

# **Generating AI: A Historical, Cultural, and Political Analysis of Generative Artificial Intelligence**

Submission to Office of the Secretary-General's Envoy on Technology Call for Papers on Global AI Governance by Carolina Aguerre, Rikke Frank Jørgensen, Gry Hasselbalch, Frank Pasquale, Nathalie Smuha, Natalia Stanusch and Aimee van Wynsberghe.

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On June 22nd, 2023, DataEthics.eu invited its Affiliated Scholars: Carolina Aguerre, Rikke Frank Jørgensen, Frank Pasquale, Nathalie Smuha, and Aimee van Wynsberghe, for a discussion on Generative AI. DataEthics.eu was represented by Director of Research Gry Hasselbalch and Academic Coordinator Natalia Stanusch. Instead of treating Generative AI from a single angle or with a pre-defined aim as many discussions currently tend to do, the meeting was meant to open the intellectual box to critically engage with Generative AI. The meeting resulted in the following paper which discusses theoretical and practical approaches to Generative AI. It also offers a much-needed historically grounded and humanistic debate which combines various pressure points and scholarly efforts. The following arguments critically engage with the fact that Generative AI is not simply the applications and models such as ChatGPT but an entire unsustainable infrastructure that we, as humans, are slowly locking ourselves into.

## **Generative AIs as Products, Above All**

The AI debate of today is still significantly framed by how human intelligence was conceptualized in the 1950s. Almost a century ago, the relationship between technology and the human mind was investigated by scholars from various fields. Yet, in the emerging field of AI and machine learning, some ideas resonated more profoundly than others. Already in the 1960s, Marshall McLuhan suggested that technology is a continuous extension of humans, of which the last stage is the extension of human consciousness into and through the machine.<sup>1</sup> In AI development, the idea of mind extension via technology was taken quite literally and is currently still coupled with the deeply situated, biased, and reductionist notion of intelligence developed in the 1950s and 1960s. Rather than focus on what makes humans – and human minds - powerful, the early AI industry envisioned commanding a new technological power.

Following this reductionist notion of intelligence, AI development has aimed to ‘match’ or even supersede human cognition. This premise of AI development and adoption lock us in a position pre-defined by specific intellectual and imaginative horizons. At the same time, this position become the foundation for new modes of organization of labour shaped by the visions and needs of dominant stakeholders. For example, Large Language Models (LLMs) and Generative AI, have been moulded by the imagination and pursuits of profits of commercial AI giants.

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<sup>1</sup> McLuhan, Marshall, 1911-1980. (1966). *Understanding media; the extensions of man*. New York :Signet Books.

Generative AI is a market. The much present ‘hype’ around the topic of Generative AI is connected to the commercial potential and the marketing framing behind it. Let’s take as a case study ChatGPT. One of the ultimate aims driving the AI market is for a model like ChatGPT to replace Google’s market position as an intermediary between the consumer and the product. This effort is based on the premise that a chatbot-like model, with a personalized history of user-model interaction, will provide the user/consumer with a tailor-made single answer following a user’s query. Almost no decision-making on the user’s part is required, let alone critical inquiry or assessment. Generative AI is available in a consumer-friendly package for a user to find quick and easy answers. Yet the ‘knowledge’ that systems such as ChatGPT provide is based on probability and correlation, without any foundational understanding of the world which we typically associate with knowledge.<sup>[08]</sup> During the mid-2010s, the concept of AI started to gain significant popularity and companies began to rebrand their big data initiatives as AI-driven endeavours<sup>[09]</sup>. With companies that brought us products like ChatGPT, we are faced with brilliant commercial minds who saw a way to exploit the big data hypes of the early 2000s and platformize AI models. However, the same commercial minds have little to no concern about why we – as humans – would need or want such AI models. Instead, AI is evolving within a similar commercial marketing framing like social media did: the products are hidden behind narratives on new ways of connecting.

### **Generative AI: New Tech, Old Problems**

Rather than groundbreakingly new, Generative AI feels more like a repetition. For decades critical thinkers discussed the machinery that has been accelerating in a direction that we were already aware of and worried about, for instance under the Frankfurt School, with critical thinkers such as Walter Benjamin<sup>3</sup> or Guy Debord<sup>4</sup>. To a degree, that the imagined future of the past is what we are living in today. We are indeed living in a Society of the Spectacle in which increasingly real-life experiences and interactions are mediated or even replaced by representation, images, and simulation. The irregularities and serendipities of authentic embodied experiences are no longer perceived as a value, but more often as an obstacle.

