

I will take two concepts from two different worlds, put them together, and see what they produce. This is the plan. The allegory comes to us from literature, and in its most basic form can be defined as one story told through another. The algorithm, coming to us from mathematics, is a pre-programmed procedure for an expected or unexpected result. While they may seem distant, they are attracted to each other: the algorithm, in that it is a written set of instructions, is the most literary of mathematical tropes, and the allegory, in that it has at least a two-part structure, is the most mathematical of literary tropes. In their overlap lies a powerful range of ideas for design and art.

While the most important task at hand may be to define these two concepts and their potential in design, they are merely the foci, two suns defining a perimeter of ideas. Other relationships—letters and numbers, order and chaos, perspective and doubling—further complete an attitude or imagination for making and critiquing visual work. In visualizing these relationships, we try to codify language in order to control it and try to narrativize mathematics in order to explain it, and funnel their tensions into the production of concrete artifacts such as diagrams, maps, and drawings, as well as abstract ideas such as entropy, one of the best examples of a crossover between allegory and algorithm.

Still, the two form only a private puzzle if they cannot find a context within contemporary design culture. We find ourselves in a strange moment when modernism has turned into a nostalgia, theory is suspect, and the “real” is the new holy grail, with words such as “simple” and “basic” as its mantra. Meanwhile, a technophilic style running counter to this claims its own authenticity with its rave-flyer, youth-culture origins. Needless to say, these styles are constantly changing. Allegory and algorithm move across them, or exist beneath them: today’s cult of the real already seeks the allegorical transformation of the ordinary into the meaningful, while the cult of the techno-artificial demonstrates the pathos of our attempts at an algorithmic way of thinking and that of the computer’s striving for a more “human” logic. Over the years, allegory and algorithm have redefined and recontextualized themselves, becoming creative and critical tools that are more powerful today than at any time in the past.

On a wider social front, our multi-everything culture has now become normal. We may now choose to put that aside, but we cannot ignore that the more multi- our culture gets, the more a single creative work fragments every time someone sees it. This does not mean that all readings are now arbitrary, but that more and more the reader must be a participant in the work in order to receive its meaning. Because the allegory uses one system to describe another, it allows for the distancing, or veiling, of the subject, and because the algorithm is an objective system of writing, it distances the author. The subject and the author must attempt to get out of the way if the individual perspective of the reader is to play a greater role in assigning meaning to the work.

There is a potential opening between a centralized, essence-obsessed modernist practice and an overly decentralized and unmotivated postmodernist one. The allegory's presentation of two possibly contradictory readings in the same work, motivated by an algorithm that says "go," presents a rational and contemporary solvent for an otherwise complex dilemma.

DEFINING ALLEGORY

“In the simplest terms, allegory says one thing and means another.” —Angus Fletcher

“We have allegory when the events of a narrative obviously and continuously refer to another simultaneous structure of events or ideas, whether historical events, moral or philosophical ideas, or natural phenomena.” —Northrop Frye

“Allegory, which is translated in Latin by inversion, either presents one thing in words and another in meaning, or else something absolutely opposed to the meaning of the words.” —Quintilian

“Allegory—the word means to speak figuratively, or to speak in other terms, or to speak of other things in public, from the Greek *allegorein*, *allos*, other, plus *agoreuein*, to speak (in public), from *agora*, an assembly, but also the marketplace or customary place of assembly.” —J. Hillis Miller

“‘Therefore I speak to them in parables,’ said Jesus, ‘Because they seeing see not; and hearing they hear not, neither do they understand.’” —Matthew 13:13

“I know that at one time the allegorical art was considered quite charming . . . and is now intolerable. We feel that, besides being intolerable, it is stupid and frivolous.” —Jorge Luis Borges

“If the allegorical is attractive for the present day and age it is because it models a relationship of breaks, gaps, discontinuities, and inner distances and incommensurabilities of all kinds.” —Fredric Jameson

The definitions of allegory range from the simple to the impossible, especially as they move from literature to art, and from the premodern to the modern. Detailed allegorical readings of premodern literary works are easy to find, but little has been written about the relationship of allegory to either our current age or to design and art. For much of the twentieth century, allegory was in disrepute, in part because the symbol reigned supreme, concerned with unity, centrism, immanence, and essence, all of which the allegory is not. Even when allegory was a viable form in literature and art, its status as a literary and not a visual trope severely limited its discussion in

painting and sculpture. When we speak of allegory in the visual arts in the twenty-first century, we are in a drastically different context.

Even within the realm of art, a distinction must be made between allegory in pre-modern art and allegory in contemporary art. Before the twentieth century, a handful of symbols and an abstract title fulfilled the requirements of allegory in painting or sculpture, marking the statue of blindfolded Justice holding up her scales as an allegory, as well as the era's countless personifications of Peace and Fortune. During the French Revolution, many works depicted the people and events of the time as being those of ancient Rome. These historical paintings, in which the present was rewritten in terms of the past, were also considered allegorical. Personification, seen as a kind of labeling, marked allegory as externally added and therefore superfluous, as did historical painting, which marked allegory as superfluous because it asked the viewer to step dozens of centuries into the past in order to understand what was already sensible in the present.¹ These forms did much to discount allegory as a viable way of working for almost a hundred years.

Allegory went into hibernation during much of the twentieth century and until the 1980s, awakened only intermittently with the works of Walter Benjamin, Paul de Man, and Fredric Jameson. Benjamin was the first to champion allegory, proclaiming that "At one stroke the profound vision of allegory transforms things and works into stirring writing" at the same time that it tends "to pile up fragments ceaselessly, without any strict idea or goal."² Paul de Man earns his position as the patron saint of allegory with his strong defense and redefinition of it (primarily as opposed to the symbol) in *Blindness and Insight*, as well as his assertion of its indefinite nature: "Attempts to define allegory keep encountering a set of predictable problems, of which the summary can serve as the preliminary characterization of the mode."³ Fredric Jameson takes cues from Benjamin's vision of history, and several years before de Man's defense of allegory, he sees the form as being devoted to the "deciphering of meaning from moment to moment, the painful attempt to restore a continuity to heterogeneous, disconnected instants."⁴ Thirty years later he returns to connect allegory to a critical era in architectural history,

1. Craig Owens, "The Allegorical Impulse: Toward a Theory of Postmodernism," *Art After Modernism: Rethinking Representation*, ed. Brian Wallis (New York: The New Museum of Contemporary Art, 1984) 215 and 210.

