WHAT MAKES A MAP A MAP?

Abstract Cartographers have long pretended that the authority of the map was a function of its resemblance to the world. Hence cartographers' obsessive concern with accuracy. Here it is argued that the map's power derives from the authority the map steals from its maker.

What makes a map a map? It is its mask that makes it a map, its mask of detached neutrality, of unbiased comprehensiveness. Why does the map wear this mask? Not as it might be imagined to obscure a blemish, but because it finds itself in a situation never meant to be. This is true of all alienated sign systems, they have become unmoored from the dock of human intercourse, they are floating on a turbulent stream, objects in the world, but with this difference, that their quality as things is less significant than their quality as signs.

Hail may or may not ... be a sign from God - it will flatten crops in either case - but an unread map - is just a piece of paper. Before it can become anything else, it needs to be spoken for. It needs what our courts need, sworn testimony. It needs warrants. Absent these ... maps fake it, they put on the mask, they try to pass. And once they're disguised ... hoo boy!

Experimental Sketch Maps
As a psychogeographer I have spent much of my scientific life concerned with things that I and others have widely referred to as mental maps. Of course, these were never maps, they were never more than hypothesized neural substrates - fusions of place imagery with desire or need - that we imagined had to exist to facilitate purposeful action. To study these hypothesized neural entities we asked people to make what my colleague, Robert Beck, and I referred to as “experimental sketch maps.” We were quite clear about what these were, defining them on one occasion as “sketch products created by experimental subjects.” Further differentiating them from maps we also noted that they were, “personal views of the geographic structure of the world expressed in map form,” where “map” was to be taken, “in the concrete sense of the conventional map, so that the products resemble maps.” Distinguishing among six hypothesized map types, I characterized this standard map as, “what we are used to calling a map,” going on to note that such a map, “can be acquired at any gas station free or purchased in book stores or found bound into atlases.”

That is, we were at pains to distinguish among three things: a map (the concrete artifact available at gas stations), an experimental sketch map (a maplike sketchproduct created by people in an experimental setting), and a mental map (the presumed neural medium for purposeful action in the world). It’s important to note that the distinction we were drawing was not just between the material and the immaterial, but between what we might call “naturally occurring artifacts” and “experimentally induced artifacts” as well. Even though the latter were complicated physical graphics, we could never bring ourselves to think about them as maps. We knew what maps were: they were what our subjects bought when they went out looking for something to guide them around the city.

Here’s what we were doing. We were collecting sketch maps made by thirty-some teenagers who were traveling through Europe for the first time. After a couple of days in London or Rome or Paris we would ask them to draw a map of the city, and then a couple of days later another, and so on, but according to a protocol we had taught them called Environmental A. This had been devised to obviate certain difficulties in interpreting what we referred to as “uninstructed sketch mapping,” and it obligated them to proceed by creating a “point-line skeleton” on a sheet of white paper that they subsequently annotated on tracing paper overlays.

Some of these products were quite elaborate (there could be as many as six layers and each could be covered with marks), and they were emphatically physical (as the sketch maps accumulated it grew increasingly difficult to drag them around Europe; and they constitute an archive we continue to study).

Why then weren’t they maps?
I want to say that they weren’t maps because their objectness, their objectiveness, their ... objectivity had not
Sealing Their Independence

Why not? Evidently the sketch maps have been produced, have been handed over, have been literally pushed (if not thrown) away. What’s missing? Think about what happens when you’re stopped for directions. First you listen carefully to make sure you not only know the destination but understand the problem getting there. Then you say, “Sure, you turn left at the light, you go straight ahead down the hill and up the hill, and you’ll see it at the top of the hill on your left,” looking, as you say this, to your auditor for understanding. If it doesn’t take, you try again. Ultimately, you get the assent you need, the eager repetition, you make your confirmation, you get the satisfied nod, the thanks ... and the satisfaction of watching the car make the appropriate turn. Until the other has assented, your directions have not become objective (have not become objects in the world), are still too caught up in the personal (they are too idiosyncratic to make sense to the other); but in the interpersonal situation the two of you keep trying until the directions ... make sense. It is only after the driver (the other) has accepted them as sufficiently in the world - that is, sealed their objectivity - that he or she will act on them. Does this assure their accuracy? Not at all. All of us give and take wrong directions all the time. The sealing only assures the status of the directions as objects, that is, as objective, in the world.

