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The Technological Art of Bernd and Hilla Becher:
Reading the Bechers' Photography through Heidegger's Philosophy of Technology

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Abstract of the Thesis

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This thesis is an investigation of the photography of Bernd and Hilla Becher through the lens of Martin Heidegger's philosophy of technology. Technology plays an important role in our lives, more so now than at the time of the publication of Heidegger's essay and the beginning of the Bechers' photographic career. With this in mind, it is important that we confront technology in order to understand its impact on our lives instead of blindly accepting it, in order to seek out and fight against any lurking dangers. In this paper Heidegger's critique of the technological or "enframing" state of mind is laid out, as is his call for the saving power of art. The photographs of the Bechers are described herein as answering this call. As works of art, they provide the occasion for a reflection on technology that wouldn't otherwise occur. This reflection is directed towards technology and industry, but not only because the photographs are of industrial equipment. The photographs also mimic the way that the mind under the sway of enframing approaches the world. Their arrangement in grids, as tokens of a single type of machine good for a single task, along with the attention given to identical composition and print quality, can be seen as a reflection of the mindset by which they were created. This enframing mindset sees the world only as resource, sterilizing it of its individuality and categorizing it according to its usefulness. The bleakness of the Bechers' photography underscores the bleakness of this enframing state of mind, and thus provides the critical thrust that Heidegger calls for. The thesis is not herein made that the Bechers made a decision to 'illustrate' Heidegger's essay with their work. Instead, the role that Heidegger's essay plays here is to provide a vocabulary adequate to the task of describing the photographs and their effects. This is done in order that our understanding of these works of art and philosophy and the world that these works orient themselves towards may be increased, and that we may thus more appropriately conduct ourselves in our daily lives.

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Introduction

Bernd and Hilla Becher's *Pitheads* of 1974 are in the style typical of the rest of their work. Their project from the late 1950's until Bernd's recent death in 2007 amasses hundreds of examples of different types of functional architecture.[1] These photographs are then redeployed in grids like the one in question, showcasing structures of a single function. Described as studies of "anonymous sculptures" or "industrial typologies," these grids can be appreciated on many levels.[2] That the austere beauty of these black-and-white photographs provides an occasion for sensuous delight cannot be denied. Having been drawn in by their beauty, the viewer is invited by the grid format to compare the structures. From a distance a compositional similarity presents itself. In this case, the structures create a triangular form tipped slightly to the right, leaning against a thin rectangular shape that makes the overall structure look like the Latin letter "Æ". This form is centered in each photograph, and this gives the grid a rhythm which unites the pictures. This formal repetition is supplemented by the consistency of the photographs' overall tonal similarity and rich amounts of detail. For all this similarity, on closer inspection the structures have their own individuating traits, which, outside of the grid, could be easily overlooked.

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[1] Bernd Becher died on June 22, 2007, aged 75.
[2] Stimson, Blake "The Photographic Comportment of Bernd and Hilla Becher" <u>Tate Papers</u> Spring 2004. Last accessed at:
http://www.tate.org.uk/research/tateresearch/tatepapers/04spring/stimson_paper.htm#notes#notes on May 3, 2008. Hereafter referred to as Stimson.

Fig. 1 Bernd and Hilla Becher, *Pitheads* 1974

This brief analysis doesn't immediately suggest that the Bechers' work is intended as a critique of technology. What this paper will argue is that their work displays many of the traits that Martin Heidegger ascribes to a particularly modern kind of technology in his essay *The Question Concerning Technology*. These traits are symptomatic of an underlying organizational impulse, which Heidegger calls "enframing," that appears to govern both the Bechers' artistic production and the production of the structures that they photograph. In his essay, Heidegger deploys this notion initially as a critique of the industrial activities that these buildings perform. From there he turns to a discussion of the kind of thinking that leads to these activities,

expanding on a conception of scientific knowledge that he formulated years earlier in his essay *The Age of the World Picture*. This scientific model of knowledge is contrasted with his notion of art as a "creative questioning" which is more in tune with the essence of things. I will argue that while they may not be as critical of these technologies as Heidegger is, the Bechers enact the creative questioning that he advocates, and their work starts the viewer on this questioning path as well. In doing so, they may in fact carry Heidegger's project farther than he was able take it himself. Though neither the Bechers nor Heidegger was able to engage with the advanced technologies of the present day, the spirit of their sustained inquiry provides a model for investigating the role of technology in our present era.

While Heidegger was writing his essay roughly contemporaneously with the beginning of Bechers' the photographic project, I don't mean to insinuate that they had read his work or were trying to illustrate this particular essay. Instead, Heidegger's essay will provide a vocabulary with which to discuss the Bechers' work. Creating a dialog between the artists and the thinker will illuminate their respective works and attitudes toward technology.

Heidegger and Technology

A short description of three major threads within *The Question Concerning Technology* will precede a more thorough explication of each. Firstly, there is an attack on technology as it manifests itself in industrial form. This can be seen in Heidegger's discussion of the dam on the Rhine River in particular, and seems to have a link to an environmentally conscious philosophy with an intense respect for nature and natural

things. Enframing in this setting deals with the collection of energy in abstract form, ready for any task, created from and at the expense of the resources of the earth. Don Ihde will appropriately call this a 'resource well' in an alternate translation of *Bestand*, a term commonly translated as 'standing-reserve.'[3]

A second reading of the essay will focus on the distinction between technology and art from an epistemological point of view. Heidegger's analysis of Hölderlin's poetry leads him to conclude that, though dangerous, a technological way of revealing the world harbors within itself a saving power. This saving power will only be available to those who are able understand the essence of technology, a prestige that Heidegger affords to artists in their confrontation with technology. Enframing will be seen as a state of mind, an impulse to impose the categorical modes of thought that Heidegger thinks have become all too dominant in modern society. It is contrasted to a poetic impulse which cultivates an open relationship to things instead of placing them into rigid categories. Thinking of enframing as a categorizing tendency of thought will create a focus on the structuring of information or 'truth' for individuals rather than on the 'resource well' that is created though industrial technologies. This concept of enframing is intimately related to Heidegger's writing in his earlier essay *The Age of the World Picture* about the character of modern science. The structure of knowledge that he ascribes to the modern scientific way of knowing the world is extremely similar to that of the person under the sway of enframing thought. Though it uses a different vocabulary than *The Question Concerning Technology*, *The Age of the World Picture* goes into more depth about the foundations of modern knowledge, and so supplements a reading of the epistemological

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[3] Idhe, Don <u>Postphenomenology</u> Evanston: Northwestern University Press, 1993. 106. Hereafter referred to as Ihde.

status of enframing in *The Question Concerning Technology*. Though it doesn't go into great detail about them, *The Age of the World Picture* lists the development of modern technology and the movement of art into the purview of aesthetics as equally essential traits of a modern understanding of the world, showing Heidegger's recognition of the thorough intertwining of these phenomena.

A third reading will attempt to work through art and technology as equally involved in the revealing of truth instead of as stable counter-terms to one another. This effort is advocated by commentators on Heidegger, and Heidegger explicitly points out this instability and togetherness at a couple of points in the essay, though explicating what this means is a difficult task.[4] One possibility for what it could entail in light of this paper's subjects is the possibility of technological art. This kind of art would bend enframing methods to an artistic use. The combination of art and technology also poses the possibility of an artistic technology. This would be a kind of technology separate from the equipment necessary for artistic production (i.e. brushes and cameras), though it is not entirely clear what existing technologies might fit this description. This kind of technology may lead us back to the environment-preserving themes of this essay.

These threads within *The Question Concerning Technology* are not intended as an exhaustive explication of the essay, as it is dense and rich with ideas. These threads are instead taken up in order to initiate a dialogue with the works of Bernd and Hilla Becher. In doing so, our knowledge of Heidegger's essay, the work of these artists, and our

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[4] An attempt to clarify this issue is made in Ross, Allison The Aesthetic Paths of Philosophy: Presentation in Kant, Heidegger, Lacoue-Labarthe, and Nancy Stanford: Stanford University Press, 2007. Chapter 3 deals with the problem of presentation in Heidegger, and chapter 4 deals specifically with technology and art as relations of presentation.

relationship to technology and art will be questioned, and through this questioning our understanding of each of them will be increased.

Industrial Technology

Heidegger begins *The Question Concerning Technology* by clarifying his goal. He won't look at specific technological items, but instead will be looking for *essence* of technology. For the same reason that we will not find the essence of trees by looking to any particular tree, he says that "the essence of technology is by no means anything technological."[5] Heidegger will use examples of particular technologies to illustrate his points, and these are meant to be indicative of an underlying trend at the root, the essence of technology.

In order to move toward the essence of technology, Heidegger needs a starting point, and so looks for a consensus about technology. He finds it in the idea that technology is "a means and a human activity."[6] Heidegger believes that this "instrumental and anthropological definition" is correct, though it doesn't grasp the essence of technology. In looking for a deeper source to investigate within this 'correct' definition of technology, he locks onto its instrumental function. Instrumentality is linked intimately with causality, and so Heidegger turns his attention there. In searching for an authority on causality, he turns to the Ancient Greek concept of the four causes: "The four causes are the ways, all belonging at once to each other, of being responsible for something else," and these ways of being responsible "bring something into appearance.

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[5] Heidegger, Martin. "The Question Concerning Technology" <u>Basic Writings: From being and Time (1927) to The Task of Thinking (1964), Revised and Expanded Edition</u> Ed. Krell, David Farrell. San Francisco: HarperSanFrancisco, 1993. 311. Hereafter referred to as QCT.

[6] QCT 312

They let it come forth into presencing."[7] [8] Instead of being a means to an end as the anthropological definition would have it, technology is responsible for making certain elements of our world present to us.

