

# Are Some Things Unrepresentable?

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## Abstract

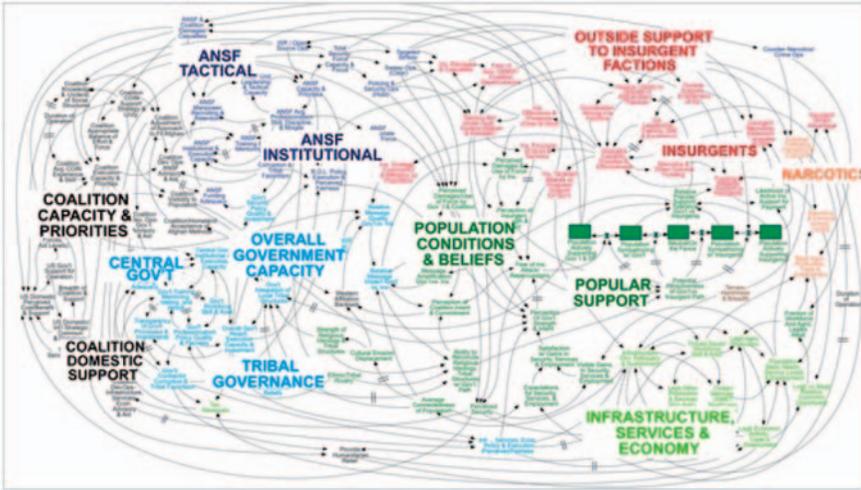
Jacques Rancière, in his essay 'Are Some Things Unrepresentable?', puts forth a challenge that is ever more pertinent to our times. What constitutes the unrepresentable today? Rancière frames his answer in a very specific way: the question of unrepresentability leads directly to the way in which political violence may or may not be put into an image. Offering an alternative to Rancière's approach, the present article turns instead to the information society, asking if and how something might be unrepresentable in a world saturated by data and information. Thus one approaches the issue of transparency and secrecy here from the perspective of the relative perspicuity (or opacity) of data visualization. Two theses structure the argument, first that 'data have no necessary visual form' and, second, that 'only one visualization has ever been made of an information network'. The tension between these two theses leads to a disconcerting conclusion, that the triumph of information aesthetics precipitates a decline in informatic perspicuity. One is obligated therefore to call for a strong reinvigoration of poetics and hermeneutics within the digital universe, so that representation as such can take place, perhaps for the first time.

## Key words

aesthetics ■ allegory ■ digital ■ information ■ violence ■ visual culture

**I**N SPRING 2010 the *New York Times* published a PowerPoint slide on their front page taken from a meeting between General Stanley McChrystal and other members of military and government. The slide depicts the American military strategy in Afghanistan in the form of a massive diagram of forces and relations. A marvel of data visualization, the slide is exhaustively detailed. One hundred and twenty nodes, rendered with phrases such as 'Tribal Governance' and 'Insurgents', are connected together with scores of lines and arrows. Like a flow chart, these lines demonstrate links of influence. Font size indicates the relative importance of each text heading.

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**Figure 1** PowerPoint slide depicting the American military strategy in Afghanistan  
 Source: Bumiller (2010)

Color clusters designate broad zones based on themes such as the government, the coalition forces, the population, and the insurgency. Yet the frenzy of words and links begins to overwhelm the eye. It is unclear exactly what the slide is meant to convey or indeed if it is meant to convey anything at all.

“When we understand that slide, we’ll have won the war”, General McChrystal dryly remarked . . . as the room erupted in laughter’ (Bumiller, 2010: 1). Despite an overwhelming amount of detail, the PowerPoint slide is not easy to digest. In fact, the high level of detail seems to hinder comprehension rather than aid it. Unlike realism in painting or photography, wherein an increase in technical detail tends to bring a heightened sense of reality (at least in the traditional definition of aesthetic realism that has held sway more or less since the Renaissance), the high level of technical detail visible here overwhelms the human sensorium, attenuating our sense of reality. Rather, like a fractal whose complexity does not decrease when viewed through a magnifying glass, the information contained in McChrystal’s PowerPoint does not grow more coherent the longer one inspects it. Eschewing lucidity, the diagram withdraws from the viewer’s grasp, effectively neutering its capacity as a vehicle for information. One is left wondering what exactly McChrystal’s PowerPoint slide is meant to communicate. Is it communicating America’s military strategy in Afghanistan? Or the reverse: is it communicating how difficult such strategies are to communicate in the first place?

Indulge for a moment a curious notion. What would happen if one were to talk about McChrystal’s PowerPoint slide in strictly aesthetic terms, as if one were talking about a painting? Would it be possible to view this peculiar brand of visual representation as a work of aesthetics? What would be the result? A painting of military life? An image of a network? Or even, to use a

term borrowed from Gilles Deleuze, a visualization of the society of control itself (1995)?<sup>1</sup> In fact, even at a purely aesthetic level it is not clear what precisely McChrystal's PowerPoint is trying to represent. Is it trying to represent data, an algorithm, a diagram, a system, a network? These terms all seem to connect to each other, yet they mean very different things. Data would be represented very differently from an algorithm, would it not? Yet it would be safe to say that all these terms fall, more or less, under the umbrella of information. Taken in that light, can this PowerPoint slide reveal anything interesting about the nature of information aesthetics? Can it tell us anything about the relationship between transparency and concealment? Between representability and unrepresentability?

