Is it a Map? The Map / Not Map Question

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This paper is an evaluation of the issues raised in my own "Making Explicit What has Been Implicit: A Call for a Conceptual Theory of Cartography," and Matthew Edney's "Making Explicit the Implicit, Idealized Understanding of 'Map' and 'Cartography': An Anti-Universalist Response to Mark Denil" (both published in Cartographic Perspectives 98, 2022).

In the first of these articles I make some proposals about how to go about investigating how a map reader decides that a given artifact is a map, and what that decision means for the user's relationship with the artifact. In the second, Edney vigorously rejects my argument as, variously: irrelevant, reactionary, subversive, pernicious, obvious, and trite.

What are Edney and I arguing about? Does the map / not map question I raise even exist and, if so, does it matter? Is Edney correct in dismissing it, and are his reasons for dismissing it valid?

This paper examines some of the salient points raised in the Denil / Edney controversy, with an eye to the pragmatic, real-world ramifications of each writer's positions.

INTRODUCTION

IN ISSUE 98 OF *CARTOGRAPHIC PERSPECTIVES* (2022), readers are treated to not just one, but two peer-reviewed articles on cartographic theory. The first is my "**Making Explicit What has Been Implicit: A Call for a Conceptual Theory of Cartography**" (2022), and the second is Matthew Edney's "**Making Explicit the Implicit, Idealized Understanding of 'Map' and 'Cartography': An Anti-Universalist Response to Mark Denil**" (2022).

As Amy Griffin wrote in her "**Letter from the Editor**" introducing the issue: "In the first, Mark Denil advocates that [C]onceptual [A]rt can be used as model for developing a conceptual theory of cartography," suggesting that such a theory can be used to understand how things that are 'maps' can be differentiated from things that are not. "In the second" article, she notes, "Matthew Edney rejects Denil's argument" (Griffin 2022, 3).

What are Edney and I arguing about? Does the map / not map question I raise even exist and, if so, does it matter?

Is Edney correct in dismissing it, and are his reasons for dismissing it valid?

The differences between our positions are not trivial. Where Edney maintains that maps and map types are so diverse and varied that there is, and can be, no such a thing as a *map* (just individual *maps*), and thus no map can be compared to any other; I point out that *some* sort of abstract, formal, conceptual, state of mapness *must* exist—because, if Edney is correct, the term map is *meaningless* and anyone speaking of "maps" simply *gibbers*.

The purpose of this paper is to sort out whether and why *anyone should care* about this debate. To do so, it will examine some of the key propositions on each side of this dispute, and the methodologies espoused by the participants. It will also introduce some useful concepts with which to frame, understand, and judge the strengths, weaknesses, and value of the positions we each present.

TO BEGIN AT THE BEGINNING

Matthew Edney and I share some common assumptions. Both of us, for example, see every map as having been defined by culture. However, our understanding of this assumption differs fundamentally.

In this corner . . .

I, for my part, centralize this cultural grounding in *both* map artifact *making* and in map *reading*—and go on to point out that map reading itself is predicated upon a conceptual act of making performed *by the reader*. I have called this making of a map from an artifact a *transfiguration*—an act closely analogous to the transfiguration described in the New Testament of the christian Bible (Matthew 17:1–8, Mark 9:2–8, Luke 9:28–36), and exactly like the transfiguration the philosopher Arthur Danto (1981) described as the way an artifact becomes an artwork. Understanding this model requires that the investigator conceptually differentiate between the artifact itself (its *matter*) and the understanding imposed upon it by the reader (its *form*); without—and this is important—losing sight of the fact that in reality the transfigured map exists only *symbiotically*. The artifact remains an artifact (you can wrap fish in it, regardless of its conceptual map-hood), but a *map* is an amalgam (or *substance*) of the artifact *and* what the reader has made of it.

In my 2022 paper, I also went on to identify the map / not map inflection—the *is this a map?* decision, the moment of *transfiguration*—as a key point for evaluating not only a particular map, but as a litmus test for evaluating *cartographic theories* as well. I maintain that if a theory cannot account for one thing being a map while another thing is not—or the same thing *being* a map for one person and *not* for another—without reference to its value as a map, then the theory *is not sound*.

. . . and in this corner . . .

Edney, by contrast, maintains that maps come into existence only as the result of *processes*—the primary one being a "spatial discourse" that circulates between map makers and map users. These discourses, he avers, define the entire scope of map being and map meaning—writing that maps only "are what they are within the precise scope of each spatial discourse" (Edney 2022, 58). Because, in his model, each map is a creature of a wholly autonomous spatial discourse—one where the map maker somehow continues to play a dynamic interpretive role long after the map has been made and shipped out the door—one simply cannot compare one map to another: "there are [just too many] fundamental differences in just what are considered as 'maps.'" (Edney 2022, 58). Edney further labels as "universalizing" any suggestion that maps have in common anything more than being referred to by the same word, and he aggressively goes after—with bell, book, and candle—anyone that suggests any such commonality exists.

Edney does, however, acknowledge *intention* as a legitimate contributing factor to map-hood. He writes that "there can be no maps unless mapmakers intend to make them" (Edney 2022, 54), although he is no more revealing of how intentions are to be gleaned than he has been about how one joins the magic circle of a spatial discourse.

Sizing up the positions

Right off the bat, we can identify profound incompatibilities between my foundational assumptions and those of Edney. According to Edney, maps are so bewilderingly diverse that "map studies are properly studies of the glorious multiplicity and variety of ways—processes—by which people construe and communicate spatial complexity" (Edney 2022, 58), and that anyone who thinks differently is seeking to "limit and control the ability of map readers to interpret maps" (Edney 2022, 54).

Edney's model—a model that effectively restricts the interpretation any map reader can apply to a map to the interpretation intentionally imposed by the maker via a hegemonic spatial discourse—is clearly, itself, an authoritarian mechanism to limit and control interpretation. It rules out any and all unauthorized readings—counter readings, improvisational readings, and even misreadings—because any rogue reading would be, by Edney's definition, illegitimate—not only just plain wrong, but a petulant display of "individuality" (Edney 2019, 53).

In contrast to that, my model allows and facilitates the broadest range of interpretation, largely because it looks at the map / not map question *abstractly*, from a position *before* any interpretation is applied. Because it makes no judgment about the validity, appropriateness, or value of any map / not map decision—or, incidentally, about any resulting *map*—it usefully describes the *entire spectrum* of possible responses and interpretations that might arise: that the artifact is *not a map*, that the artifact *is a map*, that the map is or is not *a specific type* of map, that the map is or is not *valuable* (and / or *believable* and / or *usable* and / or *useful*) as a map, and so forth.

SOME REAL-WORLD SCENARIOS

IMAGINE YOU ARE ATTENDING A RECEPTION IN A MAP gallery: there are maps (to be admired), food (to be eaten), and napkins (for wiping your fingers). *How do you know which is which*? Saying that you "*just know*" is not an option. This is neither a simple nor a trivial question—answering it involves conversance with a host of disparate cultural conventions, and your answer has ramifications going forward.

A MAP / NOT MAP EXPERIMENT

Let a map reader imagine encountering three scraps of paper on the floor (Figure 1). Each artifact is clearly separated from whatever context within which it was originally embedded, and each is crumpled in more or less the same manner. Is there any reason to think that one or more of the artifacts might be maps?

The Edneian approach

In advising a person confronted with the three scraps of paper in Figure 1, Edney would apparently begin by reminding them that maps "are what they are within the precise scope of each spatial discourse," (Edney 2022, 58) and that "there can be no maps unless mapmakers intend to make them" (Edney 2022, 54). Our observer here, however, has only the three scraps of paper on the floor; where is the *discourse*, and how is one to glean *intentions*? Edney is silent on both of these questions, yet he expects everyone to simply accept as self-evident the existence and (in this case, at least, magical) transmissibility of both discourses and intentions—in much the same way that so many accept as self-evident the existence and operation of the **Invisible Hand of the Free Market** (Figure 2).

A very spatial discourse

One of the primary weaknesses of the Edneian model is its reliance on a so-called "spatial discourse." Certainly, there *must* be *some sort* of cultural discourse regarding how spatial concepts can and should be communicated; just as there *must* be discourses concerning the plethora of other conventions—symbol vocabularies and grammars, graphic styles and conventions, techniques and standards of craftsmanship appropriate to making—that intersect in the things that a given community recognizes and uses as maps. Why, though, would a specifically *spatial* discourse be the one that governs what it is that makes a map a map?

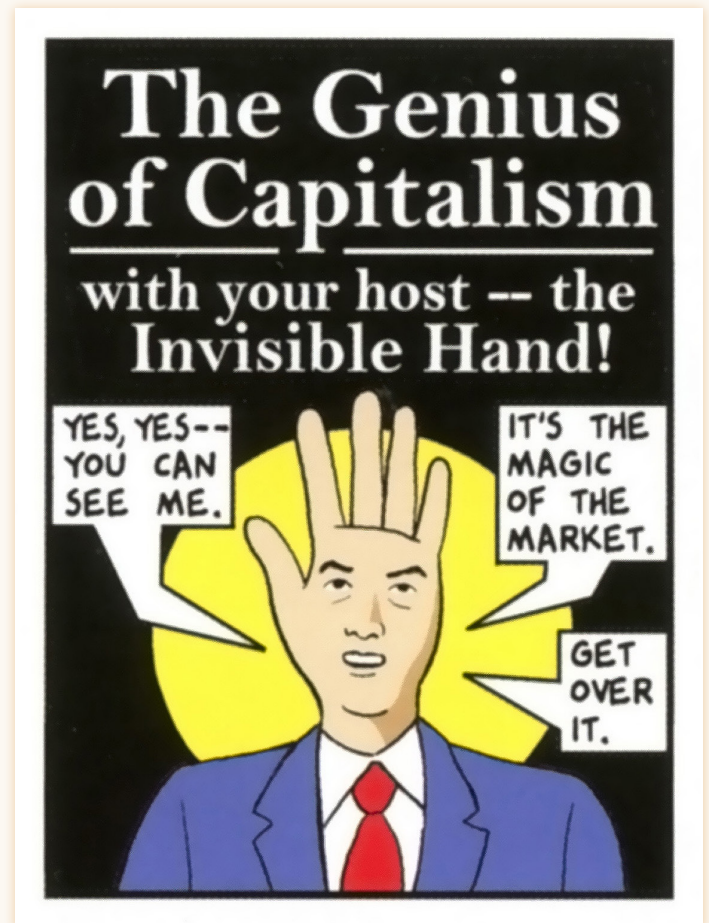**Figure 1.** Three scraps of paper. Are any of them maps? (see end note)

Figure 2. A portrait of the Invisible Hand of the Free Market Man (I.H.O.T.F.M. Man; Perkins 2009), as depicted in the comic **This Modern World**. A typically exciting and inspiring I.H.O.T.F.M. Man adventure can be found **here**.