The language of 'bringing' and 'letting' is important here. There is a sense of safety and security in the words he uses to describe the operation of causality. Heidegger quotes from Plato's *Symposium* that "every occasion for whatever passes beyond the nonpresent and goes forward into presencing is *poiēsis*, bringing-forth."[9] Because technology makes many elements of our world present to us Heidegger counts it within revealing. Heidegger's concept of revealing is rooted in Greek concept of "*alētheia*." This Greek word was Latinized to "veritas," which is translated in the modern age as "truth."[10] This means that technology is linked to truth and revealing, that it is "therefore no mere means" to accomplishing a goal.[11]

Technology has its own particular way of revealing that is different from that of *poiēsis*. For Heidegger *poiēsis* includes "handicraft manufacture," "artistic and poetical" activity, and "*physis*", the activity of nature.[12] Absent from this list is modern technology. Though it is related to the handicraft manufacture that dominated productive activity in an era that Heidegger senses is waning as he writes, he believes that "we maintain with some justification that it [modern technology] is, in contrast to the older handicraft technology, something completely different and therefore new."[13] This is in large part because the sense of safety that he sees in the bringing and letting of causality that rules

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[7] QCT 314
[8] QCT 316
[9] QCT 317
[10] QCT 317
[11] QCT 318
[12] QCT 317
[13] QCT 312

in handicraft, art, and natural activities is lacking in modern technology. Instead of the more peaceful bringing forth (which connotes that what is brought forth is unchanged in this bringing) or letting come to presence (again, as if without interference), "the revealing that rules in modern technology does not unfold into a bringing-forth in the sense of *poiēsis*. The revealing that rules is a challenging, which puts nature to the unreasonable demand that it supply energy which can be extracted as such."[14]

The difference, then, between a poetic and a technological treatment of nature is that whereas the poetic is gentle, and goes as far as it can in order to leave that nature which it reveals unchanged, the technological way of revealing *forces* nature to show itself only in terms of extractable energy. Heidegger gives a series of examples that showcase the difference between the newer and older kinds of technology. These examples are taken from what can be broadly categorized as industry, from the human activities and constructions that are responsible for transforming the components of the surrounding world into the raw materials for human projects.

Heidegger's first example is that of the "old windmill." Though it does transform the wind's energy into the grinding action of the mill, "it does not unlock energy from the air currents in order to store it."[15] This will become an important factor in the distinction between what counts as a 'good' or 'bad' technology for Heidegger.[16] If a technology uses the energy that it creates at the moment it is created, as with the windmill, then it will avoid Heidegger's scorn. If, on the other hand, it has to take further steps in order to utilize that energy, it will be heavily criticized.

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[14] QCT 320
[15] QCT 320
[16] See Ihde 105 for an investigation of 'good' and 'bad' technologies in Heidegger.

Another difference between handicraft and modern of technology is illustrated by Heidegger's mining example. If the windmill is a good technology that lets the wind be itself even as it powers the mill, then "in contrast, a tract of land is challenged in the hauling out of coal and ore. The earth now reveals itself as a coal mining district, the soil as a mineral deposit."[17] This mining district is then linked up to the network of the standing-reserve. Coal is a major factor in the modern electrical system; by burning it in a power plant the energy that is stored in the coal is abstracted and added to the pool of energy that is available for use by all of those in the system to which the power plant is attached. Instead of being used directly for a purpose at the moment it is unlocked, the energy from coal is distributed amongst many tasks. It is impossible to determine where the energy from any particular lump of coal is put to work. The ore he refers to goes through a similar process. It is gathered through mining operations and sent to a central processing area, where it is extracted and purified into the resource of metal or mineral that is designated by the needs of the industrial projects that it is tied to. Again it becomes difficult if not impossible to determine where the iron in a specific railroad track or girder came from. It has many possible sources that are commingled together in its final form, and where it will be finally put to use is still another question with an indeterminate answer.

The way these two kinds of technology effect the world is different as well. The old windmill has no appreciable effect on the wind whose power it unlocks. It does not make the wind into something else, nor does it seem possible that it decreases the wind's power or alters the way that it blows. In contrast, mining operations demolish the ground that they mine, destroying the natural arrangement of the elements of the earth. Also, the

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[17] QCT 320

method for unlocking the power within mined resources involves their destruction in order to further re-arrange them into more basic, abstract building blocks of heat, carbon, elemental iron, etc. We can see the difference here between the language of *letting* the wind blow while bringing its power into action with the windmill and the *demand* put to the earth to supply an abstract resource of power and materials.

The example that Heidegger seems most passionate about in this essay is the hydroelectric plant built into the Rhine River. While the river can be seen both as a source for Hölderlin's poem that shares its name and a source of power for the electrical system, the way in which it is a source for each is notably different. The poem fails to use it up, and is an effort to let its essence be present in language and thought (in its effort to use its source without changing it, it is like the windmill). In contrast, the hydroelectric plant in the river dams it up. This changes its flow, and alters the natural world that surrounds it. Though it might not use the river up in the way that coal is burned up in its use, changing its shape and flow does change the river instead of letting it be as it is naturally. The "monstrousness" of the hydroelectric plant is so extreme to Heidegger that he believes it is apparent in the "contrast that is spoken by the two titles: "the Rhine" as dammed into the *power* works, and "the Rhine" as uttered by the *art*-work, in Hölderlin's hymn by that name."[19] Heidegger's emphasis on the difference between the "*power* works" and the "*art*-work" re-emphasizes the difference between poetic (including art, handicraft, and *physis*) and modern technological revealing.

At this point Heidegger introduces a term that will be an anchoring point in the essay, and extremely important one for this 'industrial' reading. He writes that "whatever

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[19] QCT 321 [emphasis in the original]

is ordered about in this way has its' own standing. We call it the standing-reserve."[20]

Standing-reserve is a translation of the German word *Bestand*. An alternate translation

posed by Don Ihde uses "resource well" in place of "standing-reserve."[21] This translation

captures the sense in which those things which are revealed in a technological way are

made into an abstract reservoir of resources for our projects and activities. Heidegger

says that "the word [*Bestand*] expresses here something more, and something more

essential, than mere "stock." … whatever stands by in the sense of standing reserve no

longer stands over against us as object." [22] Heidegger doesn't take this opportunity to use

an example to illustrate the difference between "mere stock" and "standing-reserve," but

the difference is something like the difference between the resources gathered (to pick up

on a different example Heidegger uses) by the peasant farmer from his property and the

surrounding countryside and the resources which are available at any time to someone

like a modern city planner. Whereas to the mind of the peasant farmer his stock has a

very concrete reality (it takes up a certain amount of space, it took a certain amount of

energy to gather, it is bounded in a definite way) and can therefore be said to stand over

against him as object, in the mind of the city planner the available resources are virtually

boundless. In their boundlessness these resources stop appearing as objects in their own

right. These abstract resources aren't apparent as any *thing* at all before their realization

in the product which the city planner envisioned.[23]

The problem with that kind of industrial thought which sees nature as a standing-

reserve or resource well is that it refuses to allow nature to be brought forth as it is in

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[20] QCT 322
[21] Ihde 106
[22] QCT 322
[23] This failure to appear as an object likely contributes to the tendency of industrial efforts to *use up* their resources.

itself. Instead it is forced into a pre-existing rubric of usefulness. This refusal of nature's own ordering structure makes nature, for those in the technological/industrial frame of mind, into an object of their own conceiving. Heidegger says that "when man … pursues nature as an area of his own conceiving, he has already been claimed by a way of revealing that challenges him to approach nature as an object of research, until even the object disappears into the objectlessness of the standing-reserve."[24] This kind of thought then gets its own name: "we now name the challenging claim that gathers man with a view to ordering the self-revealing as standing-reserve: *Ge-stell* [enframing]."[25] Enframing thought is the essence of technology. It undertakes a project of envisioning the world as a vast resource well, and in so doing enforces an unnatural system upon the way in which the world appears to us. On the industrial model enframing occurs as a literal violent disfigurement of the earth. The world is physically restructured by enframing thought in its industrial manifestations. The difference in the language of bringing versus challenging forth, in the monstrousness of the hydroelectric plant in the Rhine versus the way that the wind is let be with the windmill, lets us know the disdain which Heidegger has for these industrial projects. It is because of this antipathy towards technology in its industrial manifestations that one could call *The Question Concerning Technology* an effort to urge the reader towards a more environmentally friendly conception of the earth.

Technology and Knowledge

This environment-preserving impulse is by no means the extent of Heidegger's thought about technology. Pointing out that industrial technology is the result of a

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[24] QCT 324
[25] QCT 324

specific comportment to the world leads him to investigate the properties of the enframing mind and the way it structures the industrialist's conception of truth. As we look to the points of *The Question Concerning Technology* where he discusses the characteristics of technology and enframing as they are manifested in epistemological commitments, we will find that instead of contrasting good and bad technologies Heidegger will focus on the difference between technology and art or *poiēsis*. Heidegger's consideration of technology here is much like his earlier investigation of modern science, physics, and the university system in *The Age of the World Picture*. Though at the time of that essay Heidegger had not yet developed the vocabulary of enframing or standing-reserve, it seems clear that he was engaging what he saw as a similar problem. The idea of a limiting ground-plan of scientific knowledge correlates to the limitation of knowledge in enframing to a rubric of useful resources. Modern scientific knowledge also presents itself as the only legitimate method of understanding the world, mirroring the way that enframing knowledge develops a monopoly on revealing and blocks other possibilities.

One of the earliest indications of this reading of *The Question Concerning Technology* is when Heidegger points out that "from earliest times until Plato the word *technē* is linked with the word *epistēmē*. Both words are terms for knowing in the widest sense. They mean to be entirely at home in something, to understand and be expert in it."[26] Enframing, then, as a technological way of revealing, is a way of knowing. It is implied in industrial projects as discussed above, but it is not defined by the aggregate of all of these projects. Industrial technologies can only come about because the world is known in a certain way. For this reason Heidegger will say that "what is decisive in

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[26] QCT 318

technē does not after all lie in making and manipulating, nor in the using of means, but rather in the revealing mentioned before. It is as revealing, and not as manufacturing, that *technē* is a bringing-forth."[27]

Heidegger begins *The Age of the World Picture* by saying that two of the most essential phenomena of the modern age are modern science and machine technology.[28] That he would characterize these two as essential phenomena of his age more than a decade before writing *The Question Concerning Technology* shows that science and technology are deep concerns for Heidegger.[29] Though he acknowledges the link between science and technology, his main focus in this essay will be on the characteristics of modern science. These characteristics will contribute to the coming-to-dominance of the titular 'age of the world picture.' The way of knowing that Heidegger describes in this essay under the concept of modern science will map precisely onto the way that enframing causes us to order our knowledge as he describes it in *The Question Concerning Technology*. .

