

# Chiron and the Machines of Loving Grace: On Optimism, Pessimism, and Singularity\*

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## Abstract

Singularity has been a concern of the developers of cybernetics and artificial intelligence (AI) since the pioneering writings of such thinkers as Norbert Wiener. Yet many accept the inevitability of systems of AI surpassing human control and are optimistic that machine intelligence will harmonize human life with our environment. This essay examines this optimism against a reading of two poets: Richard Brautigan and Friedrich Hölderlin. Through these readings, it will attempt to show that the eclipse of nature by human beings can be used to examine the eclipse of the human being by machine intelligence. Thus, what is missing in machine intelligence is a dimension related to the experience of pain and joy that reconnect us to reflect on what has been severed or lost in the movement of humanity through history. This demonstrates that the very categories of optimism and pessimism concerning the future of AI points to the value of life, one that can never be encoded into our machines.

**Keywords:** *artificial intelligence; cybernetics; singularity; Friedrich Hölderlin; Richard Brautigan*

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## Introduction

Back in 2013, I was asked by my colleague Roman Meinhold to present a paper for a conference on environmental philosophy. I was surprised when I realized that I seldom attempted to write about environmental philosophy even though it was the initial cause of my entrance into philosophy.

In my undergraduate years at college, I studied Wildlife Ecology at the University of Wisconsin at Stevens Point. After graduation, I then worked as an environmental engineer for the coal mining industry in southern West Virginia. While working on reclamation and revegetation plans for coal mines, I began reflecting on the emergence of life out of the various cycles within the environment: the cycles of nutrients in the soil, the succession of plant life and its relationship to the soil, the development of animal life in response to the developing plant life. I then began considering the place of human beings within all of these cycles. I began to wonder how the human being can be a part of nature, a part of its cycles and circulations of forces and elements, and at the same time develop an understanding of these cycles and circulations. Does the circle close on itself? Does the human being function as nature's clear self-consciousness? And so, I was gradually led from the environmental sciences toward philosophy.

My interest in nature also led me to my philosophy dissertation topic that dealt with the poetry of Friedrich Hölderlin. It was he who seemed to reflect most deeply on the contrast between the artificial and the natural, and the history of the human relationship with nature. For Hölderlin, the development of knowledge and civilization carries us away from our original unity with nature and the divine. This approach seemed to allow an entrance to what I considered the most profound problem in environmental philosophy: While the advancement of our scientific theories and remote sensing technologies has allowed us a clear picture of our place in nature, why is it that we are in increasing danger of destroying our natural environment and ourselves? Is there some (tragic) necessary connection with our more lucid visions of the world and its decline? While I still have no clear answers to these questions, it is clear that our increasing understanding of our place in nature does not necessarily lead to wiser political or economic adjustments. In fact, it often leads to the opposite. We now watch in horror not only as the destruction continues but also as it is rationalized.

These earlier reflections are still with me. They still inhabit me. What does it mean for me to look back at the past? What am I awakening to when I look back on my favorite poets, when I look back on the development of my thoughts, or when I look back on my experiences and the landscapes and forests I inhabited? This paper is a culmination of these reflections, these lingering thoughts. It is about nature and the brief span of a human life. It is about machine intelligence and poetry. It is about optimism and pessimism. And it is an exercise that draws me back to my younger self and the concerns that continue to circulate deep inside of me. This paper is a look back as well as a look forward.

## Cybernetics

When I was initially researching for this paper, I discovered another one of my favorite poets, Richard Brautigan, who is quoted by the futurist and technology forecaster Paul Saffo at the Singularity Summit 2007<sup>1</sup>. In high school, I loved Brautigan's poems one of which is "All Watched Over by Machines of Loving Grace." This was read approvingly by Saffo as an example of how our AI systems can harmonize humanity with nature.

I like to think (and  
 the sooner the better!)  
 of a cybernetic meadow  
 where mammals and computers  
 live together in mutually  
 programming harmony  
 like pure water  
 touching clear sky.

I like to think

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<sup>1</sup> Paul Saffo, "Paul Saffo at the Singularity Summit 2007: Anticipating Advanced AI," Vimeo, 11:54 Posted by MIRI (Machine Intelligence Research Institute), accessed September 10, 2021, <https://vimeo.com/showcase/1783010/video/33960673>. See also Dan Farber Singularity Summit 2007: Machines of Loving Grace, September 9, 2007, accessed September 10, 2021, <https://www.zdnet.com/article/singularity-summit-2007-machines-of-loving-grace/>.

(right now, please!)  
 of a cybernetic forest  
 filled with pines and electronics  
 where deer stroll peacefully  
 past computers  
 as if they were flowers  
 with spinning blossoms.