One might begin by talking about the obvious sensory qualities of the image, its use of color, line and word. The variations in text size inject a sense of scale into the thicket of curves and arrows. The text labels, demarcating network nodes, achieve an appealing texture. No nodes overlap. Occupying its own area of the image, each node is surrounded by a moat of white space. Spread evenly into discrete cells within the frame, they demonstrate what art historian Alois Riegl (1985) called 'tactile' perception. The lines too are well spaced. More like links than mere strokes of a pen, these marks introduce movement into the image. Like a complex vector field, the lines map multiple relationships and hierarchies. Showing what comes first, second, or third within any segment of flow, the lines establish specific connections between parts of the image, while discounting other ones. As if to mitigate the tendencies of the links and the nodes, the seven color clusters – navy blue, light blue, red, black, light green, dark green, and orange – reorganize the entire image into clearly marked zones. These themselves echo the 'Green Zones' erected in cities like Baghdad and other global sites under American military control. Even as links flow in and out, the color clusters remain coherent, like city-states organized under federation to an imperial power.

Yet such a reading of the image can only go so far. Amid all the talk recently of 'data' and 'information' it becomes more and more difficult to know what these terms mean, or indeed to tell them apart in the first place. Are the nodes meant to represent data, while the links represent information? Is data meant to be textual and static, while information is elastically structured via flows and arrangements?

Etymology provides some basic guidance. The Latin *data*, a participle in the neuter, means literally 'the things having been given.' Or in short form one might render the term more elegantly as 'the givens.' French preserves this double meaning nicely by calling data the *données*. As natural gift, as empirical trace, data are not simply measurements or recorded facts, they are also in some sense ontologically raw, not so much thrown into the world, but left over, bare, remaining after the tide of being recedes. So with 'data' there is stress on the empirical proffering of measurable or otherwise observable fact that has been given forth. Something has already taken place and, via a gift or endowment, it enters into presence. (Concerning this last point, one might

elaborate the argument, given more time, that data have always had a certain *phenomenological* claim.)

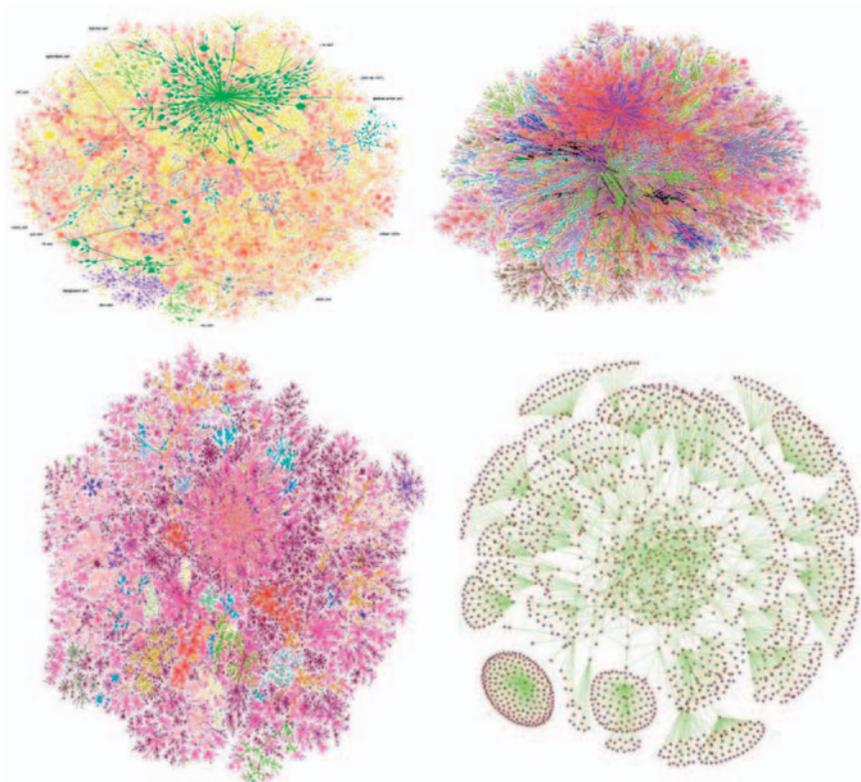
Information, on the other hand, stems from the Latin for the act of taking form or being put into form. So, in contrast to data, information stresses less a sense of presence and giving-forth, and more a plastic adoption of shape. Information exists whenever worldly things are ‘in-formed’, or ‘put into form’. As Vilém Flusser put it once in an illustrative vignette, the leaves that fall in the autumn have no information because they are scattered to and fro, but if one puts them into form – for example by moving them around to spell out a word, or simply by raking them into piles – the leaves *gain information* (Druckrey, 1999). The worldly things, having been previously given, have now been given form. Thus if data open a door into the realm of the empirical and ultimately the ontological (the level of being), information by contrast opens a door into the realm of the aesthetic.

With this in mind, and since information differs from data in a more immediate and dramatic way, we begin with the first of two theses: *Data have no necessary visual form.*

But how could this be true? Are we not drowning today in data visualizations? Is our world today not the very embodiment of data made visible? Consider the genre of image-making known as information visualization. Numerous exemplars exist, from John von Neumann’s influential flow charts from the 1940s, to the ‘crude’ diagram given in the appendix to Karl Deutsch’s *Nerves of Government* (1966), to the network diagrams in Freud’s work (and certainly the work of Jacques Lacan and Félix Guattari is full of them), to Edward Tufte’s books, or today’s ubiquitous ‘maps of the internet’, which all seem to resemble a large cauliflower floating free somewhere beyond the solar system.

To be sure, the first thesis is a very particular one, so let me reiterate it in more verbose language: data, reduced to their purest form of mathematical values, exist first and foremost as number, and, as number, data’s primary mode of existence is not a visual one. Thus in saying ‘no necessary’ one is arguing that any visualization of data requires a contingent leap from the mode of the mathematical to the mode of the visual. This does not mean that aestheticization cannot be achieved. And it does not mean that such acts of aestheticization are unmotivated, nugatory, arbitrary, or otherwise unimportant. It simply means that any visualization of data must invent an artificial set of translation rules that convert abstract number to semiotic sign. Hence it is not too juvenile to point out that any data visualization is first and foremost a visualization *of the conversion rules themselves*, and only secondarily a visualization of the raw data. In data visualization the artifice is more evident than anything else. A data visualization wears its own artifice on its sleeve. And because of this, any data visualization will be first and foremost a theater for the *logic of necessity* that has been superimposed on the vast sea of contingent relations.