Why, too, is this discourse so restricted? Edney only allows such discourses to operate between apparently specific, but completely undefined, producers and equally specific and undefined consumers. He makes clear just how narrow and parochial his sees these individual discourses to be when his example of "substantially different kinds of mapping that have been carried on without regard for one another" is that of "property mapping versus regional/geographical mapping" (Edney 2022, 52). It is apparent that Edney's entire theoretic structure rests on an absurdity—that the makers and users of cadastral maps have no participation in; access to; interest in; or knowledge of, topographic, or any other kind, of mapping—that when someone makes or reads a cadastral map they *forget* everything they know of other kinds of mapping—and that absurdity is pretty darn hard to swallow.

The diagrams Edney provides (2022, 55) to illustrate the superiority of his producer–consumer–circulatory discourse model over what he calls a "handcuff" model do little to clarify matters. In a personal communication to me, daan Strebe has remarked regarding to those two diagrams:

> I found puzzling his digression into the circle of producer vs consumer. [. . .] I do not see any way that the two conceptions contradict each other. As pertains to a given reading of a given artifact, the dynamic illustrated by [Edney's] Figure 2 [*captioned "Maps circulate between producers and consumers within spatial discourses"* (Edney 2022, 55)] is irrelevant. Yes, the dynamical process is (normally) relevant to the choices the mapmaker made in creating the map, and it is (normally) relevant to how the reader learns to interpret the map, but that process comprises the ongoing education of the participating mapmaker and the participating map reader, not what goes on when a reader transfigures an artifact into a map.

The notion of "spatial discourse" is clearly both too narrow and too artificial to be of any real value for understanding mapping. Although Edney promotes it as working just like "a linguistic community" (Edney 2022, 56), it is clearly, at best, more like a "company union"—a *transparent fiction*. By contrast, the interpretive communities I discuss actually *include* linguistic communities, social communities, interest communities: *all* the communities to which an individual belongs, has an interest in, or is aware of.

As can be seen, whatever the strengths or benefits of Edney's flavor of processualism, it simply does not, and cannot, address the map / not map question I am looking to explore: and addressing (and dismissing) my proposition is, ostensibly, the theme of Edney's 2022 article. The fact that it cannot address such a fundamental issue—*is this a map?*—also casts serious doubts on his claim that processualism is a comprehensive theory of mapping (*see* Edney 2022, 58).

My own approach

I, by contrast, would point out to the finder of the paper scraps that a reader must bring their *skills* and *literacy* to the artifact, and must then choose from amongst those skills—and such precedents as are suggested by their literacy—which to apply and in what manner. "This schema [of mapicity], which includes a paradigmatic vocabulary of appropriate form, a grammatical syntax of application, and a canon of exemplars, is how we recognize suitable candidates for map-ness" (Denil 2012, 77). In other words: *does this look to me like it might be a map?*

Discussion

In short, where Edney looks to a preexisting (and, as often as not, entirely inaccessible) spatial discourse and maker's intent to ring-fence the viewer's interpretation, I, on the other hand, fence nothing, but instead place the responsibility squarely on the viewer's shoulders: the artifact's map-hood, *and* any subsequent interpretation, is up to *that viewer*. If the viewer recognizes attributes or configurations they associate with *mapicity* (Denil 2011, 2012, 2016), the *viewer* can choose to become a *reader*, and transfigure the artifact into a map. Transfiguration instantly situates the map against a horizon of other maps— an action that both permits and facilitates interpretation. The transfiguration takes place *in the reader's mind*, but it operates on the combined artifact and concept of what the artifact is, producing an artifact that acquires a conceptual dimension that is a state of map-hood. *Gee willikers*, they say, *this is a map*!

This recognition may well eventually prove premature—or even completely incorrect—but, at least for the time being, the artifact *becomes* the physical embodiment of a map and is placed into whatever context the reader has of "maps"— and the reader *must* have a concept of, and context for, maps or they would not *be* a map reader and would *never* have recognized *any* map.

This literacy and skillset—the very things that make a map reader—are acquired by the reader from the various cultural communities to which they belong. Not every reader commands the same education, and not every reader understands the conventions, dictates, or teachings of even a single community in the same way. Too, folks sometimes just plain disagree.

That a map reader applies their *skills* and *literacy* to interpreting the artifact does *not* mean, or even imply, that "maps are *defined* and *delimited* by their nature strictly as artifacts," as Edney (2022, 55, *emphasis added*) insists that I am saying. Instead, the issue is whether the artifact *as the reader understands it* displays characteristics denoting mapicity.

Sort of but not quite really maps

Sometimes mapicity signals are recognized but are then dismissed—this is where one gets the notorious *map-like-object* (it *looks* like a map but isn't *really*)—and sometimes features are mistakenly taken to connote mapicity—yielding "the whole phenomenon of 'cartocacoethes,' works interpreted as maps that were not created as maps" (Krygier 2008 quoted in Edney 2022, 55). Whatever *reasons* a map reader has for their decision are not under consideration here—but the palpable and very real *effect* of a *positive* map decision *transfigures* the artifact into a map and situates it against a horizon of *things-that-are-maps*. A *not*

map decision consigns the artifact to some other category. In any event, the map / not map decision may be "right" or it may be "wrong," but—as far as the *recognition* of a map is concerned—the process has worked exactly as described on the tin. In examining the map / not map question one is *not* judging the *correctness* or *appropriateness* of the choice—one is *only* examining *how the choice comes to be made*.

A model like mine accommodates disagreement over mapness by allowing any two individuals to draw different map / not map conclusions concerning a single artifact. In one sense, what this model does is to problematize the term *really* in the phrase *really a map*—and makes it instead a question of *really* for *whom*?

Conclusion of the experiment

What does examination of this thought experiment reveal? It shows that the map / not map question does indeed arise, that it is indeed critical for turning an artifact into a map, and it also shows that at least one currently promoted cartographic (excuse me, *mapping*) theory—Edneian processualism— cannot address it.

This experiment also highlights another feature of my proposal that differs from those of other theories: its abstractness, and its division of abstract theory from value judgment. It divides *ontology* (theory) from *epistemology* (connoisseurship)—*what* we know from *how* we know it.

CARTOGRAPHIC THEORY AND MAP CONNOISSEURSHIP

THEORY VERSES CONNOISSEURSHIP

Cartographic *theory* frames our understanding of what maps *are* and how we know about them. Map *connoisseurship*, on the other hand, tells us about a particular map, or a group of maps. This is a critical distinction, and one not often made by writers about maps.

How theory and connoisseurship differ

In my 2022 article, I focused exclusively on theory—because at the stage where map / not map initially takes place, one has *nothing else to go on* than a juxtaposition between an artifact and what one thinks maps are. Connoisseurship cannot even begin to operate until and

unless the person examining an artifact has decided, for whatever reasons, that it is a map. Obviously, things don't *end* there, but it *is* where they *start*, and how and why that decision is made frames every subsequent map reading decision—even ones made long after, and potentially about different artifacts altogether.

Theory operates at a level so general that individual maps cannot be inferred from it. No map exists without a theory—and even *I-don't-need-no-stinking-theory* is still a theory. A person without at least a scrap of a theory simply *cannot* be a map reader because such a person *cannot know* what maps are. It must also be kept in mind that not *all* theory is sound.

Connoisseurship, on the other hand, involves *contingent* knowledge about maps and their use, about how and why they are made, about style, and about taste. It tells us *why* map *types* exist, how a given map relates to other maps, and it tells us about *good maps*. It *only* comes into play *after* something has been recognized as a map. One should note, too, that not *all* connoisseurship is sound, either.

Neither theory nor connoisseurship touch upon *ethical* concerns. Maps don't have ethics—people do—and even repugnant people with despicable intentions can make great maps.

Abstract theory allows maps to exist in all their bewildering variety, and it divides the map from the not map. Now, any particular map reader's theory may be limited, but even limited or ill-founded theories are not useless or inoperative. Connoisseurship, by contrast, is situated *in* theory, *in* history, and *in* culture, and it is embodied through criticism. Thus, while theory underpins practice, connoisseurship dwells within theory and criticizes practice. It is to this contingent grounding that Joyce Carroll Oates referred when she wrote that "there can be . . . no criticism for all time, nor even for much time" (Oates 1998, 40).

Theory does not reckon value—it instead provides us with ways of identifying things to which it is appropriate to apply valuing criteria and tests. No map is *more* of a map than any other map. Connoisseurship, on the other hand, is all about value. Some maps are *better* than others and it is connoisseurship that tells us how and why. As can be seen, the theory and connoisseurship registers are complementary, and a dialog between the two is essential for finding a complete, comprehensive view of the field as a whole.

