

QUESTIONING THE ESSENCE OF TECHNOLOGY:

HEIDEGGER AND THE HISTORY OF TRUTH

by

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This project explores Martin Heidegger's extensive engagement with technology and stands as a defense of his approach. In doing this I will explicate how technology should not be viewed simply as a means for human use but must be recognized as a way in which the truth reveals itself. This requires an inquiry into how modern technology approaches the world in a way that differs from approaches of the past. By showing what this difference is and how it is making its appearance, it becomes possible to see that technology places humanity into a new and dangerous relationship with itself. I would like to show that this danger can only be properly attended to and averted through a turn to historical reflection.

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CHAPTER I

A CONFRONTATION WITH TECHNOLOGY

“Yet it is not that the world is becoming entirely technical which is really uncanny. Far more uncanny is our being unprepared for this transformation, our inability to be able to confront meditatively what is really dawning in this age.” --Martin Heidegger, Memorial Address

In reading “On the Question Concerning Technology” I sense an immense loss during Heidegger’s discussion of the Rhine River.

The hydroelectric plant is set into the current of the Rhine...In the context of the interlocking processes pertaining to the orderly disposition of electrical energy, even the Rhine appears to be something at our command... What the river is now, namely, a water power supplier, derives out of the essence of the power station.¹

It is not the physical presence of the power station, cut into the bank of the river, which causes unease upon reading this passage. What Heidegger asks us to consider is more shocking and appalling than whether or not one believes the station to “ugly” or “detrimental to the ecosystem.” The feeling of loss arises when we acknowledge what the construct of the power station itself indicates. When the station is not viewed simply as a technological apparatus, but becomes questionable in relation to its activity for securing power, we are able to see that it is not merely a means under the command of the human; its presence and activity, when made questionable, indicate a radical shift in how humans relate to the river. Under the command of the station, the river appears as if it flows for the sake of fueling the power plant instead of in and for itself. Heidegger’s illustration of the Rhine River shows that we have somehow acquired the ability to look past the river’s majestic qualities in order to translate both what and how it is only in terms of the work that it accomplishes for the power station that has been set into it.

¹ Martin Heidegger, trans. William Lovitt, “The Question Concerning Technology,” *The Question Concerning Technology* (New York: Harper & Row, Publishers, 1977), 16.

This view of the river is horrifying for those who walk along its banks, enjoying its continual movement and the habitat it provides for animal life; all the same, it is clear that rivers have come to be interpreted and used in this way. Those who oppose technological development and seek to protect nature from this seemingly foreign invasion often offer responses which claim that these advancements are a violation of “the natural order of things” or are disrespectful to the “inherent dignity of nature.” This position is taken up in response to the feeling of unease that one experiences upon comprehending the power that technology has to alter the appearance of nature. Still, this position remains ineffectual as long as it bases its claims simply upon this feeling, or love of nature, as this form of resistance has neither the power to stop the domination of the earth nor comprehend what the rise of technology means for us.

If one is disturbed by the transformation of nature that is appearing through technological advancement, their disturbance remains nothing more than a mere feeling if they simply claim that this new interpretation or use is a violation of nature, or that life *should be* valued on its own terms. It is dangerous to be so naïve as to believe that recourse to aesthetic beauty alone would be sufficient to counter the increasing preponderance of the technological view of nature. No matter how loudly its opponents clamor, technological advancement continues. What remains to be understood is that this feeling itself rests upon a commonsensical dichotomization of “nature” and “technology.” While this opposition may seem “natural” to many, it overlooks the fact that from this perspective both nature and technology are only understood through their opposition. According to this thinking neither nature nor technology are understood on their own terms. If this is the case, how could anyone claim to defend “nature,” since it is only really understood as that which is “not-technological”? Without understanding the original unity that makes this dichotomous relationship possible the “natural perspective” remains blind to its own position. From this it is obvious that it could never attain the power to stop, or even comprehend, what is occurring in and through technological advancements, as this appears simply as “the opposition.” At the same time, the powerlessness of this position does not imply that the “technological perspective” is a superior to “naturalism.” Heidegger does not ask us to decide for or against either of

these perspectives. He asks us to seek an alternate view of both nature and technology, one in which each term is not understood simply as a negation of the other, but one that understands each, on its own terms, through a recognition of their essential unity.

Those who seek to preserve an interpretation of the river that does not reduce it to a mere means for the power station can no longer rely upon an instinctual repugnance for the technological demands that are placed upon nature. The project that seeks to both comprehend and freely relate to technology, instead of giving oneself passively over to it, requires a new point of departure. What is important here is that we do not simply do away with the feeling of loss that was experienced in with the transformation of the Rhine. Instead of becoming outraged or disenchanted by this feeling, it should be put to use by prompting an investigation into what is becoming manifest through the rise of technology and how this seemingly human contrivance has the power to fundamentally alter our relationship to nature. This investigation demands that we suspend, or put into question, our presuppositions about both nature and technology. In doing this we are prevented from deciding in advance which “position” we would like to defend and in turn, open ourselves to an exploration into the unknown. Those who have the strength to follow this investigation to its “conclusion” will see that from the desire to preserve a more traditional interpretation of nature, we will be challenged to acknowledge and take seriously this “new” interpretation that is manifesting itself. Through this we will see how this new view holds within it the power to offer an unforeseen perspective into how nature accomplishes its self-showing and will thus, force us to come into a new relation with nature, technology and ourselves.

CHAPTER II

TECHNOLOGY: INSTRUMENTALITY AND TRUTH

"We are not each self-sufficient, but are in need of much." --Socrates, Republic, Book I

"Questioning builds a way." --Martin Heidegger, The Question Concerning Technology

How is it that we are able to comprehend the need to develop and use the forces of nature for our own ends, and, at the same time, also feel as if this use is a violation of the natural order of things? Moreover, even as we confront and question this feeling, do we not also become terrified as we find ourselves powerless to stop this "transformation" of nature, as if *something greater than us has started us along a path* which threatens to destroy any sort of meaningful relationship between humans and nature? If humans have created this situation, how is it possible that we do not have control over it? Could we get hold of the situation? It is with regard to these questions that Heidegger begins his work on and confrontation with the essence of technology.

I would like to explore why Heidegger takes up the question concerning technology and what importance that this might hold for us today. I will explicate what Heidegger means when he tells us that "technology is a way of revealing" and how this demands an exploration of the history of revealing or truth. We will see that the question concerning technology is a way in which the question concerning truth as such is able to confront us. Only once we have begun on the path that seeks to understand the essence of technology do we become attentive to that which grounds its appearance, and only then are we able to question into how revealing as such comes to pass. By drawing our gaze away from technological apparatuses and turning toward technology's essential relation to truth itself, through tracing it back to its origin, we become capable of seeing that what is occurring in our current historical moment is but one mode in which that ground reveals itself to us; and yet, we will not remain satisfied in knowing that technology is only as one way of revealing among others, as Heidegger encourages us to investigate

what is new in technological revealing. It is this question which offers us the unique opportunity to experience anew our relation to the happening of truth, and it is this experience which will demand that we come into a new relation with ourselves.

The difficulty in this project is in the fact that we tend to think of visibility only in terms of physical entities, but how do you catch sight of something that is not a “physical” entity? This requires that we inquire into the manifold ways in which visibility is possible, which will require an analysis of causality as such. Through this, we will gain access to the question of Being, as Heidegger sees it, and only then will we become capable of addressing the ways in which Being appears to us. Once we have determined how technology allows us to open up the question of the truth of Being we will then see the need to turn to an interpretation of history that becomes attendant to the appearance of this truth. Only through this historical adventure will we become capable of understanding our own historical moment within its proper limits and thus, free ourselves from it, in such a way as to live with it as well as surpass it.

Heidegger seeks to understand our current situation not by demonizing science and the instruments of technology. The task to be accomplished does not seek to “get rid of” technology in order to return us to an “ideal” ancient world. This would be impossible and simplistic. The flight from one polar opposite into the other never comprehends that which makes the opposition itself possible. The task before us demands neither a reversal nor reversion to times past, but a more essential view of modern technology. In order to understand its appearance it is not enough that we speculate about modern science and seek to lay blame upon those who produce technological instruments. The task before us requires that we turn toward a way of viewing the problem that makes it possible for us to see how technology has come about and how it claims us.

How should we comprehend technology? We engage technical instruments every day. Isn't it obvious what technology is? On the one hand, we do comprehend technology. It is that with which we accomplish our daily tasks. The technological exists within that domain of objects which we use to obtain desired results, i.e. the domain of tools and instruments, or more generally, means. But does the fact that we put

technology to work necessarily mean that we know what it is? Heidegger tells us that this common interpretation of technology is not sufficient. But how is it that we do not have knowledge of that which we are so familiar, something that we deal with on a daily basis? Isn't technology something which we have made for our own use? Each of these questions tells us how we view technology: that it is something that we possess and use for our own ends. But isn't it also the case that we have become concerned with technology because we are beginning to see that this is not simply the case?

The question concerning technology cannot be answered, nor even seen as a question unless it is made clear that the issue here is not a concern with technological tools, but the *essence* of technology. If we want to understand what technology essentially is, it must be made clear that, for Heidegger, the question of *what* something is cannot be separated from the question of *how* something has arisen as an object of inquiry. For example, if we are interested in knowing what a silver chalice is, it is not enough to give a description of its attributes. Only through an analysis of the different avenues through which the chalice's appearance was made possible are we fully able to see how the chalice has come to stand before us as an object of inquiry. If one is merely attentive to its outward appearance and is satisfied with a description of this in order to understand its "whatness," they are not able to comprehend the various ways in which the chalice is what it is. The assumption that one can know in advance that what something is by being attentive to something's outward appearance alone, covers over those aspects of the object that remain hidden from view, but belong to it even in its completed form. By failing to consider how an object has become the being that it is, certain aspects of that thing remain obscured thus, placing limits upon one's knowledge of the object itself.

Heidegger refuses to be satisfied with simply viewing the outward appearance of an object to determine what it is. He demands that attention be given to the manner in which something has come about if we are to fully comprehend it. From this we are able to see that, like the chalice, if we attempt to only describe how technology appears to us without looking into the various avenues that it has traversed in order to reach us today, we will pass over hidden elements that belong to technology itself. By allowing ourselves to pass over these we will risk failing in our attempts to understand what

technology essentially is and thus, abandon ourselves to those explanations of technology that continually describe it as a mere means. Heidegger's claim is that this continual recourse to the outward appearance of some thing, as the standard for understanding what a thing is, arises out of an insufficient understanding of causality. If we have decided in advance that it is not important how some thing has come to presence, then we have already made certain assumptions about what it is to be a being; and yet, we are so removed from the question of cause that we are not even aware of these assumptions as assumptions. By failing to understand that our thinking grounds itself upon these, it is impossible for us to understand the consequences that they carry for our thinking. Thus, in order to meaningfully reflect upon technology, we must also confront ourselves in our own thinking. As we begin our approach, we should remind ourselves that "Reflection is the courage to put up for question the truth of one's own presuppositions and the space of one's goals."² Thus, we will follow Heidegger as he guides us along the way that might allow us to see the limitations of our current thinking about causality and how this might make it possible for us to establish new goals for ourselves.

Heidegger has made it clear that if we want to know what technology is, in a way that surpasses our current interpretation, it clear that we must discover how it has made its appearance in today's world. This insistence on the necessary relationship between what something is and how it has come to be present is not original to the thinking of Heidegger. He himself honors an Aristotelian approach to the question of *what-it-is-to-be* a being and on various occasions Heidegger invites us to turn to Aristotle in order to gain a fresh perspective on approaching a problem. This thinker, who stands at the beginnings of our own philosophical heritage, is in relation to us, but remains at a distance. Often this distance is helpful for gaining a new perspective on problems that seem so familiar to us, because, as heirs to Aristotle's questioning, our thinking remains tied, but irreducible, to his due to the twenty-five hundred years of philosophical history that stands between us. This historical legacy has informed our thinking in ways that Aristotle could have never foreseen; and yet, this should not be interpreted as a hindrance

² Martin Heidegger, ed. and trans. Julian Young and Kenneth Haynes, "Age of the World Picture," *Pathmarks* (Cambridge: Cambridge University Press, 2002), 57.

on either side if, in turning to Aristotle, we affirm the distance and difference between us as something that might hold value for us in our attempts to question into the unknown. If we continue to ask the same questions as Aristotle, but do so in a way that is different, it may become possible, through this difference, to free ourselves up from the familiarity that obscures the questions from us.

Aristotle's treatise on nature deals specifically with the inner relation between the questions of *what* and *how* and the most apparent point of entry for this question is found in its opening where Aristotle tells us:

Since, in all pursuits in which there are sources or causes or elements, it is by way of our acquaintance with these that knowing and understanding come to us (for we regard ourselves as knowing each thing whenever we are acquainted with its first causes and first beginnings, even down to its elements)...³

We see here that when we want to have knowledge of what something is, it is necessary for us to determine how that thing stands with regard to its source. In other words, we consider ourselves to have knowledge of something only once we have determined *how* the object of inquiry has come about as that which we encounter.⁴ For example, when we describe what a plant is we can give a detailed account of its attributes, its location and its life span. However, if one does not include a discussion of how the plant rises from the earth through the power of its own self-motion, something truly essential about the life of the plant has been left out of the account. The one who desires knowledge of this or that plant is not said to have knowledge of what a plant is if they are not given, or able to give to themselves, an account for this living activity that belongs to all plants. Thus, we do not consider one to truly know what a plant is if they lack this essential understanding of how the plant comes to presence.

³ Aristotle, trans. Joe Sachs, *Aristotle's Physics* (New Brunswick: Rutgers University Press, 2001), Book I Ch. I ln. 184a.

⁴ It is important to note that this claim is not made, or honored, due to some ancient authority that Heidegger attributes to Aristotle himself. The force of Aristotle's claim lies in the fact that it sets before us the way in which "we regard ourselves as knowing". This manner of inquiry into 'what-it-is-for-something-to-be' is necessarily bound to the questions of the 'why' and the 'how' of something's coming to presence, not because it has approach has been given to us from the outside or from without, but because we, as humans, agree upon this as the way in which knowledge manifests itself to us.

It is clear from what has been said above that if we are to fully comprehend what technology is we must discover its cause or origin and the way in which it has arisen from this. But how can we even begin to conceive of the origin or cause of technology? How are we to look for something if we don't already know what it is? If we allow Aristotle to guide us further in our beginnings, it is clear that we are not abandoned to our own devices, as the saying goes. While Aristotle has already alerted us to the need for us to be attentive to *how* something is if we want to know *what* something is, he continues by bringing our attention to how this knowing arises for us in the lines that follow:

The natural road is from what is more familiar and clearer to us to what is clearer and better known by nature; for it is not the same things that are well known to us and well known simply. For this reason it is necessary to lead ourselves forward in this way: from what is less clear by nature but clearer to us to what is clearer and better known by nature.⁵

He cautions us to be aware of the fact that we begin at a distance from the cause of something and that there is a way in which we must proceed toward this cause if we wish to come into a knowing relationship with our object of inquiry. This passage along the “natural road” requires that we question how things first appear to us in order to gain access to how they appear with regard to nature. It is only through this passage of discovery that we are able to comprehend what something is “simply” or as it appears by nature. It seems, then, that we are dealing with two orders here: the order of being or “nature” and the order of our knowing. Even as it seems as if these two oppose one another, Aristotle encourages us to carry ourselves along in such a way as to become able to witness each order, in its own right, so that we might have sufficient knowledge of a being through the relationship of both perspectives; and yet, we must remain attentive to the fact that this can only be accomplished if we begin in a way that is possible for us.

