

THE OXFORD HANDBOOK OF

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SOUND AND  
IMAGE IN  
DIGITAL MEDIA

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CAROL VERNALLIS,

AMY HERZOG,

*and*

JOHN RICHARDSON

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## CHAPTER 7

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# A NOISY BRUSH WITH THE INFINITE

## *Noise in Enfolding-Unfolding Aesthetics*

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LAURA U. MARKS

THIS essay considers “noise” in light of a model that I call *enfolding-unfolding aesthetics*, a set of relationships among image, information, and infinite that explains how certain things arrive to our perception (image) from the universe (infinite) whereas others do not. According to this model, the infinite is inaccessible to perception and appears as noise: our perception selectively unfolds some aspect of it. However, a sort of quantitative filter often predetermines what we perceive: what we end up perceiving is the product of information.

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## ENFOLDING-UNFOLDING AESTHETICS

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We may consider the infinite to be constituted of innumerable folds, like the ripples on the sea: this is Leibniz’s conception of matter, as Gilles Deleuze explains it.<sup>1</sup> When we perceive something, we unfold some small part of the infinite. Every perception is an unfolding. To figure out where an image comes from, we need to find out how it arose from the infinite; and, often, we need to find out how it arose from information, too, information that itself arose from the infinite.

So, the question is, how can we create our own ways of making contact with the infinite without drowning in noise? And, how can we appreciate information as itself an unfolding from the infinite?

To begin, please imagine the realm of perceptible things that populates your world at any given moment to be a vast, variegated surface, containing everything: holiday snapshots, action movies, ultrasound pictures, everything. This field contains sounds and

smells and other perceptibles, as well as visual images; I am using the term *image* to refer to all the things we can perceive with our senses. Imagine that this field surrounds you like a bubble, translucent, and you are looking (listening, smelling) out through it.

You look (listen, smell) through the field of images to their sources, distant in time and space: the holiday afternoon, the movie set, the inside of your own body. You realize, perhaps with a queasy feeling, that the field of sources is unimaginably more vast than the field of images that arose from it. It is the whole universe, the infinite—at this given moment—dense with impacted images, a tiny, tiny fraction of which you perceive. What I've just summarized is a sort of cartoon version of Henri Bergson's model of the universe.<sup>2</sup>

But some of the images do not come to you directly from the source. They seem to get twisted or caught on the way "in" to your perception. This is because they reflect not a perceptible experience but a calculation, a procedure. For example, the camera that took the snapshot was digital, and so the visible scene at the source has been assigned pixel values so that it can be expressed as a snapshot. The action movie was shot against a blue screen and keyed in to a digital background; its star was chosen on the basis of a calculation of her audience appeal. The ultrasound picture of the inside of your body is a translation of sound waves into visual images. These calculations constitute an intervening plane between the infinite and the images that convey it to us. I will call that plane *information*. Here is a three-layer diagram of the relations among Image, Information, and the Infinite at a given point in time (Figure 7.1).<sup>3</sup>

Aesthetics, in its simplest guise, is simply an account of how we engage with the perceptible world. This is a phenomenological aesthetics, not a system for judging what is beautiful: thus, what I am proposing is a sort of minor tradition linking the pre-Kantian eighteenth-century aesthetics of Alexander Baumgarten with Maurice Merleau-Ponty's phenomenology of perception. Baumgarten wrote in 1750 that aesthetics is a *scientia cognitionis sensitivae*, "science of sensuous cognition."<sup>4</sup> Enfolding-unfolding aesthetics, which I place within this minor tradition, deals with the coming and going of perceptibles: a kind of recycling or conservation of mass. It proposes that the images (in any sense modality) that we perceive are selectively unfolded from the infinite and that they are often shaped by information, which is itself a selective unfolding from the infinite.