I like to think  
 (it has to be!)  
 of a cybernetic ecology  
 where we are free of our labors  
 and joined back to nature,  
 returned to our mammal  
 brothers and sisters,  
 and all watched over  
 by machines of loving grace.<sup>2</sup>

Saffo was concerned that there is a tendency to lean toward pessimism about the future of AI. He believes that the way to overcome this pessimism is to harness the creativity of our poets and novelists. What Saffo sees in the above poem is a kind of creative optimism.

Singularity is a moment—an event—where the power of AI surpasses the power of human control. The first use of the concept of singularity in the technological context is attributed to the famous mathematician John von Neumann, who considered that “the ever accelerating progress of technology and changes in the mode of human life, which gives the appearance of approaching some essential singularity in the history of the race beyond which human affairs, as we know them, could not continue.”<sup>3</sup>

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<sup>2</sup> Richard Brautigan, “All Watched Over by Machines of Loving Grace,” *The Pill versus the Springhill Mine Disaster* (New York: Dell Publishing, 1969).

<sup>3</sup> This is considered the first definition of singularity and is credited to von Neumann. Yet it is a paraphrase of von Neumann in an obituary written by Stanislaw Ulam. See Ulam, “John von Neumann

Along with von Neumann, another of the founders and major developers of cybernetics was Norbert Wiener. His famous earlier work that developed the discipline is entitled *Cybernetics: Or Control and Communication in the Animal and the Machine*. In a later work entitled *The Human Use of Human Beings: Cybernetics and Society*, he discussed the dangers of autonomous machines controlling humanity, especially as they may not be able to recognize human values.

Any machine constructed for the purpose of making decisions, if it does not possess the power of learning, will be completely literal-minded. Woe to us if we let it decide our conduct, unless we have previously examined the laws of its action, and know fully that its conduct will be carried out on principles acceptable to us! On the other hand, the machine [that] can learn and can make decisions on the basis of its learning, will in no way be obliged to make such decisions as we should have made, or will be acceptable to us. For the man who is not aware of this, to throw the problem of his responsibility on the machine, whether it can learn or not, is to cast his responsibility to the winds, and to find it coming back seated on the whirlwind.<sup>4</sup>

Since then, many theorists have been concerned with the danger of human beings being manipulated or even exterminated by their machine creations. For instance, the contemporary philosopher David Chalmers warns “if the system values scientific progress but is neutral on human existence, we cannot expect humans to survive in the long run.”<sup>5</sup>

But in general, thinkers from Wiener to Saffo to Chalmers, while they see dangers, have accepted the inevitability of our AI systems surpassing human control. Their cautious optimism seems harnessed to this acceptance.<sup>6</sup> This optimism does not seem so

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1903–1957,” in *Science, Computers, and People*, ed. Mark C. Reynolds and Gian-Carlo Rota, <https://www.ams.org/journals/bull/195810189-5/S0002-9904-1958-10189-5.pdf>, accessed August 6, 2021.

<sup>4</sup> Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (New York: Doubleday, 1954), 185.

<sup>5</sup> David J. Chalmers, “The Singularity: A Philosophical Analysis,” *Journal of Consciousness Studies* 17, no. 9–10 (2010):7–65.

<sup>6</sup> Paul Saffo writes, “In the end, the biggest question is not whether AI super-intelligences will

out of place when we consider the sophisticated development of our sciences and our remote sensing capabilities to diagnose our destruction and disharmony with nature. It is natural to feel that we can program our AI to make human societies adapt to the preservation of our natural systems and further, to upload human consciousness into our systems. This is what Chalmers calls integration.<sup>7</sup>

But the problem is that AI is not only programed to be sensitive to nature, it is predominantly programed to facilitate political competition and control and the preservation of the very economic system that is destroying the environment. One famous writer concerning cybernetics is Gregory Bateson. In his famous lectures collected in *Steps to an Ecology of the Mind* he describes this danger:

Cybernetics has integrity within itself, to help us to not be seduced by it into more lunacy, but we cannot trust *it* to keep us from sin. For example, the state departments of several nations are today using games theory, backed up by computers, as a way of deciding international policy. They identify first what seem to be the rules of the game of international interaction; they then consider the distribution of strength, weapons, strategic points, grievances, etc., over the geography and the identified nations. They then ask the computers to compute what should be our next move to minimize the chances of our losing the game. The computer then cranks and heaves and gives an answer, and there is some temptation to obey the computer. After all, if you follow the computer you are a little *less responsible* than if you made up your own mind. But if you do what the

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eventually appear. Rather the question is what will be the place of humans in a world occupied by an exponentially growing population of autonomous machines. Bots on the Web already outnumber human users—the same will soon be true in the physical world as well.” “What will be the Place of Humans in a World Occupied by an Exponentially Growing Population of Autonomous Machines,” accessed August 6, 2021, <https://www.edge.org/response-detail/26071>.