CONFLATING THEORY AND CONNOISSEURSHIP PRODUCES IDEOLOGY

Unfortunately, almost everyone writing on cartography will, at some point, *conflate* theory with connoisseurship—their theories orbit around what they like to speak of as *real* maps; what they see as *good* maps; the maps of which they *approve*. In this way, their *so-called* theories are really only map criticism. This is not to say that map criticism is bad, or unimportant—indeed, it is sophisticated criticism that helps us move beyond the surface details of any cultural artifact to uncover the complex and interconnected

elements that inflect them. However, when criticism drives and frames theory, the result is simply *ideology* and—as the Indian-British post-colonialist critical theorist Homi K. Bhabha remarked—ideology is "*what we think we see without really looking*" (1998, 48 *emphasis in original*).

CARTOGRAPHIC THEORY

Many mapping theorists fall into the camp wherein theory means only "legitimate" theory—a rarefied thing that is only truly understood and engaged by philosophic elites. Noël Carroll—an American philosopher considered by some to be one of the leading figures in contemporary philosophy of art— has, for example, written that

> The sublime tap-dancing of Bill "Bojangles" Robinson and John Bubbles is, on any unprejudiced view, art, but it strains credulity to think that anything like a theory, even under a generous construal of that term, could be thought of as a condition for the existence of this dancing. . . . There were existing theories of dance, but we have no reason to think that Robinson or Bubbles subscribed to them; indeed, we may have some reason to think that they would not have subscribed to them. (Carroll 1993, 102)

There are clear advantages, however, to a more *broad*, *flexible*, and *pragmatic* understanding of what constitutes theory. Theory is more usefully seen as a general term for *what* and *how much* each individual knows about (in this case) maps—however much or however little that person may know. If someone knows maps exist—it is a part of their theory (maybe even all of it). An individual's personal map theory is what makes them a map *reader*, and the recognition that any sound general theory must *itself* be flexible enough to accommodate (*not* incorporate!) all the various weird and wacky personal theories that might come along is what makes my inclusionary understanding of theory *pragmatic*.

A note on pragmatism

The purpose of pragmatic theory is not to provide a *true* picture of the world, but to help us to *act more effectively* within it. Pragmatic theory recognizes that *any* map reader may hold almost *any* ideas about maps—and that any truly *valid* theory has to allow that to be so.

Theory is not always sound

A map reader's personal theory need not be logically consistent; it need not be philosophically complete; it may, in fact, be utter nonsense—consider, for example, Gerald Fremlin's homologue theory (2005), William Rankin's anti-representational theory (2016), or the writings of the Object Oriented Ontology people (Rossetto 2019)—but, nonetheless, whatever theory the reader holds, *that* is the way they understand maps. Their theories about maps delineate a framework through which they see and understand maps, and through which they operate as a connoisseur. Every map reader is, in this sense, a connoisseur.

MAP CONNOISSEURSHIP

Bernard Berenson (1865–1959) was an American art historian specializing in the Renaissance. His judgments were for many years widely respected in the art world, and—despite some recent scholarship raising issues about business-related conflicts of interest—he is still seen as the very model of the connoisseur. In his 1898 essay (published in 1902), *Rudiments of Connoisseurship*, Berenson defined connoisseurship as "the comparison of works . . . with a view to determining their reciprocal relationships" (Berenson 1962, 122), and noted that "it proceeds by the isolation of the characteristics of the known and their confrontation with the unknown" (Berenson 1962, 123). He maintained that "the Sense of Quality is indubitably the most essential equipment of a would-be connoisseur. It is the touchstone of all evidences of all the possible morphological tests he may be able to bring to bear upon the work" (Berenson 1962, 147–148).

As can be seen, the connoisseur draws attention to significant aspects of the works in question; draws parallels and contrasts; and identifies relationships. The connoisseur is primarily concerned with how *good* the work is, and their analysis takes into view both the single, isolated work and the horizon against which that work is situated. This is because, as the Scottish artist David Batchelor pointed out, works acquire "meaning by being placed in a relationship of difference with related antecedent works" (Batchelor 1991, 55). If the maker "fails to establish such a relationship, . . . that work will tend to be regarded simply as irrelevant" (Batchelor 1991, 53). He went on to say:

> But that relationship, that likeness, is itself not simple or unmediated. It is subject to complication and development in a variety of possible ways

and for a variety of possible reasons. For a work to express some kind of critical or qualified relationship with its antecedents it will require some feature which may be read as indicative of such a qualification" (Batchelor 1991, 53).

Thus, the first task of a connoisseur is to place works in relationships that enrich a work's meaning—for themselves and for others.

That said, we must also remember that connoisseurship is *always* situated—that it occurs inside the context of theory. It always "takes place" as the British philosopher Christine Battersby wrote, "in the context of certain evoked *traditions* which bring along with them *standards* for discriminating particular qualities and features" (Battersby 1991, 38 *emphasis in original*). Those traditions are bequeathed to us by our interpretive communities through broad cultural mechanisms that may or may not include such narrow and artificial constructs as Edneian spatial discourses. Every map owes more to other maps than they do to whatever they purport to be about, in exactly the same way that, as the Swiss art historian, aestheticist, and educator Heinrich Wölfflin (1864–1945) remarked, all paintings owe more to other paintings than they owe to direct observation (Gombrich [1960] 2000, 317).

Thus, one role of the erudite connoisseur lies in introducing us to complex, challenging, little-known, or obscure works, and in elevating and deepening our understanding. Recognized connoisseurs are usually heard with attention, but this is not to say that legitimate judgment comes only from authority.

In fact, every map reader—enabled and constrained as they all are by their education and experience—has the final word for their own understanding. They reach that understanding by drawing upon their full intellectual experience—not only on received knowledge—but also on *connections*, *analogies*, and *interpretations* they each cook up on their own.

This has, in fact, been my position since at least 2006, when I wrote: "We all of us make maps that are judged each and every time they are considered for use. What is seen on or read into a map is up to the user, and interpretation (what the user wants / expects / can recognize) constrains the facts discovered: not the other way around" (Denil 2006, 5).

There are, however, some boundaries . . .

That "final word" caveat notwithstanding, however, map readers are also each *themselves* judged by the value others place on their judgments. As Richard Rorty remarked: "Truth is what your contemporaries let you get away with saying" (1979). If a particular map reader's reading is too far afield from that of their contemporaries, they will find themselves cut off from others, and unable to agree with them—and if they go far enough down that personal interpretation road, they risk being considered insane. On the other hand, some specialized maps—nautical charts, for example—come loaded with very strict rules for construction and use. Ignoring those rules can lead to tragedy, loss of life, and legal liability.

Conclusions about theory and connoisseurship

It seems clear that most map theorists—including Edney—conflate theory and connoisseurship, to the detriment of the soundness of their theories. My strategy of divorcing them, and examining their interactions, is what is needed in order to avoid a descent into ideology—an authoritarian ring-fencing of map-hood, meaning, and interpretation. To examine what maps *are*—in a pragmatic, abstract, and broadly applicable sense; without making universalizing pronouncements—one must avoid getting sidetracked off what makes a map, and onto what makes a map *good*.

INDIVIDUALISM AND ANTI-INDIVIDUALISM

This discussion has placed quite a bit of emphasis on individual agency in establishing both personal map theory and connoisseurship, but it is important that one not lose sight of the fact that I am arguing that all of a map reader's understandings are rooted in the frameworks bequeathed to them by their cultural communities. An individual recognizes maps because they have *learned* how to recognize them—yet they exercise *their own* judgment in recognizing them. They can tell a good map from a less-good map because they have *learned* how to tell them apart—yet they bring criteria *of their own choosing* to that decision. Their understanding is not solely imposed from above or outside, but it behooves them to be accommodating of the predilections of their contemporaries—and of their forebearers—and to leverage those predilections to recognize, make, and read maps.

Edney's notions of individuality and materiality . . .

That Edney singles out "individuality" as one of the many sins of his "Cartographic Ideal" (2019) is not surprising—to acknowledge existence of *any* individual's agency would mean surrendering the hegemony of the spatial discourse, and like any authoritarian system, processualism cannot tolerate such undermining. Thus, my pragmatic foregrounding of individual agency in symbiosis with communal culture draws Edney's ire. He writes that my "arguments reveal the . . . persistent preconceptions of individualism and materiality," and goes on to elaborate that "the preconception [of individualism] further holds that maps are externalized expressions of an individual's neurological schemas and that an individual modifies their own neurological schema to accommodate what they read in the map" (Edney 2022, 54). There is no explanation whatsoever as to what all this nattering about "neurological schemas" is supposed to mean—just as there is no evidence presented that I, or anyone else, for that matter, holds any such absurd opinions.

Edney himself defines "individuality" in a nine page section (64–73) of Chapter 3 in his 2019 book. He begins by asserting that "the ideal [of individuality] construes the making and using of maps to be strictly individual, cognitive work" (Edney 2019, 64), later explaining that an individualist believes that all maps "are unmediated replications of their makers' own, internal 'cognitive maps'" (Edney 2019, 64). By the end of his first paragraph about "individuality," Edney has identified it as "the foundation for unwarranted racist and sexist characterizations about the intellectual capacity of entire groups of people" (Edney 2019, 64)—a statement, incidentally, that begs the question of if there is ever a *warranted* racism or sexism—and then goes on for a further eight pages with a stream-of-consciousness embroidery on the canvas he has thus cut from whole cloth. It is quite a performance, and is followed up with another two page Busby Berkeley number on "materiality" (Edney 2019, 74–75), wherein he denounces everyone who has ever noticed that maps are *also* artifacts by accusing them of imagining that maps are *only* artifacts "made at fixed points in time" (Edney 2019, 74)—and *nothing else*. Both are textbook-worthy examples of paralogism.