2. Walter Benjamin, *The Origin of German Tragic Drama*, trans. John Osborne (London: New Left Books, 1977), p. 178.

3. Paul de Man, "Pascal's Allegory of Persuasion," *Aesthetic Ideology* (Minneapolis: University of Minnesota Press, 1996), 51.

4. Owens, 229.

asserting that first, allegory arises from a historical and specific crisis in representation, marking itself as a structure that “designates difficulties, if not outright impossibilities, in meaning and representation.”⁵ Narrative is established as the second essential condition for allegory, completing its divide from both symbol and metaphor. For Jameson, these conditions are linked: “Allegory is a narrative process precisely because it needs to tell the narrative to the solution of its representational dilemma.”⁶

These theories and observations made it possible for Craig Owens in 1984 to declare allegory “an attitude as well as a technique, a perception as well as a procedure” ripe for appropriation from literature and a re-defined reuse in the arts, the withdrawal of which “may be one factor in their ever-accelerating loss of audience.”⁷ Connecting it to the practice of art, and highlighting an aspect that is critical for design, he writes:

Allegorical imagery is appropriated imagery; the allegorist does not invent images but confiscates them. . . . He does not restore an original meaning that may have been lost or obscured; allegory is not hermeneutics. Rather, he adds another meaning to the image. If he adds, however, he does so only to replace: the allegorical meaning supplants an antecedent one; it is a supplement. This is why allegory is condemned, but it is also the source of its theoretical significance.⁸

Allegory, then, has become a device that embraces fragmentation, discontinuity, problematization, appropriation, aggregation, heterogeneity, and narrative in an attempt to reclaim a particular history or solve a specific crisis of representation. It models “a relationship of breaks, gaps, discontinuities, and inner distances and incommensurabilities of all kinds,”⁹ linked to contemporary art through site-specificity, impermanence, accumulation, and the projection of structure as sequence.¹⁰ Lastly, the allegory has the capacity to present two clearly defined and mutually incompatible readings in the same space, an interference of literal and figurative readings. This is the allegory—not than the personification of past centuries—that holds potential in contemporary design practice.

5. *Ibid.*, 204–205.

6. Fredric Jameson, *Marxism and Form: Twentieth Century Dialectical Theories of Literature* (Princeton, N.J.: Princeton University Press, 1971), 72.

7. Fredric Jameson, “From Metaphor to Allegory,” *Anything*, ed. Cynthia C. Davidson (Cambridge, Mass.: MIT Press, 2001), 27. A similar fissure is noted in Samuel Levin’s essay “Allegorical Language” in the anthology *Allegory, Myth, and Symbol*, ed. Morton W. Bloomfield (Cambridge, Mass.: Harvard University Press, 1981). He establishes personification as a cornerstone of allegorical language, explaining that “It is a makeshift we use because of a deficiency in our lexicon. There is some irony in the fact that this very deficiency, in its full extension, is what makes allegory possible. . . . We can try to redress the poverty of our language by augmenting our powers of thought.”

8. *Ibid.*

9. *Ibid.*, 25.

10. Craig Owens makes a very good case for connecting allegory to artists such as Robert Smithson, Walker Evans, and Sol Lewitt through the use of these terms, deriving them from Walter Benjamin’s reading of the ruin as allegory and Angus Fletcher’s comparison of allegorical structure to obsessional neurosis. For his reading, see Owens, 207; for Benjamin’s discussion of the ruin, see his *German Tragic Drama*; and for Fletcher’s analysis of the allegorical structure, see his *Allegory: Theory of a Symbolic Mode* (Ithaca, N.Y.: Cornell University Press, 1964), pp. 279–303.

FINDING ALLEGORY

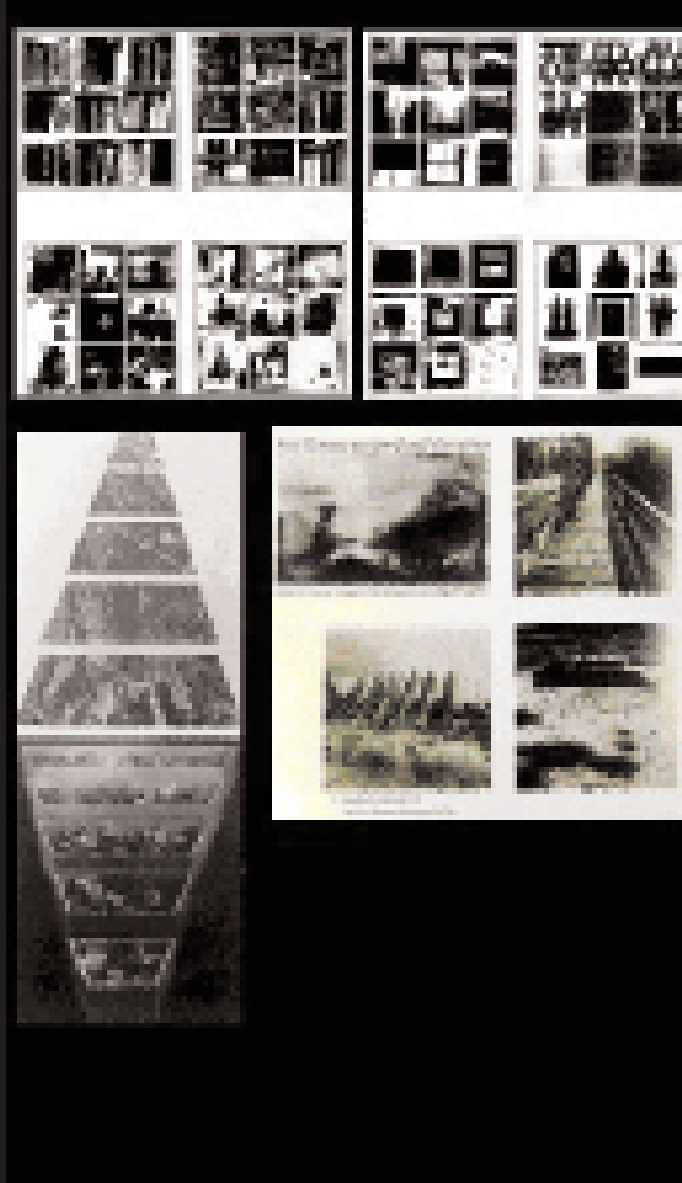
He had bought a large map representing the sea,
Without the least vestige of land:
And the crew were much pleased when they found it to be
A map they could all understand.¹