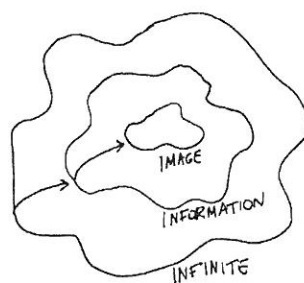


FIGURE 7.1

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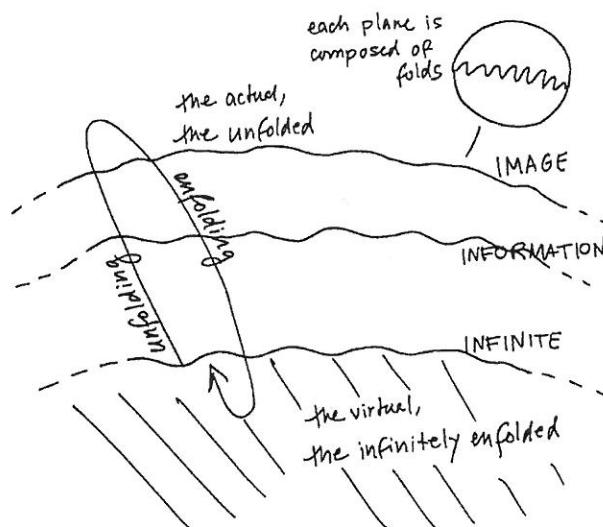


FIGURE 7.2

So, what we perceive (or don't perceive) is the result of a double process of unfolding (Figure 7.2).

I developed enfolding-unfolding aesthetics from Deleuze's investigation, found in his cinema books, into how certain images arise to us by being selected from the infinite. Deleuze, following Bergson, calls it the universe of images. I adopted the term "infinite" instead of "universe of images" in recognition of the roots of these concepts in religious philosophy, particularly the medieval Islamic philosophy that so deeply influenced the beginnings of modern European thought: infinity was considered an attribute of the divine. However, "infinite" as I use it here does not refer to a transcendent and all-powerful deity but to an immanent infinite.<sup>5</sup>

There do exist plenty of images that unfold more or less directly from the infinite: they include our own perceptions, as well as things like paintings, photographs, and audio recordings.<sup>6</sup> Something that we perceive corresponds directly to something "out there." But most perceptibles have been mediated before we ever perceive them. So, my intervention in Deleuze's theory of signs is to insert another image plane between images and the infinite, namely information: a filter that occurs before images can arise. This information layer is most evident in digital and other quantified media, where there is a layer of code underlying the perceptibles we see, hear, and touch—like the holiday snapshot I mentioned earlier. But the information layer is also evident in anything industrially produced, anything whose physical being is the result of quantified research.

Some readers may remark that enfolding-unfolding aesthetics seems to have a lot of points in common with Heidegger's philosophy. But it diverges significantly. First, Heidegger's concept of *techne* might seem similar to my term *information*, given that

*techné* describes how human labor gives form to the formless in a process of selection. However, whereas Heidegger privileges the act of selection, enfolding-unfolding aesthetics (in the less anthropocentric spirit of Merleau-Ponty and Deleuze) privileges the infinite that exists prior to human selection from it. Second, enfolding-unfolding aesthetics inquires into the imperceptible sources of the perceptible, and thus it might seem to be "disclosing," in Heidegger's sense that "If there occurs in the [art]work a disclosure of a particular being, disclosing what it is and how it is, then there is here an occurring, a happening of truth in the work." However, in enfolding-unfolding aesthetics, truth is not as important as variety: I am interested in how each thing has a singular origin *and* is made singular in its use. Heidegger's emphasis on "withdrawal" comes closest to the intentions of enfolding-unfolding aesthetics. I am interested in how works of art can hint at aspects of the infinite that are enfolded in information and image; Heidegger values the "uselessness" of works of art, in that they perceive the undisclosable.<sup>7</sup>

## THE INFINITE AND NOISE

What is the infinite? Well, *infinite* is a negative term, the not-finite, and most definitions of it are negative: limitless, boundless, uncountable, inconceivable. We cannot conceive of the infinite except as the ground from which we distinguish certain figures—or, the noise from which we receive certain signals. So, I suggest that, from our particular, interested points of view, the infinite appears as noise. We can perceive noise, but we usually filter it out.

Michel Serres points out that noise shares an etymology with *nausea* and *nautical* and that gives a sense to the seasick feeling I (and you might) have when beginning to sense the infinite beyond the bounds of perception. Noise is the sea on which our experience bobs: wave after wave of events and perceptions arise from it and fall back into it ceaselessly. "The silence of the sea is mere appearance. Background noise may well be the ground of our being. It may be that our being is not at rest, it may be that it is not in motion, it may be that our being is disturbed. . . . As soon as a phenomenon appears, it leaves the noise; as soon as a form looms up or pokes through, it reveals itself by veiling noise."<sup>8</sup> Noise sounds a lot like the infinite: it cannot be detected in itself, but everything we perceive arises from it.

