

(Infra)structuring Availability, or: Interpretivist Positivist Perversion

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After first speaking with Dena and Rob by phone back in November about what they wanted this short essay to address, I felt like the dog in the famous (*ok, boomer...*) Gary Larson cartoon—



--because what I heard them say to me, although you would not know it from the fragmented notes I typed while we spoke, was:

Dena and Rob: *blah blah blah* perverse *blah blah blah* perversity *blah blah blah...ok?*

Mike: Ok!<sup>1</sup>

Which I begin with for two reasons: 1) it's a microillustration of how "qualitative data" – a.k.a. meanings—are a product of selection, through which signal is coaxed from noise in a lively encounter, and how "qualitative analysis" and its communication—a.k.a. knowledges—are formed through the complex, limited, and simultaneously idiosyncratic and historically structured dynamics of attention and interpretive analysis; and 2) although perversion is not normally [sic] part of my analytic vocabulary or research agenda, its pointed introjection into my near-canine brain started me on a surprising path thinking toward what became the unplanned upshot of this essay: that positivism and interpretivism, the framing terms of their workshop summary paper, are related not as opposing terms; not as alternative forms of analysis, separate but (more or

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<sup>1</sup> Mike Fortun. 2019. Notes from telephone conversation with Dena Plemmons and Robert Albro, October 18, 2019, with additional notes added October 2019-February 2020. Available at <https://worldpece.org/content/notes-nsf-workshop-2020> Although Dena and Rob were indeed a bit hazy non-directive on what they were asking panelists to produce for this session, *blah blah blah* should be read only as my hyperbolic metonym for a long and friendly conversation that laid out their gentle suggestions, thoughtful queries, inviting prompts, and open-ended guidance. It's interesting: if you check my notes, you will see that I did not type the words perversion or perverse; you'll have to take my word, given here, that they were in fact uttered and it was not me doing the uttering. I take full responsibility for all the subsequent misfires of my dogged efforts to respond faithfully to their charge.

less) equal; and not even as complementary, representing or promising some romantic and/or organic synthesis of STEM and HASS (i.e. *The Heart of the Matter*<sup>2</sup>), but in a relationship of perversion.

In other words: I did not think I was going to be writing about data availability in terms of perversion, but now that I am, I understand how it makes sense and hope to convey that to you. What might we understand about the availability, analysis, and sharing of (qualitative) data if we framed interpretivism less as signature mode or method of a distinct knowledge domain, and more as perverse positivism? If we thought interpretivism, perhaps, as positivism's perverse style, form, figuration, performance? More importantly: how can we design digital infrastructure (a word which does not appear in the workshop summary paper) to take advantage of such perverse relations? How can our research infrastructures support not (only) an ethos of reproduction and reproducibility, but (also) an ethos of deviation, experimentation, and surprise?

"The shattering effect of [sexual] perversion," writes Jonathan Dollimore, "arises from the fact that it is integral to just those things it threatens." Teresa de Lauretis extends this analysis of the "constitutive paradox" of perversion to characterize it as "both central and yet disruptive; necessary and yet objectionable; a 'deviation' from the norm and yet more compatible with positive social goals...regressive or involutory and yet expressive of an original intensity of being." (De Lauretis 1994, 25) It's precisely these "perverse dynamics," these integral shatterings, that I think are at work and in play in *all* systems of data archiving and analysis, interpretivist and/or positivist alike, and well worth taking better account of and using creatively.

### Limits and Bridges

*Perversion and that inadequately specific term normality construct each other...How do you know what's normal unless you know what's not, unless you have a boundary? How do you know what's not normal unless you know what is? In the discourse of psychosexuality, perversion and heteronormality constitute each other's limits.*

Muriel Dimen, "Perversion Is Us"<sup>3</sup>

As but one quick example of how the perverse dynamics of interpretivism operate within ostensibly positivist data structures, and to open up the question of what "availability" means, how it works, and what effects it has, consider the U.S. National Bridge Inventory. I probably don't need to tell this audience that such physical infrastructure is essential and vital, and woefully underattended to. The [National Bridge Inventory makes important data available](#) concerning the state of these infrastructural structures, findable and accessible as interoperable ASCII files. This is probably as normal as data gets, and normal data is good data to