Directions, of course, are not maps. They are ... directions. Once emitted, sealed and acted upon, they evaporate. The person giving the directions has little reason to retain them since the neural substrate from which they were roused persists to generate directions as called upon. The one taking them finds them either useless (in which case they’re probably forgotten) or useful (in which case either they’re forgotten or they’re incorporated into the neural substrate to support future action). In no case do they hang around like a map.

The Sealed Sketch Map

Of course a map might have been made under these circumstances. Here, for example, is a sketch map Kelly spontaneously made to show me the layout of a backyard soccer field in which he and two friends had been playing. Why did he draw it? Because as he started to explain to me what had happened, the signs on my face made it clear that I wasn’t following him. That is, the description wasn’t getting away from him, wasn’t turning into an object. This awareness need not have led toward a map. It could have led to an, “Oh, you never understand!” and a change of topic. It could have led to a, “Got it?” and when I said “No,” another attempt at an oral description. It could have led to the construction of a model with mustard jars and pieces of pita bread (we were in the kitchen at the time). In the event, Kelly got a piece of scrap paper from the drawer and made this sketch. He described the scene to me as he drew, frequently looking up for my assent. Did I understand now? Yes, I did. But it was not until he saw


been sealed. Now, since I acknowledge the materiality of these products, when I refer to objectivity I don’t mean, “of or having to do with a material object as distinguished from a mental concept, idea or belief.” Still less am I insisting that they be, “uninfluenced by emotion, surmise or personal prejudice,” since for me it goes without saying that they are. Nor am I referring to the kind of objectivity that Jean Piaget argued:

... consists in so fully realizing the countless intrusions of the self in everyday thought and the countless illusions which result - illusions of sense, language, point of view, value, etc. - that the preliminary step to every judgment is the effort to exclude the intrusive self.

When I say “objectivity” I want you to hear the root of the idea that is buried in “object,” that is, in ob, toward + jacere, to throw; or the even deeper idea implicit in the Indo-European root ye, that is, simply ... throw. Somehow the sketch map has not yet been sufficiently ... thrown away, is not yet the jaculum of ejaculate, is still too connected, is still too tied to the subject who created it. The kind of detachment I want to suggest is less that of cool, indifferent, or disinterested, and more that of the separation that gradually occurs as kids grow up, as they become less and less attached to their parents. We finally find ourselves saying, “He’s his own person now,” and, “She’s her own person now,” acknowledging - in the very enunciation - that they weren’t before. And the sketch maps still haven’t broken away, are still too closely tied to their creators (to their parents). They haven’t become objects on their own, they’re not independent (they haven’t become ... people).
in my face the signs of understanding that he would go on: it was my understanding that validated for him (as well as for me) the object quality of the description he was making and the sketch map he was producing.8

Again, nothing about this objectivity assures its accuracy, its truthfulness, its comprehensiveness. It could have been a fantasy, Kelly could have been making it all up, or he could have had it all wrong. In the event, Neal happened to be over the next day and I showed him the sketch. He immediately recognized his yard and everything in it. A month later I made a point of showing it to Jeff. He recognized everything but the trash cans. The point, though, is not that the sketch was accurate, but that accurate or not, it was ... objective. My assent had sealed that, had assured Kelly that he had thrown the assemblage of signs he was making sufficiently far from himself to establish its independence in the world.

