other participants and visitors in the Committee on Social Theory. In the past two decades since Brian's passing, besides the initiatives we have been discussing, I have had the great pleasure to have also been involved in social movement mapping groups and to have encountered the amazing Brian Holmes, to have worked with a wonderful group of students in our Counter-Cartographies Collective, and to have been a passing participant in a cartographic history laboratory at Duke University. In each of these settings, Brian Harley is not only a canonical figure but an iconic figure of the importance of thinking carefully about the ways in which we put pen to paper.

April 2014, Tampa, Florida

Transcribed by Lindsay Shade

### Notes

1. Dobson (1983); Jordan (1988). The latter piece appeared on the front page of the newsletter and worried that "traditional" geography was being "swamped in the rush to GIS and similar easily justified but nonintellectual expertise" that would turn the discipline into a "race of technicians, for-hire scientists, and teacher-trainers."
2. Pickles (1992).

3. Pickles (1993).
4. The 1991 AAG was held in Miami. Harley was a discussant for a session titled "Ethics in Cartography." The other panelists were Sona Karenz Andrews, Patrick McHaffie, and Mark Monmonier.
5. Pickles (1991b).
6. Harley (2001).
7. Taylor (1990); Openshaw (1991); Smith (1992); Lake (1993).
8. Pickles (1991a).
9. Harley (1989).
10. Belyea (1992).
11. Goodchild (1992).
12. Wright, Goodchild, and Proctor (1997).
13. Pickles (2005).
14. Pickles (1995).
15. Pickles (2004).
16. Pickles (1985).
17. Olsson (1992, 95). The full passage reads, "For what is geography, if it is not the drawing and interpretation of lines? The only quality that makes my geography unusual is that it does not limit itself to the study of visible things. Instead it tries to foreshadow a cartography of thought!"

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