Sha Xin-wei, reflecting on Serres, writes that what mathematicians call randomness signifies the limits of our capacity to recognize. "*Random* is another name for our ignorance, our inadequate senses, and, in the computational setting, the sparseness of our reach. *Noise*, for me, is not just the random in space, or time, or shape, but the hovering of patterned material (matter, energy, symbol, affective field) at the limit of measurement, and therefore observation."<sup>9</sup>

Noise, Sha suggests, is simply the stuff whose patterns we can't recognize. To be very broad-minded, we can imagine that everything in the universe is significant for *some* entity or other. But, from a human perspective, it is hard to imagine a perfect perception



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patterns we can't recognize. To be very in the universe is significant for *some* it is hard to imagine a perfect perception

to which everything is significant and noise no longer exists. Seth Kim-Cohen recounts the story of Rainer Maria Rilke encountering a skull and becoming entranced with the groove in its cranium, a groove that had no visible meaning to the poet but that, he imagined, might be played with a gramophone needle and produce an unearthly music. Rilke's fantasy appealed to Friedrich Kittler because it indicated that there is more meaning in nature than we can fathom. This meaning, Kittler suggested, can now be assessed thanks to "algorithmically formalized data streams" that could translate the visual information into sound, bypassing any need for an author.<sup>10</sup> Kim-Cohen argues forcefully with Kittler's romanticism: "This is a kind of antimetaphysics, a negative theology: positing a universality of data that precedes any communicative intent, any transmitter, any receiver. This would be the all-knowing, the all-seeing, omnipotent itself. But messages... are context-dependent. Contextless data is gobbledygook."<sup>11</sup> The cranial music would be pure noise.

In a mystical view, the person who recognizes patterns everywhere, who can hear the music of the cranial groove, would be a God-realized individual. Psychologically, this would be a mad person; our ability to choose what to filter is what gives us agency (schizophrenics often detect patterns and relationships that truly exist but that other people's brains block out). Bergson pointed this out when he explained that normal perception has the survival function of distinguishing immediate needs; in a way, it is a dangerous luxury to perceive beyond our needs.<sup>12</sup>

As Elizabeth Grosz writes, philosophers who are sympathetic to matter, such as Bergson, Henry James, and Deleuze, argue that we "carve out" things in experience: eventually, we have to make some decisions. Grosz points out that the etymology of "de-cision" means to cut out. We have to choose some things as our objects, unfold them from the virtual, hoist them into our actuality.

The teeming flux of the real... must be symbolized, reduced, to states, things, and numeration in order to facilitate practical action. This is not an error that we commit, a fault to be unlearned, but a condition of our continuing survival in the world. We could not function within this teeming multiplicity without some ability to skeletalize it, to diagram or simplify it. Yet this reduction and division occur only at a cost, which is the failure or inability of our scientific, representational, and linguistic systems to acknowledge the in-between of things, the plural interconnections that cannot be utilized or contained within and by things but that [make] them possible.<sup>13</sup>

To be radically aware of the world in its infinite multiplicity constitutes the greatest goal of some philosophy (and mysticism). Yet, at the same time, as Grosz points out, trying to be aware of infinity—especially an infinity that is not reducible to a One but consists of innumerable connections—can paralyze and destroy the person making the effort. (This is why trying to live ecologically is so painful and difficult, for the in-between status of things asserts itself every time we try to decide, for example, whether something is trash or food.)

Grosz does not raise, in this particular essay, the question of who is served by those diagramming functions, referring to a collective "we": "our scientific, representational,

and linguistic systems." But I fear that the most important perceptual decisions are being taken, by market-driven powers, for the rest of us. "We" are not able to come into our own contact with the infinite and its innumerable connections when Google is mapping it for us, when cameras are programmed on the basis of statistics of what consumers probably want to look at, when grocery store potatoes are all the same size and shape, and in other cases (of which I will rant more later) where the teeming infinity of the world is quantified and commodified before it reaches our perception. I want us to be able to cut things out for ourselves, to have our own brushes with the infinite. I admit that the initial impulse that gave rise to my elaboration of enfolding-unfolding aesthetics was anger, anger at a world that comes to us pre-perceived.<sup>14</sup>

The infinite contains everything, by definition. So, information and image are part of the infinite. They arise from it, as waves from the sea, as signal from noise; and they return to it, returning to an undifferentiated state, becoming noise again. Things exist as information or as image for relatively brief times before they dissolve back into the universe. In Figure 2, you can picture this cycling around.

