



Data, AI and the Dialectics of More

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Abstract The attempt by the digital forces to ‘naturalize’ the digital and thus to make it one with our ontology raises a whole host of issues about how to identify the Self. The multi-pronged process of naturalization are driven by a particular dynamic: the ‘more’ of data. Data is not a static pile of information, but only works within strategies of accumulation. Businesses and academe have bought into this strategy – addicted to its potential for control – in ways that make it impossible to see ‘an outside’. This ‘more’ is, however, hardly foolproof, and is in fact designed around a wide range of fallibilities – some visible, but most not - that are also now part of the new natural. The resultant dialectic is unstable and as it operates to re-engineer our sense of Self it faces its own destiny.

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The human and the non-human, the individual and the social, and even the proverbial ‘nature or nurture’ are these days interblended in ways that make those very distinctions obsolete.¹ The AI revolution aims to bring this obsolescence to its teleological conclusion. It was not always that way. In the 1970s, computers – the love-child of mathematicians – were good at equations. They entered the world of big business and the military. For our entertainment, computers – became good at chess and other games. It was only quite recently, at the beginning of the 21st century, that the digital discovered the marvelous world of the ‘social’ with Facebook (2004), Youtube (2005), Twitter (2006) leading the way. This ‘social’ – with all its much-promoted, but naïve seductions of a closer and more integrated world – was a poli-centered front that began to integrate data products like iPhones, Verizon contracts and online banking into our daily lives. But even this was just a step along the way. As the dataverse began to move ever deeper into the domain of the ‘social,’ it also moved ever more forcibly into the domain of social construction by redefining how we make friends, do business, write term papers, and buy wine.

The backstory of how this happens is, however, almost completely invisible; indeed, it is designed as such. How else would it work? Who, for example, has ever heard of Wiland? In 2004, the same year Facebook was created, Wiland launched a “consumer intelligence cooperative database enterprise,” pronouncing itself as “the future of people-based marketing.”² It is now one of hundreds of companies – and governments – that buy and format data to engage in – what Wiland itself calls – “predictive analytics and sophisticated audience modeling.”³ The end game is to be

an interconnected, bluetoothed world, where corporations, nations, academe, and individuals operate (or at least pretend to operate) seamlessly in blissful harmony. A.I. aims to finish the job. A Google executive stated it pretty well: “Google’s goal is to become like breathing; just a necessary function for accomplishing what you need to do. You don’t think about it, you don’t really talk about it; you just instinctively do it.”⁴

For the naturalization of our socio-ontological ‘construction’ to happen, its relevant processes need our willing participation, but not necessarily our conscious participation. If consciousness is defined by our thoughts, feelings, sensations, and activities, the dataverse seeks out their translation in the form of our physical movements, our purchases, as well as our associations with friends, colleagues, doctors, books, banks, government agencies and businesses. Business is the critical element. Since it factors into almost everything we do, it is the medium by which the dataverse reaches the human, thus a push was made in the first decade of the 20th century to expand past big business into the world of small business (think of Square, for example that became available in 2009) and then even further into capitalism’s capillary reaches. “Guide to a Tech-Savvy Lemonade Stand” reads one article.⁵

Success hinges not just on the imperative to enter the capillary system of our life-worlds, but also on a rather basic principle: volume. For the dataverse to work – i.e. earn money for its providers and investors - it requires a critical mass of businesses with ready access to the internet. Thus, over the past several years, cloud providers like Microsoft and Google have gone to great lengths to create and cultivate that demand, focusing primarily on the United States and Europe. Now, of course, they are moving into the global south. Ostensibly they are doing this to increase access to digital services and solve the problem of the digital divide. But, in truth, it brings us all closer to the teleological horizon. Where there are humans there is data, meaning that the dataverse will even insert itself into the core matrix of population growth – from data to ever more data.