<sup>7</sup> Chalmers discusses four options: extinction, isolation, inferiority, and integration. The first three he considers unworkable. But the future must lie in our integration. He writes: “On this option, we become superintelligent systems ourselves. How might this happen? The obvious options are brain enhancement, or brain emulation followed by enhancement. This enhancement process might be the path by which we create AI+ in the first place, or it might be a process that takes place after we create AI+ by some other means, perhaps because the AI+ systems are themselves designed to value our enhancement.” This would require us to upload our consciousness into these systems and “dispense with our biological core entirely.” Chalmers, “The Singularity,” 33.

computer advises, you assert by that move that you support the *rules of the game* which you fed into the computer. You have affirmed the rules of that game.<sup>8</sup>

Humanity obeys its systems—systems that it had used to manipulate the earth. Thus, humanity’s thinking becomes absorbed within these systems. This was also the concern of Heidegger in *The End of Philosophy* when he diagnosed that philosophy is coming to an end. It is being replaced by cybernetics. So, our philosophical thinking, which attempted to create a consciousness of our place in nature—or Being—is replaced by the mere circulation of information, which relegates this consciousness of place to oblivion.<sup>9</sup> Bateson tried to guard against this complete absorption (in a manner similar to Heidegger) by expanding the scope of epistemology. With reference to the earlier pioneers of cybernetics and AI such as von Neuman and Weiner who saw cybernetics as the exchange of information between the human and the machine, Bateson tried to expand this relationship to include the environment. Thought is not restricted to the relationship of the individual and the machine but as a part of a larger interconnection with our environment.

Now, let us consider for a moment the question of whether a computer thinks. I would state that it does not. What “thinks” and engages in “trial and error” is the man *plus* the computer *plus* the environment. And the lines between man, computer, and environment are purely artificial, fictitious lines. They are lines *across* the pathways along which information or difference is transmitted. They are not boundaries of the thinking system. What thinks is the total system which engages in trial and error, which is man plus environment.<sup>10</sup>

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<sup>8</sup> Gregory Bateson, *Steps to an Ecology of the Mind* (Chicago: University of Chicago Press, 2000), 482.

<sup>9</sup> Heidegger writes, “Philosophy is ending in the present age. It has found its place in the scientific attitude of socially active humanity. But the fundamental characteristic of this scientific attitude is its cybernetic, that is, technological character.” Martin Heidegger, “The End of Philosophy and the Task of Thinking,” in *Basic Writings*, eds. David Farrell Krell (Harper: San Francisco, 1993), 434.

<sup>10</sup> Bateson, *Steps to an Ecology of the Mind*, 488.

But yet we can ask if it is possible to expand the scope of the flows of information to a larger order beyond our own biases.<sup>11</sup> In the present day, our sensing of our environment is partly generated by our computer systems themselves. Nature is encoded into the system as a “resource,” as something that facilitates the system and the circulation of wealth. With this encoding of the environment, the deeper essence of our relationship to our environment (which includes its unfathomable complexities, its beauty and its ambiguities) is increasingly lost. This relationship becomes simplified and codified, and as a result, the possibility of a true harmonious cybernetic system open to nature is lost.

Our computer systems can diagnose our disharmony with our environment, but they are plugged into a global economic system that has its own interests and its own momentum. Our computer systems cannot correct themselves because they cannot go backwards; they are programmed to facilitate growth, expansion, and consumption.

So, the pathologies of thought that Bateson speaks about have actually been encoded into the cybernetic system itself. Nature or the environment is not a deeper reality to be adjusted to, but a reality that has been shaped and manipulated with the movement of our systems. The destruction of nature has created and is reinforced by its own feedback loops within our systems. Decline has become the system’s reality.

## Eclipse

As Weiner observed, human life is a process of the overcoming of entropy by new creative strategies. He wrote: “we have modified our environment so radically that we must now modify ourselves in order to exist in this new environment.” Life then is always moving forward.<sup>12</sup>

Hölderlin recognized this in his writings on the Greek poet Pindar. He saw that humanity conditions and changes nature in its interaction. Much of his poetry uses river imagery. The course of the river is symbolic of the course of humanity. A young river is still bound by its banks and the surrounding landscape. But as a river grows in strength, it develops a power over surrounding nature. Likewise, as humanity matures, it moves away

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<sup>11</sup> The temptation to consider the potential harmony of natural and man-made systems must have been very strong when ecology as a science and a system began to be developed by such researchers from Ernst Haeckel in the nineteenth century to Howard and Eugene Odum in the 1950s.