If we are to proceed according to Aristotle's instruction, we must regard things as they first appear to us. This experience will open up our inquiry, if we consider this initial confrontation with the outward appearance of some thing, not as an exhaustive experience of it, but as the point of entry to the unfolding of the way that it has come to

⁵ Aristotle, *Physics*, Book I, Chapter I ln. 184a.

presence. This unfolding is a *process*, a movement of dis-covery, through which we gain access to that which has made possible, or given rise, to the thing in question. This process inverts our common notions about things in such a way that it forces us to undermine, or set aside, what we think we know about something, as it appears to us, in order to venture toward the foundations of that thing so as to witness how it has arisen and been able to appear to us in the current way that it stands before us. Looking to the thing in question in such a way requires that we look at it in its becoming *by way of* how it appears to us. Only through this passage toward that from out of which something has arisen, are we able to catch sight of that which guides and is guided through this becoming. Thus, this manner of inquiry seeks to witness the thing that comes to be present as it stands in relation to its source, not by radically separating one from the other, but by understanding each by placing them into a proper relation with one another, so that we can see them both in their unity and difference.

The problem that we are beginning to confront is two-fold. It seems as if we are at a loss with regard to both technology and its cause. How are we to begin if we do not know either? If we allow ourselves to listen to the words of Aristotle, we have already been given both the starting point for our inquiry and the manner in which we are to proceed. We must begin where we are. Even if we do not yet have sufficient clarity with regard to either technology or its origins, we do have some relationship to it, as we commonly talk about technology itself in casual discourse. Therefore, we do have a certain kind of understanding of technology and its cause. This means that if we are not immediately clear about the origin of technology there is still a possibility for us to come into a knowing relationship with it if we proceed in a way that is appropriate to the matter.

If we are to begin where we are, we first must consider the way in which technology appears to us. In order to see how people commonly discuss technology, one need only turn to the internet to see what people are saying about it. Here technology is

described as, “a means of empowerment,”⁶ or “a worthy means to spread the gospel.”⁷ In short, technology is commonly described as an instrument by means of which humans are able to cause an effect, which, in turn, fulfills some necessity or other. When we conceive of technology in this way, we also posit its cause. If technology is viewed as nothing more than the instrumental, then its cause lies in human agency. Heidegger calls this interpretation the “anthropological and instrumental definition of technology.”⁸ This description makes sense to us. Haven’t we sufficiently understood the technological as instrument when we recognize that it is the craftsman himself who puts to work the instrument, as a means, in order to form some *material* into a *design* that has been pre-established, so as to attain an end or product? Isn’t it by the work of another craft that the instrument for this work has been made? Have we not solved our problem, as this tells us both what technology and its cause are? Is this not the quintessential image of causality and the way in which the tool fits into the schema: craftsman, means and end?

While this is one way in which to view the technology and its cause, Heidegger claims that this interpretation is insufficient and does not yet hit upon that which is essential in technology; and yet, from this first approach one thing has become clear: the inquiry into instrumentality remains bound to an inquiry into causality as such.⁹ Since the question concerning technology requires of us that we become attentive to how technology initially confronts us, we must make an investigation into the way technology appears as an instrument. While it is clear that we view and use technology in its instrumentality, it is not the case that we have sufficient knowledge as to how it has come about as an instrument for us. When we assume, in advance, to know what technology is and how it has arisen by giving it the name *instrument*, we close ourselves off from the

⁶ Parsons, Carl. “Communications Technology as a Means to Empowerment”. *Journal of Family Studies*. 31 April 1997 <<http://jfs.e-contentmanagement.com/archives/vol/3/issue/1/article/2542/communication-technology-as-a-means-of-empowerment>.

⁷ Edward, Joseph S. “Technology Proves Worthy Means to Spreading the Gospel”. CIO Decisions Midmarket IT Leadership Awards. 18 June 2008 <http://searchcio-midmarket.techtarget.com/generic/0,295582,sid183_gci1317181,00.html#.

⁸ Martin Heidegger, “The Question Concerning Technology,” 5.

⁹ *Ibid.*, 6.

way that allows us to gain knowledge about the technology that surrounds us. Today, we only see the resulting effects of technology as what is essential about technology, but does this view of technology keep us from seeing it for what it truly is? When we focus on the technological as simply the result of our own power, aren't we accepting 'what appears to us' as sufficient understanding of its cause?

By beginning our inquiry in attendance to how technology appears *to us* we have started along a way that requires us to explore causality as such. When we allow ourselves to be satisfied with the interpretation that claims the essence of technology as residing in instrumentality, we attribute human agency as its cause. But can we take responsibility for the appearance of instrumentality as such? Heidegger tells us, "If we inquire, step by step, into what technology, represented as means, actually is, then we shall arrive at revealing."¹⁰ If we are to follow Heidegger to this end, it is clear that we must proceed in a way that the matter itself demands. Thus, we must turn toward a discussion of means, and therefore causality as such, in order to witness how our understanding of technology is opened up through this.

We consider ourselves to be the cause of technology when it is viewed as a means that we ourselves bring about for our use, but Heidegger cautions us by reminding us that "not only that by means of which something else is effected is a cause."¹¹ The danger that threatens our inquiry into the essence of technology is our desire to remain satisfied with our common notions about cause and how it is that it brings about an effect. Today, when we think of cause and desire to know what has brought something to come about, we automatically narrow down our search to the area of objects or agents. We ask: what thing has brought about and put to work the means for this result? Heidegger tells us that we think this way because we have come to understand cause as simply the *causa efficiens*.¹² But if we remain attentive to the philosophies of the past, it is clear that this cause is only *one* way in which beings are understood as arising into presence. We close

¹⁰ Ibid., 12.

¹¹ Ibid., 6.

¹² Ibid., 7.

ourselves off from witnessing the various ways in which beings become what they are by assuming that this is the only way in which beings are brought about. Thus, we close ourselves off from essential knowledge of beings through our own assumptions about reality.

If our narrow interpretation of causality closes us off from understanding how beings come to presence, we must free ourselves up from this interpretation. In order to proceed from things as they appear to us, toward how they appear of their own accord, we must consider how causality has been discussed by philosophers of the past. Only through this engagement will we begin to move toward that which we desire to know. Heidegger reminds us that throughout the history of philosophy we have been taught that there are four causes: the *causa materialis*, *causa formalis*, *causa finalis* and *causa efficiens*. Together, these are the four ways, or the four-fold way, in which the Greeks understood how something comes to presence. Still, Heidegger seeks not only to bring our attention to the fact that there is more than one way to think cause, he asks the decisive question: “From whence does it come that the causal *character* of the four causes is so unifiedly determined that they belong together?”¹³ This question requires that we not only take note of the various ways in which something might be understood as coming to presence, but demands that we think through how these causes necessarily stand in relation to one another in an essential unity.

Still, Heidegger does not rest in simply naming this four-fold, telling us “but everything later ages seek in Greek thought under the conception and rubric ‘causality,’ in the realm of Greek thought and for Greek thought per se has simply nothing at all to do with bringing about and effecting.”¹⁴ The Greek understanding of “cause” can be heard in the original name for cause, as *aitia*, or responsibility. Heidegger encourages us to witness the four causes are the four ways in which something is responsible for

¹³ Ibid., 7.

¹⁴ Ibid., 7.

something else.¹⁵ Our inquiry rests upon our ability to understand what and therefore, how cause is as responsibility.¹⁶ Why would Greek thinkers understand cause as responsibility? A responsibility for what? Heidegger tells us “the four ways of being responsible bring something into appearance.”¹⁷ Each of the four cause are a way in which that which comes to presence is “occasioned” or induced to come forward into presence from out of concealment. Each of the four causes work together, each according to its own aspect, through which a being is gathered into itself and thus becomes able to appear as that which it is.

Thus, causality, thought in its fullest sense cannot be understood through recourse to human agency alone, but is the source from which all coming to presence arises. The four-fold cause is that which is responsible for that which appears to us. From this it is clear that technology cannot be a mere means that the *causa efficiens* uses to produce an end, because causality cannot be reduced to this kind of operation. According to the Greek determination of causality, beings do not come to presence through a single cause and a freely chosen means for its execution, but only through the cooperation of the manifold dimensions of causality itself. Technology as a mere means has no place in this operation, because it would deny the *causa materialis*, *causa formalis* and the *causa finalis* their power to be responsible in the process of a being’s coming to presence.

Heidegger reminds us that the Greeks did not think of the coming to presence of beings in terms of craftwork alone, but also in terms of how things come to be by nature. This coming forth from out of itself falls under the heading of *poiesis*.¹⁸ This coming to

¹⁵ I use the term “witness” here so as to make clear that these relations are always already operative within causality, and that it is through our own neglect that they are no longer clear to us. Thus, it is our responsibility to return them to our view.

¹⁶ In order to grasp the Greek meaning of *aitia* we must suspend our common notions about responsibility that regard this term only in its moral sense, as this does not exhaust the manifold ways in which “responsibility” can be understood. Heidegger tells us, “Today we are too easily inclined to understand being responsible and being indebted moralistically as a lapse, or else to construe them in terms of effecting”. Martin Heidegger, “The Question Concerning Technology,” 9. The *aition* are those forces, which when brought into unison, give allow a being to come into appearance. Thus, responsibility must be thought in terms of giving rise to possibility, not in terms of a moral imperative.

¹⁷ Ibid., 9.

presence, either according to craft or according to nature, is a process of revealing through which ‘that which comes to presence’ arises from out of concealment. Thus, when we become attentive to that which is, according to its cause, we become attuned to this coming to presence as a revealing of that which previously was not yet visible. The Greek word for revealing is *aletheia*, which in later times comes to be translated as *truth*. Heidegger tells us that “*techne* is a mode of *aletheuein*. It reveals whatever does not bring itself forth and does not yet lie here before us.”¹⁹ *Poiesis*, *techne* and technology are modes of “bringing-forth” which, gather together the four causes and rules over them.²⁰ In this way, technology can no longer simply be understood as it first appeared. If technology is to be understood from the perspective offered by Greek thought, we are now able to see that like *techne*, what is decisive in the revealing does not reside in its being manipulated as a mere means. We see that each is essentially *a way of revealing* that allows for a being to come to presence by way of a gathering together of all the causal aspects that are required for the revealing. Therefore, technology itself, as a way of revealing, can never be reduced to one of the causes that cooperate within the revealing itself, but must be witnessed in its ruling over these.

If we remain attentive to the way in which beings are understood to come to presence according to Greek thought, we will open a space within which we might be able to comprehend how technology can also be understood as a “way of revealing,” or a way of truth. Heidegger himself tells us that technology comes to presence in the realm where revealing and unconcealment take place, where *aletheia*, truth happens.²¹ If this is the case, then we can no longer take responsibility for its appearance. But this is not to say that we have failed in our investigation of what technology is. We risk failure only if we deny what has come to light as this impasse confronts us. We can no longer take responsibility for the appearance of technology as such, because this does not belong to

¹⁸ Ibid., 10.

¹⁹ Ibid., 13.

²⁰ Ibid., 12.

²¹ Ibid., 12.

us as a possibility. Technology comes to presence as a way of revealing; it is a mode of truth. As we delve into our way of thinking that is concerned with technology, surprisingly, the question concerning the appearance of truth itself confronts us. This question necessarily confronts us because when we take seriously the question of what technology is, it becomes clear that this questioning builds the way to the question concerning causality, which in turn opens up for us the possibility to begin questioning into the realm of truth. From this we see that technology, causality and the realm of truth belong to one another in an essential way and only through this movement from how technology confronts us, toward its cause, are we capable of gaining access to its essential ground.

CHAPTER III

WAYS OF REVEALING: *TECHNE* AND TECHNOLOGY

“Always the unconcealment of that which is goes upon a way of revealing.”
 --Martin Heidegger, The Question Concerning Technology

If technology is a way of revealing, let us focus on how this is to be understood. In order to bring this into view I will offer an analysis of what Heidegger interprets as “new” in modern technology; and yet, this analysis can only be accomplished in relation to an analysis of *techne*. Only by viewing these two in their difference will we see how the revealing of modern technology differs from this older revealing and can therefore, be deemed new. It is important to remind ourselves that what is essential in technical revealing is not determined by the productive process of a technician, but is located in how *techne*, as a mode of truth makes possible the gathering of each co-cause to one another. In this way we are able to see that when it is understood in its essence, *techne* is a way in which beings come into unconcealment. Thus, *techne* cannot be determined by any of the co-causes themselves, but must be understood as a way of revealing beings. If technology is to be understood as a mode of truth as well, it is necessary to determine how it gathers together this four-fold. What we will see is that what is new in modern technology is made possible by what Heidegger speaks of in the term *Ge-stell* and that this gathering power, instead of allowing the human to become attentive to the possibilities that are offered by beings themselves, challenges the human to set upon nature so as to reveal it as a source of energy. By attending to what Heidegger means in and through this term we will finally be able to fully appreciate the urgency in questioning technology, as our analysis of what is new in this way of revealing will also open up how technology and the human are intimately bound to one another and how this intimacy brings with it a power which threatens to destroy the essence of humanity itself.

During our initial approach *techne* was described as falling under the heading of *poiesis*, as a way in which ‘that which comes to presence’ arises from out of unconcealment. The processes of *techne* can be seen as the co-operation of the human with the forces of nature, in that the craftsperson gathers together and sets to work that which is offered up for use through a prior vision of what is to be produced. In this way, the craftsperson is *co-responsible* for the coming to presence of the produced thing, as he or she works with that which is given by nature for use. The gathering that is accomplished by the craftsperson is made possible through her ability to be responsive to her situatedness within the world and toward beings, and this responsiveness, in turn, allows the craftsperson be attentive to the various standards that are set by the work itself. These are found through consideration of the other co-causes that work in unison to bring forth the produced end.²²

This power to consider how each cause relates to the other is the unique ability that the craftsperson exercises as the *causa efficiens*. This does not give the craftsperson the power to decide independently from the other causes what is needed for the accomplishment of the work, but merely establishes the proper limits to the power or responsibility of this cause. According to this interpretation, the power of the *causa efficiens* lies not simply in its ability to cause an effect, but is more fully understood when it is viewed in its ability to gather together each aspect of the work to be accomplished in such a way that the final product can be set forth from out of concealment as an independent thing. Within the gathering-revealing of *techne* each co-cause must be allowed to accomplish its own specific power in order for the work to succeed, therefore, if the craftsperson is to accomplish her work as the *causa efficiens*, she must consider how the other causes demand to be put to work. It is only through this responsiveness to each that the craftsperson accomplishes her part of the work and thus, allows the revealing made possible in *techne* itself to unfold into presence.

²² These causes are the *causa materialis* (material cause), *causa formalis* (formal cause) and the *causa finalis* (telic cause). The craftsperson stands as the *causa efficiens*, or that cause which draws together and sets to work the other causes which are to be considered, within this paradigm. Thus, the power of the craftsperson is of limited scope and has a specific part to play as it participates in the mode of truth that falls under the heading of *techne*.

