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The Incomputable and Instrumental Possibility

In Octavia Butler's Lilith's Brood trilogy, Lilith Iyapo, an African-American woman, awakens in a cell many centuries after the human race has effectively destroyed itself with nuclear weapons. She has been taken, together with a small number of other survivors, by the Oankali, a nomadic alien species searching the universe for new genetic information to expand their intelligence. The Oankali have repaired the Earth and now the remaining humans must combine their DNA with the Oankali's third sex in order to redesign a new race purged of humanity's self-destructive, hierarchical tendencies. Lilith must become the mother of a new, inhuman race in order for humans, in whatever form, to survive on Earth.

As one of the famous points of entry into Afrofuturism, Butler's writings allegorize the normative patriarchy and the alienated condition of black people the racist culture of the United States, and reflect the Cold War's pervasive threat of nuclear disaster. At the same time, Xenogenesis -- the trilogy's original title -- introduces a new approach to the feminist critique of biopolitical instrumentality. Rather than simply refusing instrumentality, the figure of the Promethean woman here comes into being by fully acknowledging instrumentality, politicizing it, and ultimately transcending it. Instead of rejecting the dream of autonomy from the gods, Xenogenesis -- or the promise of an alien beginning -- implies reversing the very understanding of instrumentality. In other words, Lilith embraces her abduction and starts to reason with the instrument and from within the logic of the instrument towards an unknown unknown, a previously unthinkable and entirely alien model of subjectivation.

What might such reasoning with and from the instrument mean in an age in which highly automatized vertical apparatuses of capture, classification, and control provide a complex and distributed infrastructure for increasingly self-sufficient forms of algorithmic governmentality? What would it mean, in this particular phase of the development of machine intelligence, to take the instrument/machine seriously? What conceptual tools might we need to initiate thinking from within the machine and from within the very logic of the instrument? Could such a prospect be the basis for thinking beyond the control loops of the post-cybernetic age?

If it is true that the individual is caught in a circle of continuous undulation between enslavement and liberation, trapped in the paradox of simultaneously being her own master and slave, can learning from the logic of the machine provide a path for a new, alien beginning? And if it is true that instrumentality as such has developed its own logic through the
Detail from 1988 cover of *Dawn*, the first book of Octavia Butler's Lilith's Brood trilogy. Illustration by George Underwood.
evolution of machine complexity, shouldn’t we attempt to think the instrumentality of the post-cybernetic individual beyond the dualities of means and ends? Doesn’t the instrument itself possess its own “ends,” as Lilith does? In her case, working through one’s own instrumentality becomes a form of engineering an entirely new origin that embraces and places trust in its yet incomputable, hyper-denaturalized nature. The question is what other natures – and natures’ others – such radical non-dualism would require.

Instead of succumbing to the overwhelming logic of control, data positivism, and the paranoid reasoning of the algorithmically enhanced white-man cogito that is the total myth of humanism, we wish to embrace what Isabelle Stengers calls the possible against the probable. This text is thus merely an outline, an open invitation, and an attempt to instigate a critical project based in practical knowledge, which could point towards the construction of what we could call “the incomputable subject.” In a sense, this is an invocation of a subject that comes to being by way of reclaiming the contingent as a mode of reasoning and as the field of the political. It is a subject that considers its means and its ends in the same plane of becoming.

What Stengers dubs the “speculative commitment” we wish to direct towards repoliticizing and reclaiming unknown unknowns from the jaws of paranoid apparatuses of capture and prediction. In the conditions of an omnipresent “data behaviorism,” we feel that the unknown unknowns of both the subject and the political imagination can only be taken back and built anew by enacting a political affinity with the machine, and by way of considering its very logic. Might this affinity become a path for developing an entirely new, inhuman logic of becoming-subject capable of injecting the unknowns with entirely new alien universals, beyond the white-male constructs of paranoid humanism? The new subject can only be constructed from the hard labor of alienation, which includes understanding the logic of instrumentality, politicizing it, and transcending it through usage itself. This requires building a non-paranoid imagination, and a readiness for a radical denaturalization of both humanness and subjectivity as we know it, just as it happens with Lilith in Octavia Butler’s story.

In the context of the current “daticultural revolution,” as one NSA official recently dubbed the current totalitarianism of data, unknowns are foreclosed already as part of the expected procedure of capture and classification. Data is intercepted and gathered with the aim of generating “activity-based intelligence,” which means that any anomaly triggers an alert for the paranoid techno-industrial apparatus. Its default state is permanent anticipation. It is eager to strike anywhere and everywhere the unknown appears. The data provider and the data gatherer stare at each over an abyss of fatuity, equally dull and deranged by the desperate attempt to compute the threat of the unknown. The only difference in this regime of the quantifiable is the quantity and variety of available data. Both provider and gatherer operate by inductive and deductive reasoning, without ever locating a truly new hypothesis in the process of cognition. Even though they are increasingly hard to tell apart, we could say that on the one hand the data gatherer is drowning in automated predictions guided by a hypertrophied military sense of eternal threat, while the imaginative aptitude of the data provider is reduced to the claustrophobic sense that the world is already predetermined, and that there exists a sacred code by which everything is connected in a way that can only be guessed at using cues and proxies. The guiding principle of both of these mindsets is an all-pervasive military logic that has dominated public and political discourse since the end of WWII and the rise of Cold War paranoia, which have now transformed into the hyperbolic paranoias of the War on Terror and the eternal hunt for “unknown unknowns.”