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<sup>2</sup> I had to look up this report from the AAAS, which the workshop summary paper referenced. It is appalling, complete with U.S. flags and other jingoisms, and somehow grotesquely symptomatic of exactly the condition it purports to diagnose and redress; it in fact re-doubled my commitment to explore perversion as an analytic category. And prominently citing Thomas Jefferson as admirable and innocent humanist when any humanist or social scientist could tell you...oh never mind. Maybe I'll make my way toward this in the conclusion of this essay but if not: just ugh.

<sup>3</sup> Muriel Dimen, "Perversion Is Us?: Eight Notes," *Psychoanalytic Dialogues* 11:6 (2001), 825-860, DOI: 10.1080/10481881109348647; p. 838.

have available. My former student (and Lead Platform Architect of our PECE Platform, discussed further below) Lindsay Poirier requires students in her “Intro to Data Studies” class at UC Davis to find that available data, download it, and begin working with it. They quickly find that that data is only meaningful as data because the Federal Highway Administration also makes available numerous accompanying documents, such as [Revision of Coding Guide, Item 113 - Scour Critical Bridges](#), detailing the evaluative judgments beneath, after, within, or simply *about*—some of the possible readings of the *meta*- of metadata-- the coded values in the data set. Her students must then avail themselves of this necessary supplement, one among numerous other such documents and data sets that together constitute an extensive and elaborate disseminatory structure of metadata, the interpretive infrastructure structuring (infra-ly) even the most ostensibly positivist data and data systems. These interpretivist infrastructures are both central and disruptive to positivist structures, a “‘deviation’ from the norm and yet more compatible with positive social goals.” Like keeping bridges from collapsing.

Or other positive social goals, like setting air quality standards that reduce sickness and premature death from PM2.5 and other pollutants. Or developing, through decades of work at public expense and in public institutions, global circulation models to more confidently project the likeliest climate scenarios. Or the constant revisiting and revising of evidentiary and analytic standards by genomics researchers to check their (over)enthusiastic claims concerning gene-environment interactions. These are some of the collective scientific efforts that I support, value, and study seriously as an anthropologist of the sciences. They also represent the main reason I and my collaborators first joined the [Research Data Alliance](#) in 2013: to better understand through ethnographic fieldwork how data availability was being (re-)imagined and practiced in diverse scientific endeavors, how barriers to data sharing were being negotiated and bridged, and how new data infrastructures were designed and deployed to support these positive social goals. And how interpretivism always already perverts, and norms, positivism.

Among the many other things we’ve learned through RDA: Availability of data provokes more availability, needs it, demands it; too much is never enough. This is the perverse normal state of affairs in the positivist<sup>4</sup> sciences these days. My collaborators and I decided that was an ethos well worth emulating, or at least worth exploring what it would take for cultural anthropology to mime such a profligate data ideology, what problems we would run into, and what might result. One of our axioms became: the more ethnographic data available, the better.

We did two things: went from observant ethnographic participants in RDA to full participant ethnographer members, starting the ostensibly interpretivist Digital Practices in History and Ethnography Interest Group and later the Empirical Humanities Metadata Working Group. I won’t detail all we did and

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<sup>4</sup> These are obviously shorthand terms. Positivism in the 1950s was a diverse affair, as is whatever the term denotes today. And the same goes for interpretivisms. Indeed, these differences that make a difference are central to what I am advocating we need to be more cognizant of and build quotidian infrastructures to support.