<sup>12</sup> Norbert Weiner, *The Human Use of Human Beings: Cybernetics and Society* (New York: Doubleday, 1954), 46.



from its dependency on its immediate environments and grows in its power to technologically condition nature. It is no longer bound to a fixed destiny and increasingly develops a certain freedom. So, our free will is also a symptom of our distance from the source. The problem for Hölderlin is how we relate to our origins in nature after we have obscured the path that we have taken.

One poem that reflects upon our relationship to the loss of unity with nature and the sacred is called “Chiron.” Chiron was a centaur, a creature in Greek mythology representing the primordial forces of nature. Chiron was the wisest of the centaurs and was the teacher of many Greek heroes such as Achilles. He represents the wisdom of nature itself. He was also a friend and mentor to the demigod Hercules.

Once when Hercules was on his way to capture the Erymanthian Boar, he stopped for a visit with another wise centaur, Pholus. Hercules asked to drink of the wine that Chiron had once reserved specially for him. When the wine was opened, the other more bestial centaurs smelled its sweet scent, lost control, and began to attack. Hercules drove them off with poisoned arrows, but one arrow accidentally hit Chiron in the thigh. He was in great pain and the special poison had no antidote. But since Chiron was immortal, he also could not die. So Hercules arranged with Zeus for Chiron to trade his immortality for the freedom of Prometheus the Titan who was being punished for stealing fire for mankind.

Notice that what is suggested in this story is the eclipse of the wisdom of nature represented by Chiron, by the growing power of humanity represented by the demi-god Hercules. The poet Hölderlin invoked Chiron and Hercules in one of his odes:

Where are you, thought-provoking one, that always must  
move aside at times, where are you light?  
Surely my heart is awake, but I am enraged,  
constricted by astonishing night.

That is, I once followed the herbs of the forest and listened  
for soft wild animals, in the hills; and never in vain,  
never deceived, also not even once by your  
birds, because all too quickly you came,

when foal or garden invited you,  
 giving advice, for the heart's sake; where are you, light?  
 My heart is surely awake, still heartlessly  
 powerful night constricts me.

Surely I was once that way. And the crocus and thyme  
 and the grain were given by the earth in bouquet.  
 And under the cool stars I learned,  
 but only of the nameable. And disenchanting

the wild fields, mournful, came  
 the Demi-God, servant of Zeus, the upright man;  
 I sit alone, silent, from one hour  
 To the next, and my thoughts now create shapes

From the fresh earth and clouds  
 of love, because a poison is between us,  
 and I listen far off, whether a  
 friendly Savior will perhaps come.

Then I hear often the thunderer's chariot  
 at noon, when he draws near, and is known best,  
 when the house trembles and the ground  
 is purified, and the anguish becomes an echo.

Then at night I hear the deliverer, I hear  
 him killing, the liberator, and down below  
 thick with weeds, as in a vision  
 I see the earth, an immense fire.

The days however change, if one  
 observes them, both lovely and evil, Pain

if one is divided, and  
no one can alone know the best.

But that is the sting of the Gods; otherwise  
one cannot love divine injustice.

Indigenous is the God, then  
evident, and the earth becomes other.

Day! Day! Now truly you breathe again; now you drink,  
willows of my stream, a sight,  
and the sure steps go onward, and like a  
Lord, with spurs, and in your

place, star of the day, you appear  
and you O earth, peaceful cradle, and you  
the house of my fathers, who went uncivilized  
among the clouds of beasts.

Now take a horse, and armor and take  
a light spear, O youth! The prophecy will not be  
disrupted, And not in vain waits for its  
fulfillment, Herakles' return.<sup>13</sup>

What is so fascinating about Hölderlin's poetry is that he strings together contradictions into a narrative flow. In this poem he expresses that our relationship with nature involves a strange ambivalence of both joy and pain, hope and despair, loveliness and evil, day and night. Our distance from nature is represented by poison, "a poison is between us," which is the poisoned arrow that strikes Chiron. In some versions of the myth, Chiron earlier gave Hercules this very poison from the Hydra that will lead to his own downfall. There is the recognition of the inevitability of the fulfillment of the prophecy. "The

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<sup>13</sup> Friedrich Hölderlin, *Werke*, hg. G. Meith (München: Hanser Verlag, 1970), 42 (my translation).

prophesy will not be disrupted.” Our pain and dividedness are likewise inevitable: “But that is the sting of the Gods; otherwise one cannot love divine injustice.” But how can we “love divine injustice?”<sup>14</sup>

## Distance

In other words, how can we accept the inevitability of destruction? And how can we use this to reflect on our place in this destruction? How can we slow this momentum that human thought and technological systems used to wrest control of the earth from the gods of nature? How can we readjust our cybernetic systems with our environment?<sup>15</sup>

The clue is provided by Hölderlin. It is “pain” that unites us to what is lost. It is our dividedness, which gives life to an imagination—a poetic imagination—that can ultimately maintain a connection at a distance.