Hidden from view is the incredible outlay of effort and expense. In 2019, Microsoft invested \$1 billion into AI startups, an undisclosed amount in 2021 and an additional amount of \$10 billion this last January.⁶ This is just the beginning of a new geo-political contest about who owns and controls the dataverse. This is not just about money. Lithium and rare earth metals are being mined and processed in places many people have never heard of. Huge amounts of electricity are needed to be produced, chips need to be manufactured, satellites need to be shot up into space, and so forth. The planetary distribution of this effort spans the entire economic horizon from the macro to the micro. Activists can complain about the labor conditions in the mines or about the pay structure in the factories in China, but the cumulative scale of the operation is impossible to fully understand or even historicize. Who would ever tell you that Northern Virginia hosts the world’s largest cloud cluster sites? (The reason being that it is home to Meta, Google and Microsoft.) Who would ever tell you that the U.S. data storage capacity in the US equals that of China, UK, Germany, Canada, Netherlands,

Australia and Japan combined?⁷ No wonder some are complaining about American hegemony.

We can, of course, go to Maine and live off-grid, but this is exceptionally rare. For the rest of us, the dataverse translates ‘acts of consciousness’ into ever-expanding data profiles. But, unlike the proverbial world of modernism that came in the form of factories, cars, planes, concrete, jazz, and changes in the routines of labor and production, the changes created in the dataverse are remarkably imperceptible. We all know that Google and Verizon are giants in the industry, and we all know that Zoom has changed our lives and that algorithmic biases are part of the story, but no one can understand the reach of all this. It is no accident that Google and Amazon began talking about “cloud computing” in 2006. To make that dataverse more mysterious, the data warehouses are camouflaged in the urban landscape just like the data towers that are designed to look like trees. This physical concealing of the infrastructure parallels the more insidious attempt to conceal the dataverse within our everyday world. Even if we bring the data corporations to task about their algorithms, little is revealed given the proprietary nature of these algorithms.

Yet, in all of this, the dataverse promises something almost humble, to make the human not into something different, but into something mysteriously ‘more’ than it once was. It is not just about facilitating our practical interactions with banks, doctors, ‘friends,’ government agencies and parking meters. I can get instant updates on blood oxygen and REM sleep scores. I can communicate with my car, refrigerator, and home. I can track my cat walking around the neighborhood. At MIT, they are working on a toilet that analyzes my shit and then sends me emails. The list goes on.

This new condition is defined by the dialectics of ‘more’ – a more that is never enough – but one that, nonetheless, makes me – or that claims to make me – ‘more human.’ Just as an AI can now take my purchase data and predict my next move, it can now take my drawing and make a ‘van Gogh’ painting out of it, or take a few sentences of mine and write a Milton poem. We are entering the final hallucinatory phase where creativity itself is being redefined and reconstructed. A recent headline in *Forbes* says it all: “Humanizing AI: A Case for Cognitive Design Thinking and Custom AI.”⁸The word ‘humanizing’ is deployed to sugar coat the insidious nature of the operation. It is comfort food that helps us swallow the poison. *Stanford Business* has mastered the lingo: “Building a future where AI boosts human potential requires leadership from the people who will be over-seeing its implementation.”⁹

I call this new ‘natural’ the post-ontological condition.

Adding the word ‘post’ does not mean that our natural sense of being is over, only that the classic disciplinary project that goes by the name ‘ontology’ no longer has a fixed base of operation. Ontology in its modern configuration was a discipline that could be listed alongside other disciplines like sociology, epistemology, anthropology, ethnography and in that sense it was defined by the expectations of Enlightenment ambitions and critiques. The dataverse shapeshifts itself through these disciplines

without a care. Our new ontology is not fabricated by our upbringing, learning or experiences, but by some unknown graduate from Stanford's Business School who has boosted AI's 'human potential.' The academic world has had to adjust, and mostly solves the problem of its relevance by seeking to put the dataverse into a disciplinary 'big box.' At MIT, for example, the newly created college called Social and Ethical Responsibilities of Computing (SERC), admits the need to "bring together multiple viewpoints – social scientists and humanists, engineers and computer scientists – because so much of understanding the societal and ethical challenges of computing is about combining expertise across these disciplines."¹⁰ This is certainly an advancement over the old Enlightenment project of disciplinary fragmentation, but one should not be fooled by the attempt to legitimize 'big box' multidisciplinary by putting it to use in the name of something euphemistically called 'social and ethical responsibility.' Scratch-proofing the outer surface of the dataverse makes the problem even more insidious. One professor wrote: "Computing on the whole has evolved to the point where it is redefining our approach to problem-solving in nearly every industry sector, discipline, and area of research."¹¹ He seems to be tone deaf to the frightening implications of what it means to redefine "nearly every industry sector, discipline, and area of research." The dialectics of more is the guiltless teleology of everything.

