



The Future of Critique: Mark Andrejevic on Power/Knowledge and the Big Data-Driven Decline of Symbolic Efficiency

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Mark Andrejevic, associate professor at Pomona College, and J. J. Sylvia IV, PhD student in the Communication Rhetoric and Digital Media Program at North Carolina State University, discuss the impact of the neo-materialist turn for media studies and the importance of critiquing surveillance through the theoretical framework of power in addition to that of privacy. Although the decline of symbolic efficiency, brought on at least in part by the rise of big data, seems to disrupt the link that Michel Foucault draws between power and knowledge, Andrejevic considers possibilities for reimagining the knowledge structures associated with big data's infrastructure.

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J. J. Sylvia IV:

In your teaching statement you emphasize the importance of theory as a means of introducing an element into students' understanding of the world that might make everything else shift to accommodate it. What do you see as the most important emerging theoretical debate in media studies, and in what ways do you imagine this might shift our understanding of the world?

Mark Andrejevic:

Media studies has become in some ways so diffuse it's hard to put a finger on one debate that might characterize it. One of the things that we do when we try to sort out what's happening in the field is map out those issues that have concerned us. For me, one of the big moments of engagement now has to do with what I'd call the neo-materialist turn. I really hesitate to call it new materialism because every time I go down one of these pathways I start to feel that new materialism isn't quite as new as it sometimes purports to be.

In my own thinking, the interesting debates in the field are not conditioned by the development of the field itself, but by the relationship of the field to the world around it. What has interested me about some of these recent developments in theory is that they emerged from sources whose concerns and political

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agendas I feel aligned with. They often look to me to have subterranean connections with developments beyond the realm of theory that lead me to interrogate the relationship between theory and the social formation. To be more concrete, the affective turn in theory really parallels an affective turn in marketing, data collection, and social media usage. The fascination with the "agentive character" of matter seems to echo transformations in the way we think about emerging formations through the lens of data collection and data mining. Those connections are the ones that draw me to developments in theory, in part to figure out what the appeal of the theoretical move is and in part to try and separate out what the appeal is from the seemingly parallel developments in realms beyond the theory world.

Part of the project that I set for myself is to try to understand what the potentials are in the theoretical developments that are not reducible to developments in the realm beyond theory. That's an ongoing project, and there are various directions that I go in where I really start to wonder what the appeal of some of these developments is. Many of what I think of as earlier moments in my career were shaped by taking theories that I found interesting, useful, and productive, and then applying them to cultural developments that I found to be pathological, disturbing, and destructive.

When I was writing about reality television, I was really trying to do a symptomatic analysis of informational capitalism. I wasn't particularly interested in reality TV per se. I was interested in the logics that it thematized. It seemed to be a more general social logic and I was influenced by Theodor Adorno's notion of micrological analysis.¹ It's impossible to understand the totality, but by zooming in on a detail, you can generate insights that might be useful and productive. You can try to approach the social through those details, and reality TV felt to me like one of these details. Then in work that flowed from that around surveillance, I was really interested in applying theoretical approaches that seemed to me to be productive for analyzing developments in the information economy more generally.

What I find happening now is a function of the intersection of theory and the beyond-theory world. Maybe it's something that happens when you start to get a better sense of the field. I had also come back to graduate school from the professional world, where I had been for seven years, so there were certain forms of academic socialization that I had missed out on.

Over time you become more socialized, and then you start to see which theories are rippling across the surface of contemporary publications. You find yourself feeling that maybe it's important to engage with those in ways that I don't think I was attuned to when I first started submitting articles to journals. What I find myself doing more now than I used to is working with theories that don't feel so congenial to me in order to figure out what their appeal is and what their potentials are.

I don't know how much longer I'm going to end up doing that, but when it comes to some of these developments like object oriented ontology or different strands of materialism, I find my interest in them is shaped not so much by finding those theories congenial to my own interests, but by feeling I need to

¹ As Adorno put it: "The mind (*Geist*) is indeed not capable of producing or grasping the totality of the real, but it may be possible to penetrate the detail, to explode in miniature the mass of merely existing reality" (2000, p. 38).

engage with them in order to find ways to develop a critique of what I am interested in critiquing, which is the forms of asymmetric power associated with the emerging data-driven economy and society. My underlying concern is there. Sometimes it looks like you've got to explore and work with theories that you might not otherwise have chosen because those are the theories that reflect that world that you're trying to analyze or characterize and help shape.

