3 Are Some Things Unrepresentable?

The New York Times recently published a PowerPoint slide (Fig. 3.1) on its front page taken from a meeting between military leaders and government officials. 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. 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."[1]

Having such 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 the viewer's sense of reality. Rather,

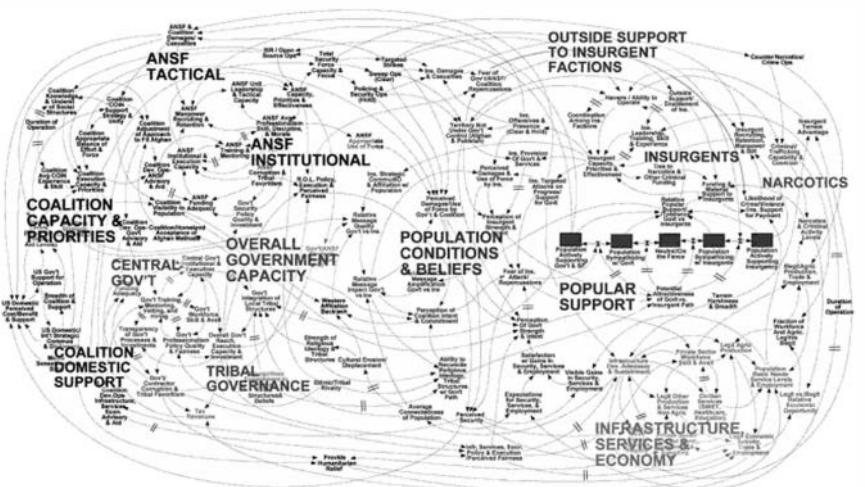

Figure 3.1. PowerPoint slide depicting the American military strategy in Afghanistan. Source: "Dynamic Planning for COIN in Afghanistan," PA Consulting Group, 2009.

like a fractal whose complexity does not decrease when viewed through a magnifying glass, the information contained in the slide 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 the 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?

Engaging with McChrystal's image is difficult at first glance. But what would happen if one were to talk about this image 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 an interface into the society of control, to borrow a term from Gilles Deleuze?[2]

Regarding the image in this way is indeed challenging. Even at a purely aesthetic level it is not clear what precisely the image 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 image 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?

Entering more deeply into the discussion, we might address 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 Aloïs Riegl 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.

However 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 elastically structured via flows and arrangements?

A turn to etymology will provide some rudimentary 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. (Given more time it would be to possible to elaborate the argument, begun in the introduction, that, whereas data have always had a certain *phenomenological* claim, the computer supersedes mere data)

Stemming from a different Latin root, information means 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*. The worldly things, having previously been 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.

Neither term can be entirely understood on its own. With this in mind, and since information differs from data in a more immediate and dramatic way, I offer the first of two theses. *Data have no necessary visual form*. But how could this be true? Is the world today not drowning in data visualizations? Is the world 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*, even Freud has a number of network diagrams in his work (and certainly Jacques Lacan and Félix Guattari are full of them), to Edward Tufte's books, or today's ubiquitous "maps of the Internet" (Fig. 3.2), which all seem to resemble a large cauliflower floating free somewhere beyond the solar system.

Evoking such questions is sure to bring controversy. 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 to say "no necessary" means 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,

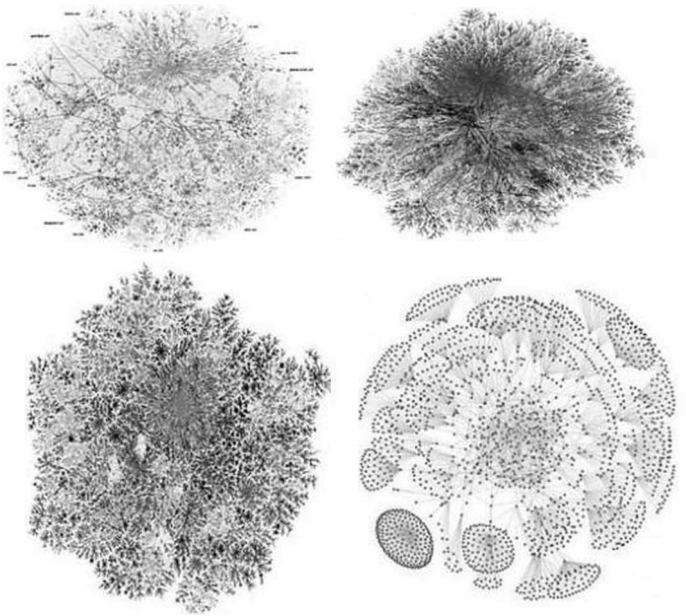

Figure 3.2. Four different maps of the Internet, produced by different methods and sources, selected from numerous examples available via a normal web search.

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.

