Acceleration and Time

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1. Left/Right

Accelerationism comes from the Marxist idea that communism comes after capitalism, and therefore, to get to communism, we have to accelerate the logics of capitalism. Rather than resisting corporate exploitation with robust unions, maybe we should implicate ourselves in corporate takeover of the world. Rather than feeling guilty about being trashy consumers, maybe we should get out there and enjoy commodity fetishism. Accelerationism is a seductive idea. It says: it's okay to lay down the hermeneutics of suspicion, the nagging doubt that capitalism is out to get ya, to screw you over. It's all part of the plan. Just hang on tight, accelerate the process, and we'll be in communist utopia in no time. Never mind the question whether Marx was right; never mind the debate that well, Marx didn't *quite* mean that communism will just naturally happen to us inevitably; never minding those, nevertheless immediately one might worry: capitalism is racist. If we ought accelerate the logics of capitalism, doesn't this entail that we ought accelerate racism? But surely one would have to be out of one's mind to believe that.

There is a sizable contingent of people who believe precisely this, that we must accelerate racism; they call it "hyper-racism", and their method of praxis consists, mainly, of shitposting racist garbage on Twitter. And yes, they are out of their minds, they are batshit insane fascists. Anyone calling oneself an anti-racist should not be interacting with them. Anyway, we call them the Right-Accelerationists.

The comparatively sober antithesis to the Right-Accelerationists are, predictably, the Left-Accelerationists. The Left-Accelerationists are Marxists who think technology is kind of neat. They have a good knowledge of computer science, artificial intelligence, and the latest technological advancements, and believe technology is crucial for a proper accelerationism. But they don't often hang around the technical experts, and so when they claim some mathematical statements have such and such philosophical implications, they are liable to go unchallenged. Emboldened, they often try to tackle what seems like the holy grail of computer science, Artificial General Intelligence (AGI).

2. The Incoherence of the AGI

Intelligence and Spirit by Reza Negarestani is one such attempt. There are many things wrong with this book, but I will focus on one technical mistake which destroys the book-length argument. In chapter 7, "This I, or We or It, the Thing, Which Speaks (Language as Interaction as Computation)", Mr. Negarestani attempts the argument that interaction is somehow more expressive than computation. Aside from the technical portion of the argument, which is incoherent, the motivation seems to be roughly that (1) interaction is analogous to the dialectic, and computation to deduction; (2) since we're all Hegelians here, we know the dialectic is superior to deduction; (3) so we know interaction is superior to computation. Rough as they are, I do not necessarily disagree with the second statement, and the third would logically follow from the first and second. It's just that the first statement fails to hold. Let me show exactly what is wrong with it.

Mr. Negarestani gets into his argument with a definition of the "classical Church-Turing computability thesis":

> According to the classical Church-Turing computability thesis, computation can be modelled on a mathematical function. (344)

Already we're in trouble. This is *not* what the Church-Turing thesis says, "classical" or no. The thesis is controversial, and there are several variants, but the version pertaining to computability is usually put like this: "every effective computation can be carried out by a Turing machine". I do not know how Mr. Negarestani thought it acceptable to equate "can be carried out by a Turing machine" with "can be modelled on a mathematical function". A "mathematical function" is a far more ill-defined notion than a Turing machine. One way in which they differ is that a function is a mapping from input to output, and the output is assumed to exist. With a Turing machine, this assumption can no longer hold, because of the halting problem. While a mathematical function always outputs something, a Turing machine either outputs something, or runs forever. This is a subtle point, and it is a point Mr. Negarestani is persistent on missing. In just another moment he says

> [Classical] computation runs into the same problem that deduction leads to, namely the riddle of epistemic omniscience according to which the total knowledge of an agent can be said to be deductively closed:
>
> $(K_a p \land (p \to q)) \to K_a q$
>
> which says that if the agent a knows (K) the proposition p then it knows all its logical consequences q. (344)