Heidegger begins his search for the essence of modern science, saying that "the essence of what we today call science is research," and that the essence of research consists "in the fact that knowing establishes itself as a procedure within some realm of what is, in nature or in history."[30] The importance of procedure in the essence of research cannot be overstated. Procedure is responsible for organizing the information, for whittling down and categorizing experience into manageable bits. The presence of a fixed

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[27] QCT 319
[28] AWP 116
[29] Investigating Dasein's relationship to tools, a certain kind of technology, constitutes a lengthy and pivotal element of <u>Being and Time</u> as well, marking technology's importance to Heidegger's work even at the beginning of his philosophical project. For example, see §15 of <u>Being and Time</u> for the importance of tools and equipmentality to Heidegger's structure of Being-in-the-world.
[30] AWP 118

procedure in this kind of revealing shows its relatively unfree relationship to what is revealed. There is no procedure for "bringing forth," no one characteristic way of organizing what is revealed in artistic revealing. The phrase "realm of what is" from this quote is also fundamental for Heidegger's notion of modern science. He claims that the fact that a particular realm of what is (Being) is marked out in advance for research is peculiar to modern science. This marking out in advance pre-determines the possible kinds of information that can be gleaned from any particular research endeavor. In this way, modern science has made an extreme degree of correctness possible; within its limited range of investigation it can be more precise than it could if it had more to deal with. This degree of correctness comes, Heidegger will say, at the expense of truth.[31] By delimiting beforehand what can be counted towards knowing some thing in the world the scientist has made himself unable to understand it on its own terms. This is just like the way that enframing restricts knowledge to what can be incorporated into the standing-reserve. Sticking to this initial "fixed ground plan of natural events" as the sole interpretive structure is the defining characteristic of research.[32] For modern science, as it has been determined by physics, the fixed ground plan is that of matter and motion related in space and time.[33] Within this framework science *must* be, in order to maintain itself as true science, extremely exact. We can see the precision of measurement that has become possible through the advances of science and technology as arising out of this demand for exactitude. The fact that this system of measuring matter and motion in space

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[31] For the Distinction between truth and correctness, see QCT 331 "The unconcealment in accordance with which nature presents itself as a calculabe complex of the effects of forces can indeed permit correct determinations; but precisely through these the danger may remain that in the midst of all that is correct the true may withdraw."
[32] AWP 118
[33] AWP 119

and time may seem to leave nothing "out of the picture" speaks to the dominance of the enframing or scientific way of revealing in our modern age. What is left out of this exacting understanding of the world? Heidegger will say that it leaves out nothing less than life itself: "The humanistic sciences, in contrast, indeed all sciences concerned with life, must necessarily be inexact in order to remain rigorous. A living thing can indeed also be grasped as a spatiotemporal magnitude of motion, but then it is no longer apprehended as living."[34] Because of its inability to understand living things, modern science has limited itself to the study of objects.

If we combine this observation of the limits of scientific knowledge with Heidegger's observations about the status of those objects which have been enframed from the *The Question Concerning Technology*, we come to an interesting conclusion. While science's pre-determined ground plan limits its scope to the realm of objects, it does so in order to make them disappear. Objects are studied in terms of calculations; what is known is not the 'essence' of the object in question, but the exact measurements that have been taken of it. These measurements and calculations then become the 'objects' of inquiry, leaving the real objects behind. Science thus interposes a veil of information between the scientist and the natural world, and in doing so takes this veil to be the extent of what can be known of that world. This allows the scientist, the person under the sway of enframing, to take this veil *as* the world. He cuts himself off from studying a thing's essence, especially if that thing is a living one.

Another characteristic of science as research is that it is "grounded upon the projection of a circumscribed object-sphere and is therefore necessarily a science of

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[34] AWP 120

individualized character."[35] Each field of scientific research is in some way cut off from the others. While each field must pay heed to the fundamental rules of modern physics if they are to maintain their correctness, the distinctions between the 'science' used in fields as diverse as astronomy and chemistry, thermodynamics and biology are necessary because of the "individualized character" of the objects studied in each field. More than this, each of the many branches of modern sciences is specialized within itself. For example, it seems that there are as many or more ways of doing specialized work within biology as there are branches of modern science. This plurality of sciences makes itself most visible in the world through its structuring of the modern research university, which is the site of another of the essential characteristics of modern science, ongoing activity.[36] This constant activity occurs when each of these individualized sciences must adapt its methodology to each new set of experimental results, while still keeping its focus on its particular 'object-sphere.' Heidegger says that in the ongoing activity of the modern research university, "more and more the methodology adapts itself to the possibilities of procedure opened up through itself."[37] The constant activity of modern science continually adds to the breadth and density of the veil of information which it places between the world and the scientific observer, while at no time does it question the grounds of its areas of research. For all the adapting that it does in response to itself, it never adapts to the world as it presents itself on its own terms. Heidegger explains the effects of this adaptation and specialization through the rhetorical question-and-answer: "What is taking place in this extending and consolidating of the institutional character of the sciences? Nothing less than the making secure of the precedence of methodology over

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[35] AWP 123
[36] AWP 124
[37] AWP 124

what ever is, which at any time becomes objective in research."[38] This making secure of

methodology amounts to securing the place of this limiting ground-plan of research. The

dominance of this model of knowledge, through the increasing size and prestige of the

research university, ensures that scientific-type, enframed knowledge is made secure as

the fundamental kind of knowledge for inhabitants of the modern world.

Heidegger couches this kind of knowledge in terms of representation: "knowing,

as research, calls whatever is to account with regard to the way in which and the extent to

which it lets itself be put at the disposal of representation."[39] This representation is what I

have been referring to as the veil of information. This is done in order that the scientist

can rest assured of his knowledge of the object under investigation. His possession,

before his interpretation of the object-as-information, of an existing system of

intelligibility within which the object must necessarily fall guarantees the certainty of his

knowledge. Heidegger looks for the root of this model of knowledge and finds the

moment when "what it is to be is for the first time defined as the objectiveness of

representing, in the metaphysics of Descartes."[40]

Heidegger has a longstanding dispute with Descartes, carried on in this essay and

others from his critique in *Being and Time*.[41] This critique of Descartes comes down, at

the most basic level, to Heidegger's refusal of the model of knowledge that arises from

the split between the 'inner' human subject and the 'outer' world. The fundamental

disjunction between an inner and an outer world, a subject and object, necessitates that

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[38] AWP 125 Remember that this statement is modified, as above, by the QCT essay's notion of enframed knowledge evaporating the object-hood of the objects that it studies in favor of a veil of information.
[39] AWP 126
[40] AWP 127
[41] See §12 and 13 of Being and Time for a critique of the traditional (Cartesian) account of knowledge and an investigation of how knowing ought to be considered outside the subject/object split.

the subject have a way of representing an outside object in his inner consciousness. The

subject is said to know the truth of this object if his representation of it is an accurate one.

Heidegger's critique of this representational scheme is that there is not an external

standard which the subject's representation has to live up to. With this shift inaugurated

by Descartes, "the very essence of man itself changes, in that man becomes subject. …

becomes that Being upon which all that is, is grounded as regards the manner of its Being

and its truth. Man becomes the relational center of that which is as such."[42] This change

of the "relational center" from "what is" (Being) to man contradicts Heidegger's notion

of truth as revealing. Instead of acknowledging the revelational nature of truth, modern

man as subject denies it in favor of his own self-determined criteria of truth.[43] In his

essay *What Are Poets For?* Heidegger stresses the connection between technological

thought and the formation of the Cartesian subject: "that man becomes the subject and the

world the object, is a consequence of technology's nature establishing itself, and not the

other way around."[44] The beginning of enframing thought is a necessary condition for the

subject/object distinction that characterizes modern thought. Enframing in the context of

science and technology is a manifestation of the subject's self-determination of truth

criteria; in this case truth corresponds to accuracy of measurement in service of

organization into the standing-reserve. Heidegger goes on to say that "representing is no

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[42] AWP 128

[43] Heidegger makes the analogy between the Greek and modern man's understanding of truth/revealing and the way that the status of revelation has changed in modern religion: "liberation *from* the revelational certainty of salvation had to be intrinsically a freeing *to* a certainty [*Gewissheit*] in which man makes secure for himself the true as the known of his own knowing [*Wissens*]. That was possible only through self-liberating man's guaranteeing for himself the certainty of the knowable. Such a thing could happen, however, only insofar as man decided, by himself and for himself, what, for him, should be "knowable" and what knowing and the making secure of the known, i.e., certainty, should mean." AWP 148

[44] Heidegger, Martin. "What are Poets For?" Poetry, Language, Thought Trans. Hofstadter, Albert. New York, Perennial, 2001. 110. Hereafter referred to as Poets.

longer a self-unconcealing for…, but is a laying hold and grasping of… What presences does not hold sway, but rather assault rules."[45]

The military analogy of assault for enframing thought brings to mind Sam Weber's commentary on the *The Question Concerning Technology*. In his essay *Questing After Technics* Weber proposes several alternatives to the translations of the key German terms from *The Question Concerning Technology*. In particular, his suggestion for *Ge-stell* is informative. Instead of translating this as enframing, Weber chooses the word emplacement.[46] This echoes Heidegger's notion of assault in *The Age of the World Picture* essay and challenging-forth from the *The Question Concerning Technology*. It also fits the concept of ordering the world as standing reserve by implying a putting into place. Though this place is secured in the ground-plan of science as research, it is always at odds with revelational truth and necessitates a constant challenging and assault in order to maintain the placement thus achieved. In this it also implies the constant activity of modern science while putting it in terms more consonant with the negative connotations that Heidegger associates with the danger of enframing.

The assault of scientific thought is analogous to the way that enframing forces the world into a rubric of intelligibility determined by man's projects and the resources he believes are necessary for them. 'What is' (Being) suffers in this translation. Whatever does not fit into the predetermined field of knowledge is blasted away, pieces of what presences of itself fall out and are not incorporated into the enframer's conception of the world. Because enframing "sets nature up to exhibit itself as a coherence of forces

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[45] AWP 149 – The ellipses in this quote are Heidegger's, and presumably any being or object can be substituted for them.