Their Descriptive Discourse Function
Both these events are naturally occurring. People ask for and give directions all the time and people call for and emit descriptions of situations constantly. These are staples of human intercourse. In such intercourse material graphic objects are frequently produced. Not all of them are maps, not all of them are even sketches. People make pictures, graphs, charts, diagrams, and what they otherwise call "drawings" - here, let me draw it for you - all the time. I'm not terribly interested in trying to draw thin lines between these categories, not because they are no more than concepts, which like others, are in perpetual motion, meaning different things in different times and places; but because these things all ... grade into one another, spawn hybrids, dance themselves into novelties for which new words need to be coined.9 At the same time I am not interested in denying that maps aren't real things, things that most of the time I can tell from other things without any difficulty. Talking definitions of poetry and marriage Wendell Berry writes that:

It is understood that these definitions cannot be altered to suit convenience or circumstance, any more than we can call a rabbit a squirrel because we preferred to see a squirrel. Poetry of the traditionally formed sort, for instance, does not propose that its difficulties should be solved by skipping or forcing a rhyme or by mutilating syntax or by writing prose. Marriage does not invite one to solve one's quarrel with one's wife by marrying a more compliant woman.10

I happen to believe this is also true of maps. Our understanding of them is not deepened by confusing them with other things (with Paleolithic symbols, with cosmogonic diagrams, with landscape paintings, with patterns of long-term potentiation in the hippocampus). In the same spirit I also believe we know what maps are. They are the things that every couple of months come tucked inside the pages of the National Geographic, they are the things we consult on the walls of city council chambers at public hearings, they are the things in the newspaper that show where the little girl lived whose life was taken by a stray bullet. That is, they are more or less permanent, more or less graphic objects supporting the descriptive function in human discourse linking territory to what comes with it.11

Maps are not everything, they are not every description, they are not even every descriptive discourse function linking territory to what comes with it. Directions do this, but maps are not directions. Songlines do this, but maps are not songlines. Deeds do this, but maps are not deeds. They are not verbal. They are not oral. They are not gestural, even though - as we have just seen - they can resemble the pointing gestures of direction-giving or flower among the gestures and words of animated narration. Most maps for most of time have probably been ephemeral, scratched in sand or snow, or, if committed to a more permanent medium, immediately crunched up and thrown away. (Even though I have been trying to save all the maps my family makes, most still end up in the wastebasket.) The need to make them graphic seems to be a function of the magnitude or complexity of the description.12 The need to make them permanent seems to be a function of the need to transmit them, from one place to another, or from one generation to the next. The transformation in reach this implies - the long hand of the tax collector, the dead hand of the past - suggests as readily as anything else the way complicated permanent graphics linking things to territory support the growth of the social power that educes them.13 Immediately this raises the question of authority.

The Authority of the Map
Where does the map's authority come from? It arises directly from the certainty guaranteed by the map's object quality, by its being ... a thing in the world (once I have
accepted it as a thing in the world it takes on the same natural quality as other things in the world, rocks, stars, trees). In the examples I have given this quality is sealed by a kind of interpersonal validation. I accepted Kelly's sketch and this sealed for him its independent being in the world (the authority for his continuing to draw lay ... in my face). But why did I accept Kelly's sketch? And why did the person seeking directions take them? What was there about Kelly's sketch (or about my directions) that demanded, if not assent, at least attention? R.D. Laing has written:

If I draw a pattern on a piece of paper ... what do I experience myself as doing and what intention have I? Am I trying to convey something to someone (communication)? Am I rearranging the elements of some internal kaleidoscopic jigsaw (invention)? Am I trying to discover the properties of the new Gestalten that emerge (discovery)?

At different times Kelly does all these things (often they are mixed in varying degree). As he talked and sketched, why did I not imagine he was babbling to himself, inventing, trying to discover something? Because ... he looked to me for acceptance, because he asked me to take what he was giving. Of course in the transpersonal world where maps - as transmissible (that is, permanent) descriptions of territorial relations - find their peculiar utility, this form of validation is impossible. Where mapmakers have not been smeared into institutional facelessness, or raveled into complicated layerings of multiple authorship, they live in another city ... or another century. What is it, then, about a map produced in such a way or at such a time or in such a place that compels from me the attention (and usually the assent) that I gave Kelly? What is it about the assemblage of marks that ... looks to me for acceptance?