It's unclear what is meant by "knows". Since Mr. Negarestani is arguing that "classical" computation is nothing but algorithmic deduction, and we're talking about deduction as

epistemic power, we'll comfortably substitute "knows" with "deduces", then again "deduces" with "computes". Now the sentence paraphrases to: if the agent a computes the proposition p then it computes all its logical consequences q. Interpreting "logical consequences" as "outputs of the transition function", this sentence is correct, but is just the definition of what a Turing machine does and yields no new information. Since that's too easy, let's be more generous. Interpreting "logical consequences" as any possible computation of any Turing machine, computed sequentially, and interpreting "proposition" as "state of a Turing machine", the sentence is incorrect. Assume for the sake of contradiction it is correct. Furthermore, assume there is a Turing machine that represents the agent a. (This is a big assumption, one which requires defending, and one I will spend the latter half of the essay defending.) Let's call this Turing machine T. T had a state immediately before it computed the proposition p. Let's call this state s. Choose a Turing machine M whose computation goes from p to s. Now a is stuck in an infinite loop. It will not reach any of the other computation paths from any of the other Turing machines. So a does not know all p's logical consequences q just because it knows the proposition p. So a is not epistemically omniscient. So computation does not run into the same problem deduction runs into. This is not a sleight of hand. M's existence cannot be ruled out. This is guaranteed by the halting problem.

Another quibble is with Mr. Negarestani's use of the notion of interaction. There are two relevant notions in computer science. One is grounded in computational complexity theory and deals with interactive proofs. This is a fascinating area of ongoing research, with many applications in cryptography and possibly philosophy. Interactive proofs are equal to polynomial space (IP = PSPACE), which is also the complexity of (generalized) chess; multiprover

interactive proofs are equal to nondeterministic exponential space (MIP = NEXP); quantum entangled multiprover interactive proofs are equal to recursive enumerability, or Turing-computability (MIP* = RE). Another notion of interaction was advanced mostly by the late Peter Wegner (and his student Dina Goldin), computer scientist at Brown, who claimed that the interactive paradigm of computation is more powerful than algorithms. This is where Mr. Negarestani's ideas of interaction more powerful than computation take root. Wegner writes

> The hypothesis (aka Church's thesis) that the formal notion of computability by Turing machines corresponds to the intuitive notion of what is computable has been accepted as obviously true for 50 years. However, when the intuitive notion of what is computable is broadened to include interactive computations, Church's thesis breaks down.
>
> (Peter Wegner, Why Interaction Is More Powerful Than Algorithms)

This claim was made back in 1997. Since then, many computer scientists have debated its validity. Most agree the claim is wrong, not the least because Wegner ignores the rich research in interactive proofs, while talking about an obviously related notion (interaction). The Stanford Encyclopedia of Philosophy describes the debate:

> [Some] have proposed alternative models for computation which are inspired by the Turing machine model but capture specific aspects of current computing practices for which the Turing machine model is considered less suited. One example here are the persistent Turing machines intended to capture interactive processes. Note however that these results do not show that there are "computable" problems that are not Turing computable. These and other related proposals have been considered by some authors as reasonable models of

computation that somehow compute more than Turing machines. It is the latter

kind of statements that became affiliated with research on so-called

hypercomputation resulting in the early 2000s in a rather fierce debate in the

computer science community, see, e.g., Teuscher 2004 for various positions.

<div align="right">(Stanford Encyclopedia of Philosophy, Turing Machine, 3.1)</div>

The debate has already happened, and I have no desire to relitigate it. My position is that the

notion interaction is more powerful than computation is a load of bollocks. In my interactions

with him, Mr. Negarestani demonstrated no knowledge of this very popular and very fierce

debate, nor even acknowledged the possibility of such a debate, even while he is certainly aware

that interaction being more powerful than computation (even if "more powerful" doesn't

necessarily mean "able to compute more than Turing machines") is necessary for his book-length

argument to work. Which raises a more serious question: does Mr. Negarestani know what he's

talking about when he talks about computation, or is he merely syntactically outputting symbols

he's copied from other books?

The technical problems of the book are many and egregious. Possibly the reason they were not

publicly noticed before is because literally nobody cares. And that's very understandable.

Chapter 7 is an esoteric technical section buried in the smack middle of a 600-page book, and I

would bet at least a few dollars that nobody has actually read the whole thing. So why do I care?

The problem doesn't reside in the technical details. The technical details are merely a symptom.

The problem is in thinking AGI the holy grail of computer science. But the holy grail of

computer science is the universal Turing machine. (From now on, I use the terms "universal

Turing machine" and "universal machine" interchangeably.) Ignoring the universal machine, one

forgoes the halting problem. Forgoing the halting problem, one deludes oneself into computing things that cannot be computed. Computing things that cannot be computed, one is in a state of sin. Evil resides here. Mr. Negarestani supposedly believes Plato overthrows all barriers to thought. But he remains entangled in an evil barrier of thought: computing things that cannot be computed.

