Thinkings:
How Computers Change the Way We See
By Altering the Way We Think

The Automation of the Sublime

I thought I knew what the word "sublime meant; I could use it like the word "divine" in a sentence—or like "excellent" or "beautiful" or "extreme", and Webster's would back me up. But for aesthetic theory, things are not that simple, and the more I've read about the sublime, the less clear I am about the concept. So tonight I'd like to share my confusion with you—it's not an evil impulse, or a desire for commiseration; I'm hoping this confusion is productive. My thesis, anyway, is not that the computer is automatically excellent beautiful or extreme, but that in its automaticity it engages that muddle of ideas, which has been discussed under the rubric of the sublime for the past two thousand years.

 "The Sublime leads the listeners not to persuasion, but to ecstasy." So says Pseudo-Longinus, the Greek rhetorician of the first century CE who gives us our first extant treatment of the topic of the sublime. "It is natural to us to feel our souls lifted up by the true Sublime, and conceiving a sort of generous exultation to be filled with joy and pride …" and further, " … a sublime thought, if happily timed, illumines an entire subject with the vividness of a lightning-flash, and exhibits the whole power of the orator in a moment of time."

So from the beginning, the sublime was known by its effects, by the feelings it stirred in the hearer: ecstasy, exaltation, power, pride, conviction. These are pleasurable effects of a particular kind; they are uplifting. The word sublime's etymological roots suggest this as well; it is literally the latin "sub" up to, and "limen" the limit. There is something mystical, or at least mysterious and fantastic about the sublime; it is something beyond the plodding and ponderous logics of *ratio* (Latin: method, theory, reason) and rhetoric. It works instantaneously and carries us beyond ourselves; it aligns us in some way with what stirred us to emotion—better than mere rhetoric and even against our will.

Immanuel Kant's treatment of the sublime in the *Critique of Aesthetic Judgment* (1790) has been perhaps the most influential. He defines it somewhat cryptically: "*Sublime is what even to be able to think proves that the mind has a power surpassing any standard of sense.*" We can recognize some of Longinus's ideas in the impression of power and exultation that this sentence suggests, but for Kant, what is at stake in the concept is something different than the power of art to move someone to ecstasy, it is rather the elevation of the power of reason, which the enlightenment sets above all else, and here, specifically the faculties of sensation.

Kant differentiates the sublime from the beautiful. Both produce feelings of pleasure, but in the beautiful the enjoyment concerns the pleasant quality of form, whereas in the sublime it concerns not form but quantity, magnitude, or greatness. He calls that pleasure negative: not so much a liking, as a respect or an admiration—even a fear. The experience of the beautiful is restful, but that of the sublime is agitated. The sublime is a complex reaction to something sensed—it is not a quality of the thing itself; it is the feeling that it inspires, that it suggests or alludes to, even as it does not posses it. The

sublime concerns the ideas of reason that are aroused by external things, though they themselves do not adequately present them.

Kant divides the sublime feeling into two modes: the dynamic and the mathematical. The dynamic sublime starts with an observation of a great force of nature like lightning, heaving waves, erupting volcanoes, staggeringly high mountains, etc., which appear threatening and overwhelming. We are both afraid of, and fascinated by, such sights. We seem small, powerless, and vulnerable in comparison to them. These phenomena present an excessive quantity: volume, force, height, distance. When we are at a safe remove, sheltered from danger but still able to observe, Kant says we discover an ability in ourselves which matches "nature's seeming omnipotence." Our mind is not subdued. We are able to survive and persevere. We understand ourselves as separate from nature. Further, we can conceive of nature as a whole—thus containing it safely within ourselves. This is the feeling of the sublime which nature inspires as we are able to elevate the mind above all of nature. The sublime occurs as a transcendence of fear and a triumph of human reason.

