AN INFRASTRUCTURAL MOMENT IN THE HUMAN SCIENCES

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The essay is both more open and more closed than traditional thought would like. It is more open in so far as, through its inner nature, it negates anything systematic and satisfies itself all the better the more strictly it excludes the systematic. . . . On the other hand, the essay is more closed in that it labors emphatically on the form of its presentation. The consciousness of the non-identity between presentation and presented material forces the form to make unlimited efforts.

—T. W. Adorno, "The Essay as Form"

Very early in our tenure as coeditors of *Cultural Anthropology* (2005–2010), before we began our years-long, nagging push for open access—an issue about which we had almost no awareness at the time[1]—we had a seemingly more minor and short-lived nagging struggle with the journal's copyeditor (whose work overall we greatly appreciated). When our first issue's redlined manuscripts came back to us, in every essay, every instance of *essay*—a word that appeared at least in each abstract ("In this essay . . .")—was struck through and changed to *article*. Publications of the American Anthropological Association (AAA), we were told, were "articles." Writing in the margins, among the comment boxes and queries and typographers' instructions, we explained our insistence on retaining the word:

the essay as form, we had learned from Theodor Adorno, was "more open" than the traditional form of the article. If anything made *Cultural Anthropology* different from other journals in anthropology, it was its openness to more open forms of writing, its openness to methodological, conceptual, and textual experimentation. Recognition of this in our representations of the journal's work wasn't trivial. We needed a way to describe and invite experimentations like Val Daniel's (2008) epic poem in *terza rima*, crafted to convey the labor, violence, and enduring legacy of the coolie labor system in Sri Lanka. And writing like Todd Ochoa's (2007, 2010), which mimed the hauntological incantations of Palo, a Cuban-Kongo society of affliction, to convey how Palo initiates come to apprehend Kalunga, the vast sea of the dead. Ochoa demonstrated both the inadequacy of a representational theory of language and the openness of language to other powers—leveraging terms native to both Palo and the theoretical traditions of Gilles Deleuze, Félix Guattari, G. W. F. Hegel, Friedrich Nietzsche, and Karl Marx.

Daniel's and Ochoa's experiments with form were deeply poetic, while also deeply empirical—experiments run to draw out the textures and rhythms of human experience, as well as the histories and structures that shape them. This demand for experimentation—to support ethnographic commitment to the empirical—can be said to be the vocation of *Cultural Anthropology*, its purpose and its challenge. And we came to see it as our challenge, as editors, to build infrastructure to support this.

With only minimal resistance, we managed to retain "essay" as the name for contributions to *Cultural Anthropology*. The harder, ongoing challenge lay in building the social and technical infrastructure needed to support what a commitment to the essay implied. Open, experimental forms of writing are called for by what Adorno (1984, 165) describes as "non-identity between presentation and presented material." This, in turn, "forces the form to make unlimited efforts." Essays aren't easily open, and they certainly aren't undisciplined; they depend on closures, on persistent and emphatic attention to the form of their presentation. They need to be written, reviewed, and revised on many registers, constantly moving between form and content. They also need open, inventive, and experimental modes of access, circulation, and feedback. Building *Cultural Anthropology*'s infrastructure, it seemed, presented similar demands: it had to be open, and thus carefully structured; inventive, and thus constantly reviewed and re-evaluated; hospitable toward unknown future content, and thus attentively disciplined for present demands.

Our years as editors were an exciting and technically challenging time that seemed to call for all this. It was a time when the business model for academic publishing moved into full crisis, a time when the AAA publications division was transitioning through multiple directors, a time when digital infrastructure was becoming available and thus expected, and a time when various forms of open access were being innovated and advocated across the human, social, and natural sciences. It was also a time when the very success of *Cultural Anthropology* challenged its future; by 2005, *Cultural Anthropology* had become a leading journal and guarantor of recognition in the institutional processes through which scholars got and kept jobs. It offered a way to become credentialed and established. This recognition was an enormous accomplishment that needed to be honored, upheld, and strategized; as editors, we were mindful of our responsibility to protect this success. We were also mindful of the many ways desire for professional recognition and establishment could be at odds with experimental sensibilities and practices, and thus at odds with *Cultural Anthropology*'s distinctive signature. This was the "infrastructural moment" of our time as editors, a moment we did not anticipate but one to which we had to respond.