Transpersonal Validation
Kelly's behaviour, of course, was coded, and not just at the local level of this or that gesture or mark (a certain attitude of his head, a given stroke of the pen); but at many nested regional levels (he was speaking and drawing according to convention, he was telling me about a game he had played with friends, he had been supposed to be studying for a midterm exam, it was exam week); as well as at the global level of our life together (he was sharing his life with me, we were living together). Although they can't raise their eyes to mine, can't talk, can't make a place for themselves in my life, maps are similarly coded. John Fels and I have identified four such levels of coding:

1 A local level of elemental maps signs (this is undecomposable: with Kelly it was a glance; on the map it is a sign for a river).
2 A regional level of sign systems (Kelly had been playing a game; on the map the marks for rivers are pulled together into a hydrologic system).
3 A level of synthesis (the game occurred within the structure of a day, there was also studying, sleeping; on the map the system of rivers is projected onto a system of roads, there is a whole world).
4 A global level of presentation (Kelly was assuring me that his day had been okay, he was telling me he was going to do well on his exam, he was growing up; the map attains the level of discourse, it proclaims its neutrality, its comprehensiveness, it proclaims the significance of rivers, the necessity of highways).

In this process Kelly happened to create a sketch map, but because he was already in a discourse frame (that is, already at the level of discourse), he didn't have to embed this discursive quality in the map. His sketch map, therefore, remains incomplete, remains a sketch map. A sketch map, thus, is a map that fails to attain the level of presentation. It's almost a map (it's much more a map than the experimental sketch maps that Beck and I collected). It has achieved object status (it has broken free of Kelly, someone else has accepted it), and, through the process of interpersonal validation, this quality has been sealed ... but only for those present. It is precisely here, where the map seeks, through the presentational code, the level of transpersonal discourse, that it puts on its mask, asks to be admitted to the party, and looks for acceptance. (Of course this isn't accurate, a sketch map can't put on a mask, the mask is continuous with the map in every way, it is not added after, but presumed out front.)

Title - what is a title but the map's tilted head asking, "Get it? This is Asia over here, and this over here is ..." - title, legend box, map image, text, illustrations, insets, scales, instructions, charts, apologies, diagrams, photos, explanations, arrows, decorations, color scheme, type faces ... all are so many assurances, so many signs (of gesture, eyes, cheek color, posture), chosen, layered, structured, to frame a discourse, to achieve speech. But as Fels and I have pointed out, the code works beyond these self-evident schemes of organization. The presentational code acts on the map as a whole ... at every level. The mask covers more than the forehead, it infects everything, it determines the costumes, poses the body, picks the party. In the transpersonal universe the mask is the unavoidable presence that at once permits the map to stand apart from the head and hand (from the heads and hands) that brought it into being, but that also tells it how to do this. Without the mask the map collapses into a jumble of marks (it is not even a sketch), it crumples up, thrown away (the directions are ignored).

Does this mean that maps are not more or less permanent, more or less graphic objects that support the descriptive function in human discourse that links territory to what comes with it? Not at all. It only means that in the transpersonal situations where more or less permanent, more or less graphic objects are required to fulfill this function, that they dare not show their face, for despite the transmission which requires and ignites the authority
Kelly's Map of Neal's Yard

Kelly's sketch tries to put on a mask: merely grotesque.

the mask unleashes, underneath it all the map is still no more ... than a voice on the wind.