With the word ‘form’ already present in the predicate of the first thesis, and if the reader will allow a sloppy syllogism, it is possible to rejig the first



**Figure 2** Four different maps of the internet, produced by different methods and sources, selected from numerous examples available via a normal web search

thesis so that both data and information may be united in something of an algebraic relationship. Hence now it goes: *data have no necessary information.*

(To say that data have no necessary information, that they are formless, existing prior to formation, the mere stuff of the world, the raw material of measurement and nothing more – to say this puts data on the same ontological footing as Aristotle’s material cause, Spinoza’s substance, Whitehead’s actual occasions, Badiou’s pure multiplicities, or Deleuze’s intensities on the surface of the One. These are some sources within philosophy that bear upon the present understanding of data. Likewise, to gain a better philosophical context for information one must evoke that other ancient philosophical specter, not so much the purely material realm, but the realm of the eternal form, the realm of spirit, of truth and beauty. Thus in Deleuze (1994) information isn’t the bubbling chaotic material plane but rather what Deleuze calls the virtual [which exists with potency across that plane]. One should specify here too, before moving on, that this first thesis is not an affront to phenomenology,

for it does not deny the existence of necessity within givenness. It merely states that form is not logically included within data – in other words, that data may appear without form. The same cannot be said about information, of course, which is almost tautologically bound up with the concept of form.)

Let us move now to the second of these two theses. There is but one image, from beginning to end, across the decades, a massive repetition of the same and nothing more: *only one visualization has ever been made of an information network*, for there can be only one.

The reader will thankfully be spared the same kind of scrutiny given previously to McChrystal's map, but suffice it to say that there is a conspicuous uniformity to the scores and scores of images available today advertising a 'map of the internet' (Figure 2), or a 'map of human neural nets', or even, as we have seen, a 'map of the American military strategy in Afghanistan.' The hub-and-spoke cloud aesthetic predominates. Minuscule branching structures cluster together forming intricate three-dimensional spaces. Nodes are connected by links. Small capillaries merge into ever greater arteries fabricating massive hierarchies governing flows and prohibitions on flow. Yet through it all, the legibility of the map remains suspiciously one-sided, even ideologically motivated. The viewer is able to intuit certain vague cosmological 'facts' about the digital firmament (apparently information likes to cluster; these color enclaves persist unmiscegenated; we love trees after all), while gleaning little about the 'facts on the ground' (who is connecting and who isn't; the intra-network struggles between protocological and proprietary software; the reification of pyramidal hierarchy; monetization of unpaid microlabor). What one is proposing therefore, in plain language, is that every map of the internet looks the same. Every visualization of the social graph looks the same. A word cloud equals a flow chart equals a map of the internet. All operate within a single uniform set of aesthetic codes. The size of this aesthetic space is one.

How might one characterize the repercussions of this from the point of view of aesthetics? No poetics is possible in this uniform aesthetic space. There is little differentiation at the level of formal analysis – for we are not all mathematicians after all. One cannot talk about genre distinctions in this space, one cannot talk about high culture versus low culture in this space, one cannot talk about folk vernacular, nor about modernist spurs and other such tendencies. This is why computer culture speaks in terms of icons, and why one might describe today's information aesthetic as a kind of neo-symbolism in which the monochromatic multiplicity of symbols has engulfed all else. A single symbolic code reigns, iterated universally. And where there is only one, there is nothing. For a representation of the one is, in fact, a representation of nothing.

In introducing these two theses, the hope is to reveal the dialectical logic operating within digital aesthetics. Let me restate the two theses side by side so that we may compare and collide them. Thesis 1: *data have no necessary visual form*; thesis 2: *only one visualization has ever been made of an information network*. There is indeed a dialectical tension between these two theses, for if there is no necessary connection, why do all visualizations of networks

look the same? There must be some kind of mandate somewhere that is forcing us to have but one aesthetic mode. What is the origin of such a mandate?

On the one hand, thesis 1 argues for digital aesthetics as nothing. On the other, thesis 2 argues for digital aesthetics as one. Either data offer zero help as to how they ought to be aestheticized, or they eclipse all available possibilities under a single way of seeing.

One might assign a name to this curious contradiction. One might call it the dilemma of *unrepresentability* lurking within information aesthetics. There is a cognitive dissonance between theses 1 and 2. My goal here is not to do away with such dissonance, nor should one waste time trying to resolve it. Its function is to shed a light on the logic of unrepresentability, something which emerges as a strategy existing through and across the two theses. Thesis 1 proves that representation must take place, while thesis 2 makes sure that when it takes place it says nothing. Hence the middle is lost. Only the two ends of the chain remain. At one extreme, information aesthetics fails because it is unable to take alternative forms, escaping from the shadow of the predominant form. At the other extreme, information aesthetics fails because it adopts one form at the expense of all others. Mediation is missing. There is, in a very literal sense, *no media happening here*. In fact, such a claim is not so far removed from the work of Jean Baudrillard, both his concept of simulacrum as ‘catastrophe’ (2003), and his ‘requiem for the media’ (2006) in which the point of communication is shown to be the point of greatest non-communication. What Baudrillard laments most is the destruction of the public, the way in which nothing can ever happen, given how all options for representation and action are taken off the table by virtue of being predicted, warded off, preempted, or otherwise second-guessed.