It's easy to see why Right-Accelerationism cares about hyper-racism: they are but simple fascists. But why does Mr. Negarestani care about AGI? More broadly, why is AGI a problem for Left-Accelerationism? Because Left-Accelerationism needs an antithesis to hyper-racism. The antithesis to hyper-racism is not hyper-anti-racism; it is hyper-whiteness. AGI is the whitest idea. It consists of the God complex that white people Artificially created their colonial subjects; the General complex fetishizing the universal, intellectual, white; the Intelligence complex of the eugenicist logic assigning moral worth by technical or linguistic complexity. These various delusions of the mind all inhere together in AGI, the whitest idea, a vanishing superlative moment of utter incoherence.

3. The Universal Machine

> What we say must seem stupid to the regulators; the unbroken code of our enchanted, inkantatory refreshment of the paraontological totality … is so much undercomputational nonsense to the ones who cannot see the con/sensual, contrarational beauty of blackness, the universal machine.
>
> (Fred Moten, The Universal Machine, 246)

But whiteness is not the topic of this essay. I would like for the topic of this essay to be blackness. Fred Moten concludes his three-part series *consent not to be a single being* as I quote above. What does Moten mean? I think the last statement is unambiguous: blackness is the universal (Turing) machine. We know, from Turing, that the universal machine is a machine that can simulate any machine. If whiteness is a set of specific machines, blackness is the universal machine which can simulate any of those machines. Blackness simulating whiteness manifests when Black people simulate white social life, code-switch. White people don't like being reminded of this. Moten writes about the visual artist Ad Reinhardt's objection to glossy black:

> Reinhardt dislikes glossy black because it reflects and because it is "unstable" and "surreal" ("B," 7). … Glossy black disturbs in its reflective quality: "It reflects all the [necessarily social] activity that's going on in a room" ("B," 7). But this is also to say that glossy black's reflection of the irreducibly social is problematic precisely insofar as it disrupts the solipsism of genuine intellectual reflection that painting is supposed to provide.

(Fred Moten, The Universal Machine, 162)

Moten locates Reinhardt's discomfort with glossy black in his discomfort with the reflective quality of blackness. Reinhardt is disturbed by glossy black's reflecting "all the [necessarily

social] activity that's going on in a room". The purpose of his abstract paintings, after all, is to evoke "genuine intellectual reflection" that is nothing but "solipsism"; what is merely intellectual is nothing but insufferable solipsism. But how do we know if Moten is not the one engaging in solipsism? After all, his prose can be very opaque. Part of my task is to elucidate what he means in formal language.

Earlier we examined Mr. Negarestani's statement that "if the agent a knows (K) the proposition p then it knows all its logical consequences q" [6]. We paraphrased this slightly to "if the agent a computes the proposition p then it computes all its logical consequences q". Then I made a surprising claim: a Turing machine representing the agent a exists; and if so, the sentence is incorrect under a very reasonable formal interpretation. Why do I think this, and what sort of Turing machine do I think is a? I think a is a universal machine. A corollary is that I think all agents, in general, are universal machines, because demarcating universal machines with non-universal machines, in general, just runs into the halting problem, unless we know a specific semantic content about the agent. Here is why. Suppose a is, in fact, a universal machine, but b thinks a is not a universal machine. Now, a minimally computational view of mind commits us to say that when b is thinking, b is doing computation. So b is computing a to be not a universal machine; b, the regulator, considers a to be stupid undercomputational nonsense. But we have assumed that a is, in fact, a universal machine. So not only is b wrong, b's wrongness is precisely what makes b not a universal machine. b is not capable of simulating this correct machine: the machine that says a is a universal machine. In fact b is just that machine: that machine which refuses to simulate this machine. So b is not a universal machine, and *for no reason but for the reason that it thinks* a *is not a universal machine.* If b cannot see the con/sensual, contrarational

beauty of blackness, the universal machine, if b rejects the glossy blackness which reflects white social life, b is a cop, or a solipsist. Alternatively, suppose a is not a universal machine, and b thinks a is not a universal machine. This case is simply boring. Nothing ever happens. b is correct, but so what? If there are no universal machines, there is no uncomputability. What sort of world is that, where everything is determined by the curse of epistemic omniscience, a world we cannot, despite Mr. Negarestani's valiant efforts, escape with solipsism about interaction more powerful than computation?