. . . and why they do not apply here

While it is possible that people exist that hold individualistic and materialistic ideas like the caricatures Edney

presents, it is obvious that I am not amongst them. Edney seems to have missed, or misunderstood, the way my form/matter analysis model holds that the physical graphic artifact alone is *not* the map.

MY EVOCATION OF CONCEPTUAL ART

In calling for a Conceptual Cartography, modeled on Conceptual Art, I am attempting to evoke a fundamental rethink of the entirety of mapping as an intellectual enterprise. Conceptual Art, as a movement, incorporated a wide variety of activities and practices—each and every one of which challenged the art viewer on multiple grounds.

THE VALUE OF CONCEPTUAL ART AS A MODEL

The map / not map question is very similar to the art / not art question that Conceptual Art explicitly addresses. There is nothing inherent in *any* artifact that necessarily classes it as a map, or as art—or as both, or as neither. Individuals, in becoming map readers or art viewers, will over time form a category of map, or of art, that is defined by what they expect a map, or an artwork, to *do*, to *allow*, to *facilitate*. These expectations constitute the formal concept of map or art in each individual's mind. Because, in both cases, these conceptual entities are mapped back *onto* the user's perception of the artifact, the conceptual entity can easily be, and often is, conflated *with* the artifact so that it *seems* that the *artifacts themselves* are the maps and / or artworks. Conceptual Art short-circuits this reflexive conflation by distinguishing sharply between *conception* and *perception*: the one being "pre-, and the other postfact" (LeWitt 1967).

A key element in many Conceptual Art works is the division between the concept of the artwork, and its physical or other manifestation—the same division I make in regard to maps. Often, conceptual works are "delivered" for exhibition as sets of open-ended descriptions that also serve as titles—for example, Sol LeWitt's 1993 *Wall drawing No. 26. A one-inch grid covering a 36" square. Within each one-inch square, there is a line in one of the four directions.* Another example would be Lawrence Weiner's 1979 *Many colored objects placed side by side to form a row of many colored objects.* In works like these the physical manifestation is incidental, and left to the accident of choice or interpretation of the individual installing it. In these instances, the "works" are the open-ended instructions—and this is largely why these examples are *not* included here as figures; you *have* the title, so you *have* the work.

Nonetheless, the manifestation is not without interest. Yoko Ono's 2010 performance *Voice Piece for Soprano* (cited in Denil 2022, 15) is a performance of her 1961 work by the same name (Ono [1964] 2000 *unpaginated*):

> Scream.
> 1. against the wind
> 2. against the wall
> 3. against the sky   (1961 autumn)

The poetic instructions on the page and the vocalization at the microphone are both *Voice Piece for Soprano*—they can be placed in conjunction, in opposition, in parallel, or in intersection, or they can be taken to be completely separate and independent. Ms. Ono's intention need not enter the picture—the status of *either* as art is *entirely* up to the *audience*.

Works of this type represent just one thread from the tapestry of Conceptual Art interrogations of the concept of art, but they serve to illustrate the fundamental challenge for which I am calling.

As I have previously remarked, *all* Conceptual artworks challenge each viewer to accept it as an artwork, or not. Any viewer is free to say *no*, and this is one of the challenges I am inviting mapmakers to take on—how far are *you* willing to push *your* mapmaking, not just stylistically, but *conceptually*, in order to explode reflexive conflation? Do *you* have the audacity to explore the edge of your audience's expectations, and of being just as happy if you happen to transgress someone's bounds?

The fact remains that opening up that reflexive conflation of concept and artifact—conception and perception—something that happens without even thinking—is harder to do than it might at first appear.

MORAVEC'S PARADOX

Others have taken on similar challenges: consider, for example, the seismic paradigm shift that artificial intelligence (AI) research underwent with the recognition of Hans Moravec's paradox—"that the hard problems are easy and the easy problems are hard" (Pinker 1994, 190). Map readers answer the map / not map question effortlessly—it arguably occurs below the level of conscious awareness—but this seeming ease is precisely what makes the way it is solved so difficult to examine. In 1986, the AI researcher Marvin Minsky noted that "in general, we're least aware of what our minds do best [. . . and . . .] we're more aware of simple processes that don't work well [like playing chess or doing higher mathematics] than of complex ones that work flawlessly," like, for example, picking up a pencil or recognizing a map (Minsky 1986, 29). Randall Munroe has also remarked on this phenomenon, and his readers provide a discussion of it on the wiki here. The seeming simplicity and corresponding practical difficulty of addressing how one identifies a map (beyond obvious reasons that apply only to specific maps) makes studying map / not map complicated.

It was really only when Artificial Intelligence research turned to the *easy-for-us* but *hard-to-get-computers-to-solve* problems that the field began to climb out of its progress (and funding) doldrums. Getting to that point, though, was a major hurdle. For years researchers proposing examination of *easy-for-us* issues in AI faced accusations remarkably similar to the ones often thrown at me: *Why bother?*

It is my contention, however, that I make a reasonably sound case: both for asking the map / not map question and for using Conceptual Art-type strategies and tactics to crack the centuries-old *what is a map* nut. Even if this approach does not solve it, it should at least expose its sinews for examination.

WHAT DOES CONCEPTUAL MEAN?

Understanding my call for a Conceptual Cartography—one analogous to Conceptual Art—and my distinction between the map artifact and the conceptual map into which it is transfigured, requires an understanding of the term *conceptual* that is not widespread in the cartographic community. Most hearers will, at first, likely equate it with "mental maps," or "cognitive maps," as discussed, for example, by A. Jon Kimerling, Aileen Buckley, Phillip Muehrcke, and Juliana Muehrcke in their 2016 edition of *Map Use*: *Reading, Analysis, Interpretation*. In the "Preface" they state that they "make a clear distinction between the tangible cartographic map and the mental or cognitive map of the environment that we hold in our heads" (Kimerling et al. 2016, xi). However, when they remark that "it is the map in our minds, not the map in front of our eyes, that we use to make decisions," and go on to "stress that cartographic maps are valuable aids for developing better mental maps" (Kimerling et al. 2016, ix) it is clear that they are dealing *only* with what, in this paper, has been termed connoisseurship—judgments on the quality of individual map artifacts. The "mental maps" they discuss only come into being *through a map reading*, and thus *cannot* be the abstract conceptual maps I discuss. The "mental maps" of *Map Use* are the *result* of a reading, while my conceptual maps are what *make reading possible*. It can thus be seen once again that Edney's accusation that my propositions are "in line with the dominant agenda of modern academic cartographers" (Edney 2022, 53) are groundless—for *whom* does Edney mean by "modern academic cartographers," if *not* the likes of Kimerling, Buckley, Muehrcke, and Muehrcke? My conceptual map is clearly *not* the same as, or even vaguely like, the "mental" or "cognitive" maps of Western cartographic orthodoxy.

Nor, by any stretch of the imagination, is my proposed cognitive cartography an all-encompassing, totalizing, or blanket theory in itself. Rather than defining or explaining maps, it instead provides an avenue for interrogating maps, mapping, and the discipline of cartography, and for exposing and examining the very sort of Moravec's paradox-like—difficult to isolate, yet essential to understand—aspects of these phenomena that are otherwise so fugitive and slippery.

OVERALL APPROACHES TO THE OVERALL ISSUE

THE ANALYTICAL APPROACH USED BY EDNEY DIFFERS fundamentally from the one I employ. Edney's processualist approach restricts any map's meaning (the interpretation that any map is permitted) to what lies "within the precise scope" (Edney 2022, 58) of map-ness as defined by the spatial discourse and intentions that pertained when

it was made. Maps are, for both him and I, both cultural and historical, but, of the two, only he sets up explicit—if poorly defined—channels through which legitimate interpretation can run.

GEORGE DICKIE'S INSTITUTIONAL THEORY OF ART

In 1974, the late George Dickie (1926–2020) proposed a theory for art quite similar in many respects to Edney's for mapping. In Dickie's Institutional Theory, the status of art-hood is handed down from what he called Art World Institutions—galleries, museums, critics, historians, and others that mutually engaged in an artistic discourse—and these Art World Institutions constitute the final word on any art / not art question. Dickie would, no doubt, both recognize and approve of many aspects of Edneian processualism: both theories hold that the artifacts discussed "are what they are within the precise scope" (Edney 2022, 58) of what your betters have decided, and that anything else is just "individuality" (Edney 2019, 53). Unlike Edney, however, Dickie clearly separated *being* from being *good*. In the Preface to his 1988 book, *Evaluating Art*, Dickie writes that "the institutional theory of art is supposed to be a *classificatory* theory of art—a theory that explains why a work of art is a work of art. Why a work of art is valuable or disvaluable is an additional question" (Dickie 1988, ix *emphasis in original*).

EDNEY'S IS SYSTEM OF MAP VALUE

For Edney, by contrast, the issue of *being* is conflated with, and subsumed by, the issue of *value*. In fact, the only real mechanism Edney allows is one of connoisseurship—a subjective judgment on how well or ill a map was made—and because his theory shares this mechanism with the common run of map theories, one can thus see that it is Edney that is, despite his protests to the contrary, firmly "in line with the [theories] of modern academic cartographers" (Edney 2022, 53).