In most cases, the augmentation of functional (algorithmic) efficiency goes hand in hand with a decline in symbolic efficiency. One might dub this ‘McChrystal’s Law’: an increase in aesthetic information produces a decline in information aesthetics. So maybe the network visualization itself – even as it flaunts its own highly precise, virtuosic level of detail – proves that there is another story happening behind and beyond the visible. In other words, there *are* some things that are unrepresentable. And the computer is our guide into that realm.

This position is something of an outlier; others authors writing on the topic have framed it rather differently. ‘Are Some Things Unrepresentable?’ is the title of an essay by the French philosopher Jacques Rancière (2007). He and many others today are engaged in a loose debate around the power of the image, around the future of the image. They ask whether it is possible to depict violence in images. They ask what happens when graphic images of state-sponsored torture circulate within the mass media. They ask: can an image *kill* (Mondzain, 2010)?

Rancière’s work on aesthetics, in this essay and elsewhere, relies on the notion that representation is a specific ‘regime’ within art. He asserts that there are two basic representational situations. The first, which is triggered by what he calls the ‘internal impossibility of representation’, champions the

‘straightforward tale’ that comes unadorned and lacking in artifice (Rancière, 2007: 111, 110). He associates this mode with Plato and Plato’s ethical framework for art. The second, arising from the ‘indignity’ of representation, takes up the call of ‘sublime art’ and tries, even in the face of failure, to ‘record the trace of the unthinkable’ (Rancière, 2007: 111). This he associates with the more modern notions of the Kantian and even Burkean sublime. So unrepresentability – and here is his trick – is less a question of the failures of representation on its own terms and more a question of the historical shift out of one regime into a subsequent regime.

The influence of Foucault is never far away in Rancière. Anti-representation arises, he argues, with the advent of an ‘aesthetic revolution’ inaugurating a new regime labeled the ‘aesthetic’. The hallmark of the aesthetic regime is a breakdown between subjects and art: ‘There are no longer rules of appropriateness between a particular subject and a particular form, but a general availability of all subjects for any artistic form whatsoever’ (Rancière, 2007: 118). Thus the aesthetic regime shares much with the profanation or secularization of culture that takes place particularly during the modern period, sometimes called simply the nihilism of modernity. But also the regime is not incompatible with postmodernism and the so-called ‘end of master narratives’, which itself pronounces a grand leveling of all value into one transcultural soup. On this point, then, Rancière quite correctly points out that the opposite of representation is *not* non-figuration, which is to say not modernism. Instead he suggests that one might look to realism for the most non-representational form, for in realism everything is leveled and equally representable, and ‘this “equally representable” spells the ruin of the representative system’ (Rancière, 2007: 121).

The dramatic consequences of this line of thinking concern the Shoah and the ability or inability for the Holocaust to be represented in art. Rancière places two literary excerpts side by side, a passage from Robert Antelme’s *The Human Race* (1992) on daily life at Buchenwald and a passage from one of the great works of literary realism, Flaubert’s *Madame Bovary* (2010). The language is strikingly similar, a paratactic style of lists of unconjoined phrases and flat observations.

The concentration camp experience as lived by Robert Antelme, and the invented sensory experience of Charles and Emma [Bovary], are conveyed according to the same *logic of minor perceptions* added to one another, which makes sense in the same way, through their silence, through their appeal to a minimal auditory and visual experience. (Rancière, 2007: 125, emphasis added)

The problem therefore with the question of representing the Holocaust is precisely not that of representation itself, which is to say the difficulty of being able to put something into words. Ineffability is not the problem. ‘The problem is in fact rather the reverse’, Rancière argues. ‘The language that conveys this experience is *in no way specific to it*’ (2007: 126, emphasis added). In other words it is not an impossible language, nor is it a specific language (suggesting,

perhaps even more provocatively, that it is *possible* and *generic*). There is no special literary style that is so unusual and special that it can only be used in a rendering of life in the concentration camp. In a certain sense this is another way of understanding the notion of the ‘banality of evil’, which we owe to the work of Hannah Arendt. For Rancière, such banality illustrates the rift between two grand modes of mediation: on the one hand the specificity of representation, and on the other the genericness of the aesthetic.

Rancière is correct on the question of representation and the aesthetic. And even if it is something of a trick, he is also essentially correct when he says that unrepresentability means the shift into the aesthetic. Nevertheless there exists a slightly different view waiting to be aired regarding this type of discourse, the type of discourse that roots unrepresentability firmly in questions of political violence (for which the Holocaust is the most significant test).

While he does not provide a thorough set of references, Rancière’s essay shares a good number of things with other authors’ work on similar topics. One could turn, for example, to Susan Sontag’s books *On Photography* (1977) and *Regarding the Pain of Others* (2003), as well as Judith Butler’s recent essay responding to Sontag, ‘Torture and the Ethics of Photography: Thinking with Sontag’ (2009). One might also consider the documentary film made by Sontag called *Promised Lands* (1974), which examines the ongoing Arab-Israeli conflict and, specifically, the question of violence and how violence may or may not be put into photographic or cinematic form. Likewise there is Harun Farocki’s stunning film *Images of the World and the Inscription of War* (1988). Or even Georges Didi-Huberman’s book first published in French in 2003, *Images in Spite of All: Four Photographs from Auschwitz*, which deals with the question of photography in the camps.

‘Unrepresentability poses a question which can only be answered via specific kinds of violence’ – this is the discourse that needs to be fleshed out today. Ultimately it is possible to agree with this conclusion, but on very different terms. And in fact in order to arrive at a similar destination it will be necessary to take a number of detours not anticipated by Rancière and perhaps not endorsed by him either.