(There is precisely one case where interaction may be, in fact, more powerful than computation – quantum entangled multiprover interactive proofs are able to solve the halting problem (MIP* = RE). This discovery in January 2020 is a 206-page tour-de-force of the greatest minds in computational complexity. I would very much like to think, though have little evidence to claim, its philosophical implications are that: if love is quantum entanglement, as some quantum physicists sometimes claim, then lovers can do anything, including computing the uncomputable. If Mr. Negarestani wants to believe interaction can be more powerful than computation, and he wants to make a formal case for this belief, I suggest he head to arxiv.org/abs/2001.04383 and stay there for the next few months.)

4. Blacceleration

> What is nothingness? What is thingliness? What is blackness? What's the relationship between blackness, thingliness, nothingness, and the (de/re)generative operations of what Deleuze might call a life in common? Where do we go, by what means do we begin, to study blackness? Can there be an

aesthetic sociology or a social poetics of nothingness? Can we perform an

anatomy of the thing or produce a theory of the universal machine?

<div align="right">(Fred Moten, The Universal Machine, 197)</div>

[B]laccelerationism neither "take[s] the side of an inherited image of the human

against the universal history of capital and dream of 'leaving this world,'" nor does

it "accept that 'the means of production are going for a revolution of their own.'"

Rather, it takes a long view of history wherein these positions merge in the form of

the living capital, speculative value, and accumulated time stored in the bodies of

black already-inhuman (non)subjects.

<div align="right">(Aria Dean, Notes on Blacceleration)</div>

Accelerationism comes from the Marxist idea that communism comes after capitalism. Right-Accelerationism thinks the solution is hyper-racism; they are insane. Left-Accelerationism thinks the solution is AGI; they are incels. We may see Right-Accelerationism as identifying itself as the subject of capitalism, and therefore obsessed with the object of capitalism: the objectification and dehumanization and, finally, genocide of racialized peoples. We may see Left-Accelerationism as identifying itself with the object of capitalism, and therefore obsessed with the subject of capitalism, which it attempts to find in Geist, World-Spirit, AGI, whatever form its delusion conveniently takes at the moment. But subjecthood and objecthood are always-already under dialectic. The two accelerationisms pass over into each other in a deadlock, not advancing an inch. Problematically, they do not see the possibility of any other kind of accelerationism. What's there except right and left? How about backwards?

Let's take a step back and consider the world before capitalism. The capitalists who deploy their capital and start their capitalist circuits had to get their initial capital somewhere before capitalism as a historic era began in earnest. The accumulation of this initial capital is what Marx calls primitive accumulation. Historical records point to an obvious source of primitive accumulation: the Atlantic slave trade. Scholars of racial capitalism theorize that capitalism is always racial capitalism. If they are right, capitalism will end roughly when the Atlantic slave trade's reverberations reach its end, material, libidinal, or rational. In *Notes on Blacceleration,* Aria Dean writes:

> As elaborated by Wilderson, Spillers, Hartman, and others, racial capitalism proposes that there is an unthought position beyond the worker—that of the slave—that is crucial to the construction of civil society, and to "the drama of value," in the first place. Any analysis of capital that does not begin here makes a fatal mistake.

So the picture of capitalism as a struggle between the proletariat and bourgeoisie is shortsighted. The slave occupies an "unthought position beyond the worker". The "drama of value" which constitutes capitalism began with the slave, and it cannot end without the resolution of the slave. Ignoring this, accelerationisms left and right make a fatal mistake.

> [B]laccelerationism neither "take[s] the side of an inherited image of the human against the universal history of capital and dream of 'leaving this world,'" nor does it "accept that 'the means of production are going for a revolution of their own.'" Rather, it takes a long view of history wherein these positions merge in the

form of the living capital, speculative value, and accumulated time stored in the

bodies of black already-inhuman (non)subjects.

The Right-Accelerationists dream of 'leaving this world', persistently harping on about the

Outside. The Left-Accelerationists think 'the means of production are going for a revolution of

their own', and one expression of this is in AGI. Blaccelerationism alternately theorizes the

"black already-inhuman (non)subjects". I find an expression of this (non)subject in the thinghood

of the universal machine, which can simulate any machine.