[46] Weber, Sam. "Upsetting the Set-Up: Remarks on Heidegger's 'Questing After Technics.' " <u>Mass Mediauras: Form Technics Media</u> Stanford: Stanford University Press, 1996. 71.

calculable in advance, it orders its experiments precisely for the purpose of asking

whether and how nature reports itself when set up in this way."[47] The fact that a model of

knowledge can be *set up* to be exclusive in this way implies another kind of knowing.

Though Heidegger doesn't give us an explicit description of what a freer, poetic

kind of revealing would be like in these essays, he gives us many clues through his

descriptions of the ills of enframing and scientific understanding. The negative

description of poetic understanding seems, though, like the only one that could be given.

If its most salient characteristic is that it has no fixed plan of what may count as truth,

then how could we presume go about giving positive descriptions? Certainly there is a

difference, and Heidegger attempts to give an example through the difference between

the way that Hölderlin and the hydroelectric plant 'speak' the title "The Rhine." It is not

well articulated what this difference consists in except the degree of "monstrousness" that

the hydroelectric plant exhibits in comparison to Hölderlin's poem. Heidegger's contrast

of these two approaches to the Rhine makes it seem like we could take sides and choose

one of these approaches over the other.

Heidegger says that "man does not have control over the unconcealment itself, in

which at any given time the actual shows itself or withdraws."[48] We can take this to mean

that both enframing and artistic thought are ways of revealing, and that which particular

way of revealing happens is not under man's control. This inability to initially decide on a

way of revealing is what Heidegger calls the "destining of revealing."[49] One way of

explaining destining is by noting that we are born into a world where our lives and minds

become organized in a certain way socially, which has the effect of making revealing

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[47] QCT 326
[48] QCT 323
[49] QCT 330

transparent to us. The idea of being skeptical about the notion of truth in a society doesn't come about easily, especially when, as with enframing, the model of truth and knowledge is in a very real way 'correct.' Added to this correctness is enframing's tendency to efface itself as *a* way of revealing and instill itself as *the* way. In the face of these entrenched notions of truth, philosophically-minded thought and art seem to be able to make revealing more present to us. As long as these other options remain (particularly art), then there is a possibility that revealing can change course, but if enframing dominates, then there is no way to stop its hegemony.

While Heidegger might seem apocalyptic in his predictions for the future of revealing, there is still hope. He says that "destining is never a fate that compels. For man becomes truly free only insofar as he belongs to the realm of destining and so becomes one who listens, though not one who simply obeys."[50] While we are not in control of how revealing will be destined for us, we *are* capable of self-reflection. In this reflection on how revealing occurs we encounter our freedom: "Freedom is that which conceals in a way that opens to light, in whose clearing shimmers the veil that hides the essential occurrence of all truth and lets the veil appear as what veils."[51] Freedom amounts to being able to see a kind of revealing for what it is, and those exceptional people who are best able to step back and witness their own place in the destining of revealing will be the most free.

These people will stand in contrast to those who are under enframing's sway, who are in the most danger. The dangers of enframing are many, but the most dangerous, the "supreme danger" that Heidegger finds in technology is that eventually the person who

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[50] QCT 330
[51] QCT 330

sees everything as standing-reserve "comes to the point where he himself will have to be taken as standing-reserve."[52] When this happens, that person will no longer "encounter himself, i.e., his essence" as a revealing entity, they will be unable to encounter the freedom that inheres in self-reflective questioning of the way in which truth and knowledge come about.[53] This danger is not without an answer, though, and Heidegger finds hope in the words of Hölderlin, who says that "But where danger is, grows/ the saving power also."[54]

Looking into the danger of enframing and seeing that it harbors a saving power is not enough to overcome the danger. We must act "here and now and in little things, that we may foster the saving power in its increase. This includes holding always before our eyes the extreme danger."[55] We must be vigilant in our monitoring of revealing, exercising cautious reflection in order to know what kind of truth operates in our lives. Again Heidegger looks to Hölderlin, who also says that "poetically man dwells on this earth."[56] This leads Heidegger to affirm what he saw as the difference between poetry and enframing, and to see the possibility of encountering the danger of enframing through art:

"Because the essence of technology is nothing technological, essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundamentally different from it.

Such a realm is art."[57]

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[52] QCT 332
[53] QCT 332
[54] QCT 333
[55] QCT 338
[56] QCT 340
[57] QCT 340

In true, free, artistic revealing, the person is in touch with their own essence as an entity within the changing destiny of revealing. In an artistic confrontation with technology, the enframing mode of thought will be shown as a part of this changing destiny instead of as the final word in what gets to count as truth. On this view, Art and Technology are as far from each other as could be, polar opposites within the many implied modes of revealing. There seems to be much to support this. Heidegger's examples of the difference between an enframed and a poetic revealing seem to ring true for the most part, and if we were to picture two exemplary individuals representing these modes of thought we could hardly imagine them agreeing on anything at all. However much this may be the case, Heidegger brings their opposition into question at the very moment that he advocates their confrontation by stating their essential kinship as a necessary premise for the confrontation itself. This kinship brings another thread out of *The Question Concerning Technology*, one which opposes a stable oppositional placement of art and technology in favor of emphasizing what it is within them that is similar.

The Saving Power

The linking of art and technology together in a complex kinship happens early on in Heidegger's essay, though it comes into question throughout the essay before it is clarified in his discussion of the saving power that is seeded within the danger of

enframing. He says that "*technē* belongs to bringing-forth, to *poiēsis*; it is something poetic."[58]

This statement destabilizes the relationship between art and technology as static counter-terms. Though it is clear that there is a distinct difference between the ways in which these two reveal the world, there is something about them that links them together in fundamental way. The conclusion that they are fundamentally linked seems appropriate when we consider Heidegger's assertion that both enframing and *poiēsis* are ways that revealing is destined, "but these ways are not kinds that, arrayed beside one another, fall under the concept of revealing."[59] Making a biological analogy, one could say that technology and the arts are not opposable as distinct species of the genera revealing.

Where does this leave us? Heidegger has let us know that enframing is the destined essence of revealing as manifested in technology and industry, so we must now look to his explanation of the *way* in which something is an essence. Something's essence as determines the way in which it will "essentially unfold."[60] Essential unfolding is another way of phrasing the notion that something is unconcealed in a revealing effort, whether this unfolding or revealing is done in a poetic or an enframing way. "Essentially unfold" is an English translation of the German word *wesen*. He points out that when it is used as a verb, as it is in this section, *wesen* is interchangeable with another word in the German language, *wahren*. *Wahren* generally means 'to endure.' Heidegger follows this

[58] QCT 318
[59] QCT 335
[60] QCT 355

linguistic connection through to the conclusion that what endures in something is its essence.[61]

In another etymological link, following Goethe, he finds that the word *wahren* is linked to *gewahren*, which means to grant. He says, "if we now ponder more carefully than we did before what it is that properly endures and perhaps alone endures, we may venture to say: *Only what is granted endures. What endures primally out of the earliest beginning is what grants*."[62] Enframing has been described as a "challenging-forth", and Heidegger makes the point that "challenging is anything but a granting."[63] Because an element of granting is needed for something to be an essence, it seems that enframing will fail to be a true essence, and the entire essay will have been undertaken only to conclude that it has been wrong about technology all along.

There is something, though, which is granted in enframing. If we follow Heidegger's trust in the truth of Hölderlin's poetry, we are reminded that a "saving power" grows alongside technological danger. It is this saving power that constitutes the granting element of enframing. Enframing's place as a true essence is secured by the saving power that it harbors within itself.

In Heidegger's estimation, the reward of the saving power is well worth the danger that must be overcome in our dealings with technology. Resisting the urge to flee from or resist technology's challenging advances and turning instead towards it in order to understand the saving power at its core "lets man see and enter into the highest dignity of his essence. This dignity lies in *keeping watch* over the unconcealment – and with it,

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[61] QCT 356
[62] QCT 356
[63] QCT 336-7

from the first, the concealment – of all essential unfolding on this earth."[64] Through the trauma of our encounter with enframing we come to understand that there are indeed many possible shades of revelatory experience. Once we realize this fact, Heidegger believes that a new sort of self-consciousness will pervade our activities and we will enter into a new mode living. Though this initial acknowledgement of our essence is an important event, it doesn't signal the beginning of a perfect, blissful state of consciousness. There is much work still implied in the "keeping watch."

An especially important part of this keeping watch is Heidegger's warning to be critical of what is concealed in our revealing activities. To be in the most free relationship to the world will mean to be within a destining of revealing that shows a new or unique aspect of something as it is brought forth while still leaving open the option of other revelatory experience. This is brought up in the context of technology and enframing, but it applies just as well to poetic or artistic revealing. Though it seems obvious that Heidegger places a higher value on what is revealed poetically, there is no perfect experience of the whole truth of some thing. Artistic or poetic revealing makes no claim to exhaust that which it reveals. In acknowledging this open-endedness of the ongoing process of revealing, artistic revealing actually comes closer to the essence of things than the enframing revealing that claims to have exhausted what can be known of them.

Both enframing and artistic revealing are involved in uncovering the truths of the world, and neither one of them is exhaustive. With this in mind, a new possibility is opened up. If one is attuned to the danger of technological or enframing revealing, then it becomes possible to understand what it reveals in a new light. Without claiming to have exhausted that which is under investigation, one can apply the systematic methods of

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[64] QCT 337 – Emphasis mine.

enframing to a poetic effect. The artist can use the truths which are inherent in a world that is in part "calculable in advance" in order to illuminate the limits of this calculability, to point outside of enframing's closed, exhaustive and exhausting world towards one which is vigorous and open to new constellations of understanding. The hybrid creations of this kind of understanding would be what were tentatively described at the outset of this essay as "technological art."