J. J. Sylvia IV:

If I'm hearing you right, it sounds like you're saying that professional praxis in the beyond-theory world, such as developments of reality TV or big data uses, drives theory selection to some degree?

Mark Andrejevic:

I don't know if I would make that general claim, but one of the formations that seems to be interesting to me is a certain type of fascination in the humanities theory world with the techno-science world that sometimes raises the concern that a particular type of hierarchy is being replicated or reinstated. In other words, there is a certain kind of aspiration to piggyback on the forms of social and cultural prestige that are associated with the excitement around these technological developments. In my world, it was supposed to be the other way around.

What the humanities had to offer was actually a perspective that didn't subordinate itself to the technological fantasies of the digital technocracy. It's interesting to me how much of the theoretical formation is actually crystalizing around studies of what scientists are doing and what the data folks are doing, and how is it that we can learn from the things that they're doing. That's really important, but I want the other side to be fleshed out too. It's crucially important to me that they learn from what it is that the humanities have to offer.

I'm thinking here of some work that I was doing on taking a look at neuromarketing that drew me into the realm of neuroscience. There are all these formations of humanities scholars who were interested in studying and sorting out this formation in ways that I think are important. But that also raised a concern about whether or not certain distinctive aspects of humanities scholarship, and the things they had to offer, were also being incorporated into that formation. So, neuroscientists have particular theories about emotion and affect, and they propagate them in particular ways. Often they're profoundly uninformed by the deep history of humanities understandings of what emotion is or philosophical understandings of what affect is, although those two things intersect sometimes.

There's a part of me that's influenced by a classic liberal arts conditioning that imagines that the humanities are not the handmaid to the technocracy, but that the humanities are actually what the technocracy should be attending to. That runs deep in my own ways of thinking, and to answer your question, it asks what would a humanities agenda be independent of the type of energy and attention that the technocracy gets these days and informs the kind of prestige that the sciences get. I think that prestige is well earned, but my underlying and guiding concern is that we live in a world where the technocracy is setting the pace. The question that continues to haunt me is how could we imagine the possibilities of forms of knowledge that seem to be deeply important achievements, culturally and intellectually? How can that help guide the path that the technocracy is taking? I'm not overly happy with

the route that technocracy is taking. I'm worried about whether or not the theoretical imagination is contracting to the point that it finds itself subordinate to the technocratic imagination. Alexander Galloway has got a great quote about this. He's talking about the speculative realists and he writes: "Why do these philosophers, when holding up a mirror to nature, see the mode of production reflected back at them? Why, in short, is there a coincidence between today's ontologies and the software of big business?" (2013, p. 347). That seems to me to be an important question, and a useful critical one.

J. J. Sylvia IV:

To dig into that a little deeper, and also follow some of the themes from the *Media, Power, Epistemology* symposium,² how do you see things like big data and the growing abundance of connected sensors altering power/knowledge relationships?

Mark Andrejevic:

One of the things that really interests me about the theme of the symposium is the way in which it articulates theoretical approaches that have overtones that need to be interrogated with critical questions of power and politics. That's what really drew me to the symposium, and the question you raise is central.

I find the capabilities of new digital networked forms of communication and information access and retrieval really exciting and interesting, and in some cases potentially empowering or democratizing. But always haunting that is my concern that technological developments are shaped by social context, and that means all of those potentials again find themselves enmeshed in the social systems in which they develop. This means one must always be wary about how potentials are being hijacked, retooled, or reappropriated. My underlying theoretical framework and political commitment is to the notion that if you want to change society, you have to change it at the level of politics and the social and power relations. To fetishize technology and imagine that it somehow exists in ways that are independent of that, and can therefore affect a political change without an actual political process, just seems flawed to me.

I think the potential and promise of these technologies is real in a virtual sense rather than an actual sense—but maybe in some cases in an actual sense also. Bearing that in mind, these need to be set within the context of the ways in which existing power relations take up the technologies and their capabilities, and the ways in which technologies are put to use to reinforce or exacerbate those relations.