There is a quotation by Aby Warburg that I am fond of repeating in many of my presentations. It is from a lecture that he delivered to his psychiatric doctors at the hospital where he was institutionalized later in life. In the speech he gave reflecting on his studies of the snake cults among the Pueblo people, he admitted that modern humanity can never return to the unity with nature represented by the snake cults. But he warns that we need to remember where we came from.

The lightning imprisoned in wire—captured electricity—has produced a culture with no use for paganism. What has replaced it? Natural forces are no longer seen in anthropomorphic or biomorphic guise, but rather as infinite waves obedient to the human touch. With these waves, the culture of the machine age destroys what the natural sciences, born of myth, so arduously achieved: the space for devotion

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<sup>14</sup> We see this insistence on the necessity of the human eclipse of nature in the ending of Wagner’s *Ring Cycle*. In what is called the “Feuerbach ending,” Brünnhilde announces the replacement of the old Gods and their laws, with a human society ruled by love: “The holiest hoard of my wisdom I bequeath to the world. Not wealth, not gold, nor godly splendour; not house, not court, nor overbearing pomp; not troubled treaties’ deceiving union, nor the dissembling custom of harsh law: Rapture in joy and sorrow comes from love alone.” Richard Wagner, *Siegfried*, Opera Folio, accessed January 20, 2020, <http://www.operafolio.com/libretto.asp?n=Siegfried&language=UK>.

<sup>15</sup> And consider as well that the poem is about a change of order—the replacement of the gods of nature with the power of the human being over nature represented by the demi-god Hercules. Should we now need to poeticize a new change of order where the power of autonomous machines eclipses the human?

which evolved in turn into the space required for reflection. The modern Prometheus and the modern Icarus, Franklin and the Wright brothers, who invented the dirigible airplane, are precisely those ominous destroyers of the sense of distance, who threaten to lead the planet back into chaos. Telegram and telephone destroy the cosmos. Mythical and symbolic thinking strive to form spiritual bonds between humanity and the surrounding world, shaping distance into the space required for devotion and reflection: the distance undone by the instantaneous electric connection.<sup>16</sup>

That is, it is the consciousness of distance that is important. The fruits of what humans have achieved in knowledge and technology has come at the price of a certain estrangement from nature. But this estrangement—this distance—also allows for a kind of perspective and consciousness. We cannot return to our source but can only maintain this connection from a distance. **The danger is that our various technologies, which have created this distance needed for reflection, are also in danger of collapsing this distance and our consciousness of nature.**

The French philosopher Paul Virilio considered the maintenance of this distance as well. To maintain a reflective distance in the face of our technologies, he proposed what he called stereo-reality, “made up on the one hand of *the actual reality* of immediate appearances and, on the other, of the *virtual reality* of media trans-appearances.”<sup>17</sup>

Our consciousness of our estrangement from nature is also our connection to nature, hence our alternations of joy and despair, and the deep relationship between conflict and creativity. The problem with our systems of artificial intelligence is that they cannot feel this pain and despair, and they cannot feel joy and hope.

### **The Elimination of the Tigers**

The poet Richard Brautigan was also a writer of short novels. One was called *In Watermelon Sugar*. It is about a small post-apocalyptic community called iDEATH. In iDEATH everything is made of watermelon sugar of various hues. It is an ecologically

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<sup>16</sup> Aby Warburg, *Images from the Region of the Pueblo Indians of North America*, trans. Michael P. Steinberg (Ithaca and London: Cornell University Press, 1995), 54.

<sup>17</sup> Paul Virilio, *The Information Bomb*, trans. Chris Turner (London: Verso, 2000), 15.

harmonious community that is based upon a kind of Buddhist renunciation of identity and strong desire and emotion. This community is adjacent to the previous collapsed industrial/technological society called the Forgotten Works, which has become a forbidden zone. The book is about the lives of the people in this community and how their lives are disrupted when some of the characters out of curiosity begin to venture into the Forgotten Works.