1. Lewis Carroll (Charles Lutwidge Dodgson), "The Hunt for the Great Snark," *The Works of Lewis Carroll*, ed. Roger Lancelyn Green (London: Paul Hamlyn Ltd., 1965), 738. Both the map and this excerpt appear in Robert Smithson's 1968 essay "A Museum of Language in the Vicinity of Art," which appears in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley, Calif.: University of California Press, 1996), 92–93.

At the turn of the century, even when the allegory was considered an aesthetic mistake, its structure was evident in Lewis Carroll's map for the "Hunt for the Great Snark." The diagram without content is a self-sufficient structural element, a residue, the remaining half of a binary system. It is a container that is content, and evidence that any notational system holds within it a potential for meaning, even when there is nothing there, nothing to see.

More often, there is something there, but it is not what we are meant to see, or not the only thing we are meant to see. Roni Horn's Another Water series of photographs is a highly charged set of images, yet they are all photographs of the Thames River in London. The commentary that she provides beneath the photographs are a complex set of footnotes for the images, musing about everything from the color of the water—"Is black water sexy?"—to the details of various suicides, triggering a different set of thoughts and emotions. Even the title has its own charge, pointing to the individuality of human experience. The photographs of Douglas Gordon also carry that same blank rationality mixed with an unspoken emotionality. His photograph of a shopping cart in a parking lot combines both familiarity and emptiness in a way that captures those very human and individual moments when the world around us becomes meaningful beyond reason. A great deal of photographs rely on this kind of found allegory, but here we can shift our attention between these roiling emotional landscapes, and the water, or the parking lot, that houses them.

The most clearly allegorical work is that of Robert Smithson, whose physical works were often inspired by a fascination with the gap between map and territory. In *Non-Site*, Franklin, New Jersey, he divides an aerial map into four parts, goes to those places, collects rocks, returns, then places the pieces of the map of the wall and the



rocks in corresponding boxes below. In his writings, he begins an essay with a small image of an eighteenth-century painting entitled *Allegorical Landscape*, then tells a story about his bus trip to Passaic, New Jersey from New York City.² With a handful of photographs and a painstakingly detailed narrative he allegorizes the physical form of Passaic to speak about life, ruins, territory, monumentality, and entropy. This essay again demonstrates the allegorization of the real, possibly the most familiar, invisible, and potent form of allegory in our time.

2. Robert Smithson, "A Tour of the Monuments of Passaic, New Jersey," *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley, Calif.: University of California Press, 1996).

This kind of finding is not the only means to allegory. The reinterpretation of another medium, the reenactment of an event, the reordering of a previously defined set, and the reappropriation of forms for another content are all allegorical techniques. While the most powerful works are those that purely present one kind of content through another, allegory is not an either/or proposition. In his novel *Leviathan* Paul Auster bases one of his characters on the artist Sophie Calle, and as a reading of his novel, she presents her work, then asks for the process to be reversed, recording the whole process in her book *Double Game*. Auster gives her a text called "The Gotham Handbook" that she follows faithfully over the course of a week, following his instructions to smile at everyone, give out sandwiches to the hungry, and adopt a public space (in her case, a telephone booth). What becomes important here is the number of threads between the two works and the two authors, with Calle becoming fiction, then Auster's fiction becoming fact, then her reinterpretation of his novel combined with her willingness to reread her own work through its frame.

In 1979, Gordon Matta-Clark, in a loose reenactment of urban decay, blew out the windows of the Institute of Architecture and Urban Studies with a shotgun, stating that it was his response to the squalor of the projects in the Bronx. Rather than breaking the windows with a hammer, he shot them out with a rifle, referencing both the broken windows and the almost-daily shootings. He created one narrative—blowing out the windows of the Institute—to tell another story happening at the same time, only a few of miles uptown. Sol Lewitt allegorizes through a reordering. In his work *Autobiography*, hundreds

of photographs are arranged into nine-square grids and laid out on three walls, some of household effects, some of things that he has seen, some of people, and so on. These photographs are taken over time but sorted by subject, effectively collapsing that time into a gridded, non-chronological order. An artist's self-portrait is a static depiction, a snapshot, while Lewitt's autobiography is a narrativization that takes on meaning in the reordering of what would normally be a chronological sequencing of his life.

Many artists and designers take other forms—especially quotidian ones—and use them as vessels for other content. Appropriation immediately establishes a two-part system with an interpretive lubricant, often with one passive element and one critical element, one representing order and the other representing chaos. GTF's appropriation of a restaurant table setting to describe London and Dave Eggers's use of the image of an almanac for his cover of *McSweeney's* are perhaps the clearest examples of allegory in graphic design. The form, and not merely the image, is appropriated in M&Co.'s signboard. Dan Graham uses another kind of sign—a neon sign—to expose the quiet, political subject of homosexuality on a museum wall. Following from this, Felix Gonzalez-Torres places a simple photograph of an empty, rumpled bed on billboards throughout New York City, a public revelation of personal grief that underscores their allegorical mode of communication. While these works still have explicit words or images to carry meaning, their situation in these alien contexts allows for a leakage of meaning between them, as well as a clear opportunity for criticality.