When I think about the sensor society, one of the things that concerns me is the way in which the infrastructure for data collection, sense making, data processing, and response are all opaque, inaccessible, and out of the control of those who find themselves subject to the forms of monitoring enabled by the technology. When it comes to big data, one of my concerns is the epistemological asymmetry created by the promise of the emergence of forms of knowledge that are fundamentally inaccessible to those who don't have access to the database and the processing power—and that's structural. I think of all of those years of people talking about the digital divide and the way in which it could be potentially overcome through the widespread deployment of technology. That always had a nice promise to it, because the divide was only structural to the extent that access to technology is structural,

² Hosted by the Communication, Rhetoric, and Digital Media program at North Carolina State University.

which it is. But it's a divide that can be overcome through economic developments and the lowering of the barrier of entry and access to the network.

The big data divide looks to me to be all but impossible to breach, and that's concerning. If we were to posit forms of knowledge that are unknowable by any particular individual, what does that mean? I think of David Weinberger's (2011) book, *Too Big to Know: Rethinking Knowledge Now That the Facts Aren't the Facts, Experts Are Everywhere, and the Smartest Person in the Room Is the Room*. His point is that there are forms of knowledge that are inaccessible to any individual or group of individuals because they're just too complex for humans to comprehend. So what does that mean? It's a kind of postknowledge, knowledge. It's an unknowable knowledge.

I suppose what it implies is that it's a reliable basis for decision making, at least for those who have access to it, in ways that remain opaque both to the people who are using it and the people who are subject to those decisions. In very simple terms, those who control the infrastructure and have access to the database and the processing power get to ask the questions. It's their questions that will be answered, and it's their ends that will be served unless we can imagine some different way of allocating control of the technology.

I think of the classic Langdon Winner (1980) question "Do artifacts have politics?" and one of the answers he gives is that there are certain technologies that actually, structurally, require certain types of political arrangements. Big data is like that in the sense that it requires a capital-intensive set of resources. One could say that what we call big data now will be accessible 10 years down the road to almost everybody. That's true, but then there will be new forms of bigger data. In that sense, although the divide is mobile, it remains structural. I take the point that the processing power in our microwaves is greater than the most powerful computer in the 1950s, but it doesn't address the concern that as soon as everybody gets access to the next level of processing power, those who have control of the infrastructure will be up at the next level.

What alarms me equally is the temptation of the desire to endow that level of knowledge with the forms of social and cultural prestige that it's getting. I'm intrigued all the time when I see different instantiations of what looks to me like this kind of postknowledge knowledge being celebrated. One of the things that I've looked at is neuromarketing, where people who have access to the fMRI machines imagine that they're getting a truth that, because it's allegedly preconscious, is somehow superior to the self-conscious truth of the subject. They'll have people watching movies and then they'll tell them what they *really* liked. What does that mean to locate the truth at that level, which is inaccessible other than through the technology? Why is *that* where we're putting the weight of the truth? There may be empirical reasons for it, although I suspect that remains to be proven. This prioritization of the language of the body over that of the subject has to be demonstrated, rather than taken at face value.

I think something similar happens in the case of big data, data mining, and data analytics, where decisions are being made on the basis of data. It is not always clear to me that the hype around big data is based on its accuracy. There is something alluring about the notion that complexity renders those forms of knowledge somehow superior. But there is also something alarming in the sense that what it imagines is a kind of—I'm tempted to call it a postrepresentational form of knowledge. Thousands of variables are

interacting in a complex data space and they yield a particular correlation that has some type of predictive value. But the finding is inexplicable in the sense that it is based on patterns that are so complex that you can't generate an accurate account of *why* a given correlation seems to have predictive power.

Why would we privilege that form of knowledge over other forms of knowledge? One reason is a certain kind of pragmatics, and again I think that pragmatics is often more assumed than it is demonstrated. But what's the appeal of it? Why are we so ready and willing to assume it? Perhaps because of its connection to the deep tradition of the technological sublime, particularly in American culture. It also gestures in the direction of an instrumentalized postpolitics that has recourse to the alibi of the "neutral" algorithm and the clean machine. Why are those so compelling? I think they're compelling because of an alarm about the political. Why are we alarmed by the political? Probably with good reason, because there have been so many failures. It's so hard. It's so fraught, and yet it looks to me like the only way out.