This mode of revealing can easily be made more concrete through an example. For instance, when a carpenter decides that he is going to construct a table he must consider certain things before he begins working. While the construction can begin with a contemplation of any of the co-causes, this analysis will concern a table that is constructed for the sake of some intended use.²³ This work must begin with the carpenter's consideration of the telic cause, or his decision of how the table is going to be used. He must consider whether it will need to endure the stresses of dining, or if it will only endure the light usage of an end table, or if it will be an object of observation and thus, serve no use function. Each of these different uses place different demands upon the table itself, as a dinner table bares a much greater load than an end table, and a piece of art may be made for the sole purpose of being viewed, never having any need to bare a load. Thus, each use demands a certain quality of material to be used which will be capable of satisfying the intended use, i.e. a dining table will need to be made from a sturdier wood than an end table, while the material that would go into a piece of art would likely be considered for its aesthetic qualities. Along with this decision the carpenter must also consider the form into which the material is to be shaped. While this cause can be played with to a certain extent by the carpenter, both the telic and material causes themselves place internal limits upon the possibilities that the form may take. Thus, within this schema, the carpenter is appropriately viewed as the one who gathers together all aspects of the work, insuring that the table will become manifest in the way that it was initially intended. Through the carrying out this activity, by attending to his proper limits, the carpenter accomplishes the revealing that is unique to this mode of truth.

This illustration shows how each aspect of the four-fold causality of a table must work in unison in order to bring a produced thing into unconcealment. The disclosure was successful because each cause was allowed to be responsible for its own aspect of bringing the table to presence. In this light, the craftsman cannot be interpreted as

²³ The construction could also arise out of some desire on the part of the carpenter to use a precious piece of wood to make a beautiful table. If this were the case, both the telic and formal causes would have to be determined from out of a consideration of the limits of the material cause.

lording over the other causes, or seen as a cause that has the power to work independently from all others. While it is true that the carpenter does have the power to make the final decisions upon both the form and the material that goes into the table, he has the power neither to ignore any of the causes nor to dictate the way in which these cooperate within the work itself. The power that the craftsman has is immense, as he has the power to shape nature to suit his desires; and yet, this power is limited by the possibilities that are offered to him by beings. From this discussion it has been made clear that revealing of *techne* is not understood when it is viewed as some metaphysical empowerment of the human over nature, but is only fully comprehended when the human is allowed to take on an appropriate role as co-cause by standing in proper relation to the power that is afforded through this mode of truth.

Within this mode of presencing, the maker is viewed as but one of the indispensable, corresponding forces at work in this process of revealing. This is carried out for the sake of revealing some thing into worldly presence. In his essay “*Techne* and Technology,” William Lovitt offers an elegant and concise description of how the human operates within the corresponding processes of technical production:

Through *techne* man, himself acting in power, confronts the overwhelming powerful reality that meets him in its confusedness. His knowing rises superior to that reality. As a seeing-doing, it comprehends the relations subsisting among the latter’s components, cuts into their given structuring, and reassembles them in letting something new stand forth as present. When this happens, both relations and distinctions first become genuinely manifest.²⁴

The technical process described here attests to the awesome power that the human has to shape nature into something new, or not yet manifest. Anyone who has thought through this power and how it remains dependent upon the possibilities offered to it by nature would hear this as a furtherance of our current discussion of *techne* as a way of revealing. When Lovitt tells us, “His knowing rises superior to that reality” we are now conditioned to hear this as a description of the power of the *causa efficiens*, as the one who’s power rests in his ability to take a step back from the other co-causes, so as to stand over them and organize them in a way that is demanded by this mode of truth itself. This is

²⁴ William Lovitt, “*Techne* and Technology,” *Philosophy Today* 24 (Spring 1980): 64.

interpretation is supported by the last sentence, “When this happens, both relations and distinctions first become genuinely manifest.” Thus, when the *causa efficiens* attends to its proper duties all the co-causes are able to work together, which means at the same time in distinction from one another, and thus accomplish the revealing of an independent thing.

Even as a description such as this is used to support this interpretation of the work of *techne*, it is important to note that it speaks from out of an engagement with the manifold character causality. Lovitt’s description of the human’s role in the processes of *techne* could also be interpreted in the following way: the human is the being that is able to assume the role of master over the given “material” of “confused nature” and, due to “his” superior intellect, is first able to “fix” nature’s improper way of appearing into an intelligible pattern. Sir Francis Bacon assumes that the human has a power to make nature conform to an order that is of his own making. His assumptions about the ruling power of “custom” lead him to say, “Force maketh nature more violent in the return; doctrine and discourse maketh nature less opportune; but custom only doth alter and subdue nature.”²⁵ He continues, “There is no trusting to the force of nature nor to the bravery of words, except it be corroborate by custom.”²⁶ Thus, it is through the human’s superior power to make nature conform to custom, be it the nature in man or that which is formed and apportioned in a garden, that enables the human to take his proper place as lord and master over nature. This interpretation rests upon the assumption that there is a radical division between man and nature, wherein nature is a wild force that can be brought under subjugation to the will of the human, if the human chooses to establish his authority over it through his cultivation. This interprets the activity of engaging and representing nature to be at the disposal of human will, but as we have seen, this interpretation remains fixated on the power of the human to cause an effect and thus, cannot comprehend that which is truly essential in technical revealing.

²⁵ Francis Bacon, “Of Nature in Men” (Oxford: Oxford University Press, 1996), 417.

²⁶ Francis Bacon, “Of Custom and Education” (Oxford: Oxford University Press, 1996), 418.

If we do not allow ourselves to be satisfied with these common assumptions about the relation of intelligibility, man and nature, we are able to see that this is not what Lovitt intends in this statement. He continues this discussion of the role of man in technical production by describing man as the one who has the power to be responsive to that which calls him to bring forth (*Hervorbringen*) that which is in need of this human responsiveness for its coming to presence.

Thus man, through his knowing that is doing, creates something new out beyond what is already given. In doing so he allows the Being of whatever is to become genuine appearing, not obscuring, confusing semblance. Man in the power of his knowing confronts reality in the power of its Being and through his creating disposes it anew. Here man does not in any sense master Being from outside itself. Man is a being in Being. His knowing and Being belong together as one, in such a way that in and through that knowing, which brings forth works, Being is accomplishing itself.²⁷

This passage asks us to consider how is it that the human is able to accomplish the act of production, or how is it possible that the human has the power to gather together and set forth that which is gatherable and settable. How does the human have the power to act as the *causa efficiens*? The common way of thinking about this ability assumes that this productive power is a possession of the human from out of his own genius, which is interpreted as a power that exceeds the brute forces of nature. This is a monstrous assumption, one that removes us from nature and places us above it as master. Lovitt, along with Heidegger, does not assume this and instead understands the source of this uniquely human power to reside outside of the human. This interpretation attempts to think through how this power is one of reception which finds itself through an acknowledgment of ‘that which calls out to be gathered together and set forth into appearance’.

Even as Lovitt poses this question in a thought provoking manner, he also places us into danger for misinterpreting Heidegger’s interpretation of *techne*. Lovitt’s description of the processes of *techne* over-emphasizes the power that resides with both the human and beings. According to his account, the technician is the one who has the power to bring forth a being from out of concealment so that it can “become genuine

²⁷ William Lovitt, “*Techne* and Technology,” 64.

appearing.” This phrasing could lead one to believe that the work of the craftsperson is arises out of a demand placed upon him by a being, which merely required human *techne* for its appearing. In this way, it seems as if the revealing of *techne* is a power that is in the possession of the human that can be set to work through the demands of beings. If this were the case then the technician would gain the power to accomplish his or her work from nothing more than a cooperation between beings and humans. This emphasis upon the role of beings within the process of technical revealing rests upon an interpretation of the Being of beings as residing in physical presencing alone. Thus, the Being of beings is determined as that which physically endures throughout the movement from concealment into unconcealment through this *poietic* revealing.

Heidegger’s concern with this interpretation of technical revealing is that it fails to focus its attention upon the way of revealing itself, choosing instead to turn its attention only toward that which becomes visible within the productive process. He stresses the fact that what we are concerning ourselves with in *techne* is not simply its productive power, but how it is a way of revealing.²⁸ Therefore, our attention should not be focused solely upon the human or beings, but these must be allowed to direct us toward the source from which the gathering power itself arises. When we turn our attention from the results of the productive processes of *techne*, we are able to comprehend that this power lies neither in beings nor in the human, but comes about from a different source. Heidegger claims that *techne* is a mode of *aletheuein*, because he understands this as a way in which beings are revealed or brought into unconcealment. While the technician deals with the production of beings, his work, on a more fundamental level, accomplishes a unique relation to Being which is made possible through technical revealing.

The difficulty in this thought stems from the fact that this relation can only be accomplished through a covering over of Being. That which gives this power must withhold itself so that the human can turn toward beings and deal with them in such a way that the relation between the human and Being can be accomplished. This

²⁸ Martin Heidegger, “The Question Concerning Technology,” 13.

withholding makes it appear that Being is not dealt with by the human in technical revealing. This covering over Heidegger terms the oblivion of Being. This oblivion is not due to some fault or error on the part of the human, but is that which first affords a space for technical revealing to be accomplished.²⁹ The human is only able to turn toward beings and shape them into useful and beautiful designs because technical revealing, in its essence, is a response to the possibilities that have been offered by Being by way of its self-concealing.

By withholding itself, Being gives the human the power to deal with beings in order to shape a world. Since the human is only able to shape this world by passing through the realm of technical revealing, the human continually comes into relation with Being through the setting up of this world. The relation between the human and Being is not necessarily one of knowing on the part of the human, but the human does understand that the power to reveal is limited by the possibilities that are offered by beings. Thus, the human that remains attentive to the revealing of *techne* does not claim authority over beings, but finds a place for himself in the world by making himself attentive to the limits of his power. Respect for these limits allow for the continual exercise of this power through which the human is able to continually accomplish an essential relation to Being.

In and through the revealing of *techne* the human accomplishes a unique relation to Being by drawing together and setting forth a produced being. This final product is ‘that for the sake of which’ the productive process is taken up, but we have seen that only by tracking how the four ways in which something is gathered together, do we comprehend how this gathering itself is made possible. Only by following this path of inquiry to its conclusion can we adequately understand how some thing comes to presence. Now that we have witnessed *how* an independent thing comes to presence, we are able to fully comprehend *what* an independent thing is; and yet, through this discussion of the produced thing we have also become attentive to who we are through an analysis of our relation to this process. Through the analysis of how *techne* is a way of revealing we have come to see that the human is but one way, be it an indispensable way,

²⁹ Martin Heidegger, ed. William McNeill, trans. David Farrell Krell, “Introduction to ‘What is Metaphysics?’” *Pathmarks* (Cambridge: Cambridge University Press, 1998), 281.

in which an independent thing comes to presence. In this way of revealing the human cannot be understood as master of the other co-causes, but has an established role to carry out as the one who is able to accomplish the task of gathering together that which is gatherable. Through this gathering and setting forth the human takes up those possibilities found in beings to accomplish a particular relation to Being.

We have learned that technical revealing is not understood essentially when it is viewed as merely the process of production. What we found was that *techne*, as a mode of truth, can only be comprehended if one understands how the manifold aspects of causality work in unison to bring something to presence and thus, into unconcealment. Through this consideration we discovered that way of revealing requires the cooperation of the four causes and that only as each is allowed to take responsibility for its own part in the revealing does the process unfold successfully. Thus, *techne* must be understood as way in which the human is able to take up and execute his unique power to respond to the possibilities that are offered by the other co-causes. This responsibility does not arise from the human itself, but is made possible through a unique human relation to Being. As we take up technology as a way of revealing, let us not forget what we have discovered about ourselves through our discussion of *techne*. The hope now is that through the difference between these two ways of revealing something unforeseen might make its appearance.

In turning to a discussion of this revealing it will be helpful to begin with an example of technological revealing itself. E-mail correspondence is a technological revealing that individuals engage on a daily basis. Through this daily engagement e-mail appears to be a tool that we use for communication. We open our e-mail account in order to type a quick message to a colleague or friend, which tells them of some news or important fact that they might be interested in. We may even find upon opening our account³⁰ that we have received something like this ourselves. These messages are short and concise, telling the recipient of all the relevant facts that they might need to know for

³⁰ The word "account" is used here not in the traditional sense of the telling or retelling of a tale, but is translated into the service of the information that is passed and stored up in the transmission of messages. This "account" does not recover and represent an event, but is a storage facility for that which is storable.

the completion of their work or to keep friends up dated about our busy life. When we hit the “send” key the message is instantly directed to whomever it is intended to reach, no matter what the distance between those who are in communication. This correspondence is carried out thanks to the revealing made possible by technology, but what is actually going on when we engage it? How is it able to accomplish this wondrous feat of conquering any distance for the sake of communication?

When we communicate via e-mail we see immediate results; the message is sent, the information is conveyed and we can go on with our business. Friendships can be sustained over great distances and business can be carried out much more efficiently due to the power of this technology. This form of communication deals with language in a very specific way. The revealing that occurs in e-mail correspondence is made possible in that it reveals something very specific to the recipient at the expense of all other aspects of discourse that are not encompassed by this specificity. The message itself allows for the sharing of information. This can only be shared if the individual who types the message tells the recipient something specific in a direct manner. This way of speaking is demanded by the medium itself with its reduced screen size reserved for the body of the message and its surrounding buttons for the commanding the account. While this space gives room for the composition of a message, all other aspects of discourse must be set aside, as the look in one’s eye as they listen or the tone of one’s voice when she speaks cannot come across in the message. What we do notice in this correspondence is that as we are given the power to communicate with one another, as those “other aspects” which are determined unnecessary for the communication of information are set aside for the sake of the transmission. This setting aside and forgetting is what allows the medium of technology to accomplish its way of revealing.

When considered as a way of revealing we see that this technology has the power to make it appear that communication itself is nothing more than an informational exchange. This is possible because this revealing is accomplished by a simultaneous concealing. On the one hand, e-mail reveals and makes available information, on the other, it conceals all other aspects of discourse. By focusing our attention upon that which is revealed it becomes possible for us to forget about all those other dimensions of

discourse, and in such a way that we forget that we have forgotten them. This way of revealing has the uncanny ability to transform our view of language to such an extent that the medium itself determines what counts as communicable. The danger that arises from this is that through continued engagement with this form of communication, individuals run the risk of forgetting the importance of those “other aspects” of communication that are hidden in e-mail communication. Through this forgetting, individuals are allowed to insistently focus upon informational exchange instead of allowing communication to be experienced as an encounter that holds within it the possibility to transcend that which is merely spoken. Thus, the use of this technology offers efficient communication, but also brings with it the risk that it could rebound on and transform ordinary language. This example of the shift that could occur in language, as it threatens to become confined to the limits established through the medium of e-mail, echoes the shift that was experienced with regard to the Rhine River in opening passage of Chapter One, in which the technological view of the river demanded that the majestic beauty of the Rhine be set aside and forgotten so that it might be referenced only in terms of its relation to the electrical station. From these examples it is clear that technology is no mere means, but must be understood in its uncanny ability to transform and reveal reality as a derivative of technology itself.