learned through these groups here, but mention only three things particularly pertinent to this workshop. First, we had to repeatedly narrate to our RDA data scientist colleagues how their constant references to “social science” or “qualitative data” were insufficiently granular (a term they understood well), inadequate, and unproductive; political scientists were not sociologists were not ethnographers, leaving aside the further differentiations within each of those (and other) disciplinary sets; digital infrastructures for social scientists and humanists needed somehow to better accommodate that granularity. Second and relatedly, we had to explain why least some cultural anthropologists may not self-identify as social scientists, even if they shared some practices and concepts as well as ethical commitments to matters like privacy, protected access, clear permissions etc.—and so, third: neither should they be categorized or ontologized as “digital humanists,” even if they appeared to share certain other practices and concepts, primarily because of their continual generation of new data through often idiosyncratic processes of selection, collection, interviewing, hasty scrawlings of free [sic] associations in field diaries, etc. These were all “differences that made a difference” to many things, but to digital infrastructure in particular. We “empirical humanists”—the term we invented to describe ourselves within RDA, as humanities-oriented interpretivists who created new data constantly—needed a prepared digital place to make our kind of data available. And to make that data, moreover, not simply available but available in particular ways, and for particular purposes.

Because availability is not an abstract quality; it is a complex ensemble of infra/structured practices.\*

#### Anxiety, Availability, Alienations

*Perversion is a topic rife with anxiety...  
Sometimes this anxiety is handled by demonizing the pervert on behalf of Western civilization...  
Sometimes it is stilled by bringing perversion into the safe precincts of matrimony...  
And always...the anxiety is relieved by exclusion,  
so that however empathically the pervert patient is comprehended,  
the pervert is still the other guy doing alien and even disgusting albeit  
(or therefore) fascinating things. Perversion may be defined, after all, as  
the sex that you like and I don't.  
Muriel Dimen, “Perversion Is Us?”<sup>6</sup>*

Through an analytic of perversion, we can make (a different kind of) sense of positivism’s recurrent and probably most strongly felt anxiety: the failure of reproducibility, that heteronorm *par excellence*. There are differing interpretations concerning how extensive and serious the “crisis of reproducibility” actually is; that’s not what interest me here. What interests me more is articulating another way to think about reproducibility’s failures other than as a form of pathology, an essential difference dividing science from not-science.

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<sup>5</sup> The alternative subhead for this section was “Fuck reproducibility IYKWIMAITYD”...if you know what I mean, and I think you do.”

<sup>6</sup> Dimen, 835.

The reproducibility crisis is not positivism's failure, but its normal (perverse) limit. Availability, then, and "Big Data" more generally, are interpretable as part of positivism's anxiety-reducing measures. By making more data and making it more openly available, the cultural logics seem to go, reproducibility is more assured at the micro-level and positivism can more successfully reproduce at the macro-level. The fact that it is not that simple, and that bigger data has in many ways only amplified the problem and the anxiety, is perfectly in keeping with the dynamics of anxiety as a defense mechanism: it may be effective for a while, in certain limited circumstances, but as a general long-term strategy it is almost certain to create more problems and require ongoing, even interminable, therapeutic measures.

Many interpretivists are similarly anxious about reproducibility, and justifiably so; some interpretivists, my collaborators and me included, are not. (We are, of course, anxious about other matters.) Of the former, the [Open Science Framework](#), the [Qualitative Data Repository](#) and the [Harvard Dataverse](#) are some of the earliest and most rapidly developing infrastructural projects making qualitative social science data available to some interpretivists. I am excited about these and other initiatives that make qualitative data shareable, and we are happy to see an increasing (albeit still relatively small) number of cultural anthropologists become data-curious, we work and advocate hard for more of this kind of availability, and have designed our own digital infrastructure (PECE) to support the goal of making as much new ethnographic data available as possible within ethical limits, situationally constituted. We want to provide the same kind of metadata-structured place as QDR, where an ethnographer can place the interview she just recorded and/or transcribed, the scan of the piece of ephemera he picked up at last week's clinic, the field sketches they drew in their notebook from the shareholder's meeting. And we certainly appreciate how this kind of availability entails a lot of really hard work, collective if not collaborative in nature, and is resource intensive. Infrastructuring is expensive and laborious (which goes some way to explaining a trend toward partnerships and alliances with publishers and other established and often for-profit institutions, a trend which we work against—but that is another essay).