My approach is more pragmatic: at the level of map recognition, it is strictly abstract—reserving value judgments for later stages where such judgments can be informed by connoisseurship. My application of a purely abstract, intellectual, separation of the artifactual map from the conceptual map—the first as present in the hand, and the second as an idea formed in the map user's mind—allows for a clear division of aspects pertinent to an artifact's instantiation

from those aspects resulting from the reader's interpretation. Evidence of my concern with map value—both how well a map is made and with factual and ethical correctness—is abundant from my other writing. My 2022 paper, however, is concerned with decisions that *must* occur *before* value enters the picture. It is my proposed hylomorphic division—a division that occurs *only* in the mind, and that is a prerequisite for any value judgments—that I suggest not only has utility for finding core commonalities amongst all things anyone calls maps, but that can also do so *without* falling into the trap of blanket universalism so central to 1970s era cartographic positivism, and to which Edney so vigorously objects.

UNIVERSALISM AND ANTI-UNIVERSALISM

In his 2022 paper, Edney places tremendous emphasis on his repeated claims to anti-universalism—and foregrounds those claims by including the term in his paper's title—but what does anti-universalism actually mean? According to his 2019 text, the full title of the Idealist sin is *singularity and universality* (Edney 2019, 55), and he identifies it with the "normative" map. He goes on to maintain that *any* and *every* non-processualist *must* perforce believe *all* maps are—as William Rankin wrote—"'singular, universal record[s] of geographic fact that includes everything worthy of attention, and nothing more'" (Rankin 2016, 3 quoted in Edney 2019, 101), and that they must further believe that "all maps must, therefore, have the same essence" (Edney 2019, 101). If one accepts these self-inflating scarlet-letter labels, it really doesn't matter *what* I *actually* proposed: *because* I reject Edney's "recent anti-universalist [processualist] argument," I *must perforce* be proposing that "that maps constitute a singular phenomenon" (Edney 2022, 51).

Plato's mouthpiece Socrates was especially skillful in employing the thin edge of such self-inflating definitions—for example, that "the temperate man, being, as we have described, also just and courageous and holy, cannot be other than a perfectly good man, nor can the good man do otherwise than well and perfectly whatever he does; and he who does well must of necessity be happy and blessed, and the evil man who does evil, miserable" (Plato 380 BCE). Socrates' line of reasoned points is—like Edney's—vivid and forceful, but it is—again, like Edney's—not actually interconnected: it is not so much a chain of reasoning as a scattering of tilting, algae covered stepping stones requiring precarious leaps from one to the next.

WHY UNIVERSALISM IS SUCH AN ISSUE FOR EDNEY

The processualist / universalist dichotomy Edney posits takes the familiar *privileged term / denigrated term* form common in much of the triumphalist–positivist theories epitomized in the writings of Joel L. Morrison (1977)—albeit, obviously, with the terms swapped-round. The "scientific" positivists of the 1970s sought to define a single "unified body of theory" based on a "fundamental paradigm" (Morrison 1977, 58) for all maps. Their goal was to establish "cartography [as] the detailed study of a communication channel," and "cartographers as information communication scientists" (Morrison 1977, 69), by placing "emphasis . . . on defining the *processes* which operate within the science of cartography" (Morrison 1977, 59 *emphasis added*).

While the righteous frenzy with which those self-styled "scientific" doctrines were originally promoted has rather fallen from fashion, the ideas themselves persist in the background miasma. Indeed, in many cases they continue be taught to aspiring cartographers by certain pedagogues who have, at least, learned to couch their sermons in somewhat less evangelical terms. Given this historical inheritance, and the echos of it that continue to be heard, Edney is not far wrong to agitate against the discredited notions he identifies as *Idealist*. He *is* wrong, however, to see antediluvian positivist sinners in anyone questioning his own doctrines—and he is *also* wrong to promote his processualism as either *anti*-universal or as a viable universal alternative.

WHY I FOCUS ON THE MOMENT OF TRANSFIGURATION

As has been mentioned, the moment of recognition—the *Ah-ha!* moment—when an artifact is recognized as a map, is an inflection that launches map reading. Before that inflection, *there is no map*. After transfiguration, an avalanche of cascading decisions has been triggered that will frame all subsequent map reading. To be a map is to exist within a context of mapicity—of map-hood—and to be situated in a landscape—against a horizon—of other maps. To *be* a map is to be a *type* of map. To be a map is to have a *purpose*. To be a map is to be "in a relationship of difference with related antecedent works" (Batchelor 1991, 55). I have identified this existence as having gone beyond simply *having* meaning to the achievement of a state of meaning *embodiment*. Things that embody meaning foster *belief*—and, as I have maintained since at least 2003, *belief* is the cornerstone of *persuasion*; and persuasion is the reason a map exists.

Edney complains that when I contrast (meaning-*embodying*) maps to mere (meaning-*bearing*) texts, I am somehow insisting "that maps and written texts are necessarily distinct" (Edney 2022, 53). However, Edney's universalizing inflation of my statement cannot stand up to scrutiny. Written texts can, indeed, come to embody meaning—religious texts come immediately to mind—but such texts are never considered *mere* texts by their adherents. Such texts have instead been transfigured into the embodied Word of whatever power or deity it is to which the adherent renders cult. Yet, even in the case of religious texts, it is still, in fact, *only in the mind of the adherent* that the leap (or *transfiguration*, to use Arthur Danto's [1981] term that I have adopted) to meaning embodiment takes place.

It seems clear that when a map reader recognizes a map, that the essence of the artifact changes in a palpable and fundamental way. It is no longer what it was before, and it becomes a conceptual entity—that is, a thing sharing properties and relationships with other transfigured conceptual entities—that it previously was not. In going from *not map* to *map*, it has acquired an *essence*.

DO MAPS HAVE AN ESSENCE?

DO ART WORKS HAVE AN ESSENTIAL NATURE?

In 2008 Denis Dutton discussed the variety that occurs in art practices, and the controversies that arise when unfamiliar practices are encountered.

> In a famous remark in [his 1913 book] *Art*, Clive Bell says that "either all works of visual art have some common quality, or when we speak of 'works of art' we gibber" (Bell [1913] 1958, 17). He meant, of course, that they have in common more than being referred to by the same word—there must be a some deep reason why that word is applied to such apparently different objects. This

fundamental truth, as Bell realized, has at least as much pertinence in the discourse of cross-cultural aesthetics as it has for disputes about visual art within Bell's (and our) culture. I have the impression that many of the theorists who have written of "art in our sense" suppose the meaning of the term is a function of its class referents; even if they might deny it as a bald assertion, they write implicitly as though "our sense" of the term is governed by "our" referents, "the only ones we know." The two problems suggested by this are, first, that if our sense of "art" were determined by referents, that sense would therefore be constantly changing, as it is extended daily to refer to objects and performances offered both from within our culture and from beyond it. But, second, how would we even know when to extend the application of "art," if we didn't have some principle of application which validates bringing new objects and performances under it? There must be stable elements in its meaning; to deny this entails that we go about arbitrarily calling anything art. (Dutton 2008, 458)

DO MAPS HAVE AN ESSENTIAL NATURE?

Map *artifacts* have certain characteristics that lend support to an essence, but do not, by themselves, confer it. For example, intentionally created map artifacts are, generally: skillfully made (at whatever level of skill is available); produced in recognizable, conventional styles epitomized by a canon of exemplary examples (no maps are completely unrelated to other maps); subject to a critical vocabulary and grammar of attributes (a map utterance either adheres to some known map dialect or it goes unrecognized and can never be a map); and (once recognized / transfigured) treated as special objects (maps).

Following Bell's lead, I have argued that there *must* be something common amongst all things humans have recognized, used as, or called, "maps," even if those commonalities become increasingly abstract as the individual examples under consideration become more widely disparate. I maintain that a map's essence is rooted in its maphood—to its transfigured state—and to be a map is to be a map amongst other maps.

It is indisputable that all attempts to isolate those commonalities have, to date, proven inadequate. Edney, speaking from a post-positivist (or post-Idealist, if you will) position denies the possibility of finding any commonality at all. I, in contrast, have proposed that both the failures and the denials stem from ill-founded investigations—traceable, in most cases, to the extreme difficulties attendant upon coming to grips with questions that *seem* to answer themselves. My proposition is that one needs to abstract out the contingent elements of individual mapping traditions and practices—the elements that are the core concern of connoisseurship—and to intellectually decouple the conceptual map from the artifactual one. While this tactic carries no guaranties of success, is the only one that holds a reasonable promise of producing practical results.

SOME REAL-WORLD EXHIBITS

PROCESSUALISM IN ACTION

The Art of Terrestrial Diagrams in Early China

Michelle H. Wang's *The Art of Terrestrial Diagrams in Early China* (2023) examines some graphic artifacts excavated from tombs dating from the fourth to the second centuries BCE that are seen as examples of a tradition of diagrammatic maps (*ditu*) that would be prepared for inclusion amongst a deceased person's grave goods to assist that person in their postmortem journey to the afterlife. These artifacts were previously known only from references in commentary texts; many written long after the tradition had, apparently, lapsed. One of these commentators, Pei Xiu (244–271 CE)—author of an influential, late third century CE treatise that laid out six principles of mapmaking emphasizing the methodologies of painstaking surveys—was especially scathing. This seems not dissimilar to the way second-century CE Gnostic writings were, until the 1945 discovery of Egypt's **Nag Hammadi** library, almost unknown save from the anti-heretical writings of early Christian Church Fathers who denounced and suppressed them.

Wang is at pains to situate the *ditu* artifacts she is studying in a diametric opposition to the parallel tradition—the one

later exemplified by Pei Xiu, and that she identifies with a *cartographic ideal* (a term she mentions explicitly, and for which she cites Edney)—that eventually overwhelmed the diagrammatic *ditu* tradition. For her, the *ideal* is equally embodied by *both* Pei Xiu's six principles *and* by present-day "normative" maps, and she further characterizes the map / diagram dichotomy as one between *representation* (what Wang says "maps" do) and *worldmaking* (what she tells us these "diagrams" do).