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Notes
2 Denis Wood, I Don’t Want To, But I Will, Clark University Cartographic Laboratory, Worcester, Massachusetts, 1973, p. 54.
6 Note that the directions do not precede the direction-giving (people don’t rehearse directions in their head in case someone might ask for them), but arise from and take on form within the interpersonal situation calling them forth. As Irving Goffman has written, “There seems to be no agent more effective than another person in bringing about a world for oneself alive, or, by a glance, a gesture, or a remark, shriveling up the reality in which one is lodged” (Irving Goffman, Encounters: Two Studies in the Sociology of Interaction (Bobbs-Merrill, Indianapolis, 1961, p. 41).
7 What does this mean? Neurologically it may refer to long-term potentiation - that is, to a strengthening of synaptic pathways - in the hippocampus, a part of the brain long associated with spatial memory. This long-term potentiation results in memories lasting from minutes to hours. Longer-term memory apparently involves anatomical changes at the same site, as well as in relevant sensory areas of the cortex. See, Larry Squire, “Memory and the Hippocampus: A Synthesis From Findings With Rats, Monkeys and Humans,” Psychological Review, 99(2), April, 1992, pp. 195–231; and Eric Kandel and Robert Hawkins, “The Biological Basis of Learning and Individuality,” Scientific American, 267(3), September, 1992, pp. 79–86.
8 Again, there was no pre-map in his mind or brain which this sketch map reproduces. The sketch - like the directions - arose from and took on form within the interpersonal situation that called for it. What prompted Kelly's hand to move this way and that? The memories of his soccer-playing expressed through the graphic codes of his culture as he has come to know them through growing up in it.
9 I argue in The Power of Maps (Guilford Press, New York, 1993, pp. 143–144) that the conventions of the map are continuous with numerous other conventional sign systems (ultimately with all of them). Kids can make ready sense of the map on the end papers of Winnie-the-Pooh because its conventions are all but continuous with those of the rest of the illustrations in that book, themselves continuous with the larger world of illustrations in children’s book, and so on. In the same way the maps used by landscape architects for site planning are continuous with the plans used by architects and the technical drawings made by engineers; plat maps are continuous with the illustrations on deeds, with the surveyor’s plot, with the verbal descriptions that accompany them; photomaps are continuous with satellite photos, with air photos, with photographs, with ... The point is that maps aren’t out there in the cold somewhere, but instead are a node in a universal system of discourse.
11 I claim in “How Maps Work” (Cartographica, in press), that “a map is a weapon in the fight for social dominion, one disguised as a representation of the world, but which in reality links territory with what comes with it (with voting rights or military service obligations, with rates of rainfall or types of vegetation),” adding that, “the map achieves this linkage by fusing onto a common plane (that of the map) multicoled images of the very world the map itself will bring into being.” Here I am stipulating additionally that these images have to be objects in the sense used above, that is, validated as independent of their creators by the assent of another (this is the source of the authority enabling their being in the world).
12 Certainly this is the point Alexander Marshack has made with increasing conviction over the past two decades. See his revised and expanded, The Roots of Civilization: The Cognitive Beginnings of Man’s First Art, Symbol and Notation, Moyer Bell, Mount Kisco, New York, 1991.
13 This is precisely the argument Denise Schmandt-Besserat advances for the invention of writing in the Near East, that writing arises with stratified social structures and a redistributive econ-
omy. She has abandoned the idea that long distance trade was critical in the development of the token, explicitly rejecting, on archeological grounds, Pierre Amiet’s hypothesis - which she formerly endorsed (and I subscribed to) - that token envelopes were hils of lading. She now feels that, “the pooling of communal resources was a major stimulus for the beginning of tokens” (Denise Schmandt-Besserat, Before Writing: Volume I: From Counting to Cuneiform, University of Texas Press Austin, 1992, p. 183). Be this as it may, in both earlier and later arguments the tokens materialized in social environments that were no longer ... face to face. This change is what demands permanence.