The main difficulty with Rancière’s position, and that of those sympathetic to him whether implicitly or explicitly, is that the question is in fact never exclusively one of representability. The question is one of affective response. Would photographs of suffering move us? And if we are not moved, are we to blame? Rancière’s concern therefore is one of ethical obligation, never simply that of representation and representability (barring for the moment those specific traditions such as Platonism – and Rancière is certainly not a Platonist – wherein representation and ethical obligation are intimately intertwined).<sup>2</sup> Occasionally he plays the part of the nervous liberal, worried whether certain images will escape into the wild, and if they do whether or not the spectators witnessing them will exhibit the proper emotional responses. His position is therefore at root allied with the creation and maintenance of proper subject positions. His is a discourse of visual culture that is quite familiar: the power of an image relies exclusively on its circulation as hidden or

visible; images exist either as triggers for emotional responses within populations or as cynical evidence of that same population's numbness to them. Either seen or unseen, either affecting or impotent – such is the trap of representation today.

Rancière remedies this a bit in his more recent book, *The Emancipated Spectator* (2009). Although it is not entirely clear that the solution he proposes – in typically post-structuralist fashion he suggests that we consider the conditions of possibility for 'the opposition between viewing and acting', that we 'blur' the binarisms, and 'dissociate' cause and effect – will be sufficient to address the core problem of representability today (Rancière, 2009: 13, 19, 14).

In order to consider an alternative solution to Rancière's problem – that unrepresentability ethically obligates one to discuss violence – one should direct one's attention back to the opening comments concerning data visualization. In comparison to political violence data visualization seems trivial indeed. One is not now speaking about the wanton destruction of real lives, of the black inhumanity of the camps. The point is not to argue for the superiority of 'informatic violence' over that of political violence. Even to pose the debate in such terms confuses much and explains very little.

The point rather is to consider a regime of art that does not appear much at all in Rancière, nor in the work of others like Butler who have weighed in on the question of political violence in photography. (If it appears anywhere it appears in Deleuze.) One will propose thus that we consider the control regime, a social and aesthetic framework that has its own brand of violence, if not as singularly spectacular as Abu Ghraib or the Twin Towers, or as catastrophically ruthless as the modern machinery of the Holocaust, then at least insidious and pervasive in its own particular deployment. Thus, if we are indeed living inside what Deleuze called the society of control, an alternative solution to Rancière's problem would obligate us to reflect on the violence embedded in that kind of society, to reflect on what it would mean for that kind of violence to be represented or unrepresented.

While much could be said on the topic of control – and much has – this article merely proffers a single claim regarding the control regime. Let this serve as a kind of descriptive provocation, no doubt slightly unsatisfactory. One of the key consequences of the control society is that *we have moved from a condition in which singular machines produce proliferations of images, into a condition in which multitudes of machines produce singular images*. To demonstrate the first half of this thesis consider the case of the cinematic or photographic camera, a singular device with the ability to output thousands and thousands of images in constant mutation. Hence Rancière's concerns are valid within their own domain, bounded as they are by the paradigmatic examples of photography and cinema.<sup>3</sup>

To demonstrate the second half, consider the case of Wikipedia, a singular (data) image produced by thousands and thousands of end users on their laptops. Or consider the network visualizations evoked above, a singular

aesthetic form produced by scores of uncoordinated network scientists and web designers. In its very resistance toward being put into an image it demonstrates the singularity of the image today, at the hands of a multitude of machines. There is quite literally an inability to render the network as an image differentiated from other images. There is a single image and thus there is none.

So, in provocation to the existing discourse on violence and unrepresentability, those who wring their hands over the supposed unrepresentability of images of state-sponsored torture or other political violence exhibit a curious form of blindness toward the apparatus. They exhibit a form of blindness toward the mode of production, sublimating a political worry, noble as it may be, into an observation about art. Of course it is important to think about violence, and to confront it directly. It is only natural to wish for *some* mechanical link between images and violence. It would be a noble pursuit if it were not demonstrably false: the photos from the Abu Ghraib prison were released, or they were not (and nothing changed); we grieved and we protested in the proper channels, or we did not (and still nothing changed). Representation *happened*, even if one feels anxiety about the outcome. The problem is that adequate visualizations of control society have *not happened*. Representation has not happened. At least not yet.

So what went wrong? One must return to first principles: the constitutive axis for representation always has a relationship with the mode of production, not simply the ideological conceits and tricks of state power that are its epiphenomena. Thus if unrepresentability is in play it will be in play around the mode of production and the realities of the socio-historical situation. It will govern the logic of showing and hiding the economic base. Or, if one prefers more Freudian language, consider how in a dream the thing that will be represented most flagrantly is the very thing that will be, in practical terms, the most invisible. Consider the logic of how the thing that most permeates our daily lives will be the same thing that retreats from any tangible malleability in our hands and minds. But what are these things? One must speak of the information economy. One must simply query today's incarnation of the mode of production: the diffusion of power into distributed networks, the increase in local autonomous decision-making, the ongoing destruction of the social order at the hands of industry, the segmentation and rationalization of minute gestures within daily life, the innovations around unpaid microlabor, the monetization of affect and the 'social graph', the entrainment of universalizing behaviors within protocological organization – *these* are the things that are unrepresentable. And are they not also harbingers of a new pervasive and insidious social violence?

To speak of the trumped-up CNN spectacles of military porn in hallowed, hushed voices as some sort of affront to the truth of representation is to miss the point entirely. Cast it all away. The point of unrepresentability is the point of power. And the point of power today is not in the image. The point of power today resides in networks, computers, algorithms, information, and data. (One can deny this last point, yet one cannot deny it and remain a materialist.)