The mathematical sublime originates more abstractly in the experience of magnitude itself: the large. "*That is sublime in comparison with which everything else is small.*" The sublime is the largest possible, the absolutely large, in other words, the infinite. What nature presents to the senses is necessarily finite; but it may be vast. What then proceeds in the imagination is a kind of counting or estimation which escalates on a scale of largeness. The imagination can always produce something larger and it tends towards infinity. But it is reason that "demands an absolute totality as a real idea" and it produces one: the concept of the infinite. So the very discrepancy between our ability to estimate the magnitude of things in the world and our ability to conceive of infinitude is what produces the feeling of the sublime because we contain a power that exceeds what we can sense and what we can imagine. The sublime is that combination of pain in failing, and pleasure in overcoming.

And, the sublime is not found in nature, or in objects in the world (even art); it is a quality of mind. "… properly speaking, sublimity can be attributed merely to our way of thinking, or, rather, to the foundation this has in human nature."

Jean-Francois Lyotard explains in an appendix to *The Postmodern Condition* (1979) how Kant's notion of the sublime underwrites the art practices of modernity wherein an aesthetics of the sublime overtakes that of the beautiful, so that the question of art is not "what is beautiful" but "what is art?"

Lyotard asserts, that the trajectory of representational painting leads directly to photography, which, serves the same ideological purpose of confirming the reality of the observed world and the political and economic status quo. Representational art functions to keep doubt at bay by presenting image to the observer as the real. Photography, simply does it better, quicker, more abundantly, and more efficiently. The strategy of the *avant-gardes* function in direct opposition: they *de-realize*. Their structure is consonant with that of the sublime: "To make visible that there is something which can be conceived and which can neither be seen nor made visible: this is what is at stake in modern painting."

Lyotard sees the abstraction and formlessness of modern painting as a direct corollary of Kant's assertions that the sublime is suggested by formlessness and found in the empty abstraction produced in the mind in response to its fruitless search for an example of the un-presentable such as the infinite, the simple, or the great. The abstract is a negative

presentation—a presentation of absence. The avant-gardes, "devote themselves to making an allusion to the un-presentable by means of visible presentations."

The art practices that undermine conventional systems of presentation, from linear perspective to the museum itself, struggle against the subordination of thought to the gaze—that impulse to assert that what is, is what can be seen. The derealizing gesture is instead an assertion of the incommensurability of reality to concept; modern art doesn't so much present that situation to the viewer as allude to it. Through a kind of shock, as in Kant's sublime, pain followed by or mixed with pleasure, it presents an opportunity for an insight into the artifice that had been assumed to produce reality.

Lyotard makes a further distinction between a nostalgic modern aesthetics that takes refuge in good form, and a postmodern aesthetics that denies itself good form. In the former, the unpresentable is put forward as the missing content of form, but the conventions of the form itself provide solace and pleasure. By contrast, the postmodern artist, in his definition, must work without given rules, without conventional forms, making up rules as they go, rules which can only be recognized as such after the fact.

The contemporary painter and theorist Jeremy Gilbert-Rolfe's claims in "Beauty and the Contemporary Sublime" (1999) that, "If inscrutability has remained a constant feature of the sublime, in other respects the latter has changed; the terrible infinity, or obligatory inscrutability, of the sublime is now a property of technology rather than nature." This technological sublime which he asserts is *the* contemporary sublime, is the place where infinitude and indeterminacy is locatable now, where systems and signs proliferate without limit. The given world, nature, no longer seems expansive or infinite, as it would have to Europeans prior to the completion of their colonizations, or to Americans with the conquest of the West ahead of them. The spatialized sense of infinitude on earth has been foreclosed. With improvements in travel and communication, a greater understanding of the limits of resource exploitation, the impossibility of finding safe places to hide our waste, and the realization that we are permanently altering the global environment, nature's finitude has been made to seem obvious, even palpable.

Our sense of possibility then comes from a faith in techno-science, the edifice in which we store all hope for solutions to the predicaments of our confinements in nature. After it's "invention of invention" (as Kittler likes to say), technology delivers endless and unpredictable innovation. Moreover, it gives us the power of immediacy which is so characteristic of our culture and our contemporary sense of time. Technology is that on which the ideological promise of progress is centered. And technology is yoked to the engines of late capitalism: as techno-capitalism or info-capitalism it asserts its own infinite expansion, adaptability, and dispersion, while in actuality functioning to consolidate power and capital with (existing or equivalent) elites.