Here is where it is worthwhile looking more closely at some of the more *infra*- effects of how data is structured in these sites. Availability is operationalized in these sites through a repository or archive structure: stable data-objects are available to be downloaded and used. But such availability alone isn't enough for reproducibility, let alone a more perverse interpretivist positivism. Here I agree with much of what Andrew Moravcsik writes about how data availability alone is insufficient, but requires analytic availability as well:

Qualitative research's distinctive epistemology implies that to track the interpretation and analysis, a reader requires more than just access to a source. One must specify where within a descriptive or causal narrative each piece of evidence fits, and which specific textual passage in the source is critical. As historians, legal academics, and interpretivist social scientists insist, an informed reader needs to know not just what a scholar cites, but why.<sup>7</sup>

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<sup>7</sup> Moravcsik, A. (2019). Transparency in Qualitative Research. In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, & R.A. Williams (Eds.), *SAGE Research Methods Foundations*. doi: 10.4135/9781526421036863782

In this regard, my appreciation of QDR extends even further, with its more recent efforts to explore and encourage “more than just access to a source” by partnering with Hypothes.is to render available more of [an article’s and author’s underlying analytics through extensive annotations](#).<sup>8</sup>

### Fueling the Infrastructures

*Following Foucault, we must conclude that sadomasochism is the principal psychodynamic animating the desire and struggle for power fueling the infrastructures of contemporary society, and it shows up everywhere authority and hierarchy are found...  
Muriel Dimen, “Perversion Is Us?”<sup>9</sup>*

My collaborators and I, in building our own open source digital infrastructure, fully share this kind of commitment to expansive availability. My brief synopsis here of the [Platform for Experimental Collaborative Ethnography](#), or PECE), designed to serve as digital research infrastructure and data management system for research project “Environmental Health Governance in Six Cities.” on [NSF grant #1535888](#) (2015-19),

QDR and its annotations are structured by and toward:

1. Reproducibility, solidity, consolidation, the conservation and preservation of meaning. “grounding” is a dominant trope, best exemplified by the enduring theory-methods package of “grounded theory,” nearly synonymous with qualitative data analysis. “thickened theory,” “kaleidosopic theory,” “finely diffracted theory” are some alternative perverse tropings, highly unlikely to enjoy the reassuring hegemonic normalcy of “grounded theory.” For a long time I’ve been puzzled by the need for transparency when availability seemed like more than enough. If you make as much as you can available, why the need to invoke and demand an additional concept-ethos of “transparency?” I interpret this as a kind of denial of availability’s meshy, “thick,” disseminated structure, its all-overness, by invoking a direct unobstructed unidirectional unmediated vision that sees straight through, transparently,<sup>+</sup> to the ground level, to the data that is always metaphorized as residing at the foundation. We perverts...
2. the journal article. We perverts...

In the end, even in some of the most interpretivist circles, there’s still a tendency to reproduce the established genre forms – the peer-reviewed journal article, the single-authored monograph – established norms – scholarship is individual first and foremost, and only maybe collaborative later -- and the established data

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<sup>8</sup> A further infrastructural requirement: that link only works as intended if you have [the hypothes.is extension installed in your browser](#).

<sup>9</sup> Dimen, 853

ideologies – most pertinently, that the best if not the only reason to make data accessible is for someone else to check your work, assess its solidity and groundedness as a measure of its truth. Call it positivism, although my analytic genealogy (just to be appropriately transparent about it) would have me go with logocentrism. Dominant infrastructures structure, by design, this conservative drive to consolidation, convergence, harmonization, validation—in a word, reproducibility. And again: completely understandable and, in so many contexts, overwhelmingly desirable and absolutely necessary. Those bridges aren't going to hold themselves up.

But those (infra)structures also pervert or undermine themselves, and I think we want to encourage that in at least some domains. And we need to design (infra)structure that does that – that privileges and cultivates divergence, dissonance, creative extension.