Heidegger claims that this revealing is altogether different from the revealing of its predecessor. We can glean some of this difference from the previous examples. Already we are able to see a difference between how humans are able to participate in each way of revealing. The activity of the carpenter is very different from the e-mail correspondent. Their difference can be found in the way that each deals with what they are offered to work with. The carpenter responds to the manifold possibilities that beings offer to him so as to bring forth a table into appearance, while the instant messenger does not take the manifold aspects of language into account before writing, but determines in advance what is to count as language within communication itself, so that he can compose a communicable message. Thus, we see the difference between these two ways of revealing emerging from out of the way in which each allows the world to appear to the human as something to be worked with.

Whereas *techne* was understood as *Hervorbringen* or the gathering together of the possibilities manifest in beings for the sake of setting forth of some independent thing from out of concealment, the revealing of technology is described by Heidegger as *Herausfordern* or a “challenging, which puts to nature the unreasonable demand that it supply energy that can be extracted and stored as such.”³¹ This challenging-revealing differs from the revealing of *techne* in that through it, the human does not accomplish the revealing through a responsiveness to the possibilities that are offered by beings, but as one who demands that nature reveal itself as a nothing more than a source of energy. By turning toward nature in a way that is different from the craftsperson, the technologist necessarily carries out his or her “project” differently and thus attains a different “end.”

At first glance, this challenging does not seem strange. Heidegger relays for us how this seems to be precisely what is carried out by older, technical practices of using a windmill or the sowing of seeds.³² But these examples remain within the revealing accorded to *techne* because they cooperate with the forces of nature, and do so for the sake of bringing forth a produced end. While both the work of the windmill and the sowing of seeds do take energy from the earth and put this to use, both are tailored to nature in such a way as to draw what it offers of itself. The turning of the windmill remains dependent upon the wind’s blowing and seeds will not grow without light and warmth from the sun. Thus, the success or failure of these projects remains tied to the movement of nature of itself. When the wind blows, water is drawn from the well and when the sun shines, the crops flourish; and yet, this setting into cooperation of nature, by the human, in no way demands that the wind blow for the sake of the windmill or that the sun shine for the growing of crops. Both technical practices set nature to work to accomplish a bringing forth of water and crops, but the products revealed in these technical practices can only be accomplished when the craftsperson is becomes attendant to the possibilities that nature offers for this use.

³¹ Martin Heidegger, “The Question Concerning Technology,” 14.

³² *Ibid.*, 15.

The difference between the work of these *technai* and modern technology rests in the fact that, for the latter, the extraction of energy from the earth is not accomplished in order to bring forth some thing from out of concealment, because its activity rests in its viewing of nature as nothing more than a supplier of energy. Thus, the activity of the technologist lies in the exposure of energy for the sake of exposure. As we have seen, this is neither what technical revealing accomplishes nor how it operates, therefore if technological revealing reveals nature as a source of energy as such, it is undoubtedly new. In order to understand how and why this new revealing occurs, and is able to occur, it is necessary to look to how the human's relation to nature fundamentally changes in the shift from the revealing that is carried out in *techne* to the revealing of technology. While the revealing of *techne* is only possible through a certain respect and responsiveness to the directives that are offered by beings, the revealing accomplished by technology no longer responds to beings, but instead "sets upon nature."³³ The modern technologist does away with "technical responsiveness" and claims the uncanny power to force nature to offer itself up as nothing more than a source of energy. This is accomplished by a passing over of beings, in order to gaze upon the pre-objective energy that nature conceals within them.

This "passing over" of beings initially sounds hypothetical and ridiculous. We engage beings all the time. I myself, right now, am pressing my fingers onto this keyboard and am thus, engaging a being; and yet, it's not simply a question of whether we deal with beings or not, but it is the way in which we engage them that is at issue here. We have already discussed a particular way in which the manifold character of language is passed over for the sake of extracting from it a particular aspect that can be readily exchanged in e-mail messaging. Thus, by looking past all those "un-useable" aspects of language, so that it might focus in on and make manifest its one useful aspect, technological revealing makes language appear as nothing more than 'that which contains the informational'. By concealing all other aspects of language we are presented with something that can now be put use and is now understood in terms of serving a purpose.

³³ Ibid., 15.

Language appears as the informational because technology demands that it reveal only this particular aspect of it, forcing it to appear according to its standards rather than allowing it to unfold from out of its own manifold possibilities. This challenging demand placed upon language and its resulting transformation is just one example of how technology side-steps the relations valued in *techne*, making it possible for the human to set his gaze upon that which can be stored up and put to some as yet undecided use.

What is so strange about this challenging-revealing is that it does not demand nature to offer up energy for the sake of some pre-established end, but does so in order to reveal energy so that it might remain on call for some unknown or unforeseen need. The absolute unforeseeability of this need determines what technology must seek to reveal and store up. Since the storage is not carried out due to some real threat that imposes itself upon humanity, what is determined as “harvestable” is that which is able to stand ready for the moment in which the human deems it valuable or useful. Therefore, that which is extracted must be available for any and every use. As we saw in the example of the carpenter, the telic cause brought both the formal and the material causes into proper relation to one another by way of the *causa efficiens*. In that case, the practical end determined what aspects of those beings should be used by the carpenter, i.e. cherry wood had to be chosen over pine because the table’s need to bear a heavy load required that a wood of greater density be used. But if use cannot be determined by any real telic causality, only the most basic forms of use can determine what is to be extracted from nature. This most basic element of use is found in the pre-objective energy that resides within nature, i.e. the earth reveals itself as a source of coal which can be converted into heat, the river a source of motion which can be converted into energy by the power plant, language becomes information that can be quickly exchanged. This “energy” can thus be stored up and put to use for any need that may arise, not like grain in a dispensary, but as pure potentiality.

And yet, this revealing does not only change its relation to the end that it “produces,” it also changes its self-relation through this as well. Since technology seeks to reveal only in the challenging forth of energy, the work of this revealing can never come to an end.

That challenging happens in that the energy concealed in nature is unlocked, what is unlocked is transformed, what is transformed is stored up, what is stored up is in turn, distributed, and what is distributed is switched about ever anew.³⁴

Thus, technology is a way of revealing that challenges forth. It seeks to establish what it produces, if this word can still be employed to describe the activity of the challenging, as ‘that which stands ready for use’. That which stands ready for use can, in turn, only be used in such a way as to be reincorporated into the challenging forth of more energy, because it comes to be comprehensible and thus understood only in terms of the challenging-revealing of technology. Through this transformation, technology makes it appear that nature stands before the human not as a realm that offers the possibilities for the setting up a durable world, but as the site in which one must do battle with the hidden possibilities of nature, so as to establish a standing reserve that could be put to use at a moment’s notice for the sake of preserving the human’s position of power and control over it.

But how is it possible that the human can come to relate to nature in such a way? This can only be understood if we take note of how the technologist views his or her role in the activity of technical revealing. The technologist, like the craftsperson, gathers together that which is gatherable in order to present ‘that which is gathered’ as something produced. The difference between these two lies in how each interprets what “nature” is and how it should be approached. While the craftsperson gathers together that which is offered up by nature to allow some thing to come to presence, the technologist decides in advance what is to be gathered, or more precisely what is gatherable, so as to bring to presence something that can be secured by the human. The former way of revealing stems from a relation to nature that retains an element of wonder and humility before that which offers itself up for use. The latter is described as setting upon nature, because the one who accomplishes technological revealing does not concern himself with experiencing nature as a source that offers possibilities of a manifold variety, but is directed only toward that which can be secured and put to use with certainty and therefore, mastered. It appears now that technological revealing occurs because the

³⁴ Ibid., 16.

human is able to narrow his or her focus to something in particular within the realm of nature that can be set upon and ordered. This is possible because the human is able to decide in advance what is to be taken notice of and thus, determined as real within the realm of nature. This narrowing of focus from beings to energy makes it possible for what is real to no longer be determined as that which comes to presence as an independent thing, but as that which can be secured as certain for human knowing. Thus, the real itself comes to be narrowly defined as only that which can be secured by human knowing.

That which is securable is that which can be known in advance and therefore, planned for. Heidegger tells us that that which can be known in advance is anything that falls under the heading of the Greek *ta mathemata*. When we hear the term “mathematics,” we automatically think of the numerical, but Heidegger turns us toward a more originary understanding of mathematics when he tells us, “The essence of the mathematical, however, is in no way defined in terms of the numerical.”³⁵ Conversely, the mathematical comes to be understood in terms of the numerical because numbers represent “the most striking of the always-already-known.” Thus, the kind of knowing that secures in advance what it is to gather must project for itself a domain in which that which is to be gathered has already been brought into view as gatherable. According to the revealing of *techne*, that which is gatherable is determined by beings themselves and the work of the craftsperson is accomplished through both a taking notice of these and a responding to them. This new way of gathering narrows its focus of what is to be viewed, i.e. the realm of nature, to such an extent that it only views ‘that which can be known in advance’ as what is real and thus, considered gatherable. But this gathering can only be accomplished if the technologist has set up, in advance, an open region in which that which is to be viewed becomes visible. This determination of the real from within the open region is set up through what Heidegger calls the establishment of a “projected

³⁵ Martin Heidegger, “Age of the World Picture,” 57.

ground-plan.”³⁶ This establishment and the subsequent determination of the real through the open region which it projects can be witnessed in the revealing of technology, as it seeks to establish a ground-plan in which that which is securable for human knowledge becomes visible.

Humans do not encounter energy as such. This encounter or extraction only becomes possible through a prior determination of what the revealing itself must disclose. What is to be revealed is determined as that which can be put to use, but this usefulness itself cannot be in regards to anything specific, because it must satisfy any and all needs that may arise. Unlike the possibilities offered by beings, energy is determined as that which can stand ready to serve any purpose at any time and can be depended upon, with certainty, to serve in the way that it is commanded. Thus, the technological gaze narrows its view of the real to the level of this pre-objective energy, because the revealing itself has determined in advance that this energy is what must be sought.

This “narrowed gaze” first makes its appearance according to Heidegger in the rise of modern physics.³⁷ The formulation of this science is the first instance in which we are able to see the human’s ordering attitude and behavior manifesting itself. This attitude shows itself in and through the establishment of this science as it determines the region through which the real is to be viewed as securable and orderable.

Because physics, indeed already as pure theory, sets up nature to exhibit itself as a coherence of forces calculable in advance, it therefore orders its experiments precisely for the purpose of asking whether and how nature reports itself when set up in this way.³⁸

Thus, we see that this science approaches nature in a way that makes it reveal itself in terms of calculable forces, so as to free them up so that they might be ordered; and yet, this entrapping of nature is not reserved for modern physics alone, as Heidegger attributes

³⁶ “Through the projection of the ground-plan and the prescribing of rigor, procedure secures for itself, within the realm of being, its sphere of objects.” *Ibid.*, 59.

³⁷ Martin Heidegger, “The Question Concerning Technology,” 21.

³⁸ *Ibid.*, 21.

this operation which seeks to represent nature in terms of its calculability according to a projected ground plan as the foundation of all the modern sciences.³⁹

The rise of modern physics makes possible a profound transformation of relation between humanity and the world. By setting up nature to reveal itself as a “coherence of forces” this science allows humans to view nature as nothing more than this coherence, making it possible to set upon these alone. By setting upon *ta mathemata*, modern physics is able to take the view that all natural bodies are essentially of the same kind. Through this reduction, beings now appear as nothing more than the hidden forces within them. Drew Leder describes this reduction in the following,

The object is left as only an exhibitor of quantity, losing the innate qualities and teleologies that set it apart from others. In the drive to achieve universal characterization and explanation, modern physics leaves a uniform world in which the totality of things manifest themselves in but one way.⁴⁰

Through this shift from an inquiry into beings themselves to the forces that are hidden within them, the modern sciences gain access to that which makes possible their specialized investigations. One could assume that this shift in the human-worldly relations causes the rise of modern technology, but Heidegger tells us that this shift was not determined or decided by any scientist.⁴¹ Since the human can never decide what is to be revealed in a revealing, it does not belong to the human to decide that nature will show itself as a source of energy. Heidegger tells us the modern physics challenges nature to exhibit itself in such a way in the seventeenth century because this is the historical moment in which the challenge of Enframing becomes felt and therefore makes this transformation possible.⁴² Thus, it is modern technology, which appears

³⁹ “Entrapping representation, which secures everything in that objectness which is thus capable of being followed out, is the fundamental characteristic of the representing through which modern science corresponds to the real.” Martin Heidegger, trans. William Lovitt, “Science and Reflection,” *The Question Concerning Technology* (New York: Harper and Row Publishers, 1977), 168.

⁴⁰ Drew Leder, “Heidegger on Modern Technology and Science,” *Philosophy Today* 29 (Fall 1985): 250.

⁴¹ Martin Heidegger, “The Question Concerning Technology,” 23.

⁴² “The essence of science is rendered necessary by the presencing of what presences at the moment when presencing sets itself forth into the objectness of the real.” *Ibid.*, 168.

chronologically later but is historically earlier, that reigns within and makes possible the appearance of modern physics.

Thus, it is technology that gives rise to the possibility for the sciences to take up this modern view of nature, allowing for their ordering-revealing to continue without interruption. By setting upon energy, the human need not look to beings for pre-existing possibilities for revealing, but need only turn toward the standing-reserve to satisfy whatever need may arise for him. For example, now instead of having to seek out a piece of wood that suits his needs, a carpenter need only go to the store where he can secure a piece of reliable wood in the form of particle board. This is much more efficient because this “wood,” composed of compacted wood fibers, is produced for the sake of having a precise density. By focusing on the aspect of the wood that can be manipulated with certainty, one no longer needs to seek out large or small, dense or light pieces of wood for the accomplishment of work, because we now have the power to force it into a form that will suit any purpose. By securing that which is securable in wood, we are no longer dependent upon a particular tree’s coming to presence, in the sense of *poiesis*, for the securing of a piece of wood that we might need for a project. Due to the power of technological revealing we now have the power to extract the useful aspect of wood products as such and set it to work to make our own “wood.” This manipulating seemingly frees us from the limits of nature, so that we can go about our business free from any interruption.

Lovitt describes the narrow view that makes technological revealing possible similarly by saying:

Thus science, as a knowing, does not confront reality in the full power of its happening. Rather it directs its attention toward the real as possessed of objectness that lets it stand forth as a network of calculable causes and effects. As theory, science so brings the real before its observation as to assure its appearing in this way.⁴³

That which is gatherable is no longer experienced as ‘that which is offered up by nature’ in its lived aspect, but is now viewed as that which can be known and thus secured in advance. Lovitt describes this entrapping as a setting upon of the “objectness” of beings

⁴³ William Lovitt, “*Techne* and Technology,” 67.

which seeks to set up only the “raw material aspect” of beings, so that the real comes to be recognized only as *ta mathemata* and thus, orderable. This interpretation of reality changes the way in which causality itself is understood. It can no longer be experienced in its manifold character, but has been reduced to the shifting and organizing of that which is organizable.⁴⁴ This means that humanity has established what is to appear as real by projecting a demand upon nature which transforms it into an object-domain. The real now appears only as that which can be experienced in its objectness. Thus, the river really is nothing more than a source of motion for the power plant and wood is a source of material for construction.