## INFORMATION AND NOISE

What does the admittedly loose term "information" mean in the model I am proposing? First, it corresponds to a concept that arose in the first half of the twentieth century in the fields of statistics and electronic communication: information is something that is "abstract yet measurable, and that it is an aspect or byproduct of an event or process."<sup>15</sup> Ted Byfield reports that this new conception of information first occurred in a 1925 article by geneticist and statistician R. A. Fisher, "Theory of Statistical Estimation." Three years later, Ralph V. L. Hartley synthesized Fisher's findings with those of AT&T and Bell Laboratories researcher Harry Nyquist in his article "Transmission of Information," published in *Bell System Technical Journal*. Hartley proposed that information is a quantity that can be transmitted but is free of "psychological considerations"; that is, Byfield says, free of meaning.

After the First World War, Claude Shannon, again at Bell Labs, proposed that information is a quantifiable entity for determining the transmission capacity of a channel.<sup>16</sup> "Noise" consists of those artifacts that interfere in the transmission of an intended message. Shannon's conception of information as a ratio between signal and noise would found modern information theory.

Now, although Shannon disparaged efforts to adapt his theory to other fields, this is what I am doing in enfolding-unfolding aesthetics. If the infinite is not perceivable in itself—if the infinite is noise—then information is often what makes a selection from the infinite so that it can be perceived. In information theory, those aspects of the infinite that do not interest us—that is, almost all of it—are "noise." Information is what has been selected from the infinite as valuable and unfolded. The rest (so, almost everything) remains enfolded. In turn, what we finally perceive, in many cases, is unfolded

stant perceptual decisions are being made. "We" are not able to come into our connections when Google is mapping the basis of statistics of what consumers see. Objects are all the same size and shape, where the teeming infinity of the shapes obscures our perception. I want us to be able to brush with the infinite. I admit the notion of enfolding-unfolding aesthetically perceived.<sup>14</sup>

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from information. Information, then, is an unfolding from the infinite that precedes our perception.

Hartley and Shannon both emphasized that information has no meaning.<sup>17</sup> Information organizes noise into something that is potentially useful, but not yet meaningful; it becomes the basis for interpretations of meaning. Nevertheless, it seems clear that cultural ideas of what is important shape what is considered to be useful information: they shape the way information is extracted from the infinite. Since what is important is usually money, information is usually selected for its saleable worth. The image that is then generated from this information may appear visible, or audible, or even material, but it is really an expression of information—and often specifically of the profit motive. What we finally perceive with our senses, in many cases, is unfolded from information. At Starbucks, for example: your delicious coffee, the appealing music, and the color and feel of the comfy chairs are all material extrusions of investment decisions. Your toothbrush? A tactile, visible image of ergonomic and market research. Sometimes it seems as if our universe consists entirely of the smooth, designed, commodified surfaces of information-based media. This is especially so for people who live in urban and suburban environments in the postindustrial world. It seems we are trapped in a world not of our invention. This is what Guy Debord testified in *Society of the Spectacle* and what Baudrillard was railing about in *Simulations*. Information penetrates profoundly into perceptible surfaces, and it is usually serving the needs of capital.

However, remember, *pace* Baudrillard, that the information level is not the source of images. There is something else out there. Information is a filter between the image and the infinite, the infinite being the world in which thousands of programmers are writing code, thousands of workers are harvesting coffee, millions of people are brushing their teeth, and more, infinitely more. When some of that infinite stuff slips out, it is considered noise—in a given system. Noise, then, is the trace of the universe that reaches around information to our perception. *Noise is an index of the infinite.*

Obviously, what counts as noise depends on what you believe. The idea that communication should be maximally clear is an ideological notion. Often, art privileges the disruption of the "signal" or the difficulty of extracting signal from "noise." This could even be the definition of art in the Information Age.

Meanwhile, another definition of information comes into play. Information or *in-form-ation* implies the imposition of form from outside, as in the medieval scholastic Latin definition, "the giving of a form or character to something" (OED), as clay is shaped into bricks by a mold. This concept dates to Aristotle's theory of form, in which matter is potentiality, form is actuality.<sup>18</sup> Matter is seen as passive, and form acts on matter. Aristotle's theory assumes that matter lacks innate properties and can be shaped in any way. Thus, "information" implies that the infinite is unformed matter that needs to be shaped in order to be used; furthermore, the same in-form-ation will always give rise to the same form, as a mold shapes a brick.