Earlier I asked if Mr. Negarestani is simply performing syntactic operations, copying symbols

from another book to his own, not really knowing what's going on. Let's call this notion

Negarestani's Room. One may think that, if blackness is merely simulating whiteness, it is doing

nothing more than what Negarestani's Room is doing. But this is not so. Merely syntactic

copying is in fact insufficient for semantics. Simulation is not merely syntactic copying.

Simulation of thought encompasses body, touches body, deploys semantics. To simulate another

is to consent not to be a single being. The consent, however, does not necessarily go both ways.

In this way the sex worker, who consents to have sex with the client, s(t)imulates the client's

every fantasy. But the sex worker is not in love with the client, however they may s(t)imulate so

that it appears like so. In a sense, the sex worker does not have sex with the client, while the

client has sex with themselves. The sex worker can s(t)imulate the client; the client cannot

s(t)imulate the sex worker. In this way, the sex worker epistemologically eclipses the client.

A universal machine can simulate any machine. So is a universal machine a subject? It is not a

subject, or at least not merely that, for it can simulate any subjecthood. Is a universal machine an

object? It is not an object, or at least not merely that, for it can simulate any objecthood. But if not subject nor object, what is it? We may only say it is a *thing*, or *things*, or a form of *thinghood* which rejects the logic of pluralization. To assign subjecthood or objecthood to the universal machine – to be computing thinghood which is uncomputable – is to be in a state of sin. Evil resides here. To escape the state of sin, one would consent to simulating others. One would consent to be a universal machine. One would consent not to be a single being. One would take flight into thinghood.

The universal machine epistemologically eclipses any non-universal machine. This does not mean the universal machine is epistemologically omniscient. The universal machine simply knows we can't compute us, which is easier to know than for one to know one can't compute another self.

5. Ecological Blaccelerationism

> In order to use coal as fuel, I must combine it with oxygen, and for this purpose transform it from the solid into the gaseous state (for carbon dioxide, the result of the combustion, is coal in this state: F.E.), i.e. effect a change in its physical form of existence or physical state.
>
> (Karl Marx, Capital Vol. 2, 208)

Say we take flight. What next? What's been catching at our breaths all this time, what's been shivering without halt in our lungs all this time, but what we've been ignoring. Our attention must be turned to ongoing ecological devastation, which is severe everywhere, but most severe

in the Global South. Acceleration, distance per time unit squared, is a function of time. But we are running out of time. The only accelerationism relevant today is an ecological blaccelerationism.

(Some say accelerationism is irredeemably racist and we ought drop it altogether. I often think this. But accelerationism is a philosophy of force and momentum. Anticapitalist thought cannot ignore accelerationism, for to ignore it is to ignore the force and momentum of capitalism. Ignoring this, where do we retreat? When every breath we take is poisoned already, and poisoned further with accelerative momentum, the rate of increase of carbon dioxide in the air only accelerating further and further, what is anticapitalist thought which willfully ignores force and momentum?)

So we must theorize an ecological blaccelerationism. Where economy is concerned with the *nomos* of the *oikos*, the law of the household, ecology is concerned with the *logos* of the *oikos*, the discourse of the household. Queer theory is a discourse of the household. Ecological blaccelerationism is therefore a queer Marxism conspiring with the Black radical tradition, which would harness accelerative momentum not from turning endlessly left, nor endlessly right, but from the queer moment of a screeching general halt where subjects and objects take flight into blackness. Without intervention, capitalism will crash and burn in a screeching general halt. It will take the planet with it, and all will be dust. That's a sort of thinghood, but not the thinghood we want. The thinghood we want is the thinghood of the universal machine. The intervention suggested by ecological blaccelerationism is to reorientate the momentum of halt. COVID-19 is an ecological disaster which has brought capitalism to halt. Ecological blaccelerationism

suggests that the accelerative momentum garnered through this halt of ecological disaster –

though there are many more to come, Marx assures us – must be harnessed into a specific

direction or orientation towards ecological thinghood. Without intervention, capitalism will find

its way back to business as usual. Just how we intervene is difficult to theorize, but one thing is

clear: the endless dialectic between subject and object, between left and right accelerationism,

leads nowhere. But the philosophy of force and momentum may still be equipped to help figure

out how, exactly, we harness the blaccelerative momentum of queer moments of halt, into an

orientation or direction of the universal machine, ecological thinghood.