When the human brings her attention only to those things that have been determined real from out of the open region established through the projected ground-plan of technological revealing, she opens a space in which she is able to view nature only in terms that make possible its planning for its securement. When this is accomplished all other ways of revealing fall into oblivion, as this new and singular task of transforming nature demands that beings are not to be experienced in their being. This turn away from nature, in its self-showing, toward a single aspect of it, i.e. that which can be made useful for the human, necessarily results in nature’s appearing as nothing more than raw material for human consumption, allowing for humanity to assume the supposed role of master over nature. Thus, man seems to encounter only himself, in the fact that everything now appears to be either of his making, or for his use.⁴⁵

This mode of revealing does not seek to establish a finished product, because it takes as its end the securement of energy for the sake of attaining more energy. Heidegger uses the German term *Bestand* to describe “that which is produced through technological revealing.” Lovitt describes this term as standing in stark contrast to the term *Gegenstand* that is used to describe the products of *techne* by saying,

⁴⁴ “Causality now displays neither the character of occasioning that brings forth nor the nature of the *causa efficiens*, let alone that of the *causa formalis*. It seems as though causality is shrinking into a reporting--reporting challenged forth--of standing --reserves that must be guaranteed either simultaneously or in sequence.” Ibid., 23.

⁴⁵ Martin Heidegger, “The Question Concerning Technology,” 27.

Bestand denotes a store or supply as “standing-by.” The word also carries the connotations of the verb *bestehen*, with its dual meaning of to last and undergo. Heidegger intends that it make us think of a ready-reserve-that-endures.⁴⁶

When nature is no longer interpreted in terms that allow it to stand in accordance with its own self-showing, in terms of *poiesis*,⁴⁷ over and against the human, but is only viewed as a source of energy or as standing-reserve, nature can no longer give directives to the human in the way that it previously did to the technician. As humanity removes itself from the directives offered by nature, it directs itself more fully toward the “standing-reserve.” This reserve does not hold value in-itself, but is that which can be put to use for the establishment of more energy; thus, that which has been gathered and secured can no longer stand over and against the human as an object, while we are left with “only a vast pool of stable reserves.”⁴⁸

We are surrounded by this world-view and with each passing day the forces of nature are mastered and converted into energy in such a way as to make any other view of them impossible. I will offer two examples in which this has become most apparent. What they will show is that even as we are surrounded by and carry out these activities, we are not fully aware of what we are accomplishing. The first example in which our desire to order the forces of nature to make them useful for us is the furtherance of the genetic modification of food. This common practice challenges the foods we eat to yield maximum output. A concrete example of this challenging forth can be seen in the genetic modification of animals, in which scientists challenge the body of an animal to grow in a certain ways that ensures a greater yield in its “products.” Scientists have the power to modify the body of a cow to grow a greater body mass, introduce foreign DNA into the body of a pig to ensure that their bodies remain resistant to the harsh environment encountered in its “storage facility” and have the ability to tinker with the immune systems of “modified” animals to ensure disease resistance.⁴⁹ It is conceivable that in the

⁴⁶ William Lovitt, “A *Gespräch* with Heidegger on Technology,” *Man and World* 6 (1973): 50.

⁴⁷ *Poiesis* includes the revealing of *techne*.

⁴⁸ *Ibid.*, 50.

future, they will attain the power and desire to produce animals with more limbs, so as to yield a greater harvest at the least expense.

Following along from our previous discussion, is it so far-fetched to assume that when we appropriate the body of the animal for our use, we see it as nothing more than a convergence of forces that has the potential to be secured and thus, exploited for human consumption? If the animal is thought of only in these terms, it can no longer be seen as a living whole, or a creature that possesses inherent integrity in-itself. When we approach the animal as a convergence of forces and nothing more, we no longer see the animal as an animal, or as living, but as ‘that which can be altered’ in order to suit our own desires. This is clearly the case, as the quality of life for the animal or the consequences of the genetic mutations that we impose upon it are not a concern, nor can they become a concern for us, as the entire project of genetic modification takes as its end the securing of the greatest yield in its product. Here we see that life itself escapes the view of this projected domain of scientific inquiry.

This “consumption” of animals is a far cry from that of the predator who seeks out its evening meal. The work of the technician demonstrates how humans have gained access to a power that allows us to impose human constructs upon nature. The power of this imposition is so great that it now appears that nature itself does not appear according to its own power of self-showing, but that it is now subject to the demands of the human. Only from this perspective are we able to witness the wonderful and monstrous power found in technical revealing!

The second example that I would like to explore is even more amazing in the fact that our current age now seeks to appropriate the sun itself as a source of energy. The push toward “green energy” is so great that no one is pausing to think through how this development might affect our relation to that which offers illumination to all life. Will we come to relate to the sun in the same manner that we do the body of animals? As we seek to secure the sun as a source of energy for human consumption, is it possible that we may someday make that which remains radically incommensurate appear as nothing

⁴⁹ McGourty, Christine. “GM Meat ‘10 Years Away’”. BBC News. 21 May, 2001. <http://news.bbc.co.uk/1/hi/sci/tech/1338704.stm>.

more than something to be manipulated by the cunning human? The drive toward harnessing the sun for its energy has already begun in the race toward “green energy” and while the solar energy movement carries with it the promise to free the world from its dependence upon petroleum, it also harbors within it the danger to close us off from an experience of the sun as an entity of wonder and power in its own right.

How then has this human power become possible? How has nature come to reveal itself as nothing more than something at human disposal? By bringing our attention to the current relation between the human and nature we are now prepared to fully experience how technology is “a way of revealing.” So far we have discussed how the power to set up an object-domain that makes viewable nature as the objective, or orderable, is a power that appears to be a possession of the human; and yet, just as in the case of the revealing of *techne*, technological revealing is not a possession that belongs to the human in the sense of ownership, but is a way in which the human is called forth to reveal the Being of beings. “Though man may treat nature as a realm of his own representation, (*Vorstellung*), and sets traps for her (*Nachstellen*) he is already claimed by a way of revelation.”⁵⁰ This claim is named by Heidegger as *Ge-stell*, or “Enframing”.

The unconcealment of the unconcealed has already come to pass whenever it calls man forth into the modes of revealing allotted to him. When man, in his way, from within unconcealment reveals that which presences, he merely responds to the call of unconcealment, even when he contradicts it. Thus when man, investigating, observing, ensnares 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...⁵¹

Just as we saw in the revealing of *techne*, it does not belong to the human to determine the conditions of revealing. The craftsperson does not decide what the co-causes are or what his role will be in and through that revealing; and yet, this is not to say that the human does not participate in and make manifest the accomplishment of the revealing. What is important to note is that the revealing of *techne* depends upon the human to play his established role properly within the revealing itself. Analogously, the establishment of the object-domain, from out of which the real is secured, cannot be understood as

⁵⁰ William Lovitt, “A *Gespräch* With Heidegger,” 52.

⁵¹ Martin Heidegger, “The Question Concerning Technology,” 19.

being derived from any human power, because the human cannot make visible or determinate anything which did not already reside in nature in a potential state. Like the *causa efficiens* in the revealing of *techne*, the technologist deals with nature in a way that is given to him as a possibility to reveal that which can be revealed. This is not accomplished because energy calls out to the human for extraction, but this setting upon accomplishes the challenge that is set forth in Enframing. Thus, the human does not command Enframing, but is always already responding to it, when he brings nature into view in the form of energy. This ability cannot be understood as either arising from nature or the human, but must be understood as a response to a claim that is made upon the human to reveal the Being of beings in this way.

Up until now the challenging forth of nature has been understood as an activity that the human takes up out of an all too human desire to become the lord of the earth. Within this inquiry the technologist has been described as one who does not take his directives from nature, but accomplishes technological revealing by choosing these directives for himself from out of a projected clearing of beings. What we have discovered is that, while it is true that the human is responsible for determining the real from out of a narrow projection of what counts as a being, it is not the case that the human carries out this task through a denial of nature. Conversely, if the essence of technology is nothing technological, but encompassed in what Heidegger has set forth as Enframing, we see that the human takes up this domineering relation to nature, not due to any human willing, but from the demands set forth by Enframing itself.

Enframing is the gathering together that belongs to the setting-upon which sets upon man and puts him in position to reveal the real, in the mode of ordering, as standing-reserve. As the one who is challenged forth in this way, man stands within the essential realm of Enframing.⁵²

This perspective shows us that it is the human who has been challenged by Enframing to set nature up in such a way that the real is able to reveal itself as standing-reserve. Just as in the case of the revealing enacted by *techne*, the human can never take responsibility for that which reveals itself so as to be gathered. Even as the human who reveals according to the directives of technological revealing plays a part in that revealing, it has become

⁵² Ibid., 24.

apparent that the technologist can only carry out this task because nature has always already contained within it the possibility to be viewed and gathered as such. Thus, the gathering that is carried out through technology can only be understood essentially when we come to see the role in which the human takes up with regard to the commands set forth by Enframing.

CHAPTER IV

TECHNOLOGY: THE AMBIGUOUS ESSENCE

“There are, then, two kinds of thinking, each justified and needed in its own way: calculative thinking and meditative thinking.”—Martin Heidegger, Memorial Address

It seems as if our understanding of Enframing as the challenging-revealing that sets the human upon nature should be sufficient for us to fully understand the essence of technology, but Heidegger does not end his investigation with simply pointing out the distinctions between technical and technological ways of revealing. To stop at this point in the discussion would be to abandon that for the sake of which this inquiry has been taken up.⁵³ It is not enough for us to look to what is new in technology. Heidegger brings his attention to this newness not for the sake of witnessing a new phenomenon, but in order to bring our attention to what is beginning to show itself in the present. The concern with technology is not how it is different, but how through this difference it threatens the essence humanity. Heidegger’s fear is that this way of revealing has the unique power to close off the human’s relation to that which makes revealing itself possible through the alienation of the human from the possibility of experiencing the world anew. If this possibility were closed off, we would no longer be able to experience ourselves as beings of freedom and thus we would no longer be able to comprehend ourselves as participants in the revealing of truth. If this closure were to be accomplished, the human would no longer stand in a free relation to the truth, but become enslaved to the command of Enframing itself.

The danger that technological revealing poses can only be understood when it is made clear that it no longer seeks to reveals beings, but concerns itself with the single

⁵³ “The essence of modern technology shows itself in what we call Enframing. But simply to point to this is still no way to answer the question concerning technology, if to answer means to respond, in the sense of correspond, to the essence of what is being asked about”. Martin Heidegger, “The Question Concerning Technology,” 23.

goal of exposing nature as energy. Since this way of revealing deals with the exposure of energy, when it looks out into the realm of beings it no longer sees beings but interprets everything in terms of energy. Its only goal is to measure and determine how much use-value might be extracted from the “material” at hand, so that it might be stored for some future use. From this we can see that this view of beings narrowly defines reality from out of what it values as useful or important for its own dealings. While those who oppose this view might argue that this is a “bad” way to treat beings, as it does not respect the animal as a living creature, or that all life should be respected due to some intrinsic worth, this opposition does not recognize what is truly at stake in this new way of viewing the world. The danger that this revealing carries with it is not exhausted in the fact that it does not *value* life. What is more frightening is that it does not think in terms of life or death at all, because, as it becomes ever increasingly occupied with its own dealings, it fails to *see* life in its living!

This fact in itself, while it seems terrible, does not require a state of alarm. There are many ways to view an object or a problem and this “scientific” approach could be one conceivable way to view nature. What is so alarming for Heidegger is that technological revealing threatens to conceal all other ways of revealing, in that it covers over the possibilities that allow for all other ways of revealing to become manifest. It accomplishes this through its demand that beings, and the possibilities that they offer of themselves through their own self-showing, be disregarded in order to make visible only to that which is orderable within them.⁵⁴ Through this demand to “look past” beings, the objective conditions that are needed for technical revealing are no longer visible and thus, that way of revealing can no longer claim us as an activity to be accomplished.⁵⁵ The danger here is not that beings will no longer be revealed in the manner of *techne*. By

⁵⁴ “Whereas the Aristotelian world-view recognized inherent potentialities and teleologies in the objects of the world, the challenging-forth engaged in by the modern technology ascribes no intrinsic integrity to the thing.” Drew Leder, “Heidegger on Modern Technology and Science,” *Philosophy Today* 29 (Fall 1985): 248.

⁵⁵ Michael E. Zimmerman rightly points to the fact that through this denial of beings, for the sake of energy, we lose the ability to make important ontological distinctions regarding time, place, things and people. Michael E. Zimmerman, *Heidegger's Confrontation with Modernity* (Bloomington: Indiana University Press, 1990), 209.

closing off these possibilities, the human becomes closed off from an experience of revealing as such, as Enframing makes itself appear as the one way in which the real comes to presence. Thus, it is not only the Rhine that becomes translated into the terms set forth by the essence of technology, but the power of the human to participate in and thus respond to revealing that is also placed into the danger of being translated only into the terms set forth by Enframing.

Drew Leder points to Enframing's uncanny ability to translate all other modes of comportment into the service of its systemization thus, making them appear as nothing more than functionaries to the technological framework.

Technology *totally* reduces all modes of encountering to that of appropriation. An object revealed aesthetically need not close off the possibility that it will be seen at another moment as useful, or as an object of theoretical curiosity. However, the modern technological attitude threatens to block all other attitudes by assimilating and transforming them. The aesthetic moment becomes *useful* as a source of relaxation, or perhaps in creating a commodity for the art market. The moment of theoretical curiosity becomes *useful* in its furthering of knowledge, control and careers. Thus the technological vision totalizes itself to incorporate within it all other modes of relation we could take to the object.⁵⁶

Thus, other modes of comportment, aside from technology, are not altogether forgotten, but their fundamental activities and accomplishments are reinterpreted so that they appear to be in service to the system established by Enframing. The concern here then is not that technology "gets rid of art." Under the rule of Enframing the activities of representation and mimesis are still carried out, but, as Leder points out, these activities are transfigured in such a way that they can no longer be practiced in and for themselves, or be allowed to reveal in their own right. Thus, one now joins the local choir because it is relaxing and takes one's mind off of their troubles. Many praise this participation as constructive and healthy, but those who choose to sing as a livelihood are often thought of as "chasing a childhood fantasy" or escaping adult responsibilities through their "art." Rarely are those who choose to take up the life of an artist treated with praise and respect. Unsurprisingly, it is only when society recognizes one's art as "unique" or "daring," that the artist is viewed as someone of praise and accomplishment; and yet, rarely, if ever, does this

⁵⁶ Drew Leder, "Heidegger on Modern Technology and Science," 247.

praise touch upon the power of art to open a world, as it focuses upon the ability of the artist to make something interesting to look at and thus, marketable.

I would like briefly to explore our relationship to the arts in order to clarify how this transfiguration is accomplished and how it affects our experience of reality. From Leder's description it is clear that once a technological interpretation is placed upon the arts, their traditional meaning and accomplishments are set aside and forgotten, while what remains of them is recognized only through their ability to be subsumed into ordered usefulness for a "productive" life. Thus, art can no longer be a space in which the artist is given room to explore and discover himself and the world anew through the act of mimetic distancing and the setting up of a world, but is an activity that anyone could take up whenever they wanted to "take their mind off" the stresses of the boardroom. While art is still valued by the latter, the ends and possibilities that are opened up through this relation do not extend in the same direction, or accomplish the same act as that of the former. The *work* of art, under the rule of Enframing, can no longer be an exploration into the unknown or unforeseeable, through the setting aside of common norms and values, but, ironically, comes to be only recognizable through these. Thus, art can no longer be practiced as a way of exploring the self or the world, which are always already questionable for the artist, but becomes nothing more than an escape, or an attempt at removal, from monotonous grind of the all-too-familiar technologically determined world; and yet, this removal itself always remains in a use-relation to the system itself, as the escape serves the purpose of allowing a worker some "free time" so that they might return to work refreshed and ready to be productive. Once art is experienced only from out of this worldly relation and placed into the service of the ends set forth by Enframing, it can no longer accomplish its innate potential, but is reduced to standing in as a functionary to the systematic production of the standing reserve.