J. J. Sylvia IV:

You're emphasizing the big data divide here, and in *Infoglut* (Andrejevic, 2013) you also write about a decline in symbolic efficiency. Does this decline break down the connection Michel Foucault draws between power and knowledge?

Mark Andrejevic:

The critical purchase of the Foucauldian conception of the power/knowledge relationship, as I understand it, has always been two-fold. One, it denaturalizes the ways in which knowledge serves as an alibi for power. That was a really important political move at a particular historical conjuncture.

The second thing it does, is that it raises an interesting possibility for resistance because subordinated knowledges can carry with them the charge of a particular type of power. There are ways in which, if indeed these realms are intertwined, particular forms of knowledge carry a charge of power. That's very tempting and hopeful in some ways. In the current context, to get to your question, the diagnosis of the demise of symbolic efficiency imagines a somewhat changed context in which the debunking of the knowledge claims that support power no longer necessarily serves the type of political purpose that it once did.

That's a really broad claim, and I wouldn't say that it's true in every instance, but increasingly there are instances in which the operations of capital or power seems to thrive on the debunking of their own knowledge-based alibis. This is one of the things I write about in *Infoglut*—the way in which certain forms of power no longer promulgate themselves through generating dominant narratives that can then be challenged or otherwise retooled. Power could propagate itself through pointing out the inefficiency of knowledge itself. This is where I think that in political terms the George W. Bush administration was a quite effective practitioner of this sort of power.

I remember watching Colin Powell do his presentation to the United Nation about the Iraq War and thinking at that time that knowledge has become disarticulated from power. This is pushing it far, but I remember thinking that there was quite a lot of information out there at the time, and if you were following it, you could quite easily interrogate the narrative that was being promulgated there. But it

became clear that it didn't really matter what the narrative was. He was performing an outdated function, which is "I'm going to now legitimate what's going to happen through a particular narrative." But it was such a futile narrative, like a picture of nothing. It was a claim of a very defined and clear form of knowledge that you could tell was a construct, and I remember watching that and thinking that they're going to invade no matter what. It doesn't matter. Somebody could come and debunk this entire thing. All of these debates are just going to swirl powerlessly while the fact of power manifests itself. That was a very depressing moment.

I feel something similar when I look at what's happening in the climate debates. We have this kind of infinite swirling of the facts that is facilitated by the communication platforms upon which narratives debunk one another ad infinitum and power continues its course relatively unharassed. It's hard to identify what the catastrophe of our times might be, but certainly the environment looks like one of the main candidates. It's fascinating to watch the almost complete inefficacy of our symbolic formation in addressing that. All of the multiplying discourses swirl off into seeming irrelevance.

That's very anxiety provoking if you're in the world of knowledge production, which we are. But what are we doing? I sometimes wonder if that's part of the allure of certain strands of new materialism. What's the disillusion with discourse? Perhaps one factor is that intervening at the level of discourse has proven not to be as effective as one might have hoped. So where does that leave one? Well, looking for something beyond discourse. The possibility of intervention becomes something quite different. I'm interested in the forms of new materialism that are fascinated by the agentic capacity of matter. But what is the appeal of the agentic capacity of matter? In theoretical terms there have long been traditions thinking about the forms of limits and pressures exerted by the material. Sartre thinks about this. Raymond Williams thinks about this. What's the current appeal? Perhaps to solve the problems that humans cannot?

J. J. Sylvia IV:

I'm interested in pursuing that line of thought and also pushing back a bit against some of the anxiety over potential problems with big data. In your essay "Personal Data: Blind Spot of the 'Affective Law of Value'?" (Andrejevic, 2014), you argue that big data can be used by organizations or companies that have access to large infrastructure and data sets in order to create "non-interpretable" (and thus nontransparent)" insights (i.e., who best to hire to maximize profits, in ways that simply aren't available to users who are trading access to their data in order to use the platforms that generate and collect the data). Yet, in *Infoglut*, you state that even gaining control over this infrastructure isn't enough. Can you expand on how we might reimagine the knowledge structures associated with infrastructural arrangements? What does this look like theoretically? In practice?