BUILDING THE BACK END

When, in 2006, our immediate predecessor Ann Anagnost handed us a disk containing a Microsoft Access file of reviewer names and contact information that Dan Segal had started during his editorship, we did not think of it as a valuable infrastructural legacy. Yet that's precisely what it was. The information itself, of course, was incredibly valuable; few things impressed us more in our job as editors than the collective knowledge of and care for the field represented by the names in that reviewer database, people who (with some cajoling sometimes necessary) would provide—or *gift*, in the refrain that we would use with increasing frequency—generous, critical, and productive readings. But almost immediately we were forced also to think about the material form of that information, and about the platform on which it ran. Because all AAA journals were transitioning to digital platforms for back-end editorial management, that Access database housed on a local computer was soon transmitted to the distant server of the Berkeley Electronic Press (BE Press). We had barely learned the electronic ropes of that system when we received the news—journal editors were as surprised as any AAA member—that the University of California Press would be replaced as publisher of AAA journals by Wiley-Blackwell.

As dramatic and drastic as the change from a nonprofit to a profit-driven publisher was, the issues were less binary on the infrastructural level. Even though our editorship quickly became dominated by discussions of page costs, download rates, impact factors, and the allocation formulas incorporating them, by which journals and their sections would receive money (or be bankrupted in some cases), and numerous other issues that arose with this transition, such would have been the case regardless of publisher. One of our first decisions was the supposedly merely infrastructural one: Should we keep the reviewer data and review process on BE Press's Electronic Workflow System that we had just started to learn, or transfer it over to Wiley's ScholarOne system? Either option would result in significant charges annually to the Society for Cultural Anthropology (SCA); equally significant to us was the prospect of ceding control and even ownership of our review and submission data. We would go with neither option, opting instead for a local installation of Open Journal Systems (OJS), an open-source editorial management platform developed by the Public Knowledge Project.

Our editorial assistant at the time of this transition was Casey O'Donnell, now an associate professor at Michigan State, where he studies, designs, and builds computer games, attuned to their critical effects and erasures, and to the kinds of play they allow and disallow—career interests shaped in part by his more mundane experience with *Cultural Anthropology*. It was Casey who, after we received the support of the SCA Board, downloaded OJS, installed it on a server at Rensselaer, and did the initial configuration of the system. (Casey did many other infrastructural jobs, like figuring out how to have submissions automatically converted from .doc or .rtf form, which could not be anonymized, to PDF form, which could—a nontrivial curatorial task at the time.) It still instills in us a sense of accomplishment and satisfaction when our login information continues to work to this day as we sign in to OJS to contribute a review—and an even greater sense of satisfaction (and relief!) that someone toggled the permissions box that now prevents us from seeing, as we did then, all those submissions and reviews demanding attention!

If OJS became the most visible, enduring, and satisfying manifestation of our infrastructural experiments, it also became a daily, taunting reminder that *Cultural Anthropology* had then become only a few small digital steps away from open-access publishing. The legal, cultural, and organizational steps necessary were much, much bigger. Jason Jackson and Chris Kelty did the most to impress on us the logics, questions, and culture of open-access publishing, tutoring us on the issues as we began our editorship.[2] They also initiated the writing of the

collaborative essay "Anthropology of/in Circulation: The Future of Open Access and Scholarly Societies" (Kelty et al. 2008), the first essay in *Cultural Anthropology* leveraging a number of other infrastructural experiments in form: the authors included an author addendum allowing them to retain copyright, and they blogged about its publication (Jackson 2008; Kelty 2008) to redirect traffic from the AnthroSource and Wiley pay sites to the toll-free, open versions posted by Jackson in the IUScholarWorks repository and on our journal's new blog. The latter version incorporated an additional experiment: wanting to see what Kelty called the "special sauce" that Wiley added to our manuscripts before publishing them, we requested the XML document that they made from the .doc file we submitted to them, so that the article could be integrated into the open-source WordPress plug-in CommentPress before being posted on *Cultural Anthropology*'s blog for further comment and elaboration. Only many years later, long after our hammering on the issue ended, through the continued hammering done by subsequent editors Charles Piot and Anne Allison, would these early infrastructural labors in form become the structures of an open-access *Cultural Anthropology*.[3]

BUILDING THE FRONT END

Building the early versions of *Cultural Anthropology*'s digital infrastructure involved more than an important technical upgrade; a new platform was not simply a more efficient way to manage and deliver content from authors to readers, and it did not run on electrons alone. An upgrade to the social infrastructure also proved necessary, and it was coproduced along with a new web presence. Here, too, the enthusiastic support of the SCA Board and its presidents Judith Farquhar, Bruce Grant, Danilyn Rutherford, and Brad Weiss (who also served as treasurer during much of our editorial tenure) should be counted as a crucial component of *Cultural Anthropology*'s infrastructure. They backed the filmmaker and graphic designer Vani Subramanian's complete and beautiful overhaul of the *Cultural Anthropology* print look in a digital-centric time, and then her continued design and production of each issue's cover. They committed to the ongoing investment in a managing editor and editorial assistant for the journal; Ali Kenner, our graduate student at the time and now an assistant professor at Drexel University, became *Cultural Anthropology*'s first managing editor. (She provides her own, more in-depth views on *Cultural Anthropology*'s infrastructure in Kenner [2014].)