Sherry Ortner puts it, a minimal definition of ethnography would be that “it has always meant the attempt to understand another life world using the self—as much of it as possible—as the instrument of knowing” (2006: 42)

definite article

I have been charged, on occasion, with fetishizing the sciences and in particular their data, data practices, and data cultures. I am not ashamed to cop to such a charge, having come to terms with this particular perversion. Flybase

A digital research infrastructure (the [Platform for Experimental Collaborative Ethnography](#), or PECE) was designed and built using entirely open source software (Drupal-based) by the investigators (including the author) and their consultants on [NSF grant #1535888](#) (2015-19), to serve as digital research infrastructure and data management system for the research project “Environmental Health Governance in Six Cities.” PECE was *bricoleured* into an experimental system (Rheinberger XXX) to better understand how digital infrastructure *structures*—from an ambiguous location below and/or beyond and or/within (*infra*)—structures of knowledge, rather than simply supporting them.<sup>10</sup> These methods and hypotheses are consistent with results from

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<sup>10</sup> “Infrastructures are matter that enable the movement of other matter. Their peculiar ontology lies in the fact that they are things and also the relation between things. As things they are present to the senses, yet they are also displaced in the focus on the matter they move around. We often see computers not cables, light not electricity, taps and water but not pipes and sewers...Yet the duality of infrastructures indicates that when they operate systemically they cannot be theorized in terms of the object alone. What distinguishes infrastructures from technologies is that they are objects that create the grounds on which other objects operate, and when they do so they operate as systems. Perhaps because of this duality, infrastructures are conceptually unruly.” Larkin, Brian. “The Politics and Poetics of Infrastructure.” *Annual Review of Anthropology* 42, no. 1 (2013): 327–43; <https://doi.org/10.1146/annurev-anthro-092412-155522>; p. 329.

research on other infrastructures, from databases to petrochemical plants to disease classification systems to sewage treatment (see e.g. Larkin, Bowker and Star).

As the Qualitative Data Repository states, it's the "infrastructure gap" that is a big part of the reason why the social sciences (primarily political science in their case) lack "a data-sharing custom." So it's been so encouraging and is such a genuinely good thing to see infrastructures like QDR and CoS and similar repositories, or repository-like structures, grow and develop, and thus grow and develop a data-sharing culture among scholars largely unaccustomed to such an ethos. I truly value them. To the point that we can now begin to interpret their (infra)structures and their (infra)effects.

## RESULTS AND DISCUSSION

### Interpretive exceptionalism

Now you may say that such interpretations of bridge data is not what we really mean by interpretation. I find such constraints perverse, but whatever; as feminist psychoanalyst Muriel Dimen notes, "Perversion may be defined, after all, as the sex that you like and I don't." Real interpretation, some anthropologists will object, is what happens when my self, as an embodied research instrument, encounters people and situations in all their near-ineffable complexity and nuance, residing with them over lengthy periods of time, and then interpreting out of that rich context into a published text likewise shaped by subtle connections to rich literatures and a complex intellectual genealogy. No metadata can adequately capture that and make it, too, available.

To which our reply is: maybe so, but why don't we try? Why not undertake a few experiments, undoubtedly crude at first but surely refineable and extensible, to see how annotations and related metadata (infra)structures can serve to create this kind of scholarly provenance, archiving it and making it available along with other data?

This is what we are working on and towards. The real perversity is: we can't really know if our elaborate, expensive, and often frustrating and hair-pulling efforts will in fact be worth it. But this is the perverse risk of the experimental style in general, even in its most positivist forms: if it is in fact experimental, the outcome is uncertain. When I think of the tens if not hundreds of millions of dollars spent on GWAS experiments that, to be generous (and I try to be generous toward GWAS generally!), have much less to show for themselves than was promised or even just hoped for – well, I am both comforted and annoyed: I could have used just some of the crumbs from their table...



Part of such a shift is a related perversion of availability, where the key concerns and questions pertaining to *any and all* data are not matters of degree or quantity, but matters of (infra)structure and style: *what* data is made available, and how is it made available—through what structures and relationalities? In other words: it's the metadata, stupid.

We also love, for example, [the “Shuffle” button placed at the top of every data-object in the ToxicDocs archive](#), and we are developing a similar function to introduce an element of chance into every encounter with ethnographic data, a bit of noise added back to every coded signal. Again, this is the kind of feature that has to be infra-structured in to one's knowledge bases.