This Buddhistic characteristic of ‘non-self’ is expressed in a famous passage where he explains his name (or the lack of one):

I guess you are kind of curious as to who I am, but I am one of those who do not have a regular name. My name depends on you. Just call me whatever is in your mind.

If you are thinking about something that happened a long time ago: Somebody asked you a question and you did not know the answer.

That is my name.

Perhaps it was raining very hard.

That is my name.

Or somebody wanted you to do something. You did it. Then they told you what you did was wrong—“Sorry for the mistake,” —and you had to do something else.

That is my name.

Perhaps it was a game you played when you were a child or something that came idly into your mind when you were old and sitting in a chair near the window.

That is my name.

Or you walked someplace. There were flowers all around.

That is my name.

Perhaps you stared into a river. There as somebody near you who loved you.

They were about to touch you. You could feel this before it happened. Then it happened.

That is my name.<sup>18</sup>

The narrator relates how in the past iDEATH was also inhabited by tigers. The tigers had beautiful voices and were friendly to children, but would occasionally eat the adults of the community, including the narrator's parents.

One morning the tigers came in while we were eating breakfast and before my father could grab a weapon they killed him and they killed my mother. My parents didn't even have time to say anything before they were dead. I was still holding the spoon from the mush I was eating.

"Don't be afraid," one of the tigers said. "We're not going to hurt you. We don't hurt children, just sit there where you are and we'll tell you a story."

One of the tigers started eating my mother. He bit her arm off and started chewing on it. "What kind of story would you like to hear? I know a good story about a rabbit."

"I don't want to hear a story," I said.

"OK," the tiger said, and he took a bite out of my father.

I sat there for a long time with the spoon in my hand, and then I put it down.

"Those were my folks," I said, finally.

"We're sorry," one of the tigers said. "We really are."

"Yeah," the other tiger said. "We wouldn't do this if we didn't have to, if we weren't absolutely forced to. But this is the only way we can keep alive."

"We're just like you," the other tiger said. "We speak the same language you do. We think the same thoughts, but we're tigers."

But gradually the community eliminated the tigers. And at the spot where the last tiger was killed, a trout hatchery was built, marking the center of the community.

The antagonist in the novel named inBOIL is the leader of a group who left iDEATH and began to scavenge and brew whiskey in the Forgotten Works. Throughout the novel, inBOIL and his followers return to iDEATH and renounced the community through a

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<sup>18</sup> Richard Brautigan, *In Watermelon Sugar* (New York: Bantam Doubleday Dell, 1974), 12.

group act of self-mutilation and suicide. Before inBOIL's suicide, he announces to the community of iDEATH:

You don't know what's really going on with iDEATH. The tigers knew more about iDEATH than you know. You killed all the tigers and burned the last one in here. That was all wrong. The tigers should never have been killed. The tigers were the true meaning of iDEATH. Without the tigers there could be no iDEATH, and you killed the tigers and so iDEATH went away.<sup>19</sup>

And through their self-mutilation and suicide, they claim to bring iDEATH back.

The tigers would represent the wilder and crueler forces of nature. The elimination of the tigers was similar to the elimination of the centaurs. The community of iDEATH had established their harmony with nature by the elimination of these wilder and crueler forces. This would include their emotions as well. This reminds us a bit of Nietzsche's criticism of Christ and the Buddha in the book *The Anti-Christ*, as Nietzsche saw their teachings as involving a retreat from suffering. For Nietzsche (as for Hölderlin), life involves both joy and suffering. Any ecological utopia, or an Ecotopia, is perhaps only possible by a rejection of certain dimensions of life.<sup>20</sup> Finally, the theatrical death of inBOIL's gang does seem to return some balance to the community of iDEATH.<sup>21</sup>

This is the tension in the novel: On one side, there is an ecologically harmonious community but one which has achieved its harmony through the rejection of identity, desire, and emotion. On the other side, there is a rival community who represents those tendencies of curiosity and passion that led to the destruction of the Forgotten Works.<sup>22</sup>

We can see now that Brautigan's interjections in his earlier poem—"I like to think."; "and the sooner the better!"; "right now, please!"; "it has to be!"—begin to sound like attempts to convince himself of a certain possibility. A possibility that is far from assured.

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<sup>19</sup> Brautigan, *In Watermelon Sugar*, 126.

<sup>20</sup> See for example Roman Meinhold and Alessandro Stasi's philosophical consideration of Ernest Callenbach's novel *Ecotopia* in his article, "Eco-Polis': Environmental Sustainability in Ecotopian Cities," *ISLE: Interdisciplinary Studies in Literature and Environment* (2021), <https://doi.org/10.1093/isle/isab002>.