If understanding the importance of the work of both enframing revealing and artistic revealing can lead us toward a technological art, it seems equally possible that it lead us toward an artistic technology. This would be something which used systematic means and rigid ordering systems in such a way that their end result would be a more open relationship to the world that would further expand the possibilities for artistic revealing. Where technological art would reveal a new set of truths whose experience is possible only through the application of systematic means, artistic technology would manifest itself in things like environmentally friendly technologies. For example, if the level of rigor that was invested in the ever-more-efficient challenging of the earth to provide energy was diverted instead towards perfecting the use of energy from a source which was as inexhaustible as enframing's demand, then it would be acting in accordance with that energy source's essence. It would be a use of what at first seem to be enframing means in order to allow that source to show itself on its own terms. An example of a current technology that seems capable of being bent towards this end is solar power. The sun carries a promise of energy far beyond what we are currently capable of extracting from it, and is practically inexhaustible.[65] This would further the possibilities of artistic revealing because it wouldn't participate in the destruction of the world's natural orders

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[65] See "A Solar Grand Plan" in Scientific American, January 2008.

by imposing its own, and would instead leave more within the world that could be allowed to show itself according to its own lights.

With these examples we see the possibility that enframing and poetic kinds of revealing can come together in unexpected ways and create a new kind of revealing which seems to sway between the essences of each. Heidegger says that "the essence of technology is in a lofty sense ambiguous. Such ambiguity points to the mystery of all revealing, i.e., of truth."[66] Though Heidegger explicitly points out the ambiguity in the essence of technology, he gives us ample reason to take it that this ambiguity lives in poetic revealing as well. We can say that enframing and *poiēsis* don't fall into secure places under the concept of revealing because there is no pure moment of either kind of revealing, there is no such static place for them to fall neatly into. If essences of all kinds of revealing are ambiguous between their dangers and saving powers, then while each revealed truth may have more characteristics of one 'kind' than another, it also always harbors within itself the possibility of an unforeseen admixture within revealing, a new way of knowing the world. It will take a commitment to watching over not just technological, but all kinds of revealing in order to find the saving power within them.

Bernd And Hilla Becher: Technological Artists

Bernd and Hilla Becher's photography consists mainly of extensive series focused on a certain type of industrial architecture. Their insightful method of presentation and adherence to a system of production provide insights into these industrial technologies similar to those that can be found in Heidegger's writing. This similarity invites an analysis of their work according to Heidegger's terms, which will serve to illuminate the

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[66] QCT 338

works of both the philosopher and the artists. Our information on these works will come from interviews with and writings about the Bechers and importantly, from the images themselves.

In our first reading of *The Question Concerning Technology* essay, we noted that Heidegger was concerned with the way that he saw the natural world being transformed by modern industry into a standing-reserve. Here he criticized technologies that were responsible for taking natural, localized sources of energy and incorporating them into an artificial network of energy without ties to any power source in particular. His examples included hydroelectric plants, mining operations, and commercial agro-businesses. At least one of these, modern industrial mining operations, is engaged with directly by the Bechers' work. Taking their series of Mineheads as a starting point, we will begin our investigation of their photography's relationship to Heidegger's notions of enframing thought and the standing-reserve.

The purpose of the minehead is to draw up the material being mined, usually coal, from out of the deep shafts of the mine.[68] In doing so it removes the resource from the earth and gets it ready to be sent on its way through the system of industrial production. Like the power generated by the hydroelectric dam, the power that is generated from this mining operation is taken up into an abstract pool of energy that can be used for almost any purpose. The call for energy on the end of the user makes no specific demand for 'this' coal's power, and moreover doesn't care to know where the power comes from. The minehead is situated at the turning point where the resources from the mine first see

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[68] Becher, Bernd and Hilla Mineheads Essen: Richard Bacht GmbH, 1985. 12. Hereafter referred to as Mineheads.
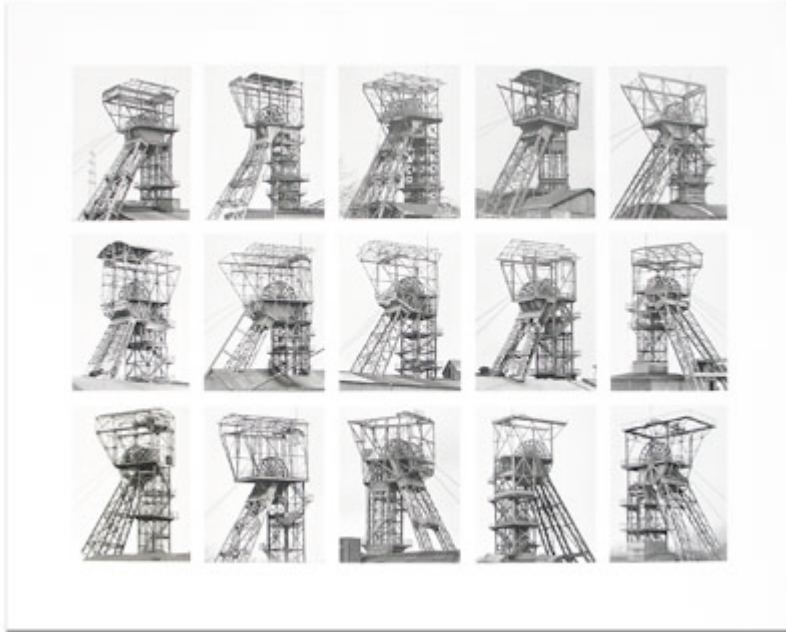
Bernd and Hilla Becher *Fördertürme (Pithead Frames)* **2006**[69]

the light of day, and from this moment on they are only seen in terms of an enframed

perspective as potential energy and production.

These characteristics make the minehead a good example of the kind of

technology that Heidegger wants to criticize for challenging-forth the natural world in

service of the standing-reserve. The minehead series represents the initial step of

extracting a resource, while other series investigate sites where resources are "switched

about ever anew" in their journey through the paths of the standing reserve: Water

Towers show nodes of the system where a resource is gathered for distribution, and

Framework Houses show one of the places where resources are distributed for use. [70]

Likely technologies that Heidegger would prefer over these homogenized sites would

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[69] Pithead frames are one of a multiplicity of kinds of minehead. The Bechers' <u>Mineheads</u> book is entitled <u>Fördertürme</u> in German and contains photos of structures like these and like the *Pitheads* from the introduction above.
[70] QCT 322

include the natural spring for water and domiciles like Heidegger's own hut in Todtnauberg.[71]

In finding these examples of what Heidegger would prefer over the structures we find in the Bechers photographs shows us another of the links between the artists and the thinker. Heidegger seems always to prefer an older 'technology' to a modern one. We see this in is his preference for the peasant farmer and the windmill over the hydroelectric plant and the industrial mining operation. The link to the Bechers' work becomes clear when we find out that the structures they photograph are often slated to be shut down or demolished. The *Mineheads* book, for instance, contains a large table documenting the status of the structure. The categories include: "In Function," "Abandoned," and "Destroyed."[72] Most of the structures, at the time of the publication of their book, fall into the latter two categories. Their series constitutes a document of the decline of a certain kind of modern structure, an effort to preserve it for generations to come. Nostalgia for an era whose relationship to the surrounding world is rapidly changing characterizes both the Bechers' and Heidegger's work. If Heidegger's nostalgia reaches as far back as ancient Greece, the Bechers are instead interested in "a world recently lost."[73] Blake Stimson will say that the beauty of their work lies in its "preservationist impulse, in its attempt to hold on to and find delight in the great beleaguered promise of the modernist past over and above the critique of that past that is still vital in the present."[74]

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[71] See Sharr, Adam <u>Heidegger's Hut</u> Cambridge: The MIT Press, 2006. for a thorough description of Heidegger's hut.

[72] Mineheads 14-17

[73] Tittel, Cornelius <u>High Precision Industrial Age Souvenirs</u> Trans Powell, Lucy signandsight.com. September 2, 2005 The article originally appeared in German in <u>Die Welt</u> on August 21, 2005 Last accessed at http://www.signandsight.com/features/338.html on May 3, 2008. Hereafter referred to as Tittel.

[74] Stimson

Because they continued this process of preservation throughout their lives, the

Bechers' work documents more than the decline of a certain kind of industrial machinery.

They have said that they are interested in the way that "the structures come and go almost

like in nature."[75] Their project also documents the next generation of structures that,

having taken over for the last, are now becoming obsolete themselves. When we compare

Bernd and Hilla Becher *Duisburg-Huckingen, Germany* **1982**

the photographs of mineheads to later photographs like *Duisburg-Huckingen, Germany*

we can see the increasing complexity of the machinery involved. In this image we can see

some "R" shaped structures similar to those that characterize the mineheads; it is as if this

larger structure had amalgamated several of them into one super-minehead. Though the

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[75] Stimson – the Bechers in conversation with Jean-Francois Chevrier, James Lingwood, Thomas Struth, in *Another Objectivity: June 10-July 17 1988*, Institute of Contemporary Arts, London 1988, p.57. Bernd and Hilla Becher quoted in an exhibition statement for 'Distance And Proximity (Germany), Bernd & Hilla Becher / Andreas Gursky / Candida Hofer / Axel Hutte / Simone Nieweg / Thomas Ruff / Jorg Sasse / Tomas Struth / Petra Wunderlich', http://www.photosynkyria.gr/98/ex/ex48_en.html. hereafter referred to as *Another Objectivity*.

original minehead's function may not have been obvious at first glance, this structure's function is far more difficult to discern. While it is still just as obviously technological machinery, its size and complexity make it a more intimidating structure. From this example we can see that the Bechers' nostalgia doesn't yearn for a pre-technological past, but for technology which is more obvious, which shows its function more directly.

By archiving these industrial buildings, the Bechers counter the tendency of enframing thought to make revealing itself transparent to those under its sway. This happens because the legitimacy of scientific knowledge never comes into question from within on Heidegger's account of science. This strengthens enframing's hold by making it seem as if there are no other kinds of knowledge. Bernd Becher has said that he believes the world will be "considerably poorer" without access to the "sacred buildings of earlier epochs."[76] By creating a record of these buildings the Bechers re-inscribe enframing t in history and open a space in which it can be both investigated and held on to.

Their preservationist impulse is not as simple as a longing for an industrial era that has passed. It is true that Bernd Becher has said that their work is in part an attempt to preserve the "sacred buildings of Calvinism," which is to say, the kind of buildings that were designed with a view towards economy over aesthetics.[77] Though the buildings are technical and economical, the Bechers aren't interested in documenting that era's technological advances. They have said that "things which can be interesting for technical historians, certain machines for example, are not visually interesting for us."[78] Their interest instead lies in the proliferation of repeated visual patterns that is a result of

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[76] Tittel

[77] Tittel

[78] Stimson - Quoting *Another Objectivity* 61.

this 'Calvinist' way of looking at things. They have noted that "An Italian gasometer does not look Italian and a Chinese blast furnace does not look Chinese," as their photographs attest.[79] Their project is one that by design dissociates itself from certain individuating elements; particularities of culture and geography make no difference to the Bechers' work, and this is evident in their systematic approach to photographing these structures.