DEFINING ALGORITHM

an algorithm is
a finite procedure,
written in a fixed symbolic vocabulary,
governed by precise instructions,
moving in discrete steps, 1, 2, 3, . . . ,
whose execution requires no insight, cleverness,
intuition, intelligence, or perspicuity,
and that sooner or later comes to an end.

—David Berlinski

The algorithm, like the allegory, is “an attitude as well as a technique, a perception as well as a procedure.” It is ubiquitous in modern life, practically invisible. A scientist’s method, a lawyer’s defense, and a journalist’s article are all products of commonly agreed-upon algorithms that legitimize them in the public sphere. A Catholic service, a baseball game, and a town hall meeting all rely on algorithms to insure their universality and fairness. Most people are first introduced to the algorithm when cooking, putting things together (such as furniture), or playing games. When I was a child in the late 1970s and early 80s, this is more or less where the algorithm ended, at least until the Atari and the Commodore 64 became common household items. Almost twenty years later, despite unimaginable advances in technology, it turns out that I and many of my contemporaries have adapted more to the computer than the computer has adapted to us. This adaptation has become an algorithmic belief system, a tendency to break problems down into parts and solve them in sequence through a predetermined procedure and to repeat the procedure until it works.¹

Although this algorithmic impulse is greater now than it has ever been, the computer did not create it. Instead, it is the algorithm that made the computer possible. The word algorithm comes from the name of the ninth-century Arab mathematician Al-Khowarizmi, whose book *Al-jabr wa'l Muqabalah* gave us the name and the fundamentals for algebra. A few centuries after Arabs brought these works and the works of the Greeks to Europe—a scholarly exchange

1. This is by no means a *new* way of thinking. However, despite half a century of proof that everything is indeterminate and subjective, it has become the norm rather than being discounted. We may even have reacted to this indeterminacy by imitating the objects that we interact with on a daily basis.

that played no small part in bringing about the Renaissance—Europe changed even its worldview from a subjective, un-knowable one into a mechanistic and mathematical work of art that was nothing less than proof of the genius of God. For the early scientists, this was the new holy grail: it is rumored that Johannes Kepler cried when he discovered that the planets moved in less determinable ellipses rather than the perfect circles and ratios that God surely preferred.

At one time, whole armies would perish in the belief that God would intervene at the last minute. Now, military operations rely heavily on statistics and game theory instead. In the medieval world, while causality must have had some role in everyday life, divine intervention had a far greater one. Today, the algorithmic way of thinking composed of “if . . . then” statements that establish definite causes and consequences has largely eclipsed the non-algorithmic one. Jorge Luis Borges puts it more eloquently:

Time’s march is a web of causes and effects, and asking for any gift of mercy, however tiny it might be, is to ask that a link be broken in that web of iron, ask that it already be broken. No one deserves such a miracle.¹

1. Jorge Luis Borges, “A Prayer,” *Collected Fictions*, trans. Andrew Hurley (New York: Viking Penguin, 1998).

As heavy as its influence may be, an algorithm is a very little idea. An algorithm is most easily defined as a shorter expression of a given thing that can allow for the recreation of that thing. If we were to take the infinite sequence 000100010001 . . . we could describe it as “print three zeroes, then print a one, then repeat,” which is considerably shorter than the sequence itself. A sequence such as 0010100111 . . . is random, and therefore would be inexpressible as anything other than itself. The only algorithm possible would be “print 0010100111 . . .,” a sequence longer than the expression itself.² In the same way, “If it is not raining, turn left upon leaving the building, walk two blocks, make a right, find the first white house” is considerably shorter than demonstrating the trip itself, yet it allows someone who did not write the description to duplicate the action. This construction also contains an “if . . . then” statement, likely to be followed or preceded by another set of instructions that begin with “if it is raining . . .” and describe another fixed alternative.

2. A more detailed definition of the algorithm can be found in John Allen Paulos, *Beyond Numeracy* (New York: Vintage Books, 1992), 47–48.

Two numbers are sufficient to perform any of the functions that a modern computer performs. This is a big idea largely attributed to the mathematician Alan Turing, who devised a brilliant conceptual model of an algorithm and its hardware operating in tandem, called the Turing Machine, in the 1930s. Its hardware consists of an infinitely long tape divided into squares and a reading head. The reading head scans the squares one at a time and responds to two commands: 1) move to the left or to the right, and 2) inscribe or erase symbols on squares. Each square either has a mark or does not have a mark, each of which can be expressed as a one or a zero. The Turing Machine, then, responds to if-then instructions, meaning that it is governed by a precise set of cause-and-effect rules. The machine seems unremarkable, yet it is capable of executing virtually any specified thinking act.³ Once this idea was expressed, there was no going back; his model proved that two numbers can produce virtually anything given enough time and space, allowing for the faith that brought about the construction of the computer, which is governed by programs that are written with only zeroes and ones.⁴

Requiring “no insight, cleverness, intuition, intelligence, or perspicuity,” it seems that the algorithm would destroy art rather than create it. But the statement only refers to its execution, not to the making of the algorithm itself. Architecture, art, and design have all absorbed and explored the algorithm in different ways. The architect is a maker of algorithms in the form of drawings and specifications, not a maker of buildings. Algorithms created by the artist question the uniqueness of the art object in favor of its concept, a visible impulse in 1920s dadaism and 1970s conceptual art. The graphic designer, inextricably linked to communication technology and reproduction, has always lived amongst technical and procedural algorithms. They are evident throughout the short history of graphic design, whether in Jan Tschichold’s elaborate rules for Penguin or Massimo Vignelli’s exhortation that one should only use one of five typefaces.

Yet the algorithm in graphic design is not merely a set of rules to be broken. The architectural drawing and the programmed work of art both hold questions that could sustain graphic design for decades, especially in its current computational habitat. Architectural

3. David Berlinski, *The Advent of the Algorithm: The 300-year Journey from an Idea to the Computer*, San Diego, Calif.: Harcourt, Inc., 2000), 189–190.