The new regimes of data production and manipulation as sanctioned by business and academe have profound philosophical implications in how they construct 'Being.' They de-legitimize the old monotheistic allegiance to the singularity of the text. If the monotheistic world of old required texts be written by god (Old Testament, Quran, Gospel, sutras), the new world of data naturalization – with their psychedelic, scale-less imaginaries – is governed by texts of new order: annual Verizon contracts, upgrade reminders, installation messages, and security alerts. Unlike the metaphysics of old that tried so hard to reform people into something presumably 'better,' this new order is designed to be more tactical, more approachable, and more serviceable. It wants nothing more than to prove its ease of access. The digital firm called *Thumbtack*, for example, uses the slogan: "Caring for your home made easy."¹²

The Chinese government has opted for a different track to a frictionless world. Newspapers, education, science, commerce and the military have all been blended into the grand, swirling cloud of a magical, centrally-controlled digital informatics.¹³ In the U.S. these grand operations are no less magical even if they are mostly controlled by corporations. Either way, living in the world of data naturalization is living in an illusion. Though Microsoft in its advertisement promises "peace of mind when it comes to privacy and security," the reality is that there are problems everywhere: data leaks, data fog, data pollution, data collapses, and data deluges.¹⁴ In fact, data scientists report spending around 80% of their time just cleansing, verifying and preparing data!¹⁵ The optimists will never recognize this as anything but a temporary problem. There is always a patch, always a way around, but algorithm designers know the contextual and temporal limitations of their work. In some places, algorithms operate

at microseconds; in other places they pile up in vast mountains of dead syntactical heaps, never to be heard of again, unless accidentally or purposefully re-activated.

The result – as humans might perceive it – is a perpetual, low-intensity torture. We have almost daily encounters with system errors, upgrade failures, and data breach alerts. These are not really problems, but rather prove that the system is working even if it means the teleological narrative is always removed to some moment in time even further into the future. The recent collapse of the air traffic control in the U.S. has been blamed on ‘old software.’ Even the U.S. government is now behind the 8-Ball. “IRS tech so ‘archaic,’ agency struggle to find people to work it,” read a recent headline in *The Washington Post*. Few people in a world saturated by the fool’s gold of “innovation” understand how difficult and expensive it is to actually update software, much less monitor for protection. The U.S. government spends untold billions to be ahead of the game. But, the truth is that when a system fails, if a problem occurs, or if there is a ransomware attack, it means that the system is working! Just as it is part of the political make-up, it is also now part of our ontological make-up. It is the way we locate our bodies in the hyper-oxygenated realm of the dataverse. When our computer crashes, when we fail to pay for our upgrades, or forget our password, we must remember that all of this is part of the ‘new natural.’¹⁶

The great teleology of ‘naturalization’ is destined to crash. In what way and when is hard to say. More satellites, more undersea cables, more touch screens, more phones, more batteries, more mines, more chips, more costs, not to mention more hackers and system failures and so on produce a rapidly escalating volume of vulnerabilities.

A.I. theorists and promoters simply ignore this problem, buying into the teleological assumption that AI will overcome these problems. Perhaps in some distant future that may be true, but in the immediate future, the dis-functionality of the data verse is not only core to its ‘functionality,’ but an essential aspect of how we – ontologically – are constructed. From that perspective, the attempts to humanize the dataverse – and in the process re-humanize humans - are racing toward a horizon of inefficiency. Can computers be fast enough and huge enough, but also free from bugs, malwares and infiltrations to capture everything and everyone in its cult of harmonious infallibility? Probably not. And with some 4,000 new algorithms being patented yearly, the algorithm-landscape has become increasingly defined by the ‘big players’ who use patents not for innovation, but to keep competitors at bay.¹⁷ They purposefully clog up the legal system to make independent innovation ever more difficult. Can upgrades be cheap and universal enough to match the ideology of accessibility? No.

The inefficiency of it all is already starting to show. Just ask the teachers in Broward County Florida who could not afford to pay the ransomware and are now doing things by paper again.¹⁸ But we are all so much a part of it that objective positioning is impossible. What can be claimed is that we are living in the last days of the digital’s Golden Age. Our life is not governed – as it was hoped a century ago – by an enlightened combination of reason, faith and nation. That was an illusion to begin with. The shattered debris of its implosion is all around us. The dialectics of

the Enlightenment has now become the dialectics of the digital ‘more,’ the floating signifier of our teleological destiny.