On the legal side, myriad concerns arise. How can liability be ensured for the – potentially highly problematic – content that is generated, or for the adverse impact on rights like non-discrimination. Concerns regarding data and privacy protections have already been debated extensively in connection with the surveillance business models of social media yet are gravely at stake in the context of Generative AI too. Similarly, we are again today discussing questions around the role, purpose and applicability of intellectual property rights. Simultaneously, a model that has been developed over decades to meet the concerns regarding the protection and promotion of shared human knowledge - Creative Commons - is under attack. Looking back, we wonder now, could copyright laws have stopped or reshaped certain business models that are now deeply entrenched and paving the way for the further erosion of intellectual property protection of authors and artists? What would the world look like if more attention had been paid to the consequences of normalizing services that, in fact, build on the work of others

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<sup>2</sup> Elish, M.C., boyd, d. (2018) *Situating methods in the magic of big data and artificial intelligence*. *Communication Monographs*, 85(1), 57–80.

<sup>3</sup> Benjamin, W. (2008). *The work of art in the age of mechanical reproduction* (J. A. Underwood, Trans.). Penguin Books.

<sup>4</sup> Debord, G. (1992). *Society of the spectacle*. Rebel Press, London.

without any compensation? What we can infer is that Generative AI would not have come to being without the global digital commons.<sup>5</sup> Generative AI technologies exploit and profit off the online content mounting over the years on the web. Consequently, in the longer term, we may well be faced with a tragedy of the commons, as the global digital commons are being extracted and used by Big Tech. Global digital commons are ‘packed into’ Generative AI models, obfuscated by algorithms, and hijacked by AI companies that avoid clear-cut answers regarding the data sources they so heavily rely on, and without which their product could not see the light of day.

### **To Regulate or Not to Regulate? What holds policies back**

The global processes to introduce policy and legal standards for Generative AI have gained momentum. Next year, the Council of Europe plans to finalize its treaty on artificial intelligence, with a focus on human rights, democracy and the rule of law – though critique can be uttered on the ever-narrowing scope of the treaty. The EU AI Act, which was originally proposed in 2021 and is currently still under negotiation, aims at regulating ‘high-risk’ usages of AI technologies across various sectors. The EU-US Trade and Technology Council, also established in 2021, has been set up to foster transatlantic cooperation to ensure that democratic values are embedded in digital transformation. Most recently, world leaders at the G7 meeting in Hiroshima, Japan, called for developing global technical standards for AI, which would ensure democratic values and ‘trustworthiness.’<sup>6</sup>

The biggest obstacle to effective regulatory solutions is human nature. Once the technologies are developed and deployed, it is tricky to govern the actual human use of it; we can regulate misleading advertisement language, marketing methods, and the processing of personal data, but the human attraction to ‘convenience,’ to taking shortcuts and saving time, is not something that can be regulated. Similarly, while there is no ‘understanding’ in Generative AI technologies, human users treat them as understanding, intelligent and sentient beings, even without wanting or realizing it. We cannot regulate the human tendency to anthropomorphize and trust these technologies, both emotionally and informationally.

For example, AI-driven companion chatbots create an emotional dependency between technology and users. While some adults consent and willingly commit to emotionally engaging with such chatbots, vulnerable individuals may be exposed to unhealthy emotional relationships with a machine. In the case of a recently introduced Snapchat bot, children’s private emotional lives and identity development are intertwined with an AI chatbot. We need a nuanced approach to the complex socio-technical realities of our human interaction with AI. The law certainly has a role to play in these cases, and recent legal complaints against companion chatbots have demonstrated this<sup>7</sup>, yet legal obligations and prohibitions can never stand alone.

Furthermore, legal rules often attract categories and boxes. While we could start categorizing all the different applications for Generative AI, the problem is that this technology is more like a fuzzy cloud that we cannot see through clearly yet. It is difficult to anticipate its limits, its effects, and the uses it might have. The only thing that seems clear so far is that we do not know

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<sup>5</sup> Aguerre, Campbell-Verduyn, and Scholte. (forthcoming) “Digital Data Governance. Polycentric Perspectives.” Routledge

<sup>6</sup> Forbrukerradet. 20. June, 2023. “New report: Generative AI threatens consumer rights.”