It is worth recalling that the computer, which is currently at the center of technological thinking and production, contains within itself a particularly potent engine of variation and difference. Our sense of potential and possibility depend on an ability to produce always yet another difference. So that all politics and ideology aside, there is also an ontological justification for locating a sense of infinitude with technology and specifically with computation. Computation is necessarily prolific—constantly providing another variation, another instantiation of the system, and another variation of the system itself. And for the sublimity tied to the new immediacy, while electric, and then electronic communications ushered in our sense of communicative immediacy, in the current iterations of mass and personal communication, the computerized network is what

delivers the immediate to us. Phenomenologically, it is our interface with the screen that continuously presents us with overwhelming difference.

At the screen we participate in the image economy, that spectacularized proliferation and circulation of everything as image (see Guy Debord's *Society of the Spectacle*). Each image of the innumerable we will watch there says to us, "This is what is. This is now." In Lyotard's terms, it functions to produce our sense of the real and is therefore at odds with the vocation of the avant-gardes to derealize through a sublime strategy of presenting the unpresentable.

It may be that the sublime is in fact no longer even an appropriate concept for characterizing, positively or negatively, either the technical culture of the moment or its aesthetic practices. One alternative is proposed by Sianne Ngai in her *Ugly Feelings* (2005). The response to an overwhelming onslaught of information or image could be what she calls stuplimity: "a bringing together of what 'dulls' and what 'irritates' or agitates; of sharp, sudden excitation and prolonged desensitization, exhaustion, or fatigue." Stuplimity is much like the first phase of Kant's sublime; the encounter with vastness. This immeasurable extension need not be infinite (just as it isn't for Kant), it is specifically a finite instantiation of discrete differences that never add up to a totality that can be grasped as a concept like the infinite. There is no uplift. Instead we feel stupefied, exhausted. The effort to add things up becomes tedious; alternately absorbing and pointless. One becomes mired in the details and never ascends to the lofty heights of reason. But one is captivated: "in stuplimity one confronts the mechanical operations of a finite system, whose taxonomy or combinatory incorporates oneself."

Ngai's examples of stuplimity are primarily literary and range from Janet Zweig's "Her Recurseive Appology" which is a computational work from 1993, to the literary tactics used by (post)modernists like Gertrude Stein and Samuel Beckett, writers whose work used repetition to exhaustion extensively. Here is one of her examples from Samuel Beckett's Worstward Ho (from 1983):

> Less best. No. Naught best. Best worse. No. Not best worse. Naught not best worse. Less best worse. No. Least. Least best worst. Least never to be naught. Never to naught be brought. Never by naught be nulled. Unnullable least. Say that best worst. With leastening words say least best worst. For want of worser worst.

Ngai sees stuplimity in contrast to the hysterical sublime theorized by Frederick Jameson in his diagnosis of various postmodern deprivations: the loss of historicity, the difficulty in representing current experience, the waning of negative affect. This sublime is characterized by a euphoric intensity and associated with the slick, the seamless, the glossy, the total.

The value of the stuplime encounter with objects of the opposite sort—prevaricating, proliferating, fragmented—is that the feeling of mastery is withheld. The virile and powerful transcendence characteristic of the sublime is not possible. The effect according to Ngai is a kind of openness and a kind of resistance. The heaping up of words or things refuses to coalesce into a preconceived idea (of form, or of totality, or of beauty). It provides, in that way, an openness to how things are, as opposed to how thing are supposed to be—that is, the ideological proper of things. The stuplime opens to the possibility of rule *making*. It performs the relation of the small subject to the large system; It enacts a kind of resistance to the law that is called "working to rule"—a submission to the system that undermines it by too-perfectly following its rules.

In constructing a theory of the "automation of the sublime" we need to move from Gilbert-Rolfe's vague intimations that technology is the location of the contemporary sublime to the specific ontology of computation itself as the location of a particular sublime. Now, the experience of technology is an experience of computation: computation's interfaces and computation's artifacts.