Every structure takes up the same amount of space in the frame as every other, and as far as is possible they present the structures from the same angle.[80] Human beings are absent from the photographs. The atmospheric conditions in each shot are very nearly the same, resulting in an even gray tone as a background for each print. Uniformity within the grid format requires that each photograph be printed in exactly the same proportion. All of these elements point towards an attitude toward the production of these images that fits in with our second reading of Heidegger's essay, which dealt with enframing as a systematic limiting of knowledge to a previously determined field of calculations. In the Bechers' photographs the limits aren't in terms of measurements, but instead have to do with a rigorous adherence to a specific set of compositional elements. In effect, Bechers' strategy is one that mimics the enframing comportment that characterizes their subject. Each different kind of industrial structure receives the same treatment, and this apparent inattention to the specificity of each object speaks to an enframing mode of thought in the Bechers' artistic production.

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[79] Stimson - Quoting Morris, Lynda *Bernd and Hilla Becher*, Arts Council of Great Britain, London 1974, n.p.
[80] There are counterexamples, like the presence of flipped and angled views of many of the structures, but these views form their own set of identically composed images, and the presence of the flipped versions I assume is a result of the impossibility of photographing the equipment properly from the other side.

Another aspect of enframing that the Bechers presentational method mirrors is the elimination of distance in favor of an ever-present and accessible standing-reserve. Their grids present us with many photographs simultaneously, allowing us to compare the images across a relatively short period of time or to stand back and take them all in during a single brief moment. In this way, they collapse the distance between the photographs in terms of both time and space. The uniform approach adopted by the Bechers creates a homogeneous look across time, making the captions and titles of the photographs our only clue as to when they were taken. Looking at one of their grids of photographs, painstakingly amassed over several years, one intuits neither the time needed to gather them together nor time's passage between distinct series. Though the sites may be from all across the world, already "an Italian gasometer does not look Italian and a Chinese blast furnace does not look Chinese,"[81] and the Bechers' system reinforces the non-importance of their geographic placement. Their locations are noted, just like their dates, but this does little to mark them out as separated by vast amounts of space. Instead, the grids create a new sense of space in which it seems only natural that they be near one another. Because time and space are understood in terms of one another, the apparent proximity of these structures in terms of space plays into their apparent proximity in time, and vice versa, further reinforcing the viewer's sense that they are bound together into a single present moment. This conceals a truth about the Bechers' work; it took intense amounts of time and travel to accomplish.

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[81] Stimson - Quoting Morris, Lynda *Bernd and Hilla Becher*, Arts Council of Great Britain, London 1974, n.p.
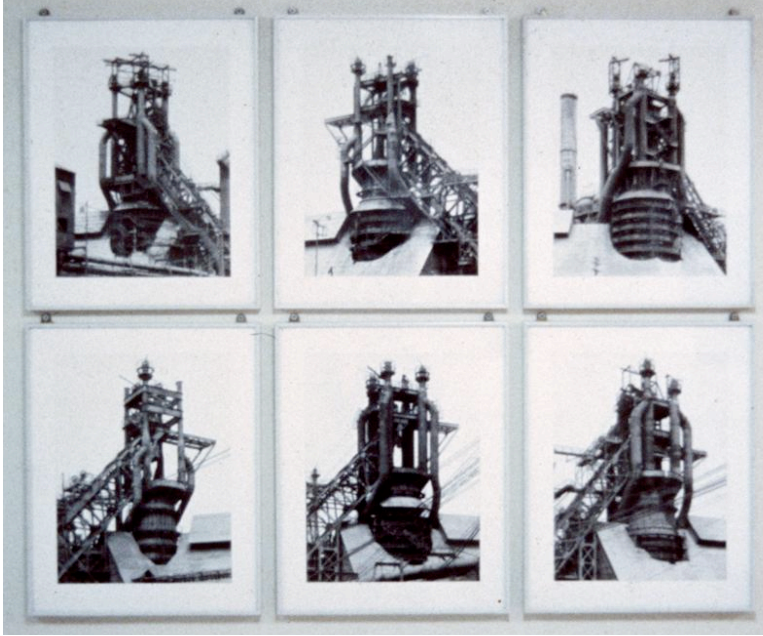
Bernd and Hilla Becher *Blast Furnaces, Heads, Baltimore* **1985**

Getting to the right place at the right time in order to photograph these structures under the right atmospheric conditions, devoid of people, and before they're demolished involves a tremendous effort that doesn't immediately show itself in their finished product. For this reason, in most discussions of their work "no mention will be made of the endless waiting, the narrow escapes, of the madness of their art. "Of course it was an adventure too", says Hilla Becher."[82] Their work brings them into contact with the communities of people who rely on these buildings for their livelihood in one way or another, people like "the mining families in Wales who took in the photographer couple like friends and shared their lives with them for weeks on end."[83] Their work connects them to many lives and stories, but these are absent from their work. The direct impact of technology upon the lives of human beings is omitted, and thus concealed, by the Bechers' work. This move away from specific stories makes sense in that it parts from a

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[82] Tittel
[83] Tittel

narrative structure, which would require a presentation of sequential episodes to make sense. Since the Bechers systematically eliminate a sense of chronological precedence among the many photographs composing their grids and series, their system is unfit for storytelling. Even if they wanted to tell about their adventures, the most they could do within their already-established system is to hint at them in the titles of their photographs and hope that the viewer can infer the rest on their own.

Ignoring regional and cultural boundaries allows the Bechers to gather together as many tokens of a certain type of industrial structure as possible. Their work thus resembles a "19th century encyclopedic" or "typological" approach.[84] The typology and the encyclopedia are two functions of enframing in Weber's sense of 'emplacement,' they are concerned with securing a place for every observable thing within an ordering structure. The Bechers' work isn't exactly typological, however, because their placement of these gathered tokens together does little to tell us more about the type. Upon closer inspection of the initially homogeneous-looking grids, one instead finds that each of these structures has a touch of its own individuality. Though they may be functionally equivalent, they are not identical. The Bechers have said that they "try to arrange these shapes and render them comparable. To do so, the objects must be isolated from their context and freed from all association."[85] This isolation resembles Heidegger's movement away from 'anything technological' and towards the essence of technology, but also, and paradoxically, their work has the additional characteristic of 'humanizing' the individual structures. The grid presentation allows for quick comparison of the

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[84] Stimson - Quoting Bernd and Hilla Becher describing their own work, in Ulf Erdmann Ziegler "The Bechers' Industrial Lexicon" Art in America, June 2002. 97.

[85] Stimson - Quoting Touraine, Liliane "Bernd and Hilla Becher: The Function doesn't make the Form" Artefactum, April/May 1989. 9.

structures, as does the rigorous adherence to a photographic system suppresses all features of the site except the building itself. The use of a large format camera and relatively modestly sized prints produces photographs that are rich in details for this comparison. This effect is one of their goals. Stimson points out that they are trying "to make families of objects" and to "humanize" the members of these families.[86] This differentiates their project from the 19th century encyclopedia and enframing thought.

If the work isn't taxonomical because it individualizes its members, doesn't function as a technical document, and isn't an overt critique of industrial technology, then it is possible that the Bechers' project is purely aesthetic. Instead of being about technology or industry, or even about systematic thought, it would be a project focused on the individual's experience of the differences in these photos. This would align well with another of Heidegger's statements about modernity, that in addition to modern science and technology, an "equally essential" characteristic of the modern age is "art's moving into the purview of aesthetics."[87] In his analysis of the Bechers Stimson claims that the aesthetic allure of their photography is a response to the modern promise of social reform. He sees their photography as a confrontation between aesthetic disinterest and modern notions of progress:

[…] where the architecture promises pure instrumentality, they provide a purity of aesthetic form. As such, while their work makes its own claim to be free of ideology, its own claim to being apolitical, it does so differently than does the industry they photograph. Their method as artists is to pit one modern form against another, to pit the nomadism of aesthetic delight against the nomadism of industry, to pit the

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[86] Stimson - Quoting *Another Objectivity* 57.
[87] AWP 118

(idealistic, German) soul of aesthetic experience against the (pragmatic, English) 'soul of industrial thought.[88]

The idea of pitting these two against each other makes it seem as if the Bechers were attempting to use the aesthetic as a weapon against the industrial. I believe that their non-ironic appropriation of systematic production from industry complicates that reading.[89] Their work is less a confrontation between these two modern forms than a synthesis of them. As such, their work achieves a more comprehensive view of the modern age through this synthesis, which allows for a more thorough investigation of modern thinking.

The aesthetic the industrial are equally essential to Heidegger's concept of modernity because they are both rooted in Descartes' concept of the subject. 'Aesthetic experience' re-entrenches the Cartesian split between subject and object because it makes art an external object for the incommunicable pleasure of an internal subject. This segregates that individual from society, but more importantly for Heidegger it keeps that individual from a revelatory experience of Being. The Bechers' synthesis of these two Cartesian paradigms within their work is appropriate, then, to the task of presenting the essence of modernity.

Heidegger's project for art is one of recuperating art from the aesthetic and trying to reinstall the notion of *poiēsis* as a creative questioning after truth.[90] If 'truth' in modernity is restricted to personal aesthetic experiences and knowledge's limitation to

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[88] Stimson
[89] Stimson also notes the lack of irony in the Bechers' appropriation of system, but he maintains an emphasis on the element of aesthetic delight. I believe the Bechers' work is aesthetically pleasing, but is more socially concerned, more political, than a reading of it on these terms alone allows.
[90] "if reflection upon art, for its part, does not shut its eyes to the constellation of truth, concerning which we are *questioning*." – QCT 340

scientific fats, then the Bechers work is just this kind of creative questioning. It has the modern "constellation of truth" in sharp focus. For this reason, calling their work either industrial or aesthetic is inappropriate. The aesthetic's denial of the truth of anything connected with ideology is a refusal of a certain destining of being, but the negating of this truth cannot be accomplished by a mere decree, as negation throws the negator off the path.[91] Their work is not there for aesthetic experience, it is an artistic re-appropriation of the element of system that is often too transparent in our everyday lives. Their system is apparently free of any 'use value' because their grids don't do anything that the system they're investigating would call 'work', which contrasts theirs with the industrial notion of system and seemingly aligns them with a disinterested aesthetic approach to art. Though this is the case, taking up a disinterested perspective does nothing to combat the subject/object split that is at the root of both 'aesthetic experience' and enframing thought. If we are to take some pleasure from their work, it ought not to be, from Heidegger's perspective, in their embrace of the aesthetic. Instead we should be pleased at their creative/artistic ability to use system in a way divorced from systematic-enframing thought.