<sup>21</sup> While the characters in iDEATH restrain their emotions, the character of Pauline does get angry when inBOIL and his gang begin mutilating themselves. But she is angry at the mess they are making in Ecotopia.

<sup>22</sup> This observation concerning the muting of passions and feeling is discussed by Foster in "Richard Brautigan's Utopia of Detachment" and Sedrlova in "Watermelon Sixties."



It is not merely optimistic as Saffo would contend, it is an alternation between optimism and pessimism.

### **Optimism and Pessimism and the Pause**

The philosopher David Chalmers in his essay “The Singularity” quite boldly considers all the scenarios concerning AI (and the stages beyond singularity that he calls AI+ and AI++). Each scenario is considered rationally and whether we can regard such scenarios with optimism or pessimism. Later in the article, he desires to understand if there is a reason for optimism that humans can someday be integrated with the growing power of machines; if perhaps we can upload our consciousness into our machines and leave our lived bodies behind.

He considers these possibilities according to various approaches. One is called “Edenic survival,” which would refer to our biological survival in nature which is considered a pure relationship to the entity perceiving it.<sup>23</sup> This is also related to what he calls a “further-fact view,” that is, our consciousness is built upon further facts besides consciousness, for instance physical nature or unconscious elements within our consciousness. He writes:

My own view is that a further-fact view *could* be true. I do not know that it is true, but I do not think that it is ruled out by anything we know. If a further-fact view is correct, I do not know whether a psychological, biological, or some other view of the conditions of survival is correct. As a result, I do not know whether to take an optimistic or a pessimistic view of destructive and reconstructive uploading.<sup>24</sup>

But he is willing to consider a “deflationary view” where external “facts,” individual identity, and biological Edenic survival is not as important as human consciousness.

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<sup>23</sup> For a full explanation of his ‘Edenic’ view of perception, see David J. Chalmers “Perception and the Fall from Eden,” in *Perceptual Experience*, ed. Tamar S. Gendler and John Hawthorne, 49–125 (Oxford University Press, 2006), accessed September 10, 2021, <http://consc.net/papers/eden.html>.

<sup>24</sup> Chalmers, “Perceptions and the Fall from Eden,” 50.

The deflationary view combines elements of the optimistic and pessimistic view of uploading. As on the optimistic view, it holds that says that uploading is like waking up. As on the pessimistic view, uploading does not involve Edenic survival. But on this view, waking up does not involve Edenic survival either, and uploading is not much worse than waking up.<sup>25</sup>

Notice how Chalmers alternates between what he designates as optimistic or pessimistic arguments. But he does not question the source of such concepts as optimism and pessimism. These concepts are presupposed by our place within nature and human life. One philosopher who tried to root optimism and pessimism in ontology is Ernst Bloch. At the end of his essay “Can Hope be Disappointed,” Bloch writes:

[T]he world process has not yet been won anywhere, but it has not been thwarted anywhere, and human beings can be on earth the indicators of their decisive way toward salvation that has not yet come or toward damnation that has also not yet come. The world remains in its entirety a *laboratorium possibilis salutis* [a laboratory of possible salvation] . . . Hercules says, ‘Whoever does not hope for the unhoped-for will not find it.’<sup>26</sup>

It is only in life that we have the possibility of a temporal and an epistemic gap that creates our consciousness of our connectedness and distance from nature. It is this gap that generates our joys and pain, our optimism and pessimism, and makes the conscious experience of life possible.<sup>27</sup> This would suggest that the absorption of consciousness

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<sup>25</sup> Chalmers, “Perceptions and the Fall from Eden,” 52.

<sup>26</sup> Ernst Bloch, “Can Hope Be Disappointed?,” in *Literary Essays*, trans. Andrew Joron (California: Stanford University press, 1986), 42. For a discussion of pessimism in Bloch’s philosophy of hope, see Joe Davidson, “A Dash of Pessimism? Ernst Bloch, Radical Disappointment and the Militant Excavation of Hope,” *Critical Horizons: A Journal of Philosophy and Social Theory* (August 2021), <https://doi.org/10.1080/14409917.2021.1957364>.

<sup>27</sup> In a footnote, Chalmers writes: “Why am I committed to a further-fact view of consciousness but not of personal identity? The difference is that I think that we are certain that we are conscious (in a strong sense that generates an epistemic gap), but we are not certain that we survive over time (in the Edenic sense, which is the sense that generates an epistemic gap). In effect, consciousness is a datum while Edenic survival is not.” Chalmers, “Perception and the Fall from Eden,” 51.

into our AI systems would be beyond the categories of optimism and pessimism. This suggests that our future AI systems would be indifferent to the value of human life.