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. So 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 rejigger the first 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.*

(Enlisting aid from philosophy will help make sense of things. 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 a number of previous concepts from the history of philosophy including 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 information isn't the bubbling chaotic material plane, but rather what Deleuze calls the virtual [which exists with potency across that plane]. But I 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 can not be said about information, of course, a term which in its very etymology is almost tautologically bound up with the concept of form.)

Repetition is the key to my second thesis. For 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 the opening image (Fig. 3.1), 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" (Fig. 3.2), or even a "map of human neural nets" – all of which end up being not so far removed from the "map of the American military strategy in Afghanistan." The hub-and-spoke cloud aesthetic predominates. Miniscule 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 intranetwork struggles between protocological and proprietary software; the reification of pyramidal hierarchy; monetization of unpaid micro labor). My proposal 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.[3]

But what does this mean? What are the aesthetic repercussions of such claims? One answer is that no poetics is possible in this uniform aesthetic space. There is little differentiation at the level of formal analysis. We are not all mathematicians after all. One can not talk about genre distinctions in this space, one can not talk about high culture versus low culture in this space, one can not 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.

Every interface must try to overcome its own unworkability. So let me restate the two theses side by side, that they may be collided and compared. 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 so many network visualizations look the same? There must be some kind of mandate somewhere that

prohibits alternate aesthetic modes. What is the origin of such a mandate?

Each thesis pulls against the other. 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 and 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 we 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.*

New media demonstrate, then, that the augmentation of functional or algorithmic efficiency goes hand in hand with a decline in symbolic efficiency. Hence the following law: an increase in aesthetic information produces a decline in information aesthetics.

Algorithmic interfaces – even as they flaunt their own highly precise, virtuosic levels of detail – prove that something is 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.

New media have not often been drawn into the larger discourse of unrepresentability. The position described thus far is something of an outlier. Other authors writing on the topic have framed it rather differently, often in terms of photography. "Are Some Things Unrepresentable?" is the title of an

essay by the French philosopher Jacques Rancière.[4] 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 what do pictures want, and can an image *kill*?[5]

As sense is redistributed into different arrangements, different "regimes" of art will emerge. Rancière calls it a distribution of the sensible. The regime known as representation is only one specific regime for Rancière, a regime produced by certain historical and social realities. In other words, representation is bound by a specific distribution of the sensible. Within this framework, 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.[6] 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."[7] This he associates with the more modern notions of the Kantian and even Burkean sublime. So unrepresentability – and here is Rancière's 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. 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."[8] 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 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."[9]

Violence takes center stage now, for 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* on daily life at Buchenwald and a passage from one of the great works of literary realism, Flaubert's *Madame Bovary*. 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."[10] 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*."[11] 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 as 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.

About representation and the aesthetic, Rancière is essentially correct. 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).

Not explicitly referencing many of the canonical texts, Rancière's essay still clearly shares a number of things with other authors' work on similar topics. For example, one could make a connection 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."[12] One might also consider the documentary film made by Sontag in 1974 called *Promised Lands*, 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.[13] "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 shall 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 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).[14] 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.[15]

Given Rancière's axiom – that unrepresentability ethically obligates us to discuss images of political violence – and in order to outline an alternative solution, consider again the opening comments concerning data visualization. In comparison to political violence data visualization seems trivial indeed. We are now not 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.

Abu Ghraib or the Twin Towers might dominate today's debate. But the point 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.) Consider then 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. If we are indeed living inside what Deleuze called the society of control, are we not obligated 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? Would this offer an alternative response to Rancière's axiom?

Regarding the control regime, I merely proffer a single speculative claim here, leaving a more detailed examination of

the concept to other writings. Let this serve as a kind of descriptive provocation, not meant to be definitive and 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.* As evidence for 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.[16] As evidence for 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.

Digital media require a different assessment of 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.

Each photograph of violence is a testament to the representability of violence, not its unrepresentability. So what went wrong with the analysis? How did it get off track? At this point it is wise to return to first principles, recalling that 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? We must speak of the information economy. We must simply describe today's mode of production in its many divergent details: 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 micro labor, 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. Some may deny this last point, yet it is impossible to deny it and remain a materialist.

One crucial question remains: How to represent power today? Countervailing tendencies already exist in parallel to the opening PowerPoint slide, 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 (Fig. 3.3), large diagrams with titles like "Psy-war Bio-war," "Complex