14 Certainty is the crux of the matter. Before we commit ourselves, we want to be certain. When in doubt, we want someone to affirm our course of action. In his recent incarnation as etymologist, Lewis Thomas has written that, “The connection of SOOTHE to YES is strange but true; it takes a bit of relaxing to get it straight in the mind. I suppose that if something is, and is true, and leads to a nodding of the head, and brings the archaic response soothe, or the modern answer yes, it is a soothing experience” (Lewis Thomas, Et Cetera, Et Cetera: Notes of a Word-Watcher, Little, Brown, Boston, 1990, p. 58). Certainly. Which is probably why it’s so dangerous. As the neurophysiologists Humberto Maturana and Francisco Varela argue in The Tree of Knowledge: The Biological Roots of Human Understanding (Revised Edition, Shambhala, Boston, 1992, p. 245-246), “The knowledge of knowledge compels. It compels us to adopt an attitude of permanent vigilance against the temptation of certainty. It compels us to realize that the world everyone sees is not the world but a world which we bring forth with others,” and, “If we know that our world is necessarily the world we bring forth with others, every time we are in conflict with another human being with whom we want to remain in coexistence, we cannot affirm what for us is certain (an absolute truth) because that would negate the other person. If we want to coexist with the other person, we must see that his certainty - however undesirable it may seem to us - is as legitimate and valid as our own because, like our own, certainty expresses his conservation of structural coupling in a domain of existence.” This is also Erving Goffman’s point (Encounters, op. cit.; Stigma, Prentice-Hall, Englewood Cliffs, 1963; etc.), and R.D. Laing’s (see R.D. Laing, The Self and Others, Quadrangle Press, Chicago, 1962; The Politics of Experience, Ballenentine, New York, 1968; and so on).

15 Or more precisely, in his reading of my face. This, of course, was manifest in his face, which I read. I want to avoid a simple stimulus-response formulation and embrace that interpersonal “world which we bring forth with others” so fundamental to the biological epistemology of Maturana and Varela (op. cit.).


17 This is the problem with the sketch maps Beck and I collected: they were too caught up in discovery, in invention, they were babbling; and this prevented their ... getting away, their ... acquiring independence as things in the world (they never looked up).

18 What takes its place? Tokens, envelopes, writing, drawing, maps. Schmandt-Besserat may now argue that trade played little role in the development of writing, but she is still capable of insisting that there was no need for accounting or record keeping during the Paleolithic, “presumably because bartering was carried out face to face” (Schmandt-Besserat, op. cit., p. 167). These alienated sign systems ... unleash personal authority, institutionalize it. It is through the exploitation of these signs of transpersonal authority that large social structures are enabled to grow.


10 In Frame Analysis: An Essay on the Organization of Experience (Harvard University Press, Cambridge, 1974), Irving Goffman describes the way alternatives to ordinary activity are discriminated, that is, how we tell it apart from play, games, dreams, rituals and so on. Here I am suggesting that there is a discourse frame (Laing’s communication, to be discriminated from invention, discovery); and that this is “keyed” (to use Goffman’s term) through the presentational code (Goffman acknowledges a relationship between “code” and “key,” p. 44, n. 15). Since Kelly and I were already in the key of discourse (the sketch was made in medias res) there was no need to separately “key” the sketch, and hence the presentational code was not exploited (or it was exploited, and the sketch is coded “sketch”).

11 Present where? Neal and Jeff had not been present when Kelly made the sketch, but both accepted its object status as readily as I. But then, it was a sketch of Neal’s home and yard, and both had played the soccer game with Kelly.

12 For a “writing” on frames less straightforward than Goffman’s, try Jacques Derrida’s The Truth In Painting (University of Chicago Press, Chicago, 1987), especially the introductory “Passe-Partout,” and the long essay “Parergon.” In “Cartouches,” Derrida pulls together many of his themes and mine when he writes, “Cartouches allow the remark that every title is itself a cartouche, caught in the (paregonal) structure of a cartouche. That’s where it takes place and it does not only mark it with a descriptive or definitional utterance, but rather with a performative, of a bizarre type, a performance without presence, without any self-production which isn’t immediately dislocated by a deviation” (p. 256, emphasis in the original).

Résumé Les cartographes ont longtemps prétendu que l’autorité d’une carte était fonction de sa ressemblance au monde. D’où le souci obsessif de précision de la part des cartographes. Ici, l’on soutient que le pouvoir de la carte dérive plutôt de l’autorité que la carte emprunte à son auteur.