Thus the question remains: how to represent power today? Countervailing tendencies already exist in parallel to McChrystal's diagram, refuting and rejecting it. For just as network visualization can tend to obfuscate its own data, it may also reveal systems of organization and power, given the right conditions. Perhaps most well known are the large-format maps drawn by artist Mark Lombardi, maps that reveal with obsessive detail the intricate interconnectedness of systems of power. Likewise consider the stunning information maps produced by the Paris-based group Bureau d'études, large diagrams with titles like 'Complex of the Self', 'Governing by Networks', and 'Governing the Agro-food Industry through Information', and which spotlight flows of influence peddling and back room power grabs (see Bureau d'études, n.d.). Interestingly, these works tend to intervene at the level of content rather than form, to rely on an old cliché. While the work of Bureau d'études is complex and variegated, a number of their maps tend to follow the flow chart style previously discussed. Thus one must rely exclusively on the data contained therein. Research-driven and revelatory, their work denudes the apparatuses of power by showing the deep interconnectedness of business, government, and the elite.

The promise of this approach also finds form in the work of Brian Holmes, both via his writings and his work as a lecturer and educator. Holmes, who has written on Bureau d'études as well as other themes including networked resistance and psychogeography (Holmes, 2008), offers something like a counter-cartography of information in which the given protocols of informatic imagination are rigorously tested. These interventions are significant not so much because they escape the dilemma of unrepresentability – in fact they tend to confirm my second thesis above on the 'one-ness' of network visualization – but because they launch a new set of initiatives, shackled not to the obfuscatory power of network visualization but to its latent pedagogical and mobilizing potential. But one must be wary of trying to seek redemption in these counter-cartographies, for as the two theses above demonstrate, the ideological content of the map is ultimately beholden to the affordances and prohibitions of its form. To end, then, let us not tarry with the various attempts to critique the social map at the level of data, and instead consider some of the attempts to critique it at the level of information.

In 2004 the Stata Center opened on the MIT campus, a crisp new university building designed by the architect Frank Gehry. Forms cascade on top of other forms, producing, through the interstices of haphazard movement, a fresco of deformation frozen in time. In Gehry's words, the building 'looks like a party of drunken robots got together to celebrate' (Pogrebin and Zezima, 2007).

Yet not long after the ribbon-cutting a number of design failures began to be noticed by those using the structure. There is a long tradition in architectural history of signature buildings leaking, cracking, or otherwise failing to live up to the basic necessities of good architecture. Apparently the Stata Center was suffering from the same fate, for the building began to fail in various ways, so much so that the university sued Gehry in 2007 for alleged design and construction shortcomings. The irony is clear: Gehry has built his

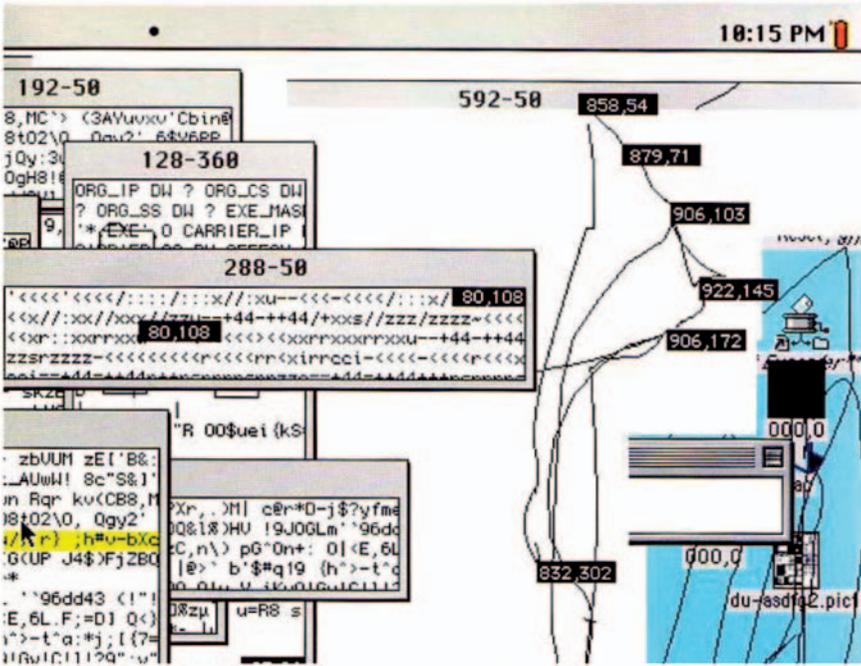
reputation on a very specific form of aestheticized breakage, yet here he is blamed for his buildings breaking. He was hired to make broken forms, yet here his forms are breaking. His 'aesthetic failure' arises from a reaction to the minimalism and functionalism of the International Style of architectural modernism. But the notion of his alleged design failures is a paradoxical one. For, as the MIT administration would attest, even if an architectural design is allowed to crack and buckle at the semiotic or symbolic level, it is not allowed to fail at the level of material functionality. Walls may bend or warp, but they cannot crack. In short, failures in function may not appear as function proper; to the extent that they appear at all, they must be transmuted into aesthetic expression, their 'breakage' having already been defanged and rearranged into entirely different outcomes. (The contrapositive phenomenon exists in another notoriously leaky building, Le Corbusier's Villa Savoye: the leaks are true failures in function, housed within a modernist style that prohibits failures in form; these may be thought of as 'honest' failures in function, whereas Gehry's are disingenuous.)

Thus informatic failures – failures of function – if they are pleasurable or 'artistic' in any way, are typically recast under a purely aesthetic aegis. Hence there exist a number of artists creating beauty via the corruption of function, from Jean Tinguely's kinetic sculpture, to the flicker films of Tony Conrad, or the programmatic drawings of Sol LeWitt, or the computer art of Jodi.org.