A different paradigm asserts that forms arise not through imposition on passive matter but according to a process of individuation, which relates an entity's potential to the changing system of which the entity is part. Gilbert Simondon proposes this distinction



between information and individuation in "The Genesis of the Individual," and, in it, we can hear the echo of Bergson's *Creative Evolution*. The results of individuation can never be predicted. Simondon wrote, "We must begin with individuation, with the being grasped at its center and in relation to its spatiality and its becoming, and not by a realized [*substantialisé*] individual faced with a world that is external to it."<sup>19</sup> No two things individuate in the same way because the universe is always changing.

According to this paradigm, we might think that information, in privileging what can be usefully quantified, chokes off certain potentials. However, Simondon points out that information, too, is always becoming: information arises as a resolution to tensions in a given metastable (i.e., out of step with itself) system. Information signals that something (something considered important in the given system) is changing, as a stock market graph signals changes in prices or a smoke detector signals a potentially dangerous level of particulates. "One could say that the information always exists in the present, that it is always contemporary, because it yields the meaning according to which a system is individuated."<sup>20</sup> If your smoke detector always goes off when you are carrying on as normal in the kitchen, and so you habitually disconnect the smoke detector's fuse when you cook (perturbing the smoke-detection system), then the smoke detector's alarm signal has become noise: the new information consists in the frequency with which you disconnect it. That's the metastability in the system that relates your cooking and the smoke detector's alertness.

Vilém Flusser's playful proposal for a quantitative art theory accommodates the shifting ratio of signal to noise to the second law of thermodynamics. Things start out as noisy and settle into being easily perceptible. Beauty is that which has a somewhat low signal-to-noise ratio: it can be comprehended but requires salutary mental effort. Ugliness is pure noise; prettiness has a higher signal-to-noise ratio; kitsch, writes Flusser, is pure signal.<sup>21</sup> We may note that cultural norms often favor a high signal-to-noise ratio—but not always! Complexity, mystery, "difference" (as in the casual comment, "It's different") are all indicators of relatively low signal-to-noise ratio. We might even consider historical aesthetic periods, like the Baroque or the complexity-loving later 'Abbasid period, to favor low signal-to-noise ratios.<sup>22</sup>

Some creative strategies arise from these conceptions of information. One is to privilege noise as our direct connection to the infinite. Another is to question the way certain information is selected from the infinite and to choose to unfold other things instead. And yet another is to consider information not as a fixed grid but as itself historical and mutable, unfolding and enfolding, something that arises from perturbations in systems. Artists, insofar as they are less bound to convention, are especially good at making and identifying alternative unfoldings.

## VIRTUE OF NOISE

As Flusser's criterion suggests, the information-generated image often intends to be aesthetically pleasing. For us, in the postindustrial world, much of what surrounds

Individual," and, in it, we find individuation can never be achieved, with the being coming, and not by a real return to it.<sup>19</sup> No two things are ever the same.

Now, in privileging what can be resolved to tensions in a system, signals that something is happening, as a stock market graph indicates a dangerously high level of participation in the present, that it is always possible that a system is individuating on as normal in the background when you cook (perhaps a fuse when you cook) or a smoke detector's alertness.

This theory accommodates the dynamics of things that start out as a somewhat noisy signal-to-noise ratio; kitsch, writes, often favors a high signal-to-noise ratio (as in the casual commercial-to-noise ratio). We might see the complexity-loving

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us is designed, styled, beautified: from our toothbrushes to our transit system, to the high-quality advertising images all around us, to the packaged food we buy, to our own faces and bodies. (Sound and smell design are a little less totalizing, but mood-enhancing music and "nice" smells also thicken our sensory environment, creating the cloying air of the commodity.) It seems that things need to keep on advertising themselves to us even once we've bought them—"Read me! I am nutritious!" "Feel me! I am ergonomic!"