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Notes and References

1. If ontology studies the properties of Being and Social Ontology the world arising from social interaction, socio-ontology begins with the *interpretation* of the two sides that are both visible and thus to some extent knowable and invisible and thus to a large extent unknowable.

2. “The Wiland Story.” Smithsonian National Postal Museum, n.d. <https://postalmuseum.si.edu/exhibition/america%E2%80%99s-mailing-industry-industry-segment-s-direct-marketing-advertising-agencies-and-12> “About Wiland,” Wiland, <https://wiland.com/about-wiland/>

3. “Wiland Company Profile: Acquisition & Investors,” Pitchbook data, (n.d.), <https://pitchbook.com/profiles/company/129847-60>

4. “The Genius of Google’s Invisibility,” VoiceGlance, January 21, 2015, <http://voiceglance.com/the-genius-of-googles-invisibility>.

5. Ari Simon, “Guide to a Tech-Savvy Lemonade Stand/Garage Sale”, April 21, 2012, <https://www.maketecheasier.com/guide-to-a-tech-savvy-lemonade-standgarage-sale/>

6. Karen Hao, “What is ChatGPT? What to Know About the AI Chatbot,” *The Wall Street Journal*, February 17, 2023, <https://www.wsj.com/articles/chatgpt-ai-chatbot-app-explained-11675865177>.

7. Josephine Walbank, “Top 10 American data centre markets,” Data Center Magazine, August 30, 2022, <https://datacentremagazine.com/articles/top-10-american-data-centre-markets>

8. Sayandeb Banerjee, “Humanizing AI: A Case For Cognitive Design Thinking and Custom AI,” *Forbes*, May 25, 2021, <https://www.forbes.com/sites/forbestechcouncil/2021/05/25/humanizing-ai-a-case-for-cognitive-design-thinking-and-custom-ai/?sh=2f0f8b4f4a24>

9. Hope Reese, “How to Survive the A.I. Revolution,” Stanford Business, October 14, 2022, <https://www.gsb.stanford.edu/insights/how-survive-artificial-intelligence-r>

evolution

10. Daniel de Wolff, “Ushering in a new Era of Computing,” MIT Schwarzman College of Computing, November 30, 2022, <https://computing.mit.edu/news/ushering-in-a-new-era-of-computing/>

11. de Wolff, “Ushering in a new Era of Computing.”

12. Thumbtack, <https://www.thumbtack.com>

13. Leah Lievrouw, professor of information studies at the University of California-Los Angeles, wrote, “To date, virtually no democratic state or system has sorted out how to deal with this challenge to the fundamental legitimacy of democratic processes, and my guess is that only a deep and destabilizing crisis (perhaps growing out of the rise of authoritarian, ethnic or cultural nationalism) will prompt a serious response.” Janna Anderson and Lee Rainie, “3. Concerns about democracy in the digital age,” *Pew Research Center*, February 21, 2020, <https://www.pewresearch.org/internet/2020/02/21/concerns-about-democracy-in-the-digital-age/>

14. Johanna Winqvist, “Peace of Mind when it comes to Privacy and Security,” Microsoft Pulse, <https://pulse.microsoft.com/en/work-productivity-en/na/fa2-peace-of-mind-when-it-comes-to-privacy-and-security/>

15. Campbell Brown, “Big Data Is Dead: Long Live Smart Data,” *Forbes*, March 23, 2021, <https://www.forbes.com/sites/forbestechcouncil/2021/03/23/big-data-is-dead-long-live-smart-data/?sh=762279622bc3>

16. The Allstate advertisement [Mayhem Smart Home :15] hits it right on the head! Allstate, “Mayhem Smart Home :15 | Allstate,” January 5, 2023, <https://www.youtube.com/watch?v=jZqvZMOxyj4>

17. Technically, one does not patent an algorithm as an idea, but rather the series of steps that constitute its operations. It is modeled very literally on a machine. One does not patent the idea of a machine, but rather its working parts.

18. Sharon Aron Baron, “Broward County Public Schools Data Hacked by Cybercriminals,” Coral Springs Talk, November 30, 2021, <https://coralspringstalk.com>