To reference Gehry and these other artists at this point in the discussion serves a specific purpose, for one sees evidence here of an approach to information visualization different from those mentioned at the outset. For Gehry, whether or not one insists on labeling him a deconstructivist, the impetus comes from the fundamentally post-structuralist nature of the information age in which no formal data are immune from their own corruption from within, modulating the formerly clean internal scaffolding into warped surface arcs and organic 'blobs' born of algorithmic iteration. (That Gehry reportedly designs using blocks and crumpled paper is a red herring; these buildings are unthinkable without the computer, just as Sullivan's skyscrapers were unthinkable without the steel mills.) Or for Tinguely or Conrad it is the machine itself that rears forward, proving that the pure mechanical sequence of things, if it is blocked or redirected, can shine through as elemental experience. Or LeWitt or Jodi, who in divergent and incompatible ways nevertheless both deploy code in such a way that it appears as non-code.

But let us be very cynical with these examples – not without some trepidation, for they are glorious works of art – and state emphatically that such work does not probe functional informatics as such, merely the point at which functional informatics might be transformed into some delight for the senses. In general, Gehry and these other artists merely feign to break the machine, restaging it as broken beauty. While tarrying with the algorithmic, each ultimately sacrifices the algorithmic in favor of the aesthetic.

None of these artists is creating new data types, new if-then statements, new network diagrams, new syllogisms, or new mathematical functions *for their own sake*. The artists may experiment with systematicity or



**Figure 3** Jodi.org, 'OSS bcad' Source: From Baumgärtel (2002: 46, detail)

functionalism, as many conceptual artists have done, but always ultimately to revert such machinic realities to the staid structures of fine art.<sup>4</sup> They turn the machine into art, but never art into machine – and when at rare moments the latter does come to fruition, it does so only under the banner of 'the art factory', be it that of Andy Warhol a generation ago or Jeff Koons today.

Thus one has come full circle from McChrystal's Law mentioned previously. Gehry, Jodi, and the others enact McChrystal's Law, only in reverse: the triumph of the aesthetic precipitates a decline in informatic perspicuity. An increase in information aesthetics produces a decline in aesthetic information. Regardless of whether the law is read forward or backward, one is still locked in the trap of unrepresentability.

The Stata Center is a sign of the times. It helps to reveal the basic conundrum explored here, which one may summarize according to three basic moments in cultural production and interpretation. While trying to give form to data, (1) network scientists and web designers have tended to aestheticize pure systematicity, thereby sacrificing the aesthetic in favor of the algorithmic, as evidenced by the many 'maps of the internet'. Yet (2) others like Gehry or Jodi feign to break the machine and restage it as broken beauty, thereby sacrificing the algorithmic in favor of the aesthetic. While the latter is a great improvement over the former, neither option is ultimately sufficient. They require (3) a remapping of the very terms of representability within the society

of control, such that both terms return to their proper home, the socio-political realities that have produced them in the first place.

To repeat, the constitutive axis for representation always has a relationship with the mode of production. The problem today, however, is that this axis is broken. (Was it ever not?) One does not yet have a critical or poetic language in which to represent the control society.

Hence let us end with a brief review of methodology. For there already exists a critical methodology coincident with the third moment, the moment of remapping the social. Fredric Jameson has given the name ‘cognitive mapping’ to such an endeavor. Cognitive mapping, defined as the attempt to achieve provisional orientation with the social totality, is described in a number of Jameson’s texts, particularly his two books on film (1992a, 1992b). Cognitive mapping emerges from a historical contradiction ‘in which the truth of our social life as a whole – in Lukács’s terms, as a totality – is increasingly irreconcilable with the possibilities of aesthetic expression or articulation available to us’ (Jameson, 1992b: 54). The cognitive map is enlisted, Jameson explains, ‘to enable a situational representation on the part of the individual subject to that vaster and properly unrepresentable totality which is the ensemble of society’s structures as a whole’ (1991: 51). One of the reasons why this method is so useful is that it does not allow the state to dictate the terms of the debate, as any meditation on political violence (Abu Ghraib, Guantanamo Bay, the Twin Towers) would tend to do. Instead Jameson’s method places the responsibility firmly at the feet of history, allowing the socio-historical situation, which of course may include the vicissitudes of political violence but is never determined by them, to engulf the subject, inflating and inflecting his or her representations of the present.

The many attempts to ‘map’ information come up short, then, on this very score, for they offer us no orientation whatsoever within the social totality. Worse, they exacerbate the problem by veiling it behind candy-colored lines and nodes. The tools and techniques required to create cognitive maps of the information society are scarcely evident even today. Hence the need, one might argue, for things like ‘allegories of control’ as figurative aids for understanding today’s control society. Jameson would never say that McChrystal’s image is a map of a system. He would say the image is an allegory for a map of a system. The difference is slight but all-important. Ultimately, however, the point is not so much to call for a return to cognitive mapping, which of course is of the highest importance, but to call for *a poetics as such* for this mysterious new machinic space.

(Here one freely admits the lingering influence of phenomenology. The dreams of the philosophical realists are so many delusions. There is a need for a strong hermeneutic breezeway between ourselves and our sciences. There is a need for a reinvigorated correlationism between man and machine. Otherwise one is lost, at the mercy of the positivistic sciences, at the mercy of industry, at the mercy of the economic base.)

The *logos* has no contrary – as Foucault famously said, and later famously retracted. He was wrong when he said it in relationship to the mad,

but perhaps it carries some truth today in relationship to the machine. Today's systemics have no contrary. Algorithms and other logical structures are uniquely, and perhaps not surprisingly, monolithic in their historical development. There is one game in town: a positivistic dominant of reductive, systemic efficiency and expediency. Offering a counter-aesthetic in the face of such systematicity is the first step toward building a poetics for it, a language of representability adequate to it. Thus, while unearthing alternatives might seem challenging, once the first few steps are taken one finds a wide-open plane, a vast anti-history of informatics waiting to be written, a vast world of representation waiting to be inscribed. To create a poetics for such algorithmic systems is the first step, necessary but not sufficient, in the quest to *represent* them.