Any definitive resistance to datafication, to mining and profiling, will thus always appear merely as a random error in the system, as an anomaly devoid of any consistent agency. It can be hard to avoid the siren call of error, hard to avoid romanticizing it. But celebrating error for its own sake is a form of mystification that can only lead to depoliticized, naive triumphalism. The fascination with errors in the system indicates, paradoxically, that the ambience of nervous paranoia comes not from understanding that the system works, but actually from the uncanny realization that it does not, or not perfectly anyway. Its core is empty and hollow and it lacks faculties of self-reflection, self-care, and self-reform. Fault is its default setting, the rule rather than the exception.

In other words, part of our nervous anxiety is generated by the revelation that we cannot even count on the consistency of the automated Leviathan to which we have conceded our agency, even when it is “working against us.” Instead the space of sovereignty is filled with competing plots and unlikely scenarios. A bizarre exchange of empty paranoias and proliferating conspiracies takes place in the evacuated space where that historical locus of tangible authority – call it the absolute Sovereign, Leviathan, God, Law, or Father, it makes no difference – used to reign. Now, the vacuum left after the dissipation of these masculine authority figures of the
Global North is filled with either the militant paranoid apparatus enhanced by AI and algorithmic processing, or with byzantine conspiracies about it.

But while the white-male apparatus and white-male conspiracies are fixed and ossified in their impossible desire to escape and their continuous search for a transcendental realm “beyond” the instrumental, the machines have been evolving and developing their own logic. The post-cybernetic system relies on the capacity of intelligent machines to observe, evaluate, and predict the behavior of data, testing the range of effects that certain strings can have on others, while counting on the unpredictability of the results. Perhaps the general diagnosis of our current condition as one of all-pervasive data governmentality might actually be missing something. The statistical “qualification” subtending the infrastructure of data positivism and predictive governmentality implies the triumph of an entirely new kind of empiricism in which data is “liberated” from the static condition of the given. Data is now stretched to embrace potentiality, indeterminacy, and contingency. This new synthesis of empiricism and statistics includes the indeterminacies of information as a potential source of the unexpected. In other words, the relentless recalculations of data guarantee the possibility of discovering something new. Cognition here no longer simply corresponds to the logical steps of formal or deductive reasoning. The learning machines of the new general and distributed AI now behave as cognitive systems that are evolutive and adaptive, and that exhibit co-causal and emergent properties. This means that as the neo-empiricism of automated governance advances, automated intelligence itself develops a new form of instrumentality. Mirroring that process, we could ask: What is there to take from the very logic of contemporary techne? Can there in fact be something in the very techne of the subject, in the very “affectable” workings of the instrumental, that can go beyond the normative, universal subject of history and reinvent the subject of the political by reclaiming the unknown unknown?

It goes without saying that the clear distinction between oppressor and the oppressed, always a bit of a contingent fantasy, has become almost impossible to recover, never mind deploy effectively. Yes, the thick verticality of the algorithm regime is built on the auto-exploitation of so many entrepreneurs of the self, furiously and automatically reiterating their small serving of subjectivity until it is entirely flattened into data and hopelessly depleted of any other possible becoming. But perhaps it is precisely this servo-mechanics of the post-cybernetic individual that indicates the way back into reason and politics by other means; that is, by repurposing othered and alien reasoning for new ends. The genealogy of such alien reasoning in instrumentality can be traced back to the famous Turing machine, which demonstrated that techne – the instrument itself – has its own logic and meaning, independent from the metamathematical language of universal knowledge compressible into iterative algorithmic sequences. Turing’s project collapsed the opposition between knowledge (theory, ideality) and knowing (practice, technè). Instead of the implementation of ideas into processing tools, with the emergence of computational logic, instrumentality itself became a productive activity or logical enquiry.

And as the incomputables were not only mathematically but also computationally evinced by and within the computational machine, this implied that the instrument demarcated the limit of a closed method of reasoning. With the mechanization of thinking and the servo-mechanic image of a causeless, empty subject, always already piloting an ever-more-efficient machine, we obfuscate a profound truth about human thinking in general: namely, that instrumentality (and not ideal truths) is the very process of subjectivity in practice.