So, ironically, art, which once had the function of providing a little island of beauty in an ugly world, now takes on the opposite job: a little island of ugliness in an overly aestheticized world. (Ugliness here means a low signal-to-noise ratio, in Flusser's conception.) "Hence," Wolfgang Iser writes, "a task for contemporary art is *not* to introduce more beauty into the already overly beautified environment but to stop the aestheticization machinery by creating aesthetic deserts and fallow lands in the midst of this hyper-aesthetic."<sup>23</sup> According to this, art's job is now to make ugliness: to unfold the infinite in a noisier, less "meaningful" way. Noise music privileges the noise that overwhelms potentially meaningful signals.

In Marxist aesthetics, noise is proof of materiality. So, in a heavily commodified world, seeking out noise has long been a strategy of resistance. Commodities' power arises from the myth that the world is not material, and, of course, the Marxist strategy is to show that it is. This is what Walter Benjamin did when he looked for signs of decay in the shiny new shopping arcades. We can do the same thing in the seamless spaces of fancy malls, airports, and online environments like Facebook: seek out deterioration, glitches, any kind of perforation in the smooth surface. Where the surface breaks down, you see the fact of materiality that commodification must always conceal, and it appears as meaninglessness, noise. This search for materiality is a sign of resistance in commodity culture. It has been for more than a century. In fact, the materiality of glitch seems to have become a commodity itself.<sup>24</sup>

I find that there is something defeatist in Marxist aesthetics' passion for the fragment, the decayed, the merely material. It needs to advocate destruction rather than creation. What I am suggesting with enfolding-unfolding aesthetics is more than chipping away at the commodity surface to show the materiality underneath. In fact it's 1.5 times more, for Marxist aesthetics is dualist, and enfolding-unfolding aesthetics is triadic.<sup>25</sup> I'm suggesting we think of that commodified skin between the universe and us not as a bad thing to be destroyed, but as a particular *manner of unfolding*. Enfolding-unfolding aesthetics suggests we can unfold things in other ways. That is what art can do.

I mentioned ugly art, noise music. The virtue of ugly or *awkward* art is that it demonstrates a different kind of unfolding. Rather than create a smooth surface of seamless information, as commodity culture does, ugly things draw attention to what they are unfolding. Things usually ignored, things forgotten, unique yet unimportant events—oddities, not commodities.

Some artworks make it quite clear how the image triangulates between information and the infinite. *Brilliant Noise* (2006), a video by Ruth Jarman and Joe Gerhardt (aka Semiconductor), allows us to look at the sun—and to hear it—in images of the gridded fiery star that emit sonic blasts of brightness and blurs of static and of solar flares that

seem to make their own music (Figure 7.3). Looking at and listening to the image helps us understand the selective procedures that were carried out at the level of information in order to extract something from the infinite. It gives us a sense of the choices involved in unfolding information from the infinite and unfolding image from information. Its beauty lies in the dramatic struggle between signal and noise, information and infinite.

Jarman and Gerhardt worked with solar observatories around the world whose staff allowed them to use their images, many apparently quite old. Without knowing more about the technology than what we can divine from watching the video, it is evident that it's very difficult to make images of the sun's surface and that every observatory does it in a different way. They use different kinds of information filters to extract image from the infinite. These filters are just like sunglasses, quantifying and regularizing the perceptible world so that people can actually see it. Jarman and Gerhardt created the sound for *Brilliant Noise* by translating image into sound. They used software to quantify the light levels in each video frame and assign sounds to each light level, so that, in time, the changes in light translate to changes in sound. The creative decisions lie in what kinds of sounds to assign. So, it looks like the sun is singing, and the noise is singing too.

The noise in these images appears both as analog electronic interference and as digital glitches. This reminds us that noise is not only the noninformative images that escape past a filter, but also it is created by the filter itself. Little white dots indicate moments when no signal could be detected, like the "snow" that used to fall on our analog electronic television screens. (Allow me a moment to mourn the demise of TV snow, for it constituted our contact with the analog ether.) I find *Brilliant Noise* surprisingly moving because it values *all* of information, noise, image, and the infinite. It gives us a sense of the choices involved in unfolding information from the infinite and unfolding image



FIGURE 7.3 Still from *Brilliant Noise* (2006) by Semiconductor.