Mark Andrejevic:

That's the key question. For me that's the ongoing project, and in *Infoglut* I was imagining that a certain debunking of the discursive needed to recognize its own embeddedness in discursivity. There is a part of me that feels one of the places to look is in the inevitability of a certain kind of ongoing reflexivity. The key figure here for me is Hegel. What I find compelling about Hegel's thought is that it is relentlessly recursive. The trajectory of that thought is to always reflect on its own conditions of possibility and its own contradictions. Often it looks to me like the moves that take place in theory-land have to do with trying to

leave behind contradictions. If the realm of the discursive gets caught up in its contradictions, let's go postdiscursive. But then the recuperative move is not to go back, and this is another reason why I think Hegel is an interesting figure. The move is never to fall back behind the recognitions that have been hard won, but to figure out how the ways in which we imagine that we distanced ourselves from previous forms of knowledge actually are illusory. Foucault made a comment in his inaugural speech at the College de France and said maybe Hegel is always waiting in the wings for us. I take that comment to heart. Foucault signaled it. He saw the ways in which certain attempts to move beyond Hegel—to the extent that they were caught up in their own conditions and presuppositions—would fall back into the problematic that Hegel was addressing.

That's a very abstract answer. In more concrete terms, I think what it might mean is finding a way to temper and qualify our enthusiasm for the postrepresentative with an understanding that that horizon of postrepresentation is an impossible one. What I mean by that, and this is speculative and maybe too categorical, is that I don't believe in the logic of a singularity. I don't think that data is eventually going to be able to free itself from the ways in which it is conditioned by the humans who collect it, develop the algorithms, and even craft the self-fashioning machines. If that fantasy is true, then in a sense things are okay. We'll all be left behind in the moment of singularity. But I just find that an impossible fantasy.

All of those discourses look fake to me, including the singularity and a type of completed posthumanism that has entirely dissolved the traditional notion of a human subjectivity. That move just looks like an impossible one to me, but that may be the limitation of my own horizon of thought. Accepting that that is my horizon of thought, it means not privileging the correlational over the causal. It means not dismissing the possibilities of narrative, and it means, in the end, holding on to the figure of the subject. When I say subject, I mean that with its embeddedness in language and desire, and a particular way of thinking and understanding what the subject is.

J. J. Sylvia IV:

To follow that up, I want to think again about one of the topics we started with: the way we make our theoretical decisions about what we investigate. Peter Galison, another presenter at the *Media, Epistemology, Power* symposium, suggests that cybernetics and the cyborg may not be a useful framework to search for a hopeful and progressive politics, because its historical development is rooted in "weapons, oppositional tactics, and the black-box conception of human nature" (1994, p. 260) Similarly, you reference David Lyon's (1994) argument that "privacy grows from the same modern soil as surveillance," (p. 21) to argue that it may be more important to theorize modern surveillance through the lens of power rather than privacy (Andrejevic, 2002). Can you expand on why you think it's so important to use a theoretical framework for critique that is born of a different soil, so to speak?

Mark Andrejevic:

Yes, the work that I do keeps sucking me into discussions about privacy, which I try to resist. Privacy is built on such a classical liberal conception of individuality that it looks counterproductive for the types of projects that I'm interested in. While I value what we call privacy as much as the next person, I really see the concerns that are emerging as not having to do with privacy per se. I do empirical work and talk to people about this, and they're not worried that some company knows what they might have looked at

online. They don't care and they don't imagine that the company really cares. While I am attentive to the fact that the collection of such information poses potential threats in a society in which there are those who want to discriminate based on the data, one of the things that people I interview say to me all the time—and it's because I interview people primarily in the U.S. and Australia—is that you only need to worry about surveillance in a society where there is a bad regime in power that is going to abuse this information.

I guess I have yet to see a purely nonbad regime. I'm not sure it exists anywhere, in the sense that there is not going to be any temptation to use information for forms of discrimination that we could probably agree are illegitimate and unjust. Most of the people who are saying that to me are people who not only live in a particular social context, but inhabit that as particular subjects who are not in a position of being routinely subjected to the forms of violence and discrimination that nonetheless, characterize their society. The recent media coverage of the "right to discriminate" laws that they're passing in the States highlights that fact. If you have a particular subjectivity, the state is interested in passing laws that make it perfectly legitimate to discriminate against you—and that means that what you do online actually may have salience for forms of state sanctioned discrimination. Keeping in mind that I have yet to see a state or society that doesn't have some form of what looks to me like unjust discrimination, I'm not sanguine even about privacy. I think it's a legitimate concern, and I respect the people who are working in that area.