<https://www.researchdatashare.org/content/how-being-anonymized-or-named-research-described-moralized>

<https://www.researchdatashare.org/content/proceedings-archiving-kenyas-past-and-futures/essay#>

We make as much as possible available, which we think makes any discourse of “transparency” unnecessary. What does that term add to availability, when availability includes as much as possible: data, analytic methods, fieldnotes, discussion of strengths and weaknesses, multiple theoretical analyses and explorations? What is it that we are supposed to see through to?

Anxieties:

Not exactly the historical moment in which to be advancing an understanding of scientific knowledge in terms of perversion. To calm myself : there is no better historical moment than the present one,

Perversion has multiple linkages to anxieties. I am anxious that the dominant models like CfOS and QDR, as much as I admire them and support them and wish to see them grow, become more normal than they already are and approach the hegemonic. Sociotechnical experiments like pre-registration are valuable undertakings and will not doubt yield positive results. It offers little to analytic perverts like me, inclined to taking seemingly stray remarks from the margins of a conversation and working them at and beyond their analytic limits, using them imaginatively to re-read and re-figure my already pre-figured data in unexpected ways.

We need more models and more infrastructures, and more models and more infrastructures means more support. Infrastructural innovation, not consolidation.

This open source digital platform for the archiving of qualitative data, for its collaborative interpretive analysis, and for the public presentation of both interpretive work and the data it encompasses

The “constitutive paradox: An experimental system has to be thoroughly reproducible so that it can fail to reproduce, so that it can produce surprises, new phenomena, new things, new concepts, new truths, “the unprecedented.”

The essay<sup>11</sup>

From RDA, we know that social sciences and qualitative data are shorthand concepts that need further differentiation and refinement, especially for purposes of making data available and shareable. Not only do sociologists have different data needs, data practices, and data ideologies than cultural anthropologists—while sharing many aspects of all of these, in case that needs to be emphasized—cultural anthropologies and anthropologists come with many different styles. Digital infrastructures or middleware, then, will become increasingly bespoke.

## RESULTS

And I am keen to show my work, and my data, to anyone who wants to see it.

These perversities matter, I think, and don’t think we don’t understand the stakes. Air pollution regs, systematic assault on EPA expert bodies, etc. is now really the time to embark on an insistence of the complexity of truth, the indelibility of its normal perversions and perverse normalcies, the truth of deconstruction?

I think it is. For one: we understand the stakes precisely because we’ve archived and metadata-ed all the data, and are collaboratively analyzing it— scientific articles and press,

One problem: providing all that metadata slows you down, its cumbersome, and sometimes you just need to work fast, as in taking fieldnotes – so now we have to reinvent fieldnotes

What could be more perverse than to call for a new “unity of science” movement?

We want to be FlyBase:

to rapidly place in the public domain

findings that did not fit into the narrative of an existing publication

findings derived from small projects, for example undergraduate summer research projects, graduate rotation projects, that stand alone and are not necessarily part of a larger effort

<https://www.micropublication.org/why-micropublish/>

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<sup>11</sup> Essay is an important word to us and one we continue to use, in part for the difficulties which it has been shown to provoke. When Kim Fortun and I were editors of *Cultural Anthropology* (2007-2010), we regularly changed “article” to “essay” in every manuscript we accepted, e.g. “In this essay, I describe how...”. For the first several issues, when the redlined manuscripts were returned to us, the proofreader (Dac Nelson, who was awesome) routinely changed each instance back to “article,” as per the AAA Style Guide and the Chicago Manual of Style. We routinely changed it back to “essay.” Eventually this routine stopped, probably because the stakes were so low, for them if not for us, and essay it stayed. We take “essay” seriously because the essay takes form seriously, respecting it even as it exceeds it, and form matters in the production of knowledge. Forms (the essay, the social science journal article, the scientific article, the book, etc.) infrastructure knowledge, imparting a style.