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## THE NOISY POTATO

In Agnès Varda's *The Gleaners and I* (2000), the filmmaker lives with modern gleaners, people who scrape a living from the leftovers of commercial agriculture. Well-shaped, nicely sized potatoes translate effortlessly into capital. They are harvested, a kilogram of potatoes is translated into a price, and they are sold. Meanwhile, perfectly edible potatoes that are too small, too big, or too knobby do not count as potatoes to the harvester: they are noise, according to the information filter that determines the sale value of a potato. The gleaners collect these noise-potatoes for food in activities that remain under the radar of capital. Varda's potato gleaning scene shows how lots of life-sustaining activity can take place in realms untouched by information.

Varda's account of the lives of gleaners shows us how people can live their entire lives in a way untouched by the codifying practices of Information. This is the way of life of the very poor, who can't afford new (newly encoded) things: unrecognized food, discarded furniture and clothes, unofficial shelters. It is also a way of life that has become attractive to people who want to be self-sufficient and unmonitored. They pay attention to those things that either have never been taken up as information—the knobby potatoes of life—or have fallen back into the Infinite in the ongoing cycle of unfolding and enfolding. We can say that the activity of gleaners and repurposers around the world perturbs the system, constituting a new kind of information, a new indicator that the information filter of the market economy is unable to detect.

## WHAT TO UNFOLD

Again, it appears to me that because our postindustrial environment, this aggressive commodity landscape, seems so against us, artists' first impulse is simply to make holes in the smooth info-generated surface, to make some noise. Given that the universe is infinite, and we have so very little contact with it, it seems like a great thing to strip away the filters and just let all the noise rush in.

But, eventually, it is necessary to make a selection. By welcoming noise and refusing to distinguish useable signals, we might feel we are embracing the infinite. But being immersed in undifferentiated noise is schizophrenia. Like the moths of which the surrealist Roger Caillois wrote, whose wings are disguised to look like tree bark so they become indistinguishable from their environment (and yet, Caillois asserted, this camouflage does not protect them), losing one's identity in this way is a kind of suicide.<sup>26</sup> So I suggest another strategy for art to make contact with the infinite, namely, to unfold it differently.



or.



Information can be considered whatever *saves us time* by preempting our encounter with the infinite. Information pre-knows the infinite for us. Information is the realm of the category, the cliché, and the commodity. So, in trying to bypass Information and make our own selections from the infinite, we need to decide what, of all that infinite stuff, to unfold: what noise to distinguish as a signal. Here, I am inspired again by Bergson. In *Creative Evolution*, he suggests that we should try not to categorize the things we perceive, but instead to respond to something that our intellect cannot comprehend, something radically new, unthought. Something that will make us grow.<sup>27</sup> *Brilliant Noise* shows one way that might be done, by first being blinded and deafened by the sun and then choosing to unfold its noisy, infinite surface into beautiful pictures and sounds. *The Gleaners and I* shows how one can make a whole life by passing under a capital-driven information filter, clinging close to the infinite and unfolding parts of it differently.

So we might try to remain in the overwhelming presence of the infinite for a while. But do not stay there forever! Let that contact make you grow in some small way, and select some thing, some new unfolding from the infinite.

## NOTES

1. Gilles Deleuze, *The Fold: Leibniz and the Baroque*, trans. Tom Conley (Minneapolis: Minnesota University Press, 1993), 6.
2. See Henri Bergson, *Matter and Memory*, trans. N. M. Paul and W. S. Palmer (New York: Zone, 1991).
3. Some of this introductory material has been published in Laura U. Marks, "Unfolding from the Real: Mediation as Connective Tissue," *Passagens* (Universidade Federal de Rio de Janeiro): 6 (2011) and "Enfolding-Unfolding Aesthetics: The Unthought at the Heart of Wood," in *Technology and Desire*, ed. Rania Gaafar (Karlsruhe: ZKM, 2013).
4. Wolfgang Iser, "Aesthetics Beyond Aesthetics," in *Rediscovering Aesthetics: Transdisciplinary Voices from Art History, Philosophy, and Art Practice*, ed. Francis Halsall, Julia Jansen, and Tony O'Connor (Palo Alto, CA: Stanford University Press, 2009), 178. The priority to which Baumgarten gave sense experience was eclipsed by Kant's "transcendental study of the objective conditions of judgments concerning the beautiful." See Nicholas Davey, "Baumgarten, Alexander G [ottlieb] (1714–1762)," in *A Companion to Aesthetics*, ed. Stephen Davies et al. (Malden, MA: Wiley-Blackwell, 2009), 162–163.
5. Islamic philosophy, as well as the Greek philosophy that often informed it, such as neo-Platonism, completely underwrites almost all European philosophy, itself first developed by Christian Scholastics, which proposes central concepts of One, Being, and Infinite. The notion that contemporary philosophy, which is usually considered secular, has a religious origin may alarm the reader. But it is only quite recently that some philosophers, such as Bergson, Nietzsche, and Peirce, stripped fundamental philosophical concepts of their divine trappings in order to propose a truly nondualist philosophy, and it was not an easy job. In fact, I would contend that most contemporary philosophy in the continental tradition remains completely indebted to religious transcendentalism.