4. Each zero or one is a “bit.” A sequence of eight bits, or characters, make up one “byte” that stands for an alphanumeric character or other form of input. A kilobyte contains a thousand bytes, while a megabyte has a million bytes, and a gigabyte has a billion bytes. We often forget that the measures of information we deal with on a daily basis are not abstract, but rather represent real quantities. The computer may be the most relevant example of this potential, but it is by no means the only one. Scientists have long known that DNA works in much the same way to create very complex organisms. On a larger scale, beehives and anthills are products of simple algorithms carried out by large numbers of organisms over time. The pyramids of Egypt and the cathedrals of Europe, too, are testaments that enough time, labor, and material can produce seemingly impossible works.

drawings made prior to construction were largely absent before the Renaissance, developing in the next eight hundred or so years, adding sections to plans, then perspectives, axonometrics, isometrics, and three-dimensional computer models. Running parallel to the development of these new drawing types was an acute interest in the architectural design process, most evident in Robert Venturi's analytical diagrams of Las Vegas, John Hejduk's axonometrics, and Peter Eisenman's generative diagrams for his early houses. The programmed work of art demonstrates the potential of a very small imperative packet of information. Sol Lewitt often places his instructions alongside the works themselves, and Lawrence Weiner often presents only the instructions, bringing the algorithmic impulse in art to its limit. If graphic design is commonly seen as not much more than the expressive aestheticization of information,⁵ these approaches can expand its potential as both a mapping of otherwise incomprehensible information and a conceptual writing of procedures carried out by someone other than the designer.

On a different note, it cannot be ignored that over the past twenty years graphic designers have seen their tools replaced by the hardware and software of a Macintosh computer. Among those who have had to adapt to this new way of working, there has been wide superstition and suspicion that personifies the computer with wild accusations that it possesses the designer, who then makes default decisions. Among those who did not have to adapt, the inability to imagine the execution of tasks outside learned instructions (the "how-to") also relinquishes control to the computer. My argument here is very basic: if you understand how the computer thinks and works, there is no question that you control the computer. Second, that same knowledge—knowledge that precedes the computer by over a thousand years—is powerful even when away from the computer.

5. Even when graphic design solely operates as aestheticization, it forms a second interpretive layer, no matter how thin. This aestheticization can also be seen as a form of encoding or ordering. In Andrzej Warminski's introduction to Paul de Man's *Aesthetic Ideology*, he writes, "Indeed, as has already been suggested, aesthetics, the category of the aesthetic, is a rigorous philosophical discourse's way of attempting to ground its own discourse on principles internal to its system and thereby to close it off as a system: that is, as a logic." (Minneapolis: University of Minnesota Press, 1996), 21.

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Like the allegory, the algorithm is an attitude and a tendency, and this tendency is most evident in our attempts to make sense of things by placing ordering layers onto them. Maps, clocks, and measuring devices are evidence that we believe we can control space and time. The representation of order on chaos is both evidence and critique of this condition, and may be the most fruitful place to find algorithm in the visual arts. However, it is also the broadest, and deserves its own, separate discussion.

Processes that create mutable forms are another kind of algorithm, such as Smithson's Asphalt Rundown and Glue Pour and Bruce Mau's logo for the Netherlands Architecture Institute (nAi). For both Asphalt Rundown and Glue Pour, the artifacts we see are the work of art in progress, making it difficult to pinpoint when it was made and where it is. Both carry an imperative for the artist to pour a substance that is solidifying according to its own logic, as well as an imperative for that substance to fan out and form itself in a way governed by the shape of the natural site, ultimately revealing a kind of algorithm in the earth or substrate itself.

Perhaps the most visibly algorithmic work is that of Sol Lewitt. With his wall drawings, the algorithm moves from site to site, not the work. When they are exhibited by museums, it is immediately visible to the museumgoer that the work was created by a series of fixed steps and that it will be destroyed when the show is over. Traditionally, the work of art is created in an instant and lasts forever. For Lewitt, however, the time of the work is critical, both in its construction and decay. While the wall drawing may elicit awe from the viewer, it can have a transformative effect on those who actually see its making. At a show at the Whitney Museum some years ago, I was approached by a museum guard who in very broken English explained to me the making of a particular piece with the same facial expressions one would associate with relating a vision of the Virgin Mary. About a year later, working at the Museum of Modern Art, I watched a team of boys execute one of his wall drawings over the course of several weeks, and I understood why.

With a nod to the work of Sol Lewitt, Peter Eisenman's early houses always seek a stable algorithm for their making, with the hope that bowing to the authority of a pre-determined order will distance themselves from both the architect and the site. His faith in the algorithm comes in part from his analysis of the work of Giuseppe Terragni that displays a vision of architecture as gathering of forces or vectors in constant motion, much in the same way that Smithson saw entropy all around him, and Matta-Clark saw space as armies of arrows swirling around in arrays of order and disorder. Because the algorithm proposes a process rather than a result, it is often the only tool that such a vision of the world can tolerate.

In graphic design, this release to a pre-determined order is evident in many of Irma Boom's works, especially in the cover for her book on Otto Treumann, where a thumbnail of every page on the cover packages the book within the diagram of the book. It is a visible and specific logic that is worlds away from the modernist rule-systems of half a century before. Complex projects within the realm of graphic design such as books and websites always involve some kind of algorithmic structuring, but it is usually an obligatory repetition rather than a playful structure. In her books, the strength of her algorithms often free the design from the content. Bruce Mau, on the other hand, attempt a synthesis of design and content in his use of more complex algorithmic structures, such as the progression of text boxes in *Incorporations*.

Peter Eisenman, Irma Boom, and Bruce Mau all develop elaborate internal instructions as opposed to LeWitt's external instructions. This is taken to an extreme in the work of Tom Friedman and Sophie Calle. Friedman begins a piece with an idea such as "sign my name in a circle until the ink runs out," then executes the work. Calle controls, then records, the way she lives her life, eating monochromatic meals, dedicating days to letters of the alphabet, and saving birthday presents.