But how can we still consider our lives in the present a *laboratorium possibilis salutis* in the face of singularity? The answer must lie in the possibility of “pauses” in the movement toward singularity. Presently, we reflect on the world in the time of a pandemic. What is surprising about the pandemic is its effect of arresting various kinds of technological and political momentum. We can ask whether this will be used as a mechanism to integrate the world into an order involving increasing biological and informational control. Or we can ask if this break in momentum opens new possibilities and new spaces for reflection.

A break in momentum or a pause—this is a theme also found in Hölderlin where the poet is the one who delays the path of men so they can reflect on the divine.

Still no less is that one attracted to men,  
 They love in return, as they are loved,  
 And delay often, the path of men,  
 so that they may long delight in the light.<sup>28</sup>

It is the pause that opens up the possibility of reflection and opens a space for new possibilities.

Paul Saffo wanted the poets to enrich the possibilities of AI. This was to counteract the pessimism concerning AI among non-specialists. But notice that the poet deals with what is outside of direct human vision. She deals with what evades the momentum of human technology or cybernetic systems. The poet pauses the cybernetic flows. Saffo believed that poetry can fill the gap between those who innovate our technological future who he calls “Engineers” and those who resist our technological future who he calls “Druids.”<sup>29</sup> This is why he invokes the vision of machines of loving grace that create a space of coexistence between nature and technological progress. I would like to suggest

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<sup>28</sup> Hölderlin, “The Voice of the People,” *Werke*, band I, s. 337, (my translation).

<sup>29</sup> Saffo writes: “The two camps forming this divide need a name, and ‘Druids’ and ‘Engineers’ will do. Druids argue that we must slow down and reverse the damage and disruption wrought by two centuries of industrialization. ‘Engineers’ advocate the opposite: we can overcome our current problems only with the heroic application of technological innovation. Druids argue for a return to the past, Engineers urge us to flee into the future.” Paul Saffo, “What \*Should\* We be Worried About,” 2013, accessed September 10, 2021, <https://www.edge.org/response-detail/23858>.

that this space is not secure. It can only be characterized by ambivalence and turmoil, by our feelings of despair and pain on one hand and joy and hope on the other. It is opened by the desire to reach back and the necessity of moving forward.

Even the contemporary inventor and technophile Daniel Hillis had reservations about the manner in which systems that we depend upon have become too homogeneous, fragile, and potentially destructive. One of his projects was to build a giant mechanical clock inside of a mountain, the Clock of the Long Now, which is designed to run for 10,000 years. This is to lead people to reflect on the future of humanity itself, to lead them beyond their short-term concerns.<sup>30</sup>

This highlights the importance of the personal—the span of an individual life. It is through our experience of time and emotion that we feel our connection with nature and feel the pain of what is being lost. We see the destruction of nature and we feel pain. We experience the augmentation of the human being by our technologies, and we feel dread. If we pass our moment of singularity, we will need mechanisms to pull back from our cybernetic flows, not to “poetically” enhance them. We will need cybernetic systems that respect the movement of experience outside of its calculations.

To return to my early question that led me into philosophy: Does the circle close on itself? Does the human consciousness function as nature’s clear self-consciousness? Regardless of the answer to these questions (which Chalmers would connect to the Edenic view), the very ability to ask these questions itself suggests the danger of our disengagement of consciousness from life itself. It would constitute the loss of reflection. If after singularity, human consciousness is harnessed only to its machines, such a consciousness will become its own prison.

And for me and my personal identity? I can see, I can feel, the process of aging. I remember my youthful energy—much of it spent walking alone in the forest, investigating every tree, rock and burrow, animal and insect. I remember the rhythm of my thinking gliding over the landscape, circulating through it. And now with experience and age, I feel a gradual distancing, a hardening, my thoughts now moving through deeply incised channels, often at odds with the surrounding landscapes. Closer to death, and yet . . . I am sometimes gifted with moments of fleeting awareness concerning the arc

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<sup>30</sup> Danny Hillis, “The Millennium Clock,” *Wired Magazine*, December 6, 1995, accessed April 4, 2021, <http://www.wired.com/wired/scenarios/clock.html>.

of my life, with the arc of humanity in general, with the arc of nature and its changing face through time. My own alternations are buffeted between joy and despair. And out of these ambivalences it seems clear to me that what is most human is to respect something that exceeds calculation, balance, and efficiency. This is something in the eternity of the moment and the way these moments echo throughout the course of a life, some form of grace that cannot be encoded into our machines.

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