Once this reinterpretation and conformity all other modes of relation are revalued according to the pre-established view set forth by the technological gaze, the regulating and securing of the standing-reserve can no longer meet any resistance. By forcing out all other ways of revealing, through re-interpreting them into its service, Enframing

covers over its own essential nature, i.e. as a way of revealing. It is this final act of self-concealing that poses the greatest threat according to Heidegger.

Thus the challenging Enframing not only conceals a former way of revealing, bringing-forth, but it conceals itself and with it That wherein unconcealment, i.e., truth comes to pass.⁵⁷

If we were placed into a position in which there remained no possibility to come into a knowing relation to truth, the human would no longer have the power to open itself to that which reveals itself anew through revealing. Without this openness, humanity would not have the power to overcome this one way of revealing, nor have the power to return to any other mode of comportment, but would remain abandoned to endlessly carry out the challenging revealing of Enframing.

Since this systemization, set into motion by Enframing, does not orient itself toward a recognizable goal, but only seeks greater levels of organization, humanity is placed into the precarious position of becoming enslaved to this way of revealing. The endless “systematic organization of life, and of reality as a whole,”⁵⁸ that is demanded by Enframing, would occlude all other possible avenues of human life and would result in the most totalizing form of slavery in human history. This closure to all other human potential would, in effect, put an end to history, as “individuals” would no longer be able to take up a questioning stance toward the world so as to experience it in its unfolding processes, because all former ways in which the world could be experienced will have been translated from out of the essence of technology. Under this rule the world no longer appears questionable because it appears as nothing more than something to be conquered. The only task to be accomplished is the ordering up of nature so as to make it available as standing-reserve.

This one task that Enframing challenges the human to accomplish necessarily disregards the phenomenal aspect of the world for the sake of focusing in on what has been pre-established as useful so as to set to work all aspects of reality in the most efficient way possible. The danger in this turn from the phenomenal aspect of living

⁵⁷ Martin Heidegger. “The Question Concerning Technology,” 27.

⁵⁸ Miguel de Beistegui, *The New Heidegger* (London: Continuum, 2005), 103.

toward production and efficiency is that ethical concerns cannot be taken into care within a system that values only production for the sake of production. Once the value in daily activities shifts from striving to live well or within one's proper bounds from out of a consideration for the well being for others, to only the production of the highest yield, there can no longer be a limit upon what an individual will do to accomplish the task that is placed before them. If the task at hand is justified in its usefulness and the supply to accomplish it is guaranteed, there is no need for reflection upon what it is that one is doing or why it is that they are doing it, as the ends can be said to justify the means. As the work within this system no longer serves any human end, but is carried out for the sake of efficiency and the system, the sole purpose of the work can only be found in the completion of the task at hand.⁵⁹ When the system is allowed to become master over its workers, all working is able to take on the appearance of being justified as well as necessary and, at the same time, endless.

When this form of life is allowed to take hold of all avenues of human existence there will be no need to look forward to the future, nor back to the past, because all events will be pre-planned, from out the demands of the system that each individual works to sustain, due to its seemingly ultra-rational organization. For writers such as Miguel de Beistegui the time in which humanity might offer itself up for this totalizing enslavement is no longer approaching, but is upon us today.

Man has become his own slave, a working animal that must carry on working in order to produce, and to produce in order to consume. His will, this very will that constitutes his pride and that he erects as an instrument of his domination over the whole of the earth, is nothing but the expression of what Heidegger calls the 'will to will'. Yet this man does not realize that his labour and his will spin in a vacuum, moving him ever more forcefully from his essence.⁶⁰

Those who exist within and perpetuate the system cannot desire or hope for any sort of change in the "system" of life, as time itself is appears to be determined in advance.

Translated from out of the rule of Enframing, time no longer unfolds onto itself, but is the

⁵⁹ "The rationality upon which the *Ge-stell* relies is purely pragmatic, functional, which means that the exigency of rationality no longer stems from the principle; it is only an instrument serving the efficacy of the *Ge-stell*." Michael Haar, *The Song of the Earth* (Bloomington: Indiana University Press, 1993), 83.

⁶⁰ *Ibid.*, 103.

measure of the linear space in which work is accomplished. This vacuous activity of production and consumption consummates itself in the perpetual present, as it turns its attention ever more intensely to the task at hand, but only so as to move on to the next task. Through this translation of time each “event” becomes viewed as having no greater or lesser value than the other, as each serves the system in its own necessary way as a functionary of the greater whole. No doubt that according to the most totalized vision of this system, the time of sleep is to be measured in terms of “hours of unconsciousness” and meals in terms of the “quanta of energy” needed to work.⁶¹ If time is nothing more than a kind of keeping account of work, it can no longer be seen to bear upon itself, allowing individuals to believe that all moments are equivalent to one another. One need not think through one’s actions, because they no longer can be understood as having any real effect, as only a break in the system itself would count as a change in reality. Once all relations to past and future are severed, which means at the same time ethical questioning is no longer a possibility, humanity is seemingly left with no recourse to escape or even see outside of the system.

The danger that is posed in this totalizing system touches upon and severely constricts all worldly relations and therefore, strikes into all avenues of human life. Still, the question remains, how is it that the system gets set up? Why would people enter into a system such as this, while they still have an ability to see outside of it? If one were to respond that the human is powerless against the challenge of Enframing, the challenge could no longer be a challenge, but would be a determination of the human. This assumption robs humanity of its freedom to offer itself over to this way of revealing and it has been established that it is this freedom, which allows the human to open itself up to the possibilities offered in nature, that allows for these ways of revealing be accomplished. Therefore, we must discover how is it that even as the human is challenged to accomplish the goals set forth by Enframing one’s ultimate participation is freely chosen.

⁶¹ It would not be outrageous to claim that the U.S.’s increasing dependence upon both coffee and prescription sleep-aids is not an effect of any economic necessity, but are symptoms of a much greater shift toward this technologically oriented interpretation of life itself.

Dominique Janicaud, like De Beistegui, describes the danger of technological revealing in terms of its ability to enslave the human race. But while De Beistegui claims that this organization is fueled by an “artificial creation of needs and desires,”⁶² Janicaud’s analysis looks specifically to the desire to produce and consume, in order to determine whether this is in fact established arbitrarily and according human caprice, or the artificial needs are themselves orderly. He claims that the drive toward this slavish state is carried out for the sake of attaining humanity’s own lofty ideal of a “better future,” one in which the chaos of life is settled into order.⁶³ It is not greed or appetite that limits the range of human action into ordering, but humanity’s desire to create an anxiety-free future that allows for this enslavement to one’s goals. What is striking about this “better future” is how differently it presents itself from the better future that is sought through models that take ethical considerations into care. The “better” future, determined by the system, does concern itself or seek to orient itself toward the enrichment of the human experience for the sake of more meaningful human relations, because this is not a possibility for it. The future is only envisioned from the perspective of the system, which rests upon ideals that value order and progress, not quality of life, and thus interprets what is “better” for human life from out of these. Therefore, the better future is one in which humanity is ordered into the most efficient system possible.

Janicaud offers us insight into the way in which this systematization actually takes hold of people in societies most effectively through its transformation of language, claiming that the narrow focus upon the attainment of a single goal is accomplished through the limitations placed on “acceptable discourse” in a technological society.⁶⁴ Recourse to the power of language is not a new theme in philosophy today, but what is striking about his description of “techno-discourse” does not lie in its description of what

⁶² Miguel de Beistegui, *The New Heidegger*, 103.

⁶³ Dominique Janicaud, trans. Peg Birmingham and Elizabeth Birmingham, *Powers of the Rational* (Bloomington: Indiana University Press, 1985), 63.

⁶⁴ “This encompassing technicism is composed of a large margin of passivity; it allows the operation of ‘circuits’ of technological networks; it accepts the ‘functioning’ of preconditioned frameworks; it welcomes gadgets and innovations which move ‘in the direction of progress’; it wraps it all in a silence that is indifferent to everything not ‘technologically viable’.” *Ibid.*, 62.

this type of speech is able to say, but what it is able to keep from entering into speech. He makes the reader attentive to the fact that technological revealing can only be fully accomplished, or be actualized as a totalizing system, if it is able to conceal the questionability of its activity. The silencing-concealing allows technology to appear as the only way in which the real is revealed by making an appeal to “natural consciousness” and its fascination with effects and results.

Modern technology essentially seeks to be *productive of effects*. If it reaches its goal, which is its proper end, the powerlessness of the discourse and the obscurity surrounding the ultimate end of the techno-scientific process are of little importance.⁶⁵

By effecting results, technological advancements do two things: produce a desired end and obscure any sort of possible need for consideration of the value of the process as a whole. Thus, the results of technological advancements seem to justify its activity, or in other words, make the process appear to be self-explanatory. Who would question the awesome power that science wields over the material at its disposal; and yet, what Janicaud, along with Heidegger, draw our attention to is the fact that this obsession with the power of effecting and goal setting obscures ‘that which makes the process itself possible’ and does so in such a way that it becomes impossible to see that the process is carrying out an obfuscation.⁶⁶

The technological system is not entered into due to some escapist desire. The illusion that technological advancement puts forth, in its accomplishments of human desires, encourages individuals to dedicate themselves to “advancement as such” because these accomplishments make it comprehensible that technology could be put to use for the sake of some “greater end.” With all of its success, it seems as if technology should be able to accomplish any goal that is placed before it, at the same time, it also appears that if a desired goal remains unattained, this is not due to a failure on the part of technology, but due to humanity’s lack of focus and determination to put it to good use. Thus, technological accomplishments offer the hope that humanity could “produce” a

⁶⁵ Ibid., 62.

⁶⁶ Martin Heidegger, “The Question Concerning Technology,” 26.

better future through its own determination and it is this hope that allows individuals to organize themselves under the common goal of systematization.

What Janicaud points to is that the highest goal that individuals are able to set for themselves within the system is progress for the sake of a better future. This goal seeks the highest possible aims within an organizational system because it does not aim at the self-serving desires of an individual entity, but seeks to organize for the sake of endless organization into the future. With the establishment of this goal one is able to carry out the task demanded by the system endlessly, with the dream that through their hard work something greater than themselves will be accomplished. Thus, we find ourselves advancing the research of atomic energy. While this energy brings with it the power to extinguish not only the human race itself, but all life on Earth as such, it also is understood as holding within it the promise of a better future. This better future is one in which there is enough energy for all. Through this busyness, the burden of life is taken from the shoulders of the worker, with the excuse that it has been done for the sake of “the future.”

But doesn't this setting aside of the burden of human life accomplish precisely the opposite of what it hopes to attain? When individuals turn toward specialized tasks in order to unify under this common goal of a better future they close off the possibility for a future that exists *as future* and not simply a recurrence of the eternal present. When individuals sacrifice themselves to the system interpersonal, and therefore intrapersonal, exchange is lost. Once humans no longer relate to one another, or to themselves, as unique individuals, but determine themselves according to the standard of “universal human subject,” they bar themselves for ever comprehending that anything may exist outside of the system. All ties of relation are stripped from the human that have not been predetermined by Enframing and with this any hope of breaking free from the goal-oriented system is lost. The human is no longer understood as the being that is determined from out of its essential relation to truth, but becomes nothing more than a functionary within the technologically determined system.

By making its demands appear unquestionable, Enframing establishes its rule and humanity finds itself willfully submitting. This ominous future is again described by Janicaud in terms of its silence.

This operation takes place as if by itself, having no need of being “articulated”. Technicism is, by instinct, silent, once the instructions have been given and the orders passed along—a silent instinct earned to some degree by the tacit acquiescence of machines. In the most technological society, in an absolutely closed technical system, only codes would break the silence, as orders would be received by a perfectly disciplined army. A hyper-technical society *would function and would remain silent.*⁶⁷

Once technology has gained acceptance as that which has the power to alter human life for the better, it seems as if it is only a matter of time before it establishes itself as the new world order. The most terrifying element of this revolution is not found in its physical brutality towards dissenters, but in its ability to make it appear as if there is not and could not ever be a position from which one could challenge the fundamental position.

When viewed from this perspective, is it too far-fetched for one to wonder if those animals that Aristotle describes as “political,” such as bee and ants, have not always organized themselves in such a fashion? Did they too possess, at one time, the power to relate to one another in a different, more originary way? Is their “rational” organizing, merely the after-effect of their inability to come to terms with a more originary freedom? From this discussion, these questions that would have seemed ridiculous at one time cannot be dismissed so easily, as they illustrate situations in which living creatures do operate silently within closed systems. A common response to these questions would be to claim that humans possess innate qualities that set them apart from these animals. On the one hand, humans are believed to possess “freedom,” whereas these animals do not have this fundamental trait; a more compelling response would remind us that humans have the power of speech, and that this is what allows us to remain irreducible to those creatures who are simply bound by their natures. But Janicaud’s work shows us that through the ordering of the system, language itself becomes unnecessary, and even counterproductive, among its workers. Accordingly, those within the most totalized

⁶⁷ Ibid., 63.

systems no longer speak. Following from this, can we be so sure that the systematic ordering of these “political” creatures can simply be attributed to “their nature,” or is it possible that are we seeing the results of a pre-human “civilization” which fell prey to, and remained within, the challenging set forth in Enframing?

This silent systematization appears to be securing a place for itself in the form of the science of “cybernetics.” This science, which seeks to organize all sciences under the single goal of the systematization of the real,⁶⁸ seems to be the actualization of the supreme danger, through which the most recent, and seemingly final, stage in this human forfeiture of freedom is being accomplished. Cybernetics focuses its attention of the use and exchange of “information.”⁶⁹ This exchange is what would make possible Janicaud’s “hyper-technical society,” as it seeks to control the work that is accomplished within the system through a closed-circuit exchange of information. This circular exchange is accomplished through messages that are sent to a process which receives an order, this receiver then accomplishes its task by responding back to the process that commands it. This process of exchange has the character of “feedback.”⁷⁰ Within this model of communication the only thing that is valued is the exchange. This “exchange” is not one that seeks to discover something that may be unknown, and thus questions. The communication that is carried in cybernetic exchange is one of command. This information that is sent to the receiver is an order and the receiver responds to the programmer or operator by carrying out the command that is given. Thus, this type of communication is only able to produce pre-established results. “Circularity—and self-regulation—are the defining characteristics of the world that cybernetics projects.”⁷¹ It does not and cannot seek to discover anything new through the exchange, as this is not its

⁶⁸ “It [cybernetics] constitutes the very matrix of techno-science in that it designates an epistemological project oriented towards operational control more than fundamental research aimed at understanding a given phenomena” Ibid., 107.

⁶⁹ See Chapter Three “Ways of Revealing: *Techné* and Technology” for a discussion of how the technology that operates through messaging reduces language to information.

⁷⁰ Miguel de Beistegui, *The New Heidegger*, 104.