<sup>7</sup> See the SAICC initiative (Safe AI Companion Chatbots) launched by Nathalie Smuha, Mieke De Ketelaere, Pierre De Witte and Thomas Ghys, which introduced a data protection and consumer protection complaint against the provider of a companion chatbot: <https://saicc-website.vercel.app/work>.

what impact Generative AI can potentially have. This uncertainty may at times make it seem almost impossible to effectively regulate this technology as practical implications for law and policy are difficult to envision. However, this should not be used as an excuse to withhold the protection of the law against the adverse impact of this technology. Rather than regulating the technology, it is important that the developers and providers of Generative AI systems abide by existing rules. A large body of existing laws and principles – from the prohibition of discrimination to the protection of privacy – already exists and must be applied in this context too, even if some actors like to act as if Generative AI is something entirely different.

For example, Meta has spoken of ‘democratizing’ its Generative AI LLM package – Llama. Meta follows the argument that LLMs should be ‘democratized’, thus appropriating politically-oriented language for what ultimately remains a commercial product from a private actor. Indeed, Meta will be controlling the guidelines for their Generative AI systems, and hence the capabilities and limitations thereof. The requirements and guidelines that Meta will impose will largely depend on their understanding of possible risks and gains, not on any “democratic” understanding thereof. Risks and gains are always defined by the interests of the one who does the defining<sup>8</sup>.

And while global regulatory solutions might be desirable, we also have to consider the standard or level of protection that these solutions can afford. Under the political reality of treaty negotiation, the more seats there are around the table, the more compromises will have to be sought. Such compromises often lead to lowering the level of protection. While this trade-off might be necessary to ensure that more individuals across the globe can benefit from a certain level of protection, this also results in a challenging and even paradoxical position where, simultaneously, more voices around the table push for further consensus on regulations, while many voices still remain completely excluded from the debate.

### **Epistemic Injustices and Geographical Binaries**

While the table on Generative AI is indeed expanding, we need to consider whether it is expanding in the right way. Thus, as we work towards maintaining the same level of protection and including more seats at the table, it is important to consider epistemic injustice. Epistemic gaps are visible in, for instance, the AI ethics debate. Many countries from the Global South do not have a voice in the global debates to express their perspectives and views in an otherwise deeply Western-centric debate on global issues. For example, how can the perspective of Ubuntu philosophy – as referenced in Mhlambi’s work<sup>9</sup>, and other cultural perspectives contribute to enrich and nuance the global AI ethics debate?

What we seem to forget in current discussions on AI is that one fundamental role of technological progress should be to improve living conditions worldwide. The working goal of all technological progress must be a deep ethical obligation for the economy.

Today, rather than choosing to develop technology to leverage global well-being, Big Tech is actively participating in digital colonization, particularly of the Global South. If scholars in a country like Ghana are in the process of developing a health AI that requires high accuracy, and they are lacking the computing power to sustain the training process, they turn to companies

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<sup>8</sup> Hasselbalch, G. (2021) *Data Ethics of Power A Human Approach in the Big Data and AI Era*, Edward Elgar.

<sup>9</sup> [Mhlambi, Sabelo. 2020. "From Rationality to Relationality: Ubuntu as an Ethical and Human Rights Framework for Artificial Intelligence Governance." Carr Center Discussion Paper Series, 2020-009.](#)

like Google. While Google can provide its infrastructure, it will ask for access to collected data. Such infrastructural imbalances directly impact the sovereignty of the Global South. We also have to consider that many countries in the Global South are not democracies. Hence, many civil society groups would trust Google more than their national government in their national sovereignty projects.

One of many approaches we should take to counter epistemic injustice is for AI researchers to collaborate with indigenous communities. Such initiatives were taken up in, for example, Australia and Canada, where indigenous knowledge and practices influence and co-create AI development. A further expansion of this initiative into the realm of policy may include the premise that a certain percentage of funding should go into such kind of collaborative research. We must enrich our mindset with different perspectives, including diverse angles on what we consider valuable in life. We would like to stress that the AI discourse we are engaging in is also a discourse of luxury - we must not forget about places and communities that lack daily access to electricity and drinking water.