In contrast to the aesthetic, the artistic is not without its own ends, it is not devoid of 'use' exactly. The true freedom of artistic revealing is that it reveals opaquely, not transparently, it reveals a way of revealing itself. In showing the technological way of revealing, the Bechers' work stands against it as an imperative towards a freer understanding of being. The pleasure that may come with this re-appropriation has to do with the realization of our essences as beings endowed with the capability for artistic thought. It is in being more in tune with our own essences that our spirits are lifted, and

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[91] AWP - 138

tuning into this essence is just as much a part of the work of the artwork as tuning into the

essence of the work's subject. Just as the essence of technology is nothing technological,

the essence of art won't be anything aesthetic; both will have to do with a deeper

underlying comportment towards the world. The viewer's simultaneous experience of

aesthetic delight and a failed promise of a fulfilling new sense of life through industrial

exploitation unites otherwise disparate elements of modern experience. Investigating the

tension and movement between these two poles of modern experience in the Bechers'

work will provide insight into art's role in the confrontation between enframing and

poiēsis.
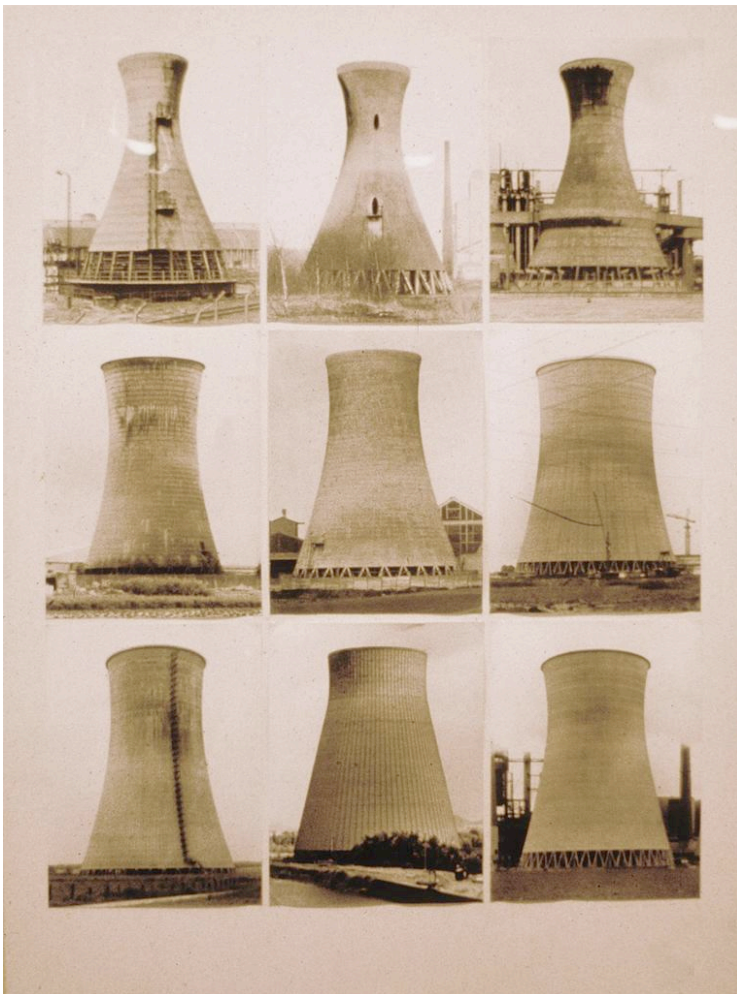
Bernd and Hilla Becher, *Cooling Towers- Steel, Corrugated Concrete* **1963-73**

For example, inspecting the different individual 'personalities' of their *Cooling Towers- Steel, Corrugated Concrete* is rewarding because of the sensuous beauty of the photographs and the delight at finding one's initial expectations of banal similarity met with a much denser and more interesting visual field. This delight is then countered with a sense of melancholy that is easily felt in presence of these photos.[92] When one reflects back on the fact that these structures are all doomed to relatively rapid obsolescence, the fact of their seeming personalities becomes a tragic one.[93] Stimson says that this darker side of their photographs results from "the experience of *no interest* where interest was once housed, of *no passion* where passion once resided."[94] This experience of deprivation is enabled by the Bechers' embrace of a typological approach instead the expressive photography of earlier artists who dealt with architecture: "We don't agree with the depiction of buildings in the 20s and 1930s. Things were seen either from above or below which tended to monumentalize the object."[95] The Bechers understand that this architecture is ephemeral and therefore not suitable for monumentalization, but are engaged in its preservation nonetheless. This recalls Heidegger's injunction to hold "always before our eyes the extreme danger." While claiming disinterest regarding the technical qualities of their subjects, Bernd seems to tip his hand when he says of this "economic architecture" that "they throw it up, they use it, they *misuse* it, they throw it

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[92] "Bernd and Hilla Becher, whose series of photographs of outmoded water towers and old-fashioned buildings convey a somewhat melancholic attitude toward their subject." D'Alessandro, Stephanie "History by Degress: The Place of the Past in Contemporary German Art" <u>Art Institute of Chicago Museum Studies</u>, Vol. 28 No. 1, <u>Negotiating History: German Art and the Past</u> Chicago: The Art Institute of Chicago, 2002. 14.

[93] This melancholic feeling complicates the sense of nostalgia that Bechers have towards their subjects, because it seems to apply to all of their series and not just those of later, more complex structures.

[94] Stimson

[95] Stimson quoting Grauerholz, Angela and Anne Ramsden, "Photographing Industrial Architecture: An Interview with Hilla and Bernd Becher" <u>Parachute</u> 22, 1981, p.18.

away."[96] This acknowledges the danger in the way technology is used, and re-opens the Bechers work as a critique of technology as regards the ecological impact of the structures and the underlying enframing motivation that spurs their construction. But in claiming that they're misused, there is an implicit affirmation of the possibility of a right or good use for these industrial sites, though no gesture is made towards what that use might be.

The Bechers' ambivalent stance toward technology comes from an intriguing set of convictions about it. They continuously analogize the turnover of industrial paradigms to the progression of generations in the natural world.[97] Though the progress of industry doesn't have the self-sufficiency of *physis* as Heidegger describes it, it is natural in another sense of the word. Heidegger believes that we are never in control of the destining of revealing, such that one cannot simply decide to reveal the world in an enframing or an artistic way. Since this is the case, and the industrial enframing paradigm of technology is a prominent one in our modern age, it is perfectly 'natural' that it manifest itself in the world. In this sense, the Bechers *are* documenting the natural course of what Heidegger calls the destining of revealing. Their project is more than documentary one, however. It has both a pleasurable and a melancholy side, and these feelings are appropriate ones for those who keep the "extreme danger" of the modern paradigms of industry and the aesthetic always in view. Where Kant claims that beauty is a matter of purposefulness without a purpose, the Bechers present us with a hopefulness without a hope. That is to say, there is no particular end that their project aims towards achieving, nothing specific that they seem to hope for. Certainly they don't share the

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[96] Stimson quoting 'Beauty in the Awful', *Time*, 5 September 1969, p.69.
[97] "The structures 'come and go almost like nature,' they have said, 'This was interesting for us.' " – Stimson quoting the Bechers in *Another Objectivity* 57.

hopes of the industrial age and its promise of a "new man."[98] Yet they hold onto a hopeful attitude. They are committed to a free relationship to technology, perhaps in hopes that by consistently engaging with it they will be prepared for the moment when the saving power will reveal itself. This connects their work to Heidegger's "sober readiness to be astounded before the coming of the dawn."[99]

Heidegger's "sober readiness" concerns itself with preparation for whatever the destining of enframing presents, not with planning out the future. The Bechers participate in this preparatory action by providing space for comparison and sustained engagement with technology. The experience of their work in time plants the seeds of an inquisitive, critical attitude toward technology. On first approaching one of their photographic grids the compositional similarity of the individual photographs leads one to believe that the subjects of the photograph will be near-identical as well. Upon physically moving closer to the work in order to verify this intuition, the individuality of the structures surfaces. The movement between these two steps, and the tension between these two appraisals of the work, walks the viewer through the kind of attitude that is necessary for a creative questioning of technology. It is a process that requires patience, close attention, and an ability to see the differences that give each place and each structure their own character. The works show that what at first may seem homogeneous and identical often isn't. This reveals a flaw in the industrial paradigm: though it attempts to treat the earth in every place as the same, the constructions required to meet this demand are in fact particular. Though it is only a slight nudge, it is a first step towards appreciating the specificity of place in face of the enframing paradigm. The Bechers' photography provides what

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[98] Stimson
[99] QCT - 327

Heidegger calls for when he says that "The modern age, requires, however, in order to be withstood in the future … an originality and range of reflection for which we today are preparing somewhat, but over which we certainly can never gain mastery."[100] Their originality comes from their use of seemingly enframing means to an artistic effect, and from the questioning attitude their work produces.