The first *Cultural Anthropology* website was built with Drupal by Casey O'Donnell, but it was Ali who really began to give it content and form. Much

of it was achieved through the editorial intern program we created at the same time, a vital part of the journal's social infrastructure that Ali eventually came to manage. An ever-growing number of graduate students from anthropology programs throughout North America came to *Cultural Anthropology*, first generating supplemental pages for each new article we published: synopses, critical commentaries, questions to use in teaching, and links to videos and other related materials on the web—anything except the *Cultural Anthropology* essay itself. Culanth.org quickly became one of the richest and most innovative digital portals for any anthropology journal, and indeed for any journal in the humanities and social sciences. Anne Allison and Charlie Piot extended this basic infrastructure further by adding photo essays, author interviews, podcasts, and Fieldsights to the evolving mix (see Elfenbein 2014).

Importantly, the production of *Cultural Anthropology*'s web presence depended on and facilitated the growth of a lively group of young scholars who became technically adept, knowledgeable about the politics and economics of publishing, and learned about the signature history of scholarship that *Cultural Anthropology* published. Those interns will no doubt provide leadership in the SCA and in our field going forward.

CULTURAL ANTHROPOLOGY AND/AS INFRASTRUCTURE AND/AS EXPERIMENTAL SYSTEM

Culture, defined as a methodological concept or tool of inquiry, might best be understood in terms of its historically layered growth of specifications and differentiations, refined into a series of "experimental systems" that, in a manner akin to the "experimental systems" of the natural sciences, allow new realities to be seen and engaged as its own parameters are changed.

—Michael M. J. Fischer, "Culture and Cultural Analysis as Experimental Systems"

Infrastructures also exist as forms separate from their purely technical functioning, and they need to be analyzed as concrete semiotic and aesthetic vehicles oriented to addressees. . . . Focusing on the issue of form, or the poetics of infrastructure, allows us to understand how the political can be constituted through different means.

—Brian Larkin, "The Politics and Poetics of Infrastructure"

Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences (Marcus and Fischer 1986) was published the same year *Cultural Anthropology* was launched. The book articulated the mid-1980s as characterized by "crises of representation" resulting from a world outpacing and exceeding the explanatory adequacy of established social theory. The challenge for anthropology was to conduct ethnographic work that, by design, queried and exposed what established social theory missed. What was missed—what didn't function—was what drove the call for experimentalism. Feminist, race, postcolonial, and other theoretical currents working in a minor key—invested in marginality—were crucial resources. *Cultural Anthropology* took shape in this context.

During the past thirty years, experimentalism in anthropology has been debated without end, but also elaborated. Theories and practices of experimentalism in the sciences have become formative, interlaced with theories and examples from the arts. Experimentalism has also moved back into the research process, enlivening ethnographic research design and methods. And experimentalism has moved online, into efforts to leverage digitization to open up and support new forms of ethnographic sociality and expression.

As the editors of *Cultural Anthropology*, we were deeply committed to its signature openness and experimentalism—motivated by enduring, disciplinary commitment to ethnography as a means to understand and politically address a rapidly changing, structurally violent world. We came to realize the importance of robust but equally experimental infrastructure—technical and social—in realizing these commitments. As Brian Larkin has described, infrastructures matter, having effects and affects far beyond their technical functioning, providing opportunities to constitute the political through different means. The infrastructure we felt it was necessary to build was, by design, at least double-visioned. We tried to build infrastructure as a stable base for the continued flourishing and prestige of the journal, and of the community of authors and readers who contributed to it and depended on it for insight and legitimacy. We also tried to build infrastructure for the continued unsettling of that community, prompting and supporting new forms of experimental research and writing. The infrastructure thus needed to serve our reviewers as well as our authors, and our readers as researchers, writers, and teachers. And we tried to make sure that a new generation of researchers, writers, and teachers were welcomed into the collective effort of ongoing experimentation.

Following Adorno (1984, 165), we thus "labor[ed] emphatically on form," recognizing our editorial moment as an infrastructural moment. It has been a

collective effort with diverse, relayed responsibilities. We're honored to have had the opportunity to play the editor's role—a role now, as George Marcus (2015) has pointed out, closely synonymous with that of the curator.