A broad canyon separating the none from the one, such is the dilemma of unrepresentability. On the one hand the 'no necessary' trap of the first thesis, which demotes all things under heaven to the same unformed fate, binds the world with shackles of cynicism and relegates every life to the cybernetic struggle of all against all. On the other hand the 'only one' trap of the second thesis, which imbues a single power player (the mode of production) with totalizing command, funnels the polyphonic desiring forces into a monochromatic channel of indentured expression. Lack of light will blind representation, but excess of light will dazzle it. Across this canyon lies the antinomy of the material. The problem of unrepresentability, thus, lies stuck in the gorge of the world. To that place one must return if ever the question is to be answered: *Are some things unrepresentable?*

### Notes

1. Luckily, there are already a number of excellent guides for such an endeavor. Particularly invaluable to the themes of the present article is Susan Buck-Morss's masterly study 'Envisioning Capital: Political Economy on Display' (1995).
2. Elsewhere Rancière describes three regimes of the sensible, in which Platonism figures as one (Rancière, 2004).
3. It is not possible to devote the necessary attention to cinema in the present essay; nevertheless, it might be pointed out in passing that Jean-Luc Godard's *Histoire(s) du cinéma* (1988–98) has proven particularly inspirational to Rancière, not least because of the important role that the Second World War and the Holocaust play in Godard's argument (if one can call it an argument). Vergil's *hoc opus hic labor est* opens Godard's multipart film, giving the viewer a cryptic indication of its central theme: how does one descend into hell? 'The possibility of thinking was extinguished at that moment', Godard has said about Auschwitz (Godard and Ishaghpour, 2005: 73). For Rancière's writings on Godard's *Histoire(s) du cinéma* see in particular 'A Fable without a Moral: Godard, Cinema, (Hi)stories' (in Rancière, 2006) and 'Sentence, Image, History' (in Rancière, 2007).
4. Most disingenuous of all might be the concept of relational aesthetics promulgated by Nicolas Bourriaud (2002), in which relationality itself is aestheticized and exported to the white-cube art world.

## References

- Antelme, R. (1992) *The Human Race*, trans. J. Haight and A. Mahler. Marlboro, VT: Marlboro Press.
- Baudrillard, J. (2003) *Passwords*, trans. C. Turner. London: Verso.
- Baudrillard, J. (2006) *Utopia Deferred: Writings from Utopie (1967–1978)*, trans. S. Kendall. New York: Semiotext(e).
- Baumgärtel, T. (2002) *INSTALL.EXE - JODI*. Basel: Christoph Merian Verlag.
- Bourriaud, N. (2002) *Relational Aesthetics*. Dijon: Les Presses du réel.
- Buck-Morss, S. (1995) 'Envisioning Capital: Political Economy on Display', *Critical Inquiry* 21: 434–67.
- Bumiller, E. (2010) 'We Have Met the Enemy and He Is PowerPoint', *New York Times* 26 April: 1.
- Bureau d'études (n.d.) Website, URL (consulted April 2011): <http://bureaudetudes.org>.
- Butler, J. (2009) *Frames of War: When is Life Grievable?* New York: Verso.
- Deleuze, G. (1994) *Difference and Repetition*, trans. P. Patton. New York: Athlone.
- Deleuze, G. (1995) *Negotiations*, trans. M. Joughin. New York: Columbia University Press.
- Deutsch, K. (1966) *The Nerves of Government: Models of Political Communication and Control*. New York: The Free Press.
- Didi-Huberman, G. (2008) *Images in Spite of All: Four Photographs from Auschwitz*, trans. S. Lillis. Chicago: University of Chicago Press.
- Druckrey, T. (ed.) (1999) *Ars Electronica*. Cambridge, MA: MIT Press.
- Farocki, H. (dir.) (1988) *Images of the World and the Inscription of War*. Berlin: Harun Farocki Filmproduktion.
- Flaubert, G. (2010) *Madame Bovary*, trans. Lydia Davis. New York: Viking.
- Godard, J.-L. (1988–98) *Histoire(s) du cinéma*. London: Artificial Eye.
- Godard, J.-L. and Y. Ishaghpour (2005) *Cinema: The Archeology of Film and the Memory of a Century*, trans. J. Howe. New York: Berg.
- Holmes, B. (2008) *Unleashing the Collective Phantoms: Essays in Reverse Imagineering*. New York: Autonomedia.
- Jameson, F. (1991) *Postmodernism, or, The Cultural Logic of Late Capitalism*. Durham, NC: Duke University Press.
- Jameson, F. (1992a) *The Geopolitical Aesthetic: Cinema and Space in the World System*. London: BFI.
- Jameson, F. (1992b) *Signatures of the Visible*. New York: Routledge.
- Mondzain, M.-J. (2010) *L'image peut-elle tuer?* Paris: Bayard Centurion.
- Pogrebin, R. and K. Zezima (2007) 'M.I.T. Sues Frank Gehry, Citing Flaws in Center He Designed', *The New York Times* 7 November: 20.
- Rancière, J. (2004) *The Politics of Aesthetics: The Distribution of the Sensible*, trans. G. Rockhill. New York: Continuum.
- Rancière, J. (2006) *Film Fables*, trans. E. Battista. New York: Berg.

- Rancière, J. (2007) *The Future of the Image*, trans. G. Elliott. New York: Verso.
- Rancière, J. (2009) *The Emancipated Spectator*, trans. G. Elliott. New York: Verso.
- Riegl, A. (1985) *Late Roman Art Industry*, trans. R. Winkes. Rome: G. Bretschneider.
- Sontag, S. (1974) *Promised Lands*. New York: Zeitgeist Films.
- Sontag, S. (1977) *On Photography*. New York: Farrar, Straus and Giroux.
- Sontag, S. (2003) *Regarding the Pain of Others*. New York: Farrar, Straus and Giroux.

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