The simplest visual algorithm is the collection in the grid. There is one algorithm for collecting the material, another for organizing it, and another for arranging it inside a grid, which is already a





pre-existing but chosen order. Bernd and Hilla Becher's photographs of water-towers and factories are the best-known examples of this gridded collection, and Ed Ruscha's books on parking lots and gas stations are perhaps the second. When separated from the collection, a single photograph runs the risk of being irrelevant due to its mundane subject and its flat rendition. The repetition and variation of the sequence recontextualizes the photograph, formalizing its contents and revealing a beauty that it fails to have as a single object.

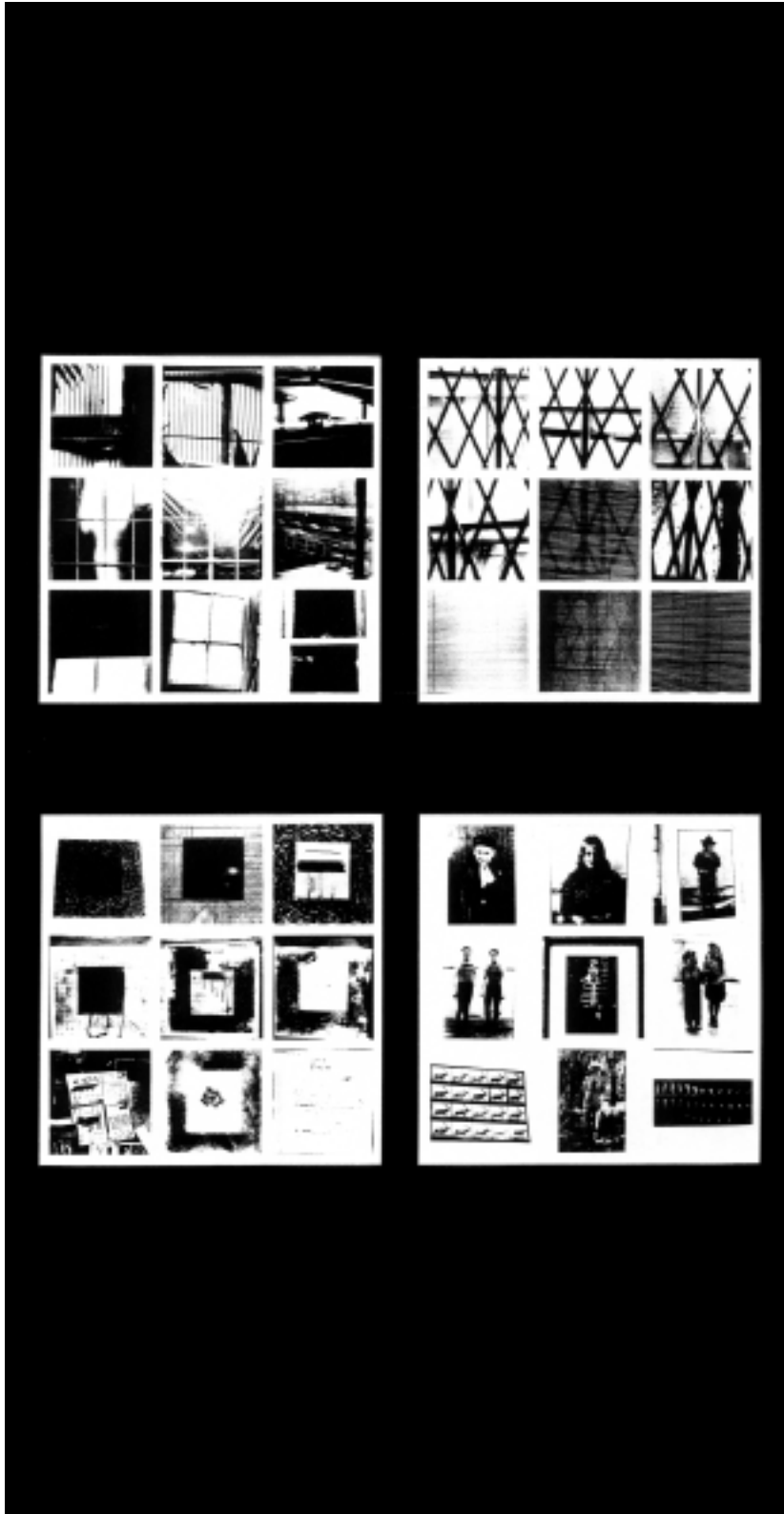
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Sol Lewitt returns us back to the allegory through the algorithm by consciously destroying the structure of a narrative. In his work *Autobiography*, hundreds of photographs are arranged into nine-square grids. These photographs are taken over time but sorted by subject, effectively folding that time into a gridded space. It does not recount a life, but rather represents it through a different narrative. But what reorganized his images so that they would create another story? In this case, there is an algorithm, or a set of rules, which could operate on any set of images: Images are grouped by subject, regardless of when they were taken or where. It is an algorithm in the context of art production because it fulfills three conditions: first, the system is not specific to the material or its context, and so can be reapplied to a different set; second, the material is not specific to the system, and can be operated on by another system; and third, the process of this arrangement existed prior to the work and was executed through the work.

I start with this example because I want to begin in a place where there is clearly a blur between allegory and algorithm. *Autobiography* is allegorical in that it tells the story of his (chronological) life through a constructed narrative of a different order. It is algorithmic because fixed rules govern this movement between the two narratives. An allegory already requires at least two systems and a certain level of calculation. An algorithm is a soft structure, often with unpredictable results, that works over time. These characteristics set them in motion towards one another, and while a given work may be dominated by one, the other, more often than not, will make an appearance.

Almost every work I have cited thus far could be said to occupy a space in the blur of allegorithm, as could many of the works that do not appear here. Even more appear under the banners of either allegory or algorithm. There are, however, specific varieties of each that as content or process begin to define a more specific motivation, and tell a more specific story.