⁷¹ Ibid., 104.

goal and the only time in which this communication could receive something other than that which has been commanded is when the receiver of information is unable to accomplish the task that it has been given. In a perfect system this denial would never come in the form of a refusal, but in the form of a “technical difficulty” or malfunction.

So we see here the danger that technological revealing carries with it in its ability to make itself appear as the only way in which the real is revealed to us and a concrete way in which this danger not only threatens us but is actually manifesting itself today in the form of cybernetics. De Beistegui and Janicaud, as heirs to Heidegger’s thinking, are able to show how the current age has moved beyond systematization in the form of the securing of energy for human consumption, toward an emphasis on the exchange of information. This move from energy to information illustrates the hyper-reality that the human seeks to dwell within. Through the increase in the cybernetic system, human work has begun to turn away from direct extraction setting up of a standing-reserve of energy, because within this system the securing of energy need only be accomplished through talk of securing. This drive toward systematization does not need to secure energy through actual work, but rests assured, so thoroughly confident in its methods and power to control, that it need only to establish sentinels, across the globe, for this securing. These executors of systematic planning would not stand ready to work, but would stand ready to immediately execute the commands set down by the operator if the need for extraction should be determined. This global, cybernetic system would establish itself in such a way that no force on earth could threaten its reign. It would hold the very forces of nature at its finger-tips and with a single command could destroy entire nations, continents, and even the earth itself.

This danger, the invisible enslavement to our own circular planning, is what we are exposed to in Enframing and is what Heidegger asks us to become aware of when he tells us,

We do not stop to consider that an attack with technological means is being prepared upon the life and nature of man compared with which the explosion of the hydrogen bomb means little. For precisely if the hydrogen bombs do *not* explode and human life on earth is preserved, an uncanny change in the world moves upon us.⁷²

The supreme danger does not arrive in the form of a foreign force that threatens human life. This danger arrives through humanity itself as we open ourselves to the threat of the “annihilation of the human essence.” If Enframing were to completely take hold of human life, it would accomplish the closure of the human’s relation to the truth and thus, transform humans into those animals that labor for the system, without freedom or speech to offer them any chance of escape. For Heidegger, “the essence of man is not given to him as a nature. He has it by being. He can gain or lose it.”⁷³ Thus, we are reminded that through this obsessive drive toward a totalizing organizational system in which “the possible would become identical to the real”⁷⁴ the human is placed into danger due to his or her own actions; and yet, it is necessary to remind ourselves of how essential human activities arise as possibilities. Even as we concern ourselves with power that technological revealing has to cover over all other ways in which the truth is revealed and the danger that this poses to the human essence, it is necessary to recall that technology is still a revealing and thus, remains a way in which the human comes to stand in relation to truth.

Enframing challenges the human to set upon nature in such a way so that it can be reckoned up and ordered. This challenge requires that the human take a particular stance with regard what appears as real within the realm of nature. This is accomplished through a narrowing of the view by which nature and the real is apprehended or made comprehensible. Thus, the human does carry out this project of viewing nature so as to discern that which can be ordered, but what must not be forgotten is that it is in no way within the power of the human to determine the manner of revealing or what is revealed through it. The human cannot make nature appear as energy if it were not already a

⁷² Martin Heidegger, trans. John M. Anderson and E. Hans Freund, “Memorial Address,” *Discourse on Thinking* (New York: Harper and Row Publishers, 1959), 52.

⁷³ Michael Haar, *The Song of the Earth*, 87.

⁷⁴ *Ibid.*, 87.

possibility for nature to appear in this way. From this perspective, it is clear that there is an aspect of revealing itself that technology can neither reveal nor bring under its command, as it rests upon this for its ability to reveal as such.

This inability of technology to does not stem from some failure in its ability to order. Technology necessarily relies upon something that remains excessive to what is revealed through it. In his essay “Science and Reflection,” Heidegger calls this elusive and enigmatic character “that which cannot be gotten around.”⁷⁵ Here he points to the fact that it does not belong to the individual sciences to inquire into the ground of their specific object domain because this does not fall within the power of the revealing that the sciences operate under. He tells us,

Accordingly, it would have to be expected that science itself could find and present within itself that which is not to be gotten around, and could define it as such. But it is precisely this that does not come about, and indeed because this is impossible...If the sciences themselves should at any time be able to find at hand in any of themselves what is not to be gotten around of which we are speaking, they would have before all else to be in a position to conceive and represent their own essence. But they are never in a position to do this.⁷⁶

Thus, Heidegger acknowledges that technological revealing carries within it an internal limit and in its very nature both conceals and reveals this. Enframing orders and challenges so as to set all aspects of reality into place within its pre-established order; and yet, even as it orders and challenges endlessly, there will always remain that which cannot be made to stand in terms set forth by this revealing. Thus, through the particular example of the sciences we see that it cannot ever belong to this way of revealing to reveal that which grounds it.⁷⁷

This limit that technological revealing confronts cannot be interpreted as a failure of the revealing itself, but must be understood as disclosive of the ground upon which this revealing rests. If it is not witnessed simply as a limitation of the human mind, the limits

⁷⁵ Martin Heidegger, “Science and Reflection,” 175.

⁷⁶ *Ibid.*, 176.

⁷⁷ Aristotle himself acknowledges this limit as belonging to the sciences in the *Physics* when he tell us, “For just as it no longer belongs to the geometer to give an account to someone who rejects his starting points, but either to a different science or one common to all knowledge, so it is with the one considering origins”. Aristotle, *Physics*, Book I, Ch. 2, ln. 185a.

of science can be disclosive of something that remains operative within technological revealing, but can never be appropriated by it. If we wish to respond that which claims us from out of the failure of scientific knowing, it has been made clear that we cannot approach it in the manner that science approaches an object of inquiry, as “that which cannot be gotten around” must be granted a different kind attention. Heidegger tells us “reflection” is the only way in which we might bring ourselves into a knowing relationship with what cannot be appropriated through scientific inquiry.⁷⁸ Reflection, or meditative thinking, is a thinking that is not commanded by technological revealing, but also does not simply abandon it. It is exercised in relation to technological revealing. Instead of remaining captivated by the efficiency of technological revealing, this thinking questions into the ground that makes the revealing possible. In order to do this, the human gaze must be freed up from its focus on beings and energy so that it might question into the ground which makes revealing itself possible. In doing this it is allowed to ponder not only what is revealed through the revealing, but also the *way* in which this is revealed. Thus, reflection must be able to turn itself back onto itself, not seeking to command but to experience itself anew, so as to witness that which has been previously passed over and grounds revealing as such.

⁷⁸ Martin Heidegger, “Science and Reflection,” 180.

CHAPTER V

THE TRUTH OF TECHNOLOGY

“We learn nothing with greater difficulty than to freely use the national.”
 --Friedrich Hölderlin, Letter to Böhlendorff

Our concern has been to comprehend the essence of technology. If we recall the words of Aristotle that were put forth in Chapter Two, we will be reminded that this work seeks to understand how technology stands in relation to its source or cause so that we might understand how it has arisen from both the perspective in which it appears to us *and* how it appears simply. In making our first approach, it was shown that the technological devices that we commonly think of as technology cannot ever fully encompass its essence, because the essence of technology is not a mere means, but is a mode of truth. This required that we look past these devices, in order to turn toward an analysis of causality. This turn toward causality as such has allowed us to investigate the different ways of revealing according to how causality operates within them.⁷⁹ Through this analysis we have discovered how the human cooperates within these differing modes of truth only by coming into accord with the demands set forth by the mode of truth itself. Thus, we have discovered that the human never determines what the truth reveals or how he is to participate in the revealing, but accomplishes that which is set forth by the revealing itself. While the human is witnessed as the one who is receptive to the demands set forth by the revealing, this does not mean that the revealing is accomplished above or without the human, because even as the human does not rule over or determine the truth, the human intimately belongs to this movement as the one who is able to respond to and unfold it into its completion.

⁷⁹ As we have seen, causality operates differently within each way of revealing. Within the revealing of *techne* causality operated as the drawing together of the four-fold causes so as to induce a being to come into unconcealment, while in technological revealing causality was described as a reporting.

In focusing our attention upon causality as such we considered these different ways of revealing, in order to inquire into how causality operates differently within each. But we still need to discuss how the *ways of revealing* themselves become manifest. By following our investigation along the way that has been possible for us we have arrived at the question of what a way of truth is as such. But don't we hear in the word *aletheia* the truth of truth? Haven't we been working under the belief that truth is unconcealment? Doesn't unconcealment encompass what truth itself is? While our investigation has rested upon an understanding of truth as unconcealment, we have not yet fully understood the movement of arising from concealment into unconcealment to its fullest extent. As our investigation into cause has rested upon our belief in different modes of truth, we have been working all along under the assumption that there are differing modes of truth. Thus, if we allow ourselves to reflect back upon our investigation, we are able to see that the truth reveals itself in different ways. Truth itself is manifold. Thus, if we are to fully comprehend the truth, we cannot remain satisfied with this tentative distinction between 'the concealed' and 'the unconcealed,' but must continue to investigate into how these different modes of presencing occur.

This investigation has focused upon what is revealed through the human's participation in the ways of revealing of *techne* and technology. Thus far, our attention has been turned toward that which is revealed, and the part the human plays within this revealing; and yet, in turning toward these aspect of the revealing we have failed to adequately question into that which makes the revealing itself possible. In both cases we relied upon our observations about the various ways in which beings or nature offered themselves to the human as a source to be encountered and worked with. By orienting ourselves unquestioningly toward those aspects of beings which are already manifest to us, we have been thinking through the question concerning technology in a way that accords with all metaphysical thinking.

As metaphysics, it is by its very essence excluded from the experience of Being; for it always represents beings only with an eye to that aspect of them that has already manifested itself as being. But metaphysics never pays attention to what is concealed itself in this very being insofar as it became unconcealed.⁸⁰

In turning toward and questioning what is already visible in the revealing, we too have passed over the concealing which allows for the coming to presence of beings. In Chapter Two we began along this way, which seeks to attend to what is concealed in a being, because it was determined that we could not count ourselves as knowledgeable about a being unless we had unfolded the cause that had allowed it to come to presence.⁸¹ For this very reason we turned toward an investigation into the four-fold causality that philosophy has historically rested its investigations upon. But, as we are beginning to see now, it appears that this interpretation of causality itself rests upon something still prior to it. Thus, if we are to fully comprehend technology as a way of revealing, we must go back and look more closely to causality itself in order to more fully see what is occurring in the revealing.

Heidegger tells us that both *techne* and technology are “ways of revealing.” What does it mean to be a *way* of revealing? Until now, we have remained satisfied with describing the activities that occur within these two *ways*, as the interaction between the human and those possibilities that are offered to him for the accomplishment of the revealing itself, to suffice for an explanation of the way itself. But it has been shown that the revealing does not take place in the productive or challenging processes, as the revealing in *techne* does not rest in a power of the human to create beings from nothing or to respond to some demand from beings themselves, and that the challenging forth of energy in the revealing of technology is only possible because nature hides this securable aspect within itself prior to any human activity that seeks it out. In both of these ways of revealing we see that the human is only able to carry out the activity of revealing due to some prior possibility that allows these to become accessible in such a way.

⁸⁰ Martin Heidegger, “Introduction to ‘What is Metaphysics?’” 288.

⁸¹ Here we determined this to be the manifold cause which induced something to come forth from out of unconcealment. This was understood to be determined through the cooperation of the four co-causes which are responsible for particular aspects in the occasioning of a being.

While it has already been established that the human is the being who is able to respond to those possibilities that are offered for the revealing to be accomplished, the question remains, if the directives for the accomplishment of the revealing do not originate in the human or from beings, how does this revealing become possible? Heidegger tells us, “Always the unconcealment of that which is goes upon a way of revealing.”⁸² Since this revealing does not occur beyond all human doing, but requires his cooperation for its accomplishment, the activity of the human can only be understood as a response to that which sets him along a way of revealing. Heidegger deems this setting along a way as “destining” or “*Geshick*.”⁸³ Destiny is that which sends the human along a way of revealing. This sending guides the human to reveal that which presences in such a way that is made possible through the sending. Even still, what does it mean to be *a way* of revealing and how does this have the power to “send the human along this way” as a destiny?

Heidegger explicitly asks the question, “What is a way?” in his essay “The Way to Language.” His response to this question is, “The way lets us get somewhere.”⁸⁴ Thus, a way of revealing lets us arrive at the revealing that the way allows. But how then does this happen? How is it that a way of revealing can bring us to reveal the real as beings or as energy? This “way” that Heidegger speaks of cannot be comprehended if one simply thinks of it as a path that has been pre-established that the human is compelled to follow, as this would remove the human from his essence as the being that is free to respond to that which offers itself to him as a way. Heidegger offers us a directive for thinking way, not in terms of the pre-established, but as way-making, or as being the way itself. He uses the term *Be-wëgen* to lend the term “way” its transitive sense, as in the clearing of a way. “*Be-wëgen*, thought in this transitive sense, no longer means to merely transport something on a way that is already at hand; rather it means

⁸² Martin Heidegger, “The Question Concerning Technology,” 25.

⁸³ *Ibid.*, 25.

⁸⁴ Martin Heidegger, ed. David Ferrell Krell, “The Way to Language,” *Basic Writings* (San Francisco: HarperCollins Publishers, 1993), 413.

rendering the way to...in the first place, thus being the way.”⁸⁵ Thus, to be a way means to clear the way through an opening up of the way.

Heidegger’s interpretation and employment of “way” is reminiscent of the Greek term *arche*, which Aristotle uses to name the origin or cause. This term has a two-fold sense, in which it means both to begin and also to rule over. In this context, if we think of a way of truth in terms of being an *arche*, truth is the origin of the revealing, in that it clears the way for the revealing that comes to pass, and also guides the revealing to its completion. Since the human is determined by his freedom, which allows him to come into relation to this way of revealing, this destiny that is not a fate that compels, but is an opening up of a passage that the human is called to follow along and carry out.⁸⁶

Thus, a way of revealing cannot be determined by any human willing, but must be understood as the process through which the truth itself becomes manifest and draws the human into a relation to its manifestation. This requires that we witness the truth not simply as unconcealment, but as the way-making movement that allows something to arise from concealment into unconcealment. Heidegger tells us, “All revealing comes out of the open, goes into the open, and brings into the open.”⁸⁷ Thus, the way of revealing encompasses all the moments that are contained within the revealing and guide it from its outset. This means that if we are to fully comprehend *aletheia*, as unconcealment, we must inquire also into the hidden ground of truth. If the way-making of truth involves all aspects of the revealing, then we must become attentive to not only what is made manifest through the revealing, but also how that which comes to presence stands in relation to its ground, or to that which remains concealed.

This thinking asks us to consider not only the truth of beings but the truth of Being. This guiding and revealing, that send us along a way of revealing, is

⁸⁵ Ibid., 418.

⁸⁶ “To free oneself for a binding directedness is possible only by *being free* [Freidsein] for what is opened up [*zum Offenbaren*—hence also, for what becomes manifest] in an open region.” John Sallis, ed. by François Raffoul and David Pettigrew, “Free Thinking,” *Heidegger and Practical Philosophy* (Albany: State University of New York Press, 2002), 7.