Positivism or interpretivism? The perverse reality is that each needs the other, relies on the other, is supplemented by the other interpretivism is not the other of positivism, but its perversion. Not nonoverlapping magisterial of knowledge, but one not two cultures, and not some bullshit dialectic third culture, but  $\sqrt{2}$  Cultures

What Ludwik Fleck (1946) called the “problem of the science of science”

#### A Modest Proposal

*The label of perversion is as clinically superfluous as we now understand the label of homosexuality to be. It is not a diagnostic category; it does not tell us what to do.*

*Dimen 853*

*How can we prescribe health when we cannot know, going forward, what produces illness? There needs to be a way to back off from the authoritarian and dominating inclinations that psychoanalysis shares with other regulatory practices. Remembering doubt is one route; writing disruptively is another.*

*Dimen 856*

Positivists have a history of shaming interpretivists because, in my analysis, their own dependency on interpretation generates a series of anxieties, as all perversions do, that then have to be dismissed, minimized, or managed. Disavowal through pathologization is one option, rather extreme but not unheard of. Splitting is another strategy: positivism on the one hand, coded as normal and good, interpretivism on the other, coded as abnormal or at least not quite normal enough, maybe bad but tolerable so—“...not that there’s anything wrong with that!”—with the former in the position of dominance. This is the “Two Cultures” model first named as such in the 1950s by C.P. Snow. As long as we interpretivists are imagined and categorized as qualitatively different than positivists, we will never be more than second best knowledge producers. In this cultural model interpretivists get to be, at best, *The Heart of the Matter*, and we should be more than satisfied with hearts and not at all envious of brains. And the route to perversion surely runs through the heart, doesn’t it? We seem to be saddled with this arrangement, and saddles...hmmmmmmmm.

So I propose that we continue building the diverse data ontologies, disseminating conceptual vocabularies, and experimental sense-making infrastructures that are already well underway for cultivating the  $\sqrt{2}$  Cultures: more than one, less than two—a perverse 1.41421356237... Cultures, perfectly calculable but always exceeding our most recent attempts at elaboration, which we extend eagerly and even a bit obsessively. We need, in this interpretation, a kind of re-iteration of the “Unity of the Sciences” movements of the 1950s, but this time not under the sign of positivism—shown historically to be untenable—but under the more anxious, uneasy sign of perversion.

The apparently simple and restricted concept of “availability” in reality is implicated within and connect us up to these most meta- and expansive questions of knowledge systems and knowledge cultures.

To work on infrastructures is to work out these difficult, complex and vitally important questions—and their often conflictual Otherings.

Even if I wouldn't regard my statements here as "reproducible," in the sense that you would expect some other empirical humanist to pore over and analyze the same set of available materials and weave them into a matching pattern of claims, I nevertheless regard them as truthful. Interpretive is not some kind of disqualifying qualifier that the real positivist sciences in their other culture have no need of; I am quite confident the situation is at least a little more perverse than these normally operative oppositions would suggest: real or interpreted, quantitative or qualitative, grounded or speculative, normal or perverse, hard modernist positivist rationality or squishy postmodern bullshit. I know that it is, truly, a little more perverse than that, and rather than pathologizing perversities and trying to exclude them or at least safely contain them elsewhere, we should be listening more carefully to them, having richer and more open-ended conversations with them, and experimenting with them. More and different quotidian infrastructures that increase diverse and rich availabilities will be essential.

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To jumpstart some recent talks on these matters, including to some of our undergraduate anthro majors, I've compared what we've been building with PECE, and/or what we aspire to build, to [FlyBase](#). Like all comparisons, this one is not exact. To say that Flybase "makes data available" is of course true. But what's more interesting is how it makes it available

Availability is hard fucking work. If we were going to get flybase, these kinds of databases are a product of collective and institutional labor. So a choice: AAA solved this problem by opting to partner, again, with Wiley

Idiosyncratic, boutique

Positivism is anxious about non-reproducibility, it's most dreaded perversion. But this retroping gives insight I think: non-reproducibility is not a failure of positivist knowledge, but its ineradicable or irreducible limit. That perversion will always be with it, and that needs to be normalized and not pathologized. No amount of availability or transparency will ward it off. No matter how big you make Big Data, as a protective fetish against reproductive failure, it can't be big enough. Being a size queen is a fine and no doubt common perversion; there's no need to rationalize and normalize it.