The first I will call the “allegorical landscape.” Many early scientists were deeply religious and very much devoted to demonstrating the presence and perfection of God everywhere, whether in a blade of grass or an ocean. This brought about a conception of nature as having been written by God, and of science having the purpose of deciphering that writing. Several hundred years later, we still hold vestiges of their vision, as we believe that “cracking” the genetic code, or identifying all of the different species on earth, will provide us with revelation. More importantly, when we look at our everyday landscape, our objects and environments speak to us. Our remarkable ability to see what is not there, and believe that something is what it is not, causes us to see anger in a storm, permission from a traffic light, and the rush of time in the movement of a train. We tag places with our memories so that returning to a particular street-corner or bench in a park comes with a flood of memories every time we return.

The second is what I will call “Xeno’s paradox,” in reference to our perpetual quest for perfection and completion, our willingness to become Sisyphus over and over again. This ultimately has its allegorical implications as well, because whenever we see these unavoidably flawed works, our own desire and lack of fulfillment come to the foreground.

THE ALLEGORICAL LANDSCAPE

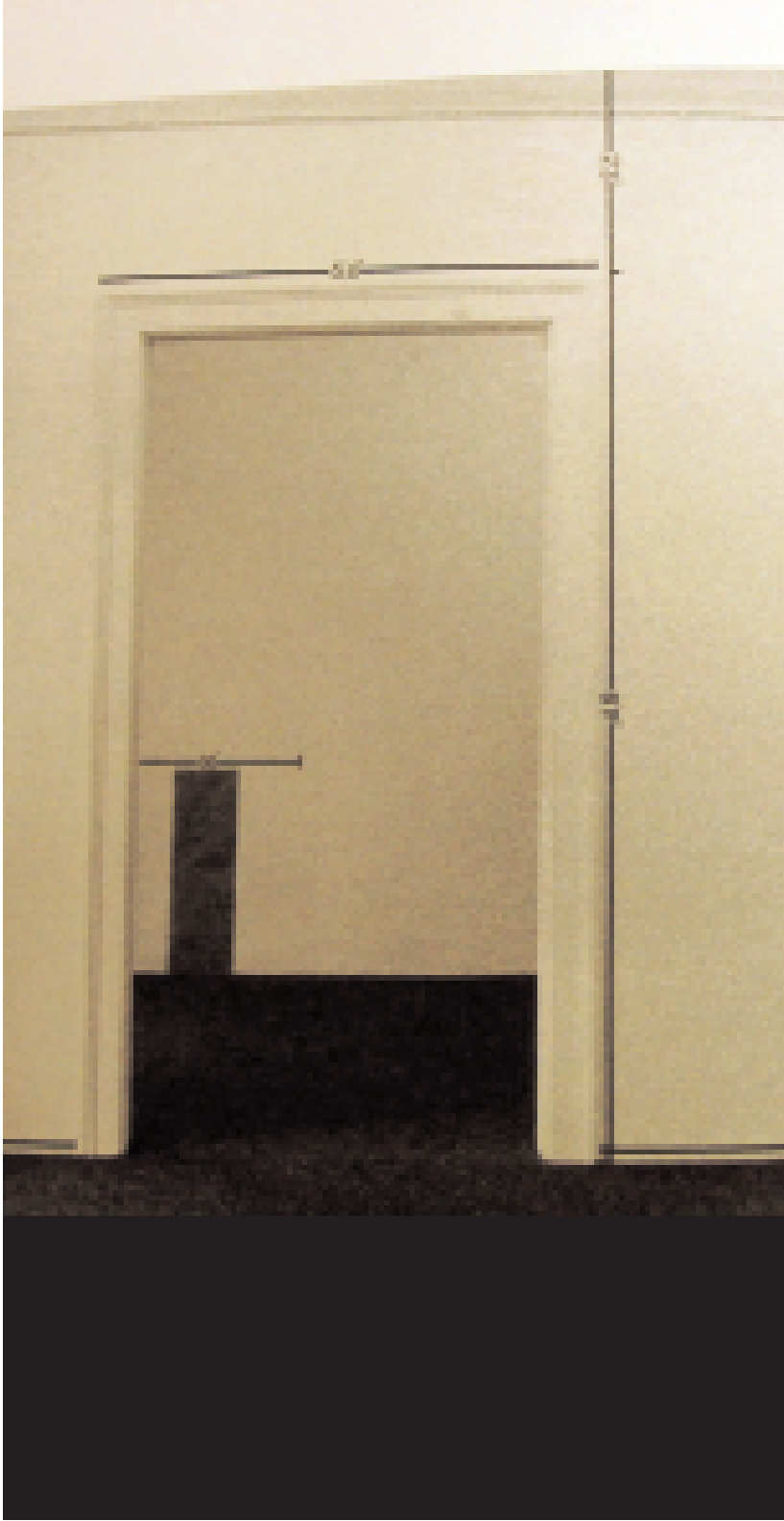
Allegory can be taken as either process or content. As a process, it offers another mode of communication, and as content, it allows us to look at how we look at the world. The way that our brains work, we associate and dissociate things in order to make sense of what is going on around us. Many of these associations are through time, the moments when an event reminds us of a past event and therefore provides us with clues for what to do. I am more interested in the spatial associations that we make, where one place or one thing can stand for another, even if the two things in question are as far apart as a poem and a staircase.