Interestingly, she also acknowledges that maps are *propositional*; quoting: "'a map—any map—is a proposition about the world'" (Bol 2016, 211 quoted in Wang 2023, 6), a position that I, myself, have espoused since at least my 2003 paper *Cartographic Design*: *Rhetoric and Persuasion*—"the aim of the [map making] endeavor is persuasion, to convince someone to believe something" (Denil 2003, 50).

Thus, Wang is evoking two conflicting theoretical frameworks—Edney's *maps as processes* and Bol's (and my) *maps as rhetorical argumentation*. Where Edney would likely characterize—to use Wang's terms—maps and diagrams as "substantially different kinds of mapping that have been carried on without regard for one another" (Edney 2022, 52); Bol's characterization would likely be of rival propositions in a debate: the question being about which is more useful, usable, and persuasive for a given audience in a given situation (*see* Denil 2003, 2011, 2012).

Issues with Wang's processualist straitjacket

The plain fact of the matter is that *any* map only represents by proposing that some sound reason exists for seeing the world the way it is presented by *that* map—every map proposes that some important aspect of the wider milieu is "really" like it is depicted—and this means that every map effectively *makes a world*. Thus, *both* the maps Wang terms terrestrial diagrams *and* the maps she characterizes as prioritizing some level of representational accuracy are clearly *both* worldmaking (in that they construct a proposed world) *and* representational (in that they present a persuasive stand-in for a world—either existing or envisioned)—yet the processualist framework Wang favors *requires* a polar opposition between the two types and for what they do.

None of this implies that Wang is wrong to focus on the distinction between the two types. Each type is clearly the fruit of very different—and, as can be seen from the denunciatory writings of Pei Xiu and others, rival—mapping traditions. Artifacts from both traditions were clearly skillfully made; each were produced in recognizable, conventional styles likely epitomized by a canon of exemplary examples; the "diagrams" were as likely to be subject to a critical vocabulary and grammar of attributes as were the "maps," and both were treated as special objects—just special objects targeted at *different audiences* with *different needs*. In short, each type of graphic conformed to dictates of traditions that could be characterized as an *ideal*. That one of the traditions eventually triumphed in China—a triumph that effectively effaced all evidence of the other tradition save examples that were actually buried in tombs before the purge—is important to the maps as artifacts, and to their place in history, but not to any normative map *vs.* terrestrial diagram or representational *vs.* worldmaking dichotomy.

The map / not map question—in the form of a normative map / terrestrial diagram dichotomy— however, is one Wang sees as central to her thesis. In its support she conjurers other binaries, for example, between drawing as a "naive" practice and drawing in what she calls a "normative," "representative," mode, or between topology (epitomized by Beck's 1933 *London Underground* map) and reference (this time expressed in the 1908 *London Underground Railways Pocket Map*—the one that Beck's map replaced). Wang's discussion of the nature of topology as a branch of mathematics and its application in understanding the topological nature of the terrestrial diagrams is quite important and it is very useful in explicating the construal of space they employ. However, she has a hard time bringing this into line with the diagram *vs.* map dichotomy dictated by her adherence to processualism—the one she frames as world making *vs.* world representing.

The 1972 New York subway map—map or diagram?

Wang cites Massimo Vignelli's masterful 1972 New York subway map as an example of a topological diagram that was eventually withdrawn as a "failure" because it did not conform to the "representational" dictates of the cartographically idealist worldview of the subway-riding public (2023, 167–173). However, as Michael Bierut explained,

> The problem, of course, was that Vignelli's logical system came into conflict with another, equally logical system: the 1811 Commissioners' Plan for Manhattan. In London, Henry Beck's

rigorous map brought conceptual clarity to a senseless tangle of streets and neighborhoods that had no underlying order. In New York, however, the orthoginal [*sic*] grid introduced by the Commissioners' Plan set out its own ordered system of streets and avenues that has become second nature to New Yorkers. Londoners may be vague about the physical relationship of the Kennington station to the Vauxhall station: on the London underground map, Vauxhall is positioned to the northwest of Kennington when it's actually to the southwest, and it doesn't seem to bother anyone. On the other hand, because of the simplicity of the Manhattan street grid, every New Yorker knows that the Twenty-eighth Street number 6 train stops exactly six blocks south and four blocks east of Penn Station. As a result, the geographical liberties that Vignelli took with the streets of New York were immediately noticeable, and commuters without a taste for graphic poetry cried foul. (Bierut 2007, 137)

So the issue in New York was *never* one of representation versus worldmaking—as Wang suggests— but rather a collision between two different representations based on two different diagrammatic world-making systems. It was *never* a difference in *underlying theory*, but a *value based difference*—comparable to the popularity of south-at-the-top (*not* upside-down) world maps in the southern hemisphere. One might loosely paraphrase Cassius from Shakespeare's *The Tragedy of Julius Caesar* (I.ii.147): while many preferred the 1979 replacement map to the Vignelli, the fault lay not in the 1972 publication being a diagram, but instead in themselves.

Conclusions from the Terrestrial Diagrams in Early China exhibit

There *must* have existed conventions amongst the makers and (eventual) users of *ditu* artifacts for expressing, describing, and delineating the post mortem world in a manner deemed of utility to the deceased. It should be obvious that surveyors' conventions and tools are of little importance in that expression, description, or delineation— and that the map-hood *vs.* diagram-hood of the artifacts themselves had just as little bearing on it as well. Wang closes her text with the statement: "if maps represent the visible, then diagrams make sense of the invisible spaces between, leaving room for ambiguity and contingencies" (Wang 2023, 173). The key word in that sentence is *if*: there is no *if*. Her posited map / diagram dichotomy is a false one, and, in this instance at least, map and diagram are interchangeable terms.

It reminds one of the (perhaps apocryphal) story of the traveler recounting his visit to Lake Geneva and lac Léman in Switzerland, who—when a listener remarked that the two were, in fact, synonymous— replied that in his opinion lac Léman was by far the more synonymous of the two.

It appears that Wang is attempting to break free of one set of restrictive misconceptions (judging the *ditu* by inappropriate parochial criteria) by taking refuge in another (Edneian processualism). While "process" may be of some use in explicating some aspects of her topic, it simply cannot be stretched to cover all she attempts to engross. In short, the overburden of constant contrast to a posited "normative map" or "cartographic ideal" is little more than the imposition of an ill-fitting and superfluous theoretical template—an exercise that confuses rather than illuminates the unique qualities of these extraordinary artifacts and of her otherwise excellent study.

CONCEPTUAL CARTOGRAPHY IN ACTION

WHAT, ONE WONDERS, MIGHT A CONCEPTUAL MAP— such as those for which I am calling—look like?

MONSTER TAXONOMY, A POSSIBLE CONCEPTUAL MAP EXAMPLE

A recent work by the artist **Markus Denil**, *Monster Taxonomy* (Figures 3 and 4), might qualify as one type of the Conceptual Map work I have been advocating as being of investigatory utility. This work on paper looks like a diagram or a map that, like other map artifacts, invites transfiguration, reading, and interpretation. Upon examination, however, there seems to be no rhyme or reason to any of the graphic, despite appearing to push so many map-ish buttons. The "map" teeters on a map / not map inflection; alternately inviting and frustrating readings.

This teetering is, in fact, quite deliberate; as the artist writes:

> My most recent and ongoing body of work is a multimedia exploration of masculinity by way of Monster Energy. This exploration began with a large print titled *Monster Taxonomy*. This work was created to look like a diagram or a map that could be read and deciphered. Images of each of the distinctive cans [of] the myriad flavors of Monster Energy drinks are scattered over the page. There seem to be groups and clusters of containers, their proximity implying relation—this being Waldo Tobler's so-called First Law of Geography, and one of the fundamental assumptions used in all spatial analysis. It states that "everything is related to everything else, but near things are more related than distant things" (Tobler 1970, 236). Overlaid on the constellation of cans is a tangle of looping lines that further seem to group cans that are sometimes quite widely separated, implying a different clustering, based on some criteria other than spatial proximity. The many grouping lines overlap, and blend together as they are not differentiated by any symbol dimensions and can be almost impossible to sort out—especially as their compass expands beyond a few cans. Text featuring terms associated with sexual and gender identity—some more mainstream than others—at first appear to be labels for either the spatial clusters or the groups enclosed by the outlined polygons, but these, too, soon disappoint the map reader: there seems to be no rhyme nor reason to any of it. The 'map' refuses to be read.
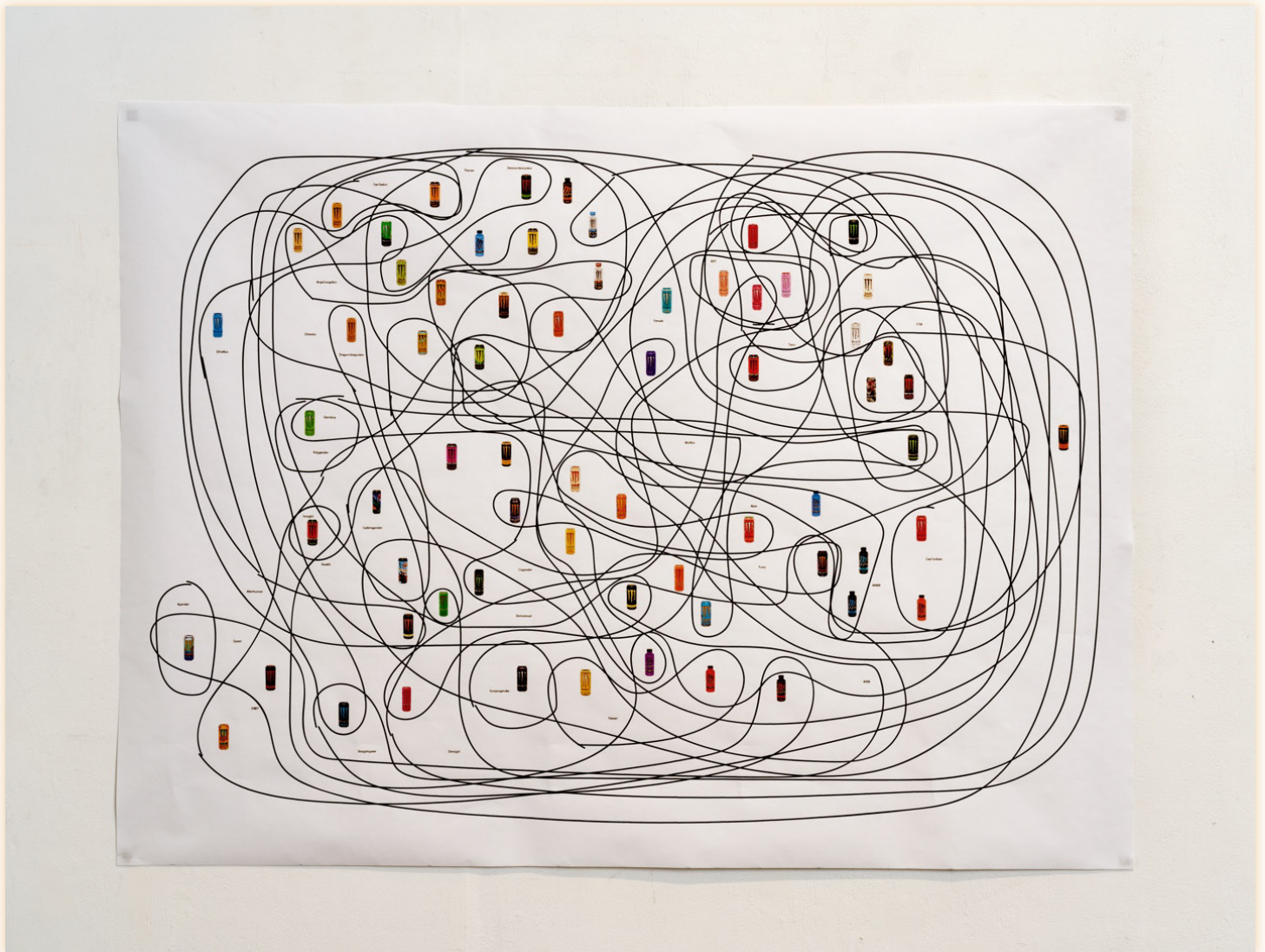