⁸⁷ Martin Heidegger, “The Question Concerning Technology,” 25.

accomplished in that Being grants or brings to light certain possibilities that offer themselves to humans for the carrying out of the revealing, but this opening can only be accomplished through a through a certain self-concealing. This concealing cannot be considered a lack, but is that which first affords a space for beings to come into the open.⁸⁸ Miguel De Beistegui attributes to this self-concealing the possibility of destiny.

Destiny, for Heidegger, is a sending of being. What characterizes this sending, though, is that it implicates a certain reserve, an opacity: in sending itself, it also holds itself back. This is what, following the Greek, Heidegger calls the *epoche* of truth. The various ways in which the truth holds itself back determine the various ‘epochs’ of truth. In manifesting itself the truth also conceals itself.⁸⁹

Through this “holding back” of itself Being opens a space for beings to appear and thus, the possibility for the human to engage beings as beings; and yet, we have also seen that beings do not always reveal themselves in the same way. This tells us that Being does not conceal itself and therefore, reveal beings in only one way. Thus, we see that through the withholding of Being, beings appear to the human in accordance with the way in which Being withdraws itself.

This prior withholding is what determines the possibilities that are to be found in beings by the human. As was determined in Chapter Three, the technician does not decide how the co-causes are to cooperate, because this is determined by the revealing itself; likewise, the scientist does not determine that nature can be set up to report itself as a complex of forces, but does so only because he finds this as a pre-existing possibility in nature. Therefore, we must understand that the possibilities that the human discovers and sets to work in the revealing is only possible, because beings themselves come into unconcealment as the beings that they are only through this prior engagement with that which conceals. Thus, it is through the withholding of Being, which allows beings to appear according to the unique epoch of truth, which allows the human to go along a way

⁸⁸ “All revealing belongs within a harboring and concealing...Freedom is that which conceals in a way that opens to light.” *Ibid.*, 25. This quotation is reminiscent of the saying which tells us that pure light is equivalent to pure darkness. If Being did not withhold itself so as to limit possibilities, then there would be nothing for the human to deal with for revealing. There would be infinite possibility and thus, no directive for some particular thing to be accomplished.

⁸⁹ Miguel de Beistegui, *The New Heidegger*, 115.

of revealing. Through its self-concealing Being sends the human along a way because it determines what possibilities can manifest themselves within nature and beings, which in turn determines the range of possibilities that the human can have in coming into relation with them and thus, accomplish the revealing in the way that is possible.

The clearing of Being, in and through which beings come into unconcealment determines how they are to appear. Their manner of presencing is never determined by human dealings, but are offered up for human response. In the revealing of *techne* beings offered themselves as entities to be gathered together by the craftsperson and in the revealing of technology nature offers itself up as energy. The manner of presencing that is made manifest by the open region determines the way in which the worldly relations between beings, humans and Being come to stand. Epochs of truth determine how the human is drawn into these relations and opens up the way through which the human can respond to what is given in order to set up a world.⁹⁰ In and through this response all worldly relations are established. This is not a work of human making, but that which is first afforded by Being, by way of beings, and it is through the appropriate human responsiveness that a singular order of beings is allowed to come to pass.

We find ourselves in the epoch of truth in which all beings present themselves as nothing more than a store of energy for human consumption. Since this aspect of beings is available for human relations, we view beings and nature as nothing more than this. Energy is something that does not demand respect, as it is merely an inert mass or lifeless force that serves human need. Thus, beings and nature are not treated with dignity, because they appear only as something which intrinsically does not require respect, but is something that only holds value in terms of its use. It is this outward appearance of beings, as energy, that has set the standard for all worldly relations within this epoch of truth. But it is clear that beings have not always appeared in this light. During Medieval times beings appeared not as a convergence of forces or inert matter, but as created beings. Beings which appear as created encourage humans to relate to them in a certain

⁹⁰ "World is the ever non-objective to which we are subject as long as the paths of birth and death, blessing and curse keep us transported into Being." Martin Heidegger, ed. David Ferrell Krell, "The Origin of the Work of Art," *Basic Writings* (San Francisco: HarperCollins Publishers, 1993), 170.

way. During this epoch, beings could not be handled, dissected and forced into human use in the ways that they are now, because each being, as a being, had been crafted by the divine maker and thus, carried with it a portion of the divine grace. When beings are determined as being allotted a portion of divinity they demand a certain level of respect in themselves. In this time beings were not viewed as raw material, but as beings worthy of wonder and praise. Thus, we can see that the way in which beings appear determines the way in which we, as humans, are able to approach and deal with them.

From this we are able to see that Being withholds itself so that beings can shine forth in the way that has been allotted to them from Being itself. By looking to different epochs of truth we are also able to see that Being does not allow for beings to come into unconcealment always in one way, but that this comes about differently as well. Therefore, the challenge of Enframing is not a force that has randomly claimed humanity, which seeks to destroy the earth through some frenzied ordering and challenging; it is the destiny that belongs to our historical moment. In his essay “Science and Reflection” Heidegger tells us,

Thus modern science, as the theory of the real, is not anything self-evident. It is neither a mere construct of man nor something extorted from the real. Quite to the contrary, the essence of science is rendered necessary by the presencing of what presences at the moment when presencing sets itself forth into the objectness of the real. This moment remains mysterious, as does every moment of its kind. It is not only the greatest thoughts that come upon doves’ feet; but at any given time it is the change in the presencing of everything that presences that comes thus—and before all else.⁹¹

Thus, it is the change in the presencing of that which presences which draws the human into the claim of destiny. We find ourselves within the time in which the real presences as that which can be revealed as energy. We do not choose to either succumb or deny the challenge of Enframing, as we are already claimed by it; and yet, since the revealing itself requires human cooperation for its accomplishment, this destining requires the human for its unfolding into accomplishment. As long as we merely respond to beings, in the way that they offer themselves up as energy, we remain bound to the challenge of

⁹¹ Martin Heidegger, “Science and Reflection,” 169.

Enframing. In doing this we still respond to the call of Being, but in a way that does not fully embrace the freedom that makes this response possible.

Only when we pause from the challenging-revealing to ask ourselves how worldly relations between humans and beings are made possible are we able to free ourselves from the ordering revealing and think it from a difference provenance. Now that we have determined that it is not beings, but Being, that both opens and makes the way of revealing, we are able to comprehend how the human stands in relation to the way itself. Being withholds itself so that beings might offer themselves up to the human for cooperation in the revealing. In doing this Being holds open the way; and yet, the way cannot be accomplished as a way unless the human responds to that which is given in a way that is appropriate to what is offered. Thus, we see that the way is only able to unfold as a way if the human takes it up and accomplishes it. Only in this light, the one in which the human is seen as responding to Being and not simply beings, are we able to see that an order of beings comes to pass through the response of the human to the way that is opened by Being itself.

When we ask the question of what it means to be a way, we are given the opportunity to experience ourselves, even everything, anew. This question reconnects us with our own essence, because it allows us to open ourselves to the freedom that enables an ordering of beings. This both allows us to partake in the way of revealing that has been allotted to us, and also gives us the opportunity to comprehend that we are needed in the unfolding of truth itself. *Ge-stell* has been witnessed as but one way in which the truth of Being is revealed; and yet, its challenging claim is what has brought us into this confrontation with the truth of Being itself. Thus, the way that is cleared by this revealing is not exhausted in the challenging-revealing of Enframing, but also opens a way to the way of truth itself.

What are we witness to here and what is becoming manifest to us through this questioning? As we are no longer simply bound to the way that is set by *Ge-stell* but are able to see that it is a mode of truth, we are able ask then, how it stands in relation to other modes of truth, and thus, how truth stands in relation to itself. This is possible because the essence of technology is nothing technological, but is the essence of truth

itself. The question concerning technology asks us to think through the relation between concealment and unconcealment in such a way that a new relation to the truth becomes possible. Thus, technology is *a way of truth that opens onto the way of truth as such*. This opening onto the way of truth as such cannot be of any human making, but arises from out of the possibilities that the truth of Being as offered of itself. Thus, this turn toward the truth as truth has come about from a call to truth from out of itself. We may choose to respond or to deny this claim, but we remain within this destinal sending all the same. But it remains to be said how this way has arisen and is coming to meet us.

As a way of truth, technology sends the human along the way of its revealing, but in doing this to closes the human off from all other ways of revealing. From our discussion we could assume that technological revealing is but one way among others, but if it closes us off from any other way, now or in the future, it cannot be counted as one way among many, as if these ways were to all fall under a single concept of revealing.⁹² This way of truth threatens to close us off from an experience of the truth as such and thus, offers us a new experience of truth. Thus, it is through the challenging-revealing of technology that the truth itself is able to reveal itself to the human in a way that is possible for it. Heidegger names this other revealing of technology “the saving power”. He tells us of this power,

For the saving power lets man see and enter into the highest dignity of his essence. This dignity lies in keeping watch over the unconcealment—and with it, from the first, *the concealment*⁹³—of all coming to presence on this earth.⁹⁴

So it is not only beings and a particular relation to them that is made manifest in Enframing, but also the play of concealment and unconcealment are brought to light as well. Thus, technology cannot be thought of as one way of revealing among many, but is the way in which truth as such is brought to itself. Instead of simply being the way of truth that threatens to destroy the human essence, technology must also be thought as that

⁹² Martin Heidegger, “The Question Concerning Technology,” 30.

⁹³ Emphasis mine.

⁹⁴ Ibid., 32.

unavoidable way in which we are brought into a proper relation to truth, which means at the same time ourselves.

Technology is not of our making, but is a destiny of truth. This destiny has unfolded through the passage of history and we find ourselves at the consummation of this way of truth as it brings itself to itself through our cooperation. If technology is what is revealed through this way, this is only because technology has been destined to reveal itself from the outset, in which the truth revealed itself as the presence of what presences. Heidegger hints at this destiny on occasion in his writings on technology. Through this, he gestures toward the idea that history is the occurrence of the singular event of the unfolding of the truth of Being.

That which was thought and in poetry was sung at the dawn of Greek antiquity is still present today, present in such a way that its essence, which is still hidden from itself, everywhere comes to encounter us and approaches us most of all where we least expect it, namely in the rule of modern technology, which is thoroughly foreign to the ancient world, yet nevertheless has in the latter its essential origin.⁹⁵

Thus, we do not fully understanding of these different ways of revealing when we conceive of them as different modes of truth which stand next to one another, as members of the same *genus*, but only in that they are unique moments within the unfolding of truth itself. In this way we are able to see that the essence of technology is that way which stands at the completion of this way of unfolding as that which has ruled over the unfolding of this history itself.

We find ourselves within the historical moment in which Enframing threatens to conceal the relation of the human to Being; and yet, by becoming attentive to this danger we are also brought into a new relation with the truth itself. Instead of simply being fixated upon that which is unconcealed, we now have the power to remain attentive to that which remains concealed, as it is concealed, in and thorough that which is unconcealed, and see that this concealment is the source which gives rise to, or grants, that which is unconcealed. By remaining attentive to ‘that which grants,’ we free ourselves up from experiencing it only in its appearance as the challenge of Enframing.

⁹⁵ Martin Heidegger, “Science and Reflection,” 158.

This freeing claim allows us to experience and thus, comport ourselves toward beings in a new way. This new relation Heidegger terms *Gelassenheit* or “releasement toward things.”⁹⁶ This relation is knowingly held open through an effort on the part of the human, as he seeks to experience beings in their being. This cannot be understood as an experience of beings in their quantifiability, but in the way in which they presence of themselves.

This comportment is not an attitude of human making, but it is also not a fate that is imposed upon him. This releasement toward beings can only come about and be sustained through the human’s comprehending of his proper relation to the unfolding of truth and the subsequent taking up of the role of the one who watches over the unconcealed. This watching is described as a “waiting” by Andrew Mitchell and it is through this practice of waiting on things that the human comes to properly dwell upon the earth.

To wait upon a thing’s thing-essence, then, is precisely not to challenge it forth, not to decide in advance how it is to be revealed, and not to demand that it be purely present. Rather to wait upon a thing’s thing-essence is to let the thing rest *in its essence*, and that means *to not be purely present*... When things are allowed to show themselves, they preserve this hiddenness and self-concealment, and only then can they be said to be whole (Heil).⁹⁷

It is only through remaining attentive to that which remains concealed in beings that we are able to allow them to most fully be the beings that they are. Through this the human does not seek to master beings, but to experience them in the ways in which they offer themselves; and yet, we have seen that the presencing of beings does not arise from beings themselves, or from any human power, but is granted from Being. Thus, opening ourselves to an experience of beings in the ways that they offer themselves means that, through this experience of beings, Being is recalled and allowed to be responsible as that which grants to beings their presencing.

⁹⁶ Martin Heidegger, “Memorial Address,” 54.

⁹⁷ Andrew Mitchell, ed. by François Raffoul and David Pettigrew, “Praxis and Gelassenheit: The ‘Practice’ of the Limit,” *Heidegger and Practical Philosophy* (Albany: State University of New York, 2002), 329.

Michael Haar calls this knowing relation between the human and Being the link of “reciprocal appropriation.”

The call of being appearing to man through Technology is not an “event,” nor an advent, but one expression of this *singular tantum*, the unique, reciprocal appropriation. As such, *Ereignis* is already a cure: the “turning” of the oblivion of being into memory, into the watch of being.⁹⁸

Through the experience of *Gelassenheit*, beings are able to offer us an experience of Being in a way that is possible for us, which allows us to remain attentive to the truth of Being, through our experience of beings.

The question concerning technology has allowed us to save ourselves, beings and Being. “*To save* is to fetch something home into its essence, in order to bring the essence for the first time into genuine appearing.”⁹⁹ By remaining attentive to the truth of Being we are brought to ourselves in a more ordinary way, in that we are able to comprehend that our essential actions are not of our making, but are a responding to that which calls out for us to act. This has allowed us to witness that which has always granted the possibilities for our actions, even while we previously remained oblivious to this ground. Thus, through this inquiry we have learned to think through the essential relation of the human and Being, for the first time, in the way that allows these relations to genuinely appear. In doing this we have made ourselves free for our own freedom. This is not a freedom that is determined by human caprice, but free in the sense that we comprehend that we have the ability to respond to that which claims us.

Through our investigation into the essence of technology, it has been determined that the human can no longer be understood as the ruler of nature or the *animal rationale*, but is the one who can distinguish between beings and Being, and thus respond to the truth of Being. By holding fast to this essential knowledge we have become attuned to a new possibility, one in which we might be brought more fully into our own human essence, as we now have the ability to turn toward a new experience of this truth. By bringing this new experience to light, we have been freed from our fascination with the

⁹⁸ Michael Haar, *The Song of the Earth*, 89.

⁹⁹ Martin Heidegger, “The Question Concerning Technology,” 28.

effects of technology so that we might engage it, but in such a way that we are not enrapt by its extreme effectiveness. Thus, we are now both free to engage it and to leave it alone. This holds out a promise of a future that is not determined by technology, but one in which humanity might learn to belong to the realm of beings in a way that is not determined by its will to dominate, but by its letting beings be in their being. This future will only be accomplished through a conscious attempt to shelter that which remains concealed within beings, as an acknowledgement of that which makes possible their presencing in unconcealment. It will only be through giving ourselves over to this, by remaining attentive to and remembering Being, that the way will be prepared for us to come into a new worldly relation in which we are both able to listen and respond to the Being of beings in a way that is most appropriate for us.

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