The implementation of logic in machines therefore did not only mark the end of reasoning and the failure of deductive truths, but also the very dawn of instrumental thinking: the origination of an alien activity of automated cognition. This precious discovery of alien logic should not be conceded to the paranoid automated Leviathan of data prediction and control. Rather, we should find in it the tools to critically reclaim the unknown and the incomputable from the paranoid apparatuses of the white-male subject of humanism, and equally from a mindless trust in the error.

The project of transcending instrumentality to devise the incomputable subject implies moving towards a logic of the subject that no longer separates ideation from use, a subject that synthesizes the constructivist and the axiomatic in its becoming. And for this we need a “creative” logic that goes beyond the inductive and deductive reasoning of the paranoid data Leviathan.

If we know that today political imagination is limited by the spell of the “quantifiable,” then the logic of abduction, introduced by Charles Sanders Pierce at the beginning of the twentieth century, might have the potential to generate non-paranoid imagination and agency. With abduction, it is possible to create semiotic chains (from non-signifying signs to meanings)
driven by hypotheses that propose the best explanation from unknown situations. This could be a starting point for non-inferential practices, where materiality and truth are not the same, but both partake in a larger continuum of modes of reasoning (abduction-induction-deduction). In particular, the non-inferential use of technology seems crucial for reassessing the truth of our current situation, perhaps affording possibilities of decision and the collective determination of truths.

Peirce’s abductive reasoning helps us define rules not as symbolic representations of material practices. Logic is embedded in a social matrix by which local specificities are structured, in a general schema of relations between relations. In other words, abductive reasoning, as opposed to the inductive testing of existing “knowns,” helps us to explain, and not discount, the causal process that conditions and constrains the generation of new hypotheses. In contrast to the automated cognition of the regime of induction, abduction allows for an alternative view of instrumentality as transcending the function of data-matching. Abduction is an alien system of cognition. For a new, double-helix-like becoming of reason and imagination, an alienation of the very myth of origin must be enacted. The vessel then must be understood as the agent.

The politicization of the instrumental always entails the arrival of the incomputable. This politicization is never simply a sudden refusal of quantification by the quantified. The instrument declares itself a subject by insisting on its own irreducibility to the very instrumental function that it nevertheless undeniably possesses, since this is what gives its refusal power in the first place. Octavia Butler’s radical survivalist science fiction dramatizes this process whereby the construction of a new subject discloses the radical incomputability at work beneath the concept of humanity itself. Instrumentality is hereby acknowledged and worked through in order to be transcended through its own utilization. Lilith understands that humans need to recode themselves and construct an imaginative logic of becoming more/less-than human. The becoming of the inhuman here starts with a new theory and searches for the least familiar hypothesis, constructing worlds of possibility by denaturalizing the human from within the instrumental. Far from achieving definite ends, this alien beginning is rather conditioned by the means of its engineering, where opposite realities, mismatching desires, and complex reasonings reveal the inhumaness of the original. Instead of replacing the human with an ex novo form of being, Octavia Butler shows us how to supply the human with futurity. An alien

beginning of the new subject calls for abduction, and for the generation of new hypotheses of instrumentality, one that acknowledges the history of techne whereby the machine has been able to elaborate strategies of autonomy from and through its own use.

If to generate hypotheses is an inferential process that entails a close engagement with practices, with doings and using, then it is logic of and for instrumentality, too. Here, however, the elaboration of thinking from doing involves not simply mimicking existing practices. Instead, as with Butler’s envisioning of Lilith as the originator of a new species, the instrumental argument for an alien political subjectivity capable of politicizing unknown unknowns from a non-paranoid perspective requires that she – the experimental instrument – is a sorcerer and not a mirror of the actual state of things.
This phrase was infamously used by Donald Rumsfeld in response to a question about the lack of evidence linking the government of Saddam Hussein to weapons of mass destruction: “As we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say, we know there are some things we do not know. But there are also unknown unknowns — the ones we don’t know we don’t know.” For a possible outline of a genealogy of the paranoid white-male imagination see, Antonia Majaca: “Little Daniel Before the Law: Algorithmic Extimacy and the Rise of the Paranoid Apparatus,” e-flux journal 75 (September 2016) http://www.e-flux.com/journal/75/67140/little-daniel-before-the-law-algorithmic-extimacy-and-the-rise-of-the-paranoid-apparatus/.

In The Matrix trilogy, the protagonist’s name (Neo) means “novelty,” which is indistinguishable from an error in the system. The question is simply whether this error is fatal to the system or entirely anticipated.

Antoinette Rouvroy has brilliantly elaborated the new data epistemology and what she calls “data behaviorism,” where the correlation of data becomes the new truth regime leading, ultimately, to the death of causal reasoning and the end of critique.

In logic, abduction involves the possibility of inferring laws from observable events through the trial and error (induction) of explanation, driven by a hypothetical reasoning about unknown phenomena. In other words, it concerns reasoning coinciding not simply with evaluation, but with the formation of an entirely new theory.