As we write this retrospective essay, the social sciences writ large are under attack by U.S. politicians, and they have little standing in public spheres. Yet the need for social science and humanities insights—particularly anthropological and ethnographic insight—is clear and pressing, offering ways to understand and change how problems are identified, conceived, addressed, or discounted. Experimental work that brings new problems, concepts, and political possibilities into play is critical. So is the infrastructural work on which those experiments depend, and which is itself a form of experimentation. *Cultural Anthropology*, through its decades-long "layered growth of specifications and differentiations," is well-positioned for the important work ahead.

NOTES

1.   Our crash course in the process and significance of open-access publishing, led by Jason Jackson and Chris Kelty, has had enduring effects. From open-access publishing we have now moved to an effort to make anthropological data itself more open, and more open to collaborative interpretation; with Jason Jackson, we are co-chairs of the Digital Practices in History and Ethnography Interest Group, part of the Research Data Alliance, an international organization working to make research data more interoperable, shareable, and freely accessible.

2.   See Jackson and Anderson 2014 for an excellent primer on open-access publishing.

3.   See also Kelty 2014.

REFERENCES

Adorno, T. W.
    1984   "The Essay as Form." *New German Critique*, no. 32: 151–71. http://dx.doi.org/ 10.2307/488160. First published in 1954.

Daniel, E. Valentine
    2008   "The Coolie." *Cultural Anthropology* 23, no. 2: 254–78. http://dx.doi.org/ 10.1111/j.1548-1360.2008.00009.x.

Elfenbein, Timothy W.
    2014   "*Cultural Anthropology* and the Infrastructure of Publishing." *Cultural Anthropology* 29, no. 2: 288–303. http://dx.doi.org/10.14506/ca29.2.06.

Fischer, Michael M. J.
    2007   "Culture and Cultural Analysis as Experimental Systems." *Cultural Anthropology* 22(1): 1–65. http://dx.doi.org/10.1525/can.2007.22.1.1.

Fortun, Kim
    2003   "Ethnography in/of/as Open Systems." *Reviews of Anthropology* 32, no. 2: 171–90. http://dx.doi.org/10.1080/00988150390197695.

Jackson, Jason Baird
    2008   "Anthropology Of/in Circulation: Join the Conversation." *Shreds and Patches*. http://jasonbairdjackson.com/2008/08/26/anthropology-ofin-circulation-join-the-conversation/, accessed May 24, 2015.

Jackson, Jason Baird, and Ryan Anderson
    2014   "Anthropology and Open Access." *Cultural Anthropology* 29, no. 2: 236–63. http://dx.doi.org/10.14506/ca29.2.04.
Kelty, Christopher
    2008   "Anthropology In/of Circulation." *Savage Minds*, September 30. http://savageminds.org/2008/09/30/anthropology-inof-circulation/, accessed May 24, 2015.
    2014   "Beyond Copyright and Technology: What Open Access Can Tell Us about Precarity, Authority, Innovation, and Automation in the University Today." *Cultural Anthropology* 29, no. 2: 203–15. http://dx.doi.org/10.14506/ca29.2.02.
Kelty, Christopher, Michael M. J. Fischer, Alex "Rex" Golub, Jason Baird Jackson, Kimberly Christen, Michael F. Brown, and Tom Boellstorff
    2008   "Anthropology of/in Circulation: The Future of Open Access and Scholarly Societies." *Cultural Anthropology* 23, no. 3: 559–88. http://dx.doi.org/10.1111/j.1548-1360.2008.00018.x.
Kenner, Ali
    2014   "Designing Digital Infrastructure: Four Considerations for Scholarly Publishing Projects." *Cultural Anthropology* 29, no. 2: 264–87. http://dx.doi.org/10.14506/ca29.2.05.
Larkin, Brian
    2013   "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42: 327–43. http://dx.doi.org/10.1146/annurev-anthro-092412-155522
Marcus, George E.
    2015   "Editorial Curation and the Durability of Anthropological Ideas In a Time of Ambient Innovation: A Comment on the Thirtieth Year of Cultural Anthropology." *Cultural Anthropology* 30, no. 1: 6–11. http://dx.doi.org/10.14506/ca30.1.02.
Marcus, George E., and Michael M. J. Fischer
    1986   *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences*. Chicago: University of Chicago Press.
Ochoa, Todd Ramón
    2007   "Versions of the Dead: Kalunga, Cuban-Kongo Materiality, and Ethnography." *Cultural Anthropology* 22, no. 4: 473–500. http://dx.doi.org/10.1525/can.2007.22.4.473.
    2010   "Prendas-Ngangas-Enquisos: Turbulence and the Influence of the Dead in Cuban Kongo Material Culture." *Cultural Anthropology* 25, no. 3: 387–420. http://dx.doi.org/10.1111/j.1548-1360.2010.01065.x.