The attitude characterizing the Bechers' work is the kind of preparatory hopefulness without a hope that Heidegger seems to want from an engagement with technology, yet Heidegger's own writing on the subject seems to fall short of his ideals. His writing is considerably charged with romanticized and nostalgic claims about older "handicraft" technologies.[101] Heidegger's negative judgments about technologies are sensible considering his appraisal of modern revealing, yet in describing these technologies he doesn't gesture toward what their saving power might be. This marks his hopeful openness as more restrained than the Bechers'. One factor that might be holding Heidegger back from a more open relationship to technology is the idea of a learning curve. The technologies that Heidegger is most comfortable with are ones that have existed throughout his life, and he is wary of new ones that arise during his adulthood. The typewriter is a good example of this.[102] He doesn't like the way that it places a mechanical device between the hand and the paper. This eliminates the role of the hand in writing, and prefigures a world of information that, thus dissociated from any particular hand, is uniform and consistent, enframed. Heidegger's mistrust of the typewriter may come from his initial discomfort when using it, the difficulty of learning to type

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[100] AWP 138
[101] Ihde 107
[102] Heidegger's thoughts on the hand and the typewriter are reproduced at: Kittler, Friedrich <u>Gramaphone, Film, Typewriter</u> trans Winthrop-Young, Geoffrey and Michael Wutz. Stanford: Stanford University Press, 1999. 198-200.

efficiently coming from a background based entirely on handwriting. What this kind of mistrust forgets is the initial difficulty of writing; the pen too needs to be mastered in order to be put to use. Consistent penmanship is the result of years of practice and use, not an initial revelatory epiphany regarding the pen. This learning curve is easily ignored once the writer has become comfortable with hand writing skills, the pen eventually becomes a transparent tool for writing. This happens as well with the newer technology of the typewriter, but not without the initial effort required to master it, an effort that Heidegger seems reluctant to invest.

Another possible factor that might be holding Heidegger back was that while he believed that drawing near the extreme danger of enframing would help to reveal its saving power, he didn't get to see that saving power begin to show itself in his lifetime. Contemporary discussions about power are becoming more and more invested in ideas of renewable resources of the kind that Heidegger would favor over the rust-belt industrial attitude towards energy. These do not require a return to Heidegger's preferred older low-tech strategies. Instead they only become possible through the technological advances that occurred alongside the upsurge of enframing industry. Developing these new technologies (ones with a more open relationship to the world and its energy sources) becomes increasingly important as we realize that we realize that we are on the path towards exhausting the resources of energy upon which we are the most dependent.[103] Enframing technologies seem to seal their own fate; their ever-increasing efficiency at creating a standing reserve of energy from the natural resources of the earth progressively eliminates the store of these resources available for uptake into the standing reserve. This makes the Bechers' work a document not just of the overturning of different technologies

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[103] That we have even developed the notion of 'peak oil' speaks to this problem.

within a certain paradigm, but of the process of a kind technology making itself obsolete. Because this is the case, their project of keeping watch over enframing technologies is one which cannot continue indefinitely, and yet they continue to rigorously pursue it. In this way they mirror another aspect of the enframing technologies that they are photographing: both are projects which are going to run out of work to do. The industrial project because it uses up the things it takes from the earth, the Bechers because their systematic approach is best suited to these 'Calvinistic' buildings, and they would likely redesign a new approach if they were to take up a new subject. While it is possible that they would take up a new project and a new approach, it is just as possible that they might suffer from the same handicap as Heidegger seems to. An inability to appropriate new technologies in an open way might block their path. Due to Bernd's recent death we'll never know if they could have adapted to the kinds of technologies that are currently being developed.

In any event, the industrial age is by no means over. If these kinds of mines and factories are slowly disappearing in the western world in favor of the more high-tech energy solutions which follow in the industrial age's wake, they are popping up in other places.[105] Insofar as Heidegger's notion of enframing is applied to these technologies, it seems an appropriate fit, but what about newer technologies? These seem to fall off of Heidegger's map, either because of historical circumstance or his reluctance to engage with technology. This doesn't prevent his analysis of technological revealing from remaining important and useful, though. He says that each way of revealing also conceals aspects of the things that it reveals, and this applies to new technologies as well as old.

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[105] China, for example, has been building coal-burning power plants at a rapid rate. See
http://www.nytimes.com/2006/06/11/business/worldbusiness/11chinacoal.html?ex=1307678400en=e9ac1f
6255a24fd8ei=5088partner=rssnytemc=rss

Though they might not display many of the more environmentally dangerous characteristics of enframing technologies, it is possible that they harbor new and unforeseen dangers of their own. This necessitates a continued creative questioning of technology even and especially if it appears that the dangers of enframing have been avoided. For this reason, the Bechers' work and the questioning comportment that it initiates remain valuable for an increasingly technological society.

So far the discussion has noted the Bechers' relationship to technology both as a subject of their work and as regards their working process. There is another technological element of their work that deserves attention: the technological instrument of the camera. The camera itself is absent from the final images, though it is of course intimately involved in their production. A beginning point for investigating the camera's relationship to enframing can be found in a common expression for photographic composition, the notion of "framing up" a shot or putting something "in the frame." From this perspective photographing something is a process of en-framing it, of putting it into the camera's frame. Intentionally including and excluding certain elements in the process of "framing" a photograph seems to perform a function similar to the limiting of knowledge to a pre-existing ground plan that occurs in enframing thought. The camera is not so straightforwardly attached to the purposes of enframing, however. That the Bechers have used the camera in a method akin to that of enframing without serving enframing's needs is a prime example. Instead of being allied solely to an enframing comportment, what seems exemplary about photography is the way that its kind of en-framing action presents the comportment of the photographer towards their subject, be it enframing or otherwise. In his essay *Photography and the Representation of Vision*,

Jonathan Friday calls this element of a photograph the way that it represents an "expressive perspective."[106] He says that representing this kind of vision "means depicting that bit of the world serving as the object of the visual experience represented such that we can *infer* the visual understanding exhibited in the representation of expressive perception."[107] [108] Though it is possible for an artist using any medium to present an expressive perspective, Friday claims that one of the virtues of photography is its "power to do this with a subtlety and a potency not obviously available to the painter."[109] It seems particularly appropriate, then, for the Bechers to use photography as their medium for presenting their questioning comportment to the technological world.

This comportment is one of personal responsibility in the face of modern enframing modes of perception. It is a call to the work of keeping watch over all of revealing, staying in touch with our essences as revealing beings. This work of keeping watch over revealing necessitates a watch over ourselves as well. Heidegger describes this kind of self-reflection as "the courage to make the truth of our own presuppositions and the realm of our own goals into the things that most deserve to be called into question."[110] I have characterized the Bechers' work as a prod towards a comportment of creative questioning. In picking up on this suggestion, the viewer of their work is put into

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[106] Friday, Jonathan "Photography and the Representation of Vision" The Journal of Aesthetics and Art Criticism 59:4, Fall 2001. 358. Hereafter referred to as Friday.

[107] Friday 359. My emphasis.

[108] I assume that by visual understanding here Friday refers to something like what Mikel Dufrenne explains when he talks about the immediacy of the meaning in the sensuous appreciation of a work of art. He says that "the work of art says something directly – something beyond its intelligible meaning – and reveals a certain affective quality which may not be easy to translate but which can nevertheless be experienced directly." In this case, the something 'said directly' would be in the artworks sensuous, perceptible, visual appearance, through which we have some kind of knowledge which has not yet been translated into a systematic prose.

Dufrenne, Mikel The Phenomenology of Aesthetic Experience trans. Casey, Edward S. et al, Evanston: Northwestern University Press, 1973. 326.

[109] Friday 360

[110] AWP 116

a position where they can reflect on their position in relation to this artistic mode of being. In deciding to take this reflection up earnestly, the viewer begins the truly difficult work: "The hard thing consists not only in the difficulty of forming the work of language, but in the difficulty of going over from the saying work of the still covetous vision of things, from the work of the eyes, to the "work of the heart."[111]

Neither the Bechers' photographs nor Heidegger's philosophy can take up full responsibility for changing the comportment of those who encounter them. The thinker and the artists understand that their work cannot tell their audiences how to act in every situation. To do so would be to undermine the illuminating openness that the Bechers bring to their photography and whose seed is planted in those who are patient in the company of their work. For Heidegger, prescribing a plan of action is antithetical to openness to the destining of revealing; adhering to a fixed set of instructions could blind one to the saving power when it shows itself. Instead of attempting to negate the enframing mindset outright, the Bechers use elements of enframing in a way that opens up new possibilities for understanding instead of closing these possibilities off. This doesn't seem to offer the viewer any choice about the process of viewing their work. In this way it mimics the destining of revealing: it conditions our world silently. Our reflection upon our experience of these works can let us know that enframing doesn't hold complete sway over our experience of the world. This puts us in touch with our essences as beings endowed with an ability to maintain open, poetic relationships to the world. That this could happen through the Bechers' employment of what seems like solely enframing means also shows that enframing contains within itself the seed of its own undoing, what Heidegger calls its 'saving power.' This also destabilizes the concepts

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[111] Poets 136

of poetic and enframing as stable counter-terms to one another and points towards the more ambiguous nature of all revealing. This is why Heidegger will say in *What are Poets For?* that "an eye that looks out upon the *integral whole* of beings will receive a hint from the phenomena of rising technology, directing it toward those realms from which there could perhaps emerge a surpassing of the technical – a surpassing that would be primordially formative."[112] The Bechers are involved in 'surpassing the technical' because their work creates fissures in a cemented way of knowing, and this instability leads to a more open relationship not only to the natural world, but to the technological world as well. Openness to the possibilities of technology outside of merely improving the efficiency of existing industrial practices will allow for technological advances that increase humankind's ability to take up more open relationships to the world.

The relationship between artists and technologists in this surpassing is a process of mutual feedback. If artists are taking hints from rising technology, they are doing so in order to create works which nudge the technologist in a new direction, the artist then engages in preparation for and response to the next generation of technology. The technologist is not expendable in the process of surpassing the technical; the artist cannot complete this task on their own.

The Bechers' art is not only for technologists, of course. Because the destining of revealing effects everyone, enframing estranges everyone from their essence. When we are set on the path of creative questioning we will be able to move ourselves and our society away from seeing the world in enframing terms. The Bechers' work, even in its most systematic and enframing moments, leads us towards an open comportment to the world. It holds out hope for a future where technology will not be rooted in enframing,

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[112] Poets 110

where art will have the ability to guide our lives, and where our minds will be open so that we can deal with new problems as they inevitably arise. This future won't be easily won. The Bechers' photography only initiates the work of the heart. The rest of the work of overcoming enframing must be accomplished by our own courageous self-reflection and attention to the paths of truth.

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