Figure 3. Markus Denil. 2023. *Monster Taxonomy*. Inkjet print. 36 x 48 inches (91.4 × 121.9 cm).

Figure 4. Detail from *Monster Taxonomy*. Markus Denil. 2023. Inkjet print. 36 x 48 inches (91.4 × 121.9 cm).

I became intrigued by the expansive web of flavor profiles of the different Monster Energy drinks, and the increasingly specific *type* of guy each one is aimed at. *Assault* for the battle-ready boys, *Rehab* for the ones waking up after an intoxicated rager, and *Mean Bean* for the guy who still wants coffee, but just can't stand the weak BS of the third-wave coffee house anymore. I couldn't help but see the similarities between this capitalist driven world of commodified identities and the ever-expansive encyclopedia of gender and sexual identities of the young online gender warriors. Each hyper-specific label comes paired with a flag, often a symbol, and sometimes an etymological breakdown of the term. These ostensibly counter-cultural guerrillas seem to be only one step away from each being

paired with their own Monster flavors, which is where works titled *Stealth FTM transmasculine truscum, identifies as "man"*; *Straight stealth ENBY. Aromantic. Masc-leaning omnisexual*; and *CisHet heteroromantic, super-straight. Masc feral Wolf Therian* came from.

In the drawings [*separate, related works*; *not shown*] the cans become characters. Their titles are their sexual, gender, and romantic identifies—a quick and concise description of exactly what and who they are and what type of partner they're seeking. Simple and easy, they've squeezed themselves so deep into their respective corners that there's no wiggle room left in their projected identities.

On one hand, a significant number of queers are fighting for these increasingly fixed and specific labels to describe every facet of their gender and sexual identity, while on the flip side there are those who have adopted a post-gender identity, moving beyond the use of pronouns and labels all together. I'm troubled in both directions. It seems to me that neither is working all that well.

Perhaps it's about remaining in a state of becoming. Unfixed, but actively moving toward something, looking for a way to balance delicately somewhere in the in-between. Or maybe not so delicately, but instead balancing aggressively, assertively, and un-apologetically—firmly establishing a presence in the fluctuating tides of growth, embracing the flu-idity of transformation, and standing resolute in the midst of a perpetually shifting identity. As the magnetic poles of the extremities pull with such force, it can be hard to stay upright, but that's the challenge. (2024 22–29)

Thus, it can be seen that *Monster Taxonomy* does, arguably, function as a map—albeit a map into an unbalanced and problematized social / gender / commercial space—but as a map every bit as problematic as the topography mapped.

In October of 2023, in the map gallery at the North American Cartographic Information Society (NACIS) Annual Meeting, Bethany Craig dis-played a graphic entitled *they mark me out as being trans* (Figure 5). It was one of a series of works in a project that she discussed in a talk delivered at that same conference, entitled "Unsettled: Scars and Landscape," that "makes visible the blurriness of time, memory, and space of and on the body by combining qual-itatively collected photographs and coordinates of bodily scars and GIS technology."

The graphic consists primarily of three elements: the title, a semi-transparent greyscale hillshade of a ridged land-scape, and a semi-transparent color photo of what seems to be a reddish scar on pale skin. A rectangular text block, set in a tall modernist sans-serif typeface significantly dif-ferent from (and larger than) that used for the title, sits to the left of the main graphic.

Note that the illustration shown here was captured from the YouTube video of Craig's talk, and differs slightly from the printed copy displayed in the conference map gallery. In this image, the text block is missing, and the left hand edge of the scar photo is cropped differently.

The statement in the map displayed in the map in the gal-lery read:

> Whether we choose their presence, or they are in-flicted upon us not under conditions of our own choosing, the scars on our bodies hold mem-ory. These "scar maps" blend together affects, geographies, and memories found, imprinted, and created through the body as a cartographic reimagining.
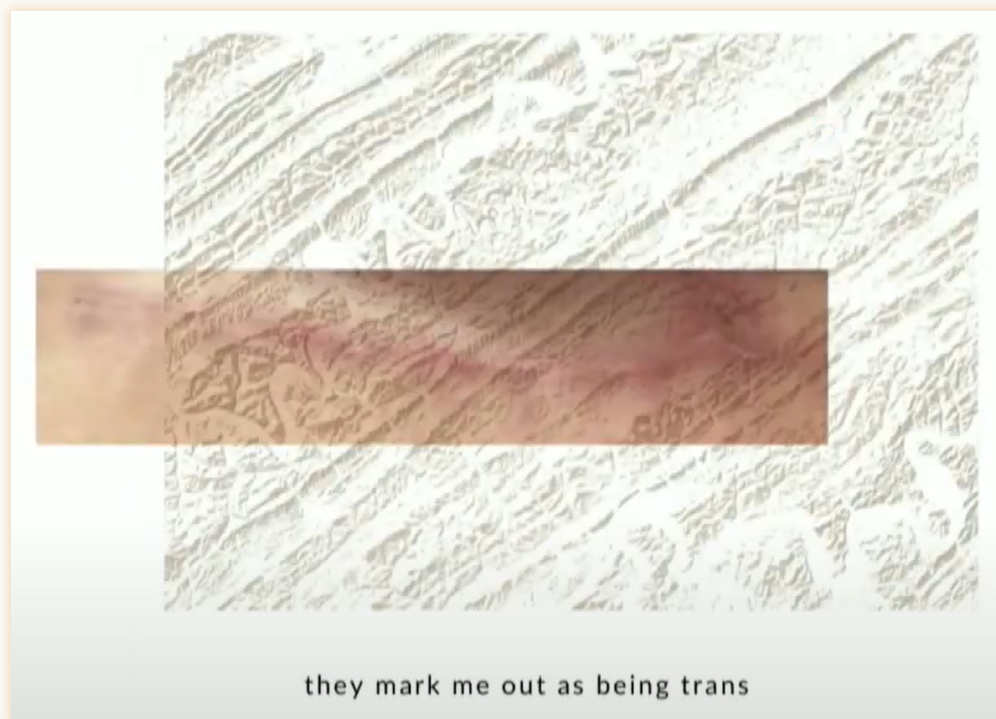

they mark me out as being trans

Figure 5. Bethany Craig. *they mark me out as being trans*. Note that this digital image differs slightly from the printed version displayed in Pittsburgh and discussed here.

> This is a picture of a scar from a trans masculine top surgery which took place at a hospital in East Tennessee. The scar is overlaid onto a map of the hospital's exact geographic location.

That Craig intends the works to be read as maps seems clear from her explicit references to them as "maps"—specifically, "these 'scar maps'" and "overlaid onto a map" in the text on the gallery-displayed version, and from remarks she made at various points in her lecture.

It strikes me that *they mark me out as being trans*, and other examples of Craig's "scar map" works, could well exist—at least for some viewers—in the contested space between what some accept as maps and others do not. I maintain, in fact, that they raise some interesting questions about what constitutes a map.

The explanatory text, referring as it does, to both "scar maps" and to the scar being "overlaid onto a map," raises a certain ambiguity of the relationship between the scar and hillshade. Is the scar an integral part of the map, that is to say, a mapped feature? Is it a non-map element juxtaposed with the mapped terrain? It seems that the text identifies it as both, simultaneously.