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6. Although the latter, insofar as they are conventional images, are relayed through information. I discuss this kind of image in "Experience-Information-Image: A Historiography of Unfolding: Arab Cinema As Example," *Cultural Studies Review* 16, no.1 (March 2007), special issue on "Rethinking the Past": 85-98; and "Enfolding and Unfolding: An Aesthetics for the Information Age," an interactive essay produced in collaboration with designer Raegan Kelly, in *Vectors: Journal of Culture and Technology in a Dynamic Vernacular* 1, no. 3 (2006), <http://vectors.usc.edu/projects/index.php?project=72>.
7. See Martin Heidegger, "The Origin of the Work of Art," trans. Albert Hofstadter, in *Philosophers on Art from Kant to the Postmodernists*, ed. Christopher Kul-Want (New York: Columbia University Press, 2010), 139-148.
8. Michel Serres, *Genesis*, trans. Geneviève James and James Nielson (Ann Arbor: University of Michigan Press, 1995), 12-13.
9. Sha Xin-wei, *Poesis and Enchantment in Topological Matter* (unpublished book manuscript, 2011).
10. Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Palo Alto, CA: Stanford University Press, 1999), 43-44.
11. Seth Kim-Cohen, *In the Blink of an Ear: Toward a Non-Cochlear Sonic Art* (New York: Continuum, 2009), 100.
12. Bergson, *Matter and Memory*.
13. Elizabeth Grosz, "The Thing," in *Time Travels: Feminism, Nature, Power* (Durham, NC: Duke University Press, 2005), 131.
14. The angry essay that inaugurated enfolding-unfolding aesthetics is Laura U. Marks, "Invisible Media," in *New Media: Theories and Practices of Digitextuality*, ed. Anna Everett and John T. Caldwell (New York: Routledge, 2003), 33-46.
15. Ted Byfield, "Information," in *Software Studies: A Lexicon*, ed. Matthew Fuller (Cambridge, MA: MIT Press, 2008).
16. Claude Shannon, "A Mathematical Theory of Communication," *Bell System Technics Journal*, 1948; popularized in Claude Shannon and Warren Weaver, *A Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949).
17. Byfield, "Information."
18. Gilbert Simondon, "The Genesis of the Individual," in *Incorporations*, ed. Jonathan Crary and Sanford Kwinter (New York: Zone Books, 1992), 298.
19. *Ibid.*, 310.
20. *Ibid.*, 311.
21. Vilém Flusser, "Habit: The True Aesthetic Criterion," *Vilém Flusser: Writings*, ed. Andreas Ströhl, trans. Erik Eisel (Minneapolis: University of Minnesota Press, 2002), 51-57.
22. See "From Algorithmic to Baroque," in chapter 6, "Baghdad, 830: Birth of the Algorithm," in Laura U. Marks, *Enfoldment and Infinity: An Islamic Genealogy of New Media Art* (Cambridge, MA: MIT Press, 2010), 168-188.
23. Wolfgang Iser, "Aesthetics Beyond Aesthetics," in Halsall, Jansen, and O'Connor, *Rediscovering Aesthetics*, 181.
24. As my editor Carol Vernallis notes; see the essays by Melissa Ragona (chapter 11) and Caetlin Benson-Allott (chapter 9) within.
25. Infinite, information, and image correspond to Firstness, Secondness, and Thirdness in Charles Sanders Peirce's triadic logic. See Charles Sanders Peirce, "The Principles of Phenomenology," in *Philosophical Writings of Peirce*, ed. Justus Buchler (New York: Dover, 1955), 74-97.

26. Roger Caillois, "Mimicry and Legendary Psychasthenia," trans. John Shepley, *October* 31 (Winter 1984): 16-32.
27. Bergson, *Creative Evolution*, trans. Arthur Mitchell (Mineola, NY: Dover, 1998).

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