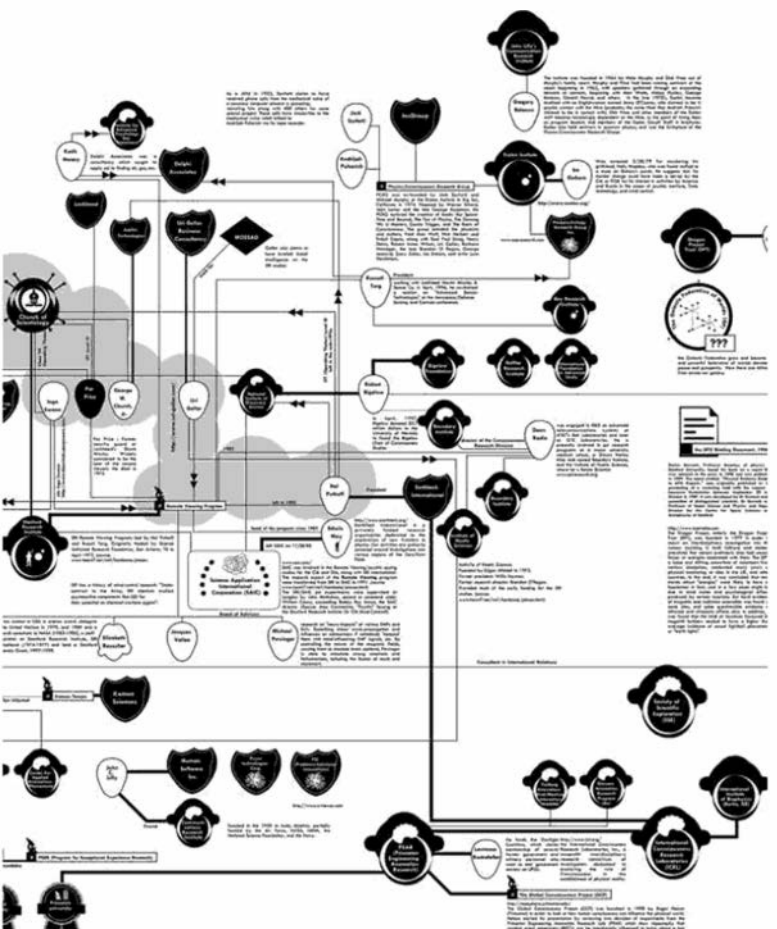

Figure 3.3. Bureau d'Etudes. *Psy-war Bio-war*, 2003. Detail.

of the Self," and "Governing by Networks," which spotlight flows of influence peddling and back room power grabs. 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, 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 "oneness" 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 we 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.

Frank Gehry's Stata Center, a crisp new university building, opened on the MIT campus in 2004 (Fig. 3.4). 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."[17] Yet not long after the ribbon cutting a number of design failures began to be noticed by those using the structure. Of course there is a noble tradition throughout architectural history of signature buildings leaking,

Figure 3.4. Frank Gehry (architect), Stata Center, Massachusetts Institute of Technology, Cambridge, MA.

cracking, or otherwise failing to live up to the basic necessities of good engineering. 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 aestheticize breakage, yet here he is blamed for his buildings breaking. He was hired to make forms that appear to fall apart, yet here they are actually falling apart. 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 in deconstructivist architecture, 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 phenomena 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.)

Honest 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.

Enlisting such artists at this point in the discussion serves a specific purpose, for there is evidence here of an approach to information visualization different from those mentioned thus far. For Gehry, whether or not one insists on labeling him a deconstructivist, the impetus comes from the fundamentally poststructuralist 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 by hand using wooden 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.

Art works like these can be glorious, but a bit of skepticism is necessary, since 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, all the while 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 functionalism, as many conceptual artists have done, but always ultimately to revert such machinic realities to the staid structures of fine art.[18] 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 sad and cynical banner of "the art factory," be it that of Andy Warhol a generation ago or Jeff Koons today.

Looping back now, we have come full circle from the law of information aesthetics mentioned previously. Gehry, Jodi, and the others enact the 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. Yet regardless if the law is read forward or backward, one is still locked in the trap of unrepresentability.

Gehry's building is a sign of the times. It helps 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 re-stage 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.

Overtures are scored with certain motifs meant to reappear. One of my themes was that 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?) That is to say, we do not yet have a critical or poetic language in which to represent the control society.

Returning to methodology, I cite again Jameson's technique for remapping the social. With much of the book exhausted, it is now possible to say more about it. "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. Cognitive mapping emerges from a historical contradiction "in which the truth of our social life as a whole – in Lukács' terms, as a totality – is increasingly irreconcilable with the possibilities of aesthetic expression or articulation available to us."[19] 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."[20] 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, engulf the subject, inflating and inflecting his or her representations of the present.

Information interfaces, particularly the many attempts to "map" information, often come up short on this score, for they typically offer little orientation within the social totality. Worse, they often 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, I suggest, for "allegories of control" as figurative aids for understanding today's control society. Jameson would never say that the opening image of military strategy (Fig. 3.1) 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 crucial. Yet the point is not so much to call for a return to cognitive mapping, which of course is of highest importance, but to call for *a poetics as such* for this mysterious new machinic space.

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.

Here many challenges remain. But while unearthing alternatives might seem difficult, once the first few steps are taken, a wide-open plane emerges, 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.

Miles of 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. Between these two mountains lies the antinomy of the material. The problem of unrepresentability, thus, lies stuck in the gorge of the world. To that place we must return if ever Rancière's question is to be answered: *Are some things unrepresentable?*