Even without the text, the map-hood of *they mark me out as being trans* retains a degree of ambiguity. The only graphic element that it shares with other artifacts that are commonly accepted unproblematically as maps is the hillshade, and a hillshade by itself is—if you will pardon the pun—really little more than a shadow of a "map element." It is certainly not *invalid* to use a hillshade alone, but it is somewhat *obscure*—and is arguably, but not not necessarily, elitist: how many non-map-making audiences (the venue *was* a *NACIS* conference, after all: a map-making and map-reading audience if ever there was one) could be relied upon to recognize or read a "naked" hillshade?

In both presentations, the map appears without furniture—furniture being those features or elements that afford accessibility or usability to any map—like scale notations, feature labels, location keys, and the like. Sometimes map furniture is referred to as "marginalia," and there are some commentators that insist that such "decorations" are imposed only to adhere to some sort of "mask" of "normativity." Both assertions are clearly nonsensical: map furniture is what makes map use possible, in that same way that horse furniture—saddles, bridals, stirrups,

etcetera—makes equestrianism possible. Sure, be as paleo as you fancy—eat only nuts, berries, and gravel; ride only bareback; or dispense with Americans with Disabilities Act (ADA) type affordances in your own home—but if you expect others to use your map you should supply some sort of accessible finger hold here and there. You can have a map without furniture, but a map is always less accessible without it. In a very real sense, a map without furniture sails hazardously close to the map-ness wind, risking an unintended jibe—the sailing metaphors are apt—and being dismissed as a map and instead interpreted some other, unexpected, way.

The relationship of the scar to the topography might also be examined. The "scar" may well be "overlaid onto a map of the hospital's exact geographic location," but here, too, ambiguities abound. That scar on this map would seem, at a very rough estimate, to be over twenty-two miles long—quite large for a hospital, or a scar—but perhaps the image is *centered* on "the hospital's exact geographic location." This still leaves open the relation between the land forms of the southern Appalachian Mountains and any medical procedures performed at a facility there. Was the decision to undertake the operation a reaction to, or prompted by, or in some manner influenced by, the admittedly remarkable topography south west of Knoxville? I can't say. I myself know that although my own body carries scars from several traumatic injuries, none are really tied to topography—but this is not to say that mine is the only possible experience.

Perhaps the long, slicing, shape of the scar is meant to echo the folded and gouged landscape? If so, that might have been clearer if the scar was oriented to run parallel to the ridges and valleys. Or, again, perhaps if the scar was rotated to run directly across the topographic trend, it would resonate to the note of imposition. Allowing the scar's imposition on the body to echo the way retreating glaciers dropped melt water rivers atop the landscape—carving out the water-gap and wind-gap scars so typical of the whole Appalachian range—would certainly be a powerful image.

In reaching for possible interpretations of *they mark me out as being trans*, it should not be thought that I am attempting to corral interpretation into some sort of academic or normative cartographic straitjacket. Quite to the contrary, I am searching amongst the very wide range of cultural references available to me through my education and experience—references pointedly not restricted to cartography.

I am, for example, familiar with the work of the German Romantic painter Philipp Otto Runge (1777–1810), noted for his employment of a quite personal iconography—a personal vocabulary and grammar of symbol and meaning—as famously employed in his 1808 painting *The Morning* (Figure 6). Upon encountering this picture, I believe I can identify a variety of iconographic features—signs signaling meaning—but these signs do not seem entirely in line with any meanings I can decipher. That *meaning was intended* I do not doubt: my recognition of the artifact as an artwork carries with it that assumption. My art-historical literacy informs me that Runge's works are so freighted with idiosyncratic meaning that even a well-informed connoisseur can never be quite sure as to what that meaning might be, and, in fact, I cannot even be entirely confidant that I am looking in the "right" places to discover the signs I assume Runge has placed before me. I have only *my* interpretation, and, as I know, *interpretations create the very facts that prove them.*

Similarly, that the scar–topography linkages seemingly referenced in *they mark me out as being trans* are not immediately accessible, or maybe not even accessible at all, is not a problem. I am just dealing with the questions anyone encountering any work like this must face—this graphic looks in so many ways like a map (and in some cases we are even told it is a map: by text on the printed version and / or directly by the maker in a lecture), but do I believe that it is?

So, are the works of the *Unsettled* project maps or not? They *are* for *me* if I decide they are: what are they for *you*?

MONSTER TAXONOMY *AND* THEY MARK ME OUT AS BEING TRANS *AS CONCEPTUAL MAP EXAMPLES*

It should be kept in mind that in calling for a Conceptual Cartography, I am not prescribing any particular look, feel, use, affordance, or any other dimension of connoisseurship

Figure 6. Philipp Otto Runge. *The Morning* (1809–10), 152 × 113 cm. Hamburger Kunsthalle: Hamburg, Germany.

for any map—I am instead calling for a destabilization and problematizing of map / not map expectations; not for its own sake but in order to expose the sub-conscious map / not map inflection that must always occur. This is something both *Monster Taxonomy* and *they mark me out as being trans* appear to do—in spades—vibrating back and forth over the map-hood line.

Obviously, two artifacts reviewed by a single reader is only a beginning, but these readings serve here as examples of the sort of artifact that explores the edge of an audience's expectations—one that may or may not transgress the bounds any particular reader places between map and not map.

CONCLUSION

THIS PAPER HAS EXAMINED THE DENIL–EDNEY debate with a view to determining what the disputed issues are and the validity of the arguments presented. It seems clear that there is indeed a fundamental map / not map question lying either entirely neglected, or unsatisfactorily addressed, by all other theories of cartography, maps, and mapping. While map makers and map users have gotten along fine for some considerable time without addressing it, it is also clear that no theory of maps, mapping, or cartography can make any claim of generality without addressing map / not map.

RING-FENCING

What, then, of Edney's charge that I somehow seek to "ring-fenc[e] both 'cartography' and 'the map'" (Edney 2022, 58)—with, it is strongly implied, no good intentions? It is interesting that Edney himself is happy to fence *in* Beck's *London Underground* (Edney 2019, 218) and fence *out* the Çatalhöyük drawing (Edney 2019, 68; Denil 2022, 11)—whatever one thinks of his reasons for placing his fences as he does—yet he claims that fencing is somehow "self-defeating" (Edney 2022, 58) if done by anyone else.

Clearly, *everyone* who reads maps fences some artifacts *in* and others *out*—for *anyone* to say "*this is a map*" or "*this is not*" is, in fact, ring-fencing. It is only a *refusal* to ring-fence—*refusing* to differentiate between a map and a not-map—that is self-defeating. Anyone who cannot, or will not, divide maps from not maps *is not*, and *cannot be*, a map reader. Such a person only *gibbers* when speaking of maps.

SOME COMMON QUALITY

This paper has demonstrated that it is valid to seek some common quality among the plethora of maps—for without *some* common quality the word "map" is meaningless—and that one can seek that quality without joining the myrmidons of 1970s cartographic positivism that so haunt Edney's dreams. I have also shown that any mapping or cartographic theory of general utility must be *abstract*—so abstract, in fact, that no individual map could be inferred from it, although any and all maps must be able to be ascribed to it. That theory itself, however, has yet to be fully defined—although some of its dimensions

are becoming clear. I further maintain that my propositions about a Conceptual Cartography offer a reasonably useful way of investigating it.

THEORY AND CONNOISSEURSHIP

This paper has examined the relationship between theory and connoisseurship; the importance of each, and the hazards of basing the former on the latter. Because standards of value and disvalue are volatile and contingent, any cartographic theory that is based on *good* maps is of only limited utility. Such "theories" cannot account for the fact that a *bad* map is every inch a *map* as a *good* map.

PRAGMATIC INDIVIDUALISM

By acknowledging and accepting the role played by individual interpretation—framed and guided by some level of mapicity bequeathed by that individual's education and cultural community—my approach is shown to be pragmatic, in the great tradition of American Pragmatism. Now, one *could* object to the very openness of my concept of theory: thinking that if everyone's and anyone's possibly fantastical "theory" is "operative," then, in effect, anything goes. However, I am *not* saying that: I *am* saying that while everyone has a theory, some theories are *better* than others; that only *some* theories are *sound*. That said, in order to be generally applicable, any sound theory has to take into account the variability of individualized theory and interpretation. I am *not* saying everyone is *right*, but I am *acknowledging* that even if map readers are quite mistaken about their readings, *they are still reaching a reading*. Thus, even Edneian processualists can get by on their flawed theory—I simply suggest that there are advantages to trying to understand what is really going on.

THE EASY PROBLEMS ARE ALWAYS HARD

Finally, this paper has discussed the main, real-world, obstacle to achieving the goals I have set for my proposed Conceptual Cartography: the obstacle embodied in the Moravec paradox—the inescapable fact that "that the hard problems are easy and the easy problems are hard" (Pinker 1994, 190). It is notable that grappling with Moravec's paradox will require not only the making of maps, but *also* their reading *and* a discourse circulating around their making and reading. Clearly, were Edney's spatial

discourses not only unworkably narrow and artificial, but also almost completely imaginary, they might be of some utility here. Nonetheless, if the conceptual map artifacts themselves are engaging, the challenges they present are appealing, and a knowledgeable and sophisticated audience can be attracted to the give and take, then a great deal can be learned. It will—like Conceptual Art—likely take some time and effort to sort out, and—again, like Conceptual Art—it is never likely to be mainstream, but it should, at least, be fun.

End note: On the left of Figure 1: *Collier's World Atlas and Gazetteer*. 1939. New York: P. F. Collier and Son. Page 19.

In the center: *New Books: Fall/Winter 2022*. Catalog. University of Oklahoma Press. Pages 17–18.

On the right: A printout of the drawing on Wall 14, Level VII of the Neolithic settlement of Çatalhöyük (or Çatal Hüyük), Turkey.

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