My interests, however, are elsewhere. In part this may be because there are lots of people working on privacy, but I also see the legal framework around privacy getting hamstrung on its own conception of privacy as a form of personal property. Therefore, it can't really recognize harms that don't somehow impinge upon property value or the value of your reputation. It automatically translates the category of harm into economic form. I think that useful work has been done around discrimination, but I'm interested in those forms of social sorting that remain beyond the current collective imagination. I really think we're headed into a world in which decisions are going to be made about whether we get jobs, what schools we get into, what type of health care we receive, what type of mobility we have access to, all on a basis that becomes increasingly opaque to us.

It is fascinating to me that there is a relatively low level of recognition about that. If you talk to people about privacy concerns around big data and data mining, it is very rare that they'll think about employment as a realm that is affected by this. But of course, data monitoring potential employees is going to be at the core of hiring practices.

J. J. Sylvia IV:

But it sounded like there was a theoretical reason behind choosing power as well. Perhaps it could do something that privacy couldn't because it doesn't have the history of surveillance that was linked to privacy?

Mark Andrejevic:

One of the things that I think it can do is allow us to imagine collective forms of response. One thing privacy does is individualize. What's collective privacy? It's not clear. Privacy, at least in the tradition that informs contemporary discussions, is not an individual thing. It's my privacy, not your privacy. And, in

fact, if you shared my privacy, it wouldn't be private any more. Power lends itself to thinking in the form of collectivities. Which groups are disenfranchised and affected disproportionately? How can they recognize their shared interest in contesting those forms of disadvantage?

J. J. Sylvia IV:

I wanted to end on a lighter note. As I was reading some of the interviews you've done in the past, I noticed you always had some questions about Facebook. I want to take a slightly different route and ask what you think about Ello—the social networking site that launched last year, has a privacy manifesto, and uses only anonymized Google analytic information?

Mark Andrejevic:

I welcome the idea of alternative ways of organizing our communication information platforms and infrastructures. I think that one of the things we have to do at an even deeper infrastructural level is reimagine the political economy of how we support these technologies. The world that we've accepted without thinking about it or interrogating it is one in which there will be a commercial model for these services based on data collection and data mining. In terms of various possibilities, this is not necessarily even the most obvious way to do it. It's so clear that public infrastructures lend themselves very nicely to the ways in which network technology works. Take a look at public media, such as National Public Radio or BBC. Because these are publicly supported platforms, they don't need to monetize themselves through data collection, and they don't need to monetize themselves through enforced scarcity. Enforced scarcity in the era of the Internet just looks so artificial. These companies that make you want to pay to hear their previous podcast . . . Or in the academic world—which is one of the things that drives me nuts—these companies with firewalled articles that they want to charge you \$45 for . . . That's insane. That's just a model that is not at all in tune with the capabilities of the medium. I do think that there are affordances of the medium that, while clearly not determinative, you do find none the less. The Internet lends itself to the rapid reproduction and distribution of intellectual content.

As an academic, I hate to see my work firewalled. I'd like a public infrastructure supported by the universities for academic publishing that is also supported up front by a public or nonprofit consortium that doesn't have to make a profit off of academic publishing and therefore doesn't have to enforce scarcity.

I feel the absurdity of this situation every time I go to the digital library. I have some books in my library that are available digitally, and you can only print or copy a few pages. That's such a forced constraint. I understand that creators of content need to be rewarded, but we need to develop alternative ways of doing that.

One of the things that has been so wonderful and transformative about the Internet for me in terms of information access, is all of the public media that is so readily available and makes its archives so useful in ways that would be so costly prior to having the infrastructure. This is a long-winded way of saying that I think that public and nonprofit infrastructures fit so well with the character of the medium and its potentials. It looks to me in some ways dramatically inefficient to have a company like Facebook in order to support a pretty basic service. They develop these huge data infrastructures that go far beyond

supporting the content that users share with one other. It's multiplied by orders of magnitude in order to capture data in the hopes that they'll one day be able to monetize it. That looks breathtakingly inefficient. One of the things that I find interesting about infrastructure is imagining the possible alternative ways in which it might be organized.

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