I can anticipate your objections and anxieties, because I share them too. If I were to give them a name, I would name it Rep. Lamar Smith, a signifier of the weaponizability of those positive positivist virtues of availability and transparency. Any hint or suggestion of a perverse positivism can only be pathological to these types. But I would accept the challenge, even if Smith and others weren't so obviously acting in bad faith.

Take the perverse/normal couplet here:

Perversion and that inadequately specific term *normality* construct each other...[P]erversion and heteronormality constitute each other's limits. Perversion marks the boundary across which you become an

outlaw. Normality marks off the territory that, if stayed inside, keeps you safe from shame, disgust, and anxiety.” (Dimen 2001: 838)

And substitute the interpretivist/positivist couplet:

Interpretivism and that inadequately specific term *positivism* construct each other...Interpretivism and positivism constitute each other’s limits. Interpretivism marks the boundary across which you become an outlaw. Positivism marks off the territory that, if stayed inside, keeps you safe from shame, disgust, and anxiety.”

I’ll put this baldly and so probably too forcefully: As long as we interpretivists are imagined and categorized as qualitatively different than positivists, we will never be more than second best knowledge producers. Some might be satisfied being a heart and not a brain; I’m not. We need infrastructures that make all of our analytic practices as fully available as possible to be seen as the human scientists that we are

Axiom: the more ethnographic data openly available, the better.

Availability without transparency; only availability; there is nothing outside availability. An extension or corollary of thick description/analysis: the thicker you make it, the more you make that thickness available, the less “transparency” you get, in the sense of seeing through to an actual presence. Making the entire (infras)structure available

We also love, for example, [the “Shuffle” button placed at the top of every data-object in the ToxicDocs archive](#), and we are developing a similar function to introduce an element of chance into every encounter with ethnographic data, a bit of noise added back to every coded signal. Again, this is the kind of feature that has to be infra-structured in to one’s knowledge bases.

Transparency into what? The data in one sense, of course, and into analytic procedures as well. But there’s also the broader sense, the infra-sense, of transparency straight [sic] into the plain unvarnished truth. Transparency covers up a metaphysics of presence. Why does transparency add that availability, avidly pursued through its mad logics of proliferation, doesn’t do on its own?

Star, Susan Leigh (1999) The Ethnography of Infrastructure. *American Behavioral Scientist* 43:377-391.

Star, Susan Leigh, and Karen Ruhleder (1996) Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces. *Information Systems Research* 7(1):111-134

## ENDNOTES

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\* Availability of data, then, needs to be read more perversely than as something simply there for the taking, an open or shut case. This is a relatively late sense of the term, and a “positivized” one at that. I read from the OED that the sense of “availability” undergoes a transformation enjoined with the transformations of broader sensibilities that occurred in the long cultural morphing of the “hermetical physick” of the 17<sup>th</sup> century to the physics of the 19<sup>th</sup> – the evolution of alchemy to chemistry, in our current interpretation. Puritan clergyman alchemist Thomas Tymme could postulate in 1605 that a certain “oyle” was “as available against the falling sicknesse as vitriol.” To be available was to be efficacious, powerful, beneficial as a complex whole. It’s not until 1827 that the skilled experimentalist, lousy theorist, and Sandemanian Michael Faraday\* would narrow it to its currently dominant sense: “This quantity is..wholly available in the liquid when used as a bleaching agent.” Here, now, availability has mostly been pared back to an isolatable quality or property “at one’s disposal,” extractable from its larger context.

† Allow me to pre-register this hypothesis, utilizing the foot/endnote infrastructure to do another of the things it’s long done effectively, namely to explore some tangents and/or loose ends, to provide a place for the wry and (one hopes) telling aside, to be taken up (perhaps) in a subsequent essay: We share the commitment to availability 100%; we have a 0% commitment to the ideal of transparency. We don’t think we need it, and we think transparency hides, perversely enough, a particular philosophy or what anthropologists like us would call a semiotic ideology, one that we simply do not find conducive or tenable.