The artifacts of computation, the outputs which fall from printers and from presses, the ever changing images which glow on innumerable screens, the products which roll off millions of assembly lines in automated factories across the globe, all allude to and instantiate a system of rules which exists somewhere on the silicon interiors of a universal machine. The serial parade of these items through the spaces of our lives make of experience itself a kind of blank space for the instantiation of computational artifacts as a continuation of the fractal progression of the computational structure ramifying in the material substrate of contemporary existence.

What instantiations refer to are the rules of their presentation and replacement. They allude to the possibility of rule as the motive of presence. From this perspective, they are the concrete things which through the senses draw the mind into the abstraction of the system. Even as a representation or as an image, an instantiation refers to its rule in the machine as much as it might to an externality, a referent in the world—in that way it is similar to the sublime. Rather than protecting us from doubt by confirming an external reality, instantiations refer us to the system which governs the mobility of the signs within the space of variability. Instantiation refers to a motivating and containing other which remains unseen. And this implied rule itself sits inside the space of possibility enabled through the abstraction of the universal machine. Since that machine's universality is based on its configurability, every rule is seen to be arbitrary. The computer is a machine of possibility, a machine of all possible abstract machines, all logics, all systems.

One affective trajectory from the infinitude of possible logics offers the same kind of self-congratulatory pleasure that Kant finds in reason's capacity to conceive the infinite. With the Turing Machine at its origin, computation is a product of reason; in its material realization the computer is an externalization of, and simulation of, a certain human cognitive faculty. Like all technology, it shows nature to be subordinate to human reason by instrumentalizing the properties of the natural as they come to light under the gaze of human understanding.

All shadows are banished in the light of human potentiality. The avatar of progress wears vinyl tights. Technophilia is the fetishistic enthusiasm for formal signs of contemporaneity. It desires and delights in the smooth, slick, shiny, blobby baubles of techno-culture. Following the logic of fetish, technophilia substitutes the instantiations of CAM (computer aided manufacture), what is present, for the prowess of CAD (computer aided design), what is absent.

The symptomology of this paraphilia matches Jameson's hysterical sublime. But Jameson is careful to assert that our fascination with a technological sublime is caused by a displacement; the technological sublime is a figure of capital's newly decentered total world system: "a privileged representational shorthand for grasping a network of power and control even more difficult for our minds and imaginations to grasp." Jameson specifically denies technology as a *the* determining force of post-modern culture; that would preclude a Marxist analysis of economic determination.

Even if the technological figures global capitalism, however, it does also enable and sustain it. To posit a techno-capitalism is not to deny the significance of economic factors

but to suggest that the shape of late capitalism incorporates computational structures into its mechanisms and instrumentalizes them for its own ends.

In any case, the importance of computational or technological forms within culture is not contested and that is why it crucial to find some alternative to a sublimation of technology which only serves to valorize and confirm a total and final triumph of techno-capitalism.

Ngai's neologism, stuplimity, offers a hint of that alternative formulation. By suspending the movement of the experience of the sublime prior to transcendence, stuplimity suggests the opportunity of a reckoning with the shocking, exhausting, deadening, streams of computational instantiations that occupy our attention, our time, and our space: the stuff, the images, the information.

This proliferation of instantiations that threaten to overwhelm the subject proceeds from the existence of computers in the circuits of communication, production and distribution; but we need not enthusiastically confirm them as inevitable, good, or desirable commodities. We can instead attend to the feelings that the accumulation of instantiations trigger (exhaustion, stupor, etc.), and discover a resistive openness. Being mired in the instantiations that computation casts off and not saying simply "this is it!" we might find the resources to reprogram the machine or break it by repeating its own gestures in defense of the continuation of history, that ironically progress seems to foreclose. I suspect that a reception of instantiations where each is a singularity—a perfect, customized, truth of the moment—predisposes a referential reading of the thing as a confirmation of an ideologized reality. By contrast, a confrontation with instantiations that accumulate, and proliferate, and vary, and refuse to coalesce definitively, conveys the mind to the mechanisms of rule making, and raises doubts about the necessity of the being of any given, any particular thing.

The automation of the sublime might take on the character of either of these affective trajectories: Jekyll or Hyde. But in the present configuration of the world, the sublime will be automated.