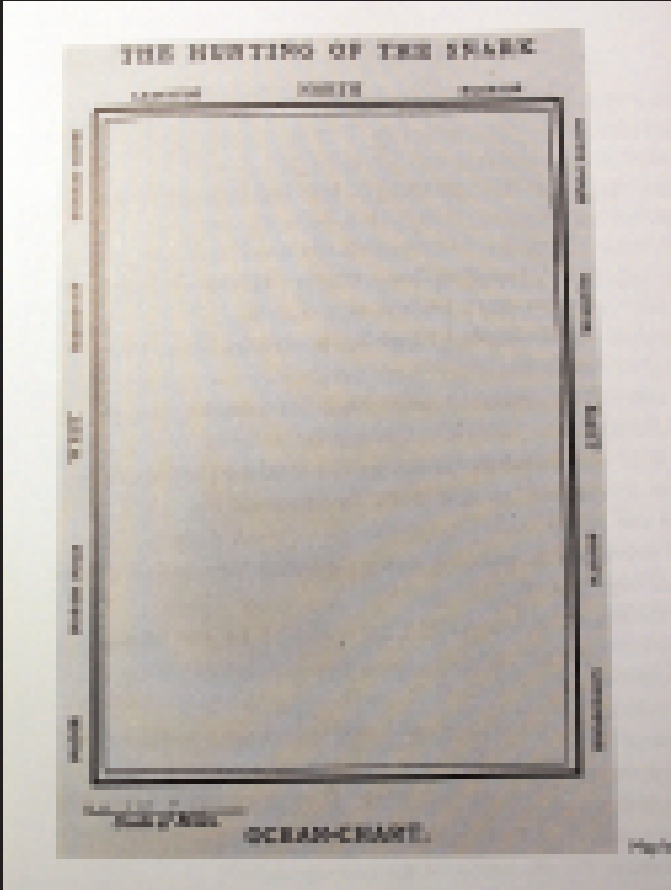
1. Robert Smithson, "The Spiral Jetty," *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley, Calif.: University of California Press, 1996), 149. This essay was originally published in 1972.

Probably the most well-known example of this kind of association is the mythical behavior of monks in the middle ages. It is said that in order to memorize passages from the bible, a monk would mentally attach verses to various parts of the monastery, such as a hallway, a window, or a door, essentially turning the building into a book and vice versa. This is not an activity reserved for monks – we do it too, every day, attaching meaning to people, places, and things. This is the way that we can transfer what we know about one thing to something else.

As Frederic Jameson noted above, II representation, to some degree, is allegorical. We could also say that at the point at which there is a vibration between a thing and the thing that is mapping it – such as with the bible verse and the window – we can call that allegorical. One of the most uneasy tropes is that of the synecdoche, where one part of a thing comes to represent the whole. The synecdoche maps a small thing to a larger one that contains it, the exact opposite of the distance that creates the uncanniness in the case of the monk.

I bring up the synecdoche because it is a portal to the algorithm. The same way the synecdoche – which is a literary trope – is the same as the whole, the fractal repeats a behavior for the same result. One part of a fractal, when scaled, is formed like every other at any scale. The fjords of Norway, when viewed from high in the air,





the form you see is exactly the same as when you are standing on the rocks, looking down at your feet.

The most familiar form of mapping is, in fact, mapping. When it approaches a limit, as with the short Lewis Carroll passage inside the front cover of this book, we develop another kind of vibration, this time not from a distancing, or from a scale shift, but by being equal, or almost equal. The story of the map and the territory has been told by many different people in many different ways, and all of them bring up possible one-to-one maps on territories in the real world, the most cited one being language.

One other example is that of the map that is non-specific, incapable of sticking to any one thing to represent. The most famous is that of the chart that appears in Lewis Carroll's *The Hunt for the Great Snark*. With the map he explains its advantages:

He had bought a large map representing the sea,
Without the least vestige of land:
And the crew were much pleased when they found it to be
A map they could all understand.¹

The commonality between all of these things is very plain: you look at one thing and think another. Many things are stubborn in forcing your thoughts to slip in that way, such as when words in the environment can have more than one meaning, something that is bound to happen frequently since our language is often metaphorical.

This kind of collapse has long been an issue for architecture. Each type of architectural drawing is a different code or set of conventions that encodes, idealizes, and organizes otherwise flawed and irrational systems, taking up their place within the world of maps and diagrams. The allegorical nature of drawing and painting is most evident when a painting tries to emulate three dimensions.

Perspective was discovered shortly before the Renaissance, and even at that time there was much debate on the rudimentary principles of its construction. While two-dimensional perspective remains essentially inaccurate, we still seek the illusion of depth. Sol Lewitt's cubes and John Hejduk's axonometrics both point to the problematization of this kind of representation. (Architects at the same time

were increasingly drawn to the axonometric as a clean, objective, and non-perspectival method of drawing).

We have grown comfortable with the representation of space by other systems that do not resemble space as we perceive it. Photography already has within it a stamp of credibility, so “real” artifacts, no matter how contrived, present believable representations of real life with their temporal dimension, especially when combined with elements that are on the picture plane. GTF’s prospectus for the London College of Printing has this double space of communication throughout—while the text can stand on its own, the images and captions tell a parallel story. For their graphic design program, there is a photograph of a computer screen with a student’s typeface, an easy foil for placing words in the picture. Once that picture plane has been crossed, there is no turning back. This transfer of language from the flat, two-dimensional surface to the three-dimensional representation creates two modes of communication on a single page.

The further articulation of this questioning of perspective happens in three dimensions. Cildo Miereles, in an installation at the New Museum, built a chamber that grows smaller and smaller as you go into it. Richard Serra’s *Torqued Ellipses* presents the problem of having no point of reference other than the ground. While these full-scale spaces carry the most potential for this kind of disorientation, small-scale constructions, such as Robert Smithson’s mirrors. Many of Bill Viola’s video constructions, such as *The Pool or Teardrop*, either question perception at its base or relocate the viewer in different modes. Video art, partly due to its time-based capabilities, has most advanced this collapse of the three-dimensional on the three-dimensional. This duality brings these works back to allegory. Gary Hill’s installation at Barbara Gladstone in 1997, entitled *Line-up*, presents a row of suspects with tape behind their heads marking their heights. The suspects stand straight, moving very little. They are projected along one wall of the gallery, for about fifteen or twenty feet. Most importantly, the projections are at real size. You find yourself standing in front of a suspect, participating in a strange staring contest where you can see him but he can’t see you. And therein lies

the allegorical aspect of this work: in a real lineup, because the suspects are behind one-way glass, the same condition applies.

Through the one-way glass of the video camera, Hill recreates the one-way glass of the police station, and his viewer becomes a participant in a narrative outside of the gallery without realizing it.

In the end, our perpetual quest for perfection and completion, our willingness to become Sisyphus over and over again, becomes its own allegory. Whenever we see these unavoidably flawed works, our own desire and lack of fulfillment come to the foreground.