### **Environmental (in)Justice**

Generative AI is not captured in an immaterial and transparent 'cloud.' The environmental reality of Generative AI is not addressed as critically and widely as it should be. The development of Generative AI and the infrastructure that sustains it are far from transparent regarding energy and water use. One can barely measure the harm that ChatGPT alone has done environmentally. What we are certain of is that AI impacts environments on a scale that should make us question whether it is worth it at all.

We have to remember that Generative AI is not just carbon emissions: it is fresh water usage for cooling the data centres that spoils the water quality, it is land usage, it is the mining of precious minerals and the environmental degradation that follows such mining, it is the electronic waste of, e.g., used lithium batteries, it is the health and life-threatening working condition of underpaid workers in the mines. Those who applaud the great advancements Generative AI will bring for humanity are often the ones who, purposely or not, remain silent about the mountains of electronic waste and environmental degradation they are creating.<sup>10</sup>

### **The Political AI and its Fondness of the Authoritarian**

Ethical and legal implications of Generative AI are deeply intertwined with its potential misuses.<sup>11</sup> Yet we have to be aware of some tendencies embedded in these technologies' mass use. While many existing regulations (e.g. the General Data Protection Regulation or Consumer Protection Law) are in place, political choices are being made not to apply and enforce such legislation. We should stop separating the political infrastructure from the technological infrastructure, as they are deeply intertwined. An increased use of AI in public administration bears an uncanny resemblance to the approach to administration in the populist and totalitarian contexts. With an alarming rise in populist and authoritarian sentiments growing around the world, a tendency for automated centralization of data and knowledge seems to fit as a 'perfect'

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<sup>10</sup> See, for example, <https://sustainable-ai.eu/>

<sup>11</sup> See more generally Nathalie A. Smuha (2021), "Beyond the individual: governing AI's societal harm". Internet Policy Review 10 (3). DOI: 10.14763/2021.3.1574. <https://policyreview.info/articles/analysis/beyond-individual-governing-ais-societal-harm>.

extension of such sentiments.<sup>12</sup> The convenience of finding information in one place - and finding 'one right' information - dangerously couples techno-solutionist and authoritarian trains of thought.

Generative AI has more direct implications for the public sector and the rule of law. If a judge uses ChatGPT as an aid in writing her judgment, the very notion of the rule of law is shaken.<sup>13</sup> We should ponder whether it is safe for democracy to head towards a dependency on LLMs and Big Tech to access any information. What democratic standards are preserved if all information we can access comes from centrally and privately managed Generative AI systems, with little to no verification of whether the information the model feeds us is correct or comprehensive? In education, the enthusiasm of some students has to be contrasted with seeing and anticipating possible risks.

The implications of Generative AI on our political and social reality ultimately impact our human condition. If we are indeed observing the authoritarian tactics in which AI systems are creeping in on our lives, then – following Hannah Arendt – we should focus on the questions of liberty and freedom. What kind of freedom can we have? What is the space of freedom that we as individuals and communities have? How are individuals and communities free to develop their own ideas about the world? How free are we to be detached from the technological imposition of systems such as Generative AI models?

### **The Question of Human Agency**

One core element of the human-AI interaction that we want to acknowledge is human intersubjectivity. There is a certain inevitable loss when technology mediates our interactions which we otherwise would take on with other human beings.<sup>14</sup> Theoretically, we do not need to write emails anymore, as ChatGPT can do it for us. We must not forget why we value communication with others in the first place. Communicative acts are not purely for utilitarian reasons - we communicate to express ourselves, engage intersubjectively with other human beings, and build our own identity. It is one of many examples of what makes us human and makes our life valuable. When, partially inevitably, such human acts are getting reduced through technology, it is becoming increasingly important to map what we value as human beings and why we value it.

We are reminded here of the work of Shannon Vallor.<sup>15</sup> Vallor speaks of developing moral virtues in the context of technologies. She argues that technologies descale us in our ability to develop moral virtues, whether understood as patience or the ability to communicate. The virtues we used to hold in high regard up to now – such as perseverance at any cost - are the virtues that got us into the locked-in state we find ourselves in today. Vallor argues that we

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<sup>12</sup> See in this regard Nathalie A. Smuha, *Algorithmic rule by Law*, Cambridge University Press (forthcoming 2024).

<sup>13</sup> See also Nathalie A. Smuha and Victoria Hendrickx, "AI and the Administration of Justice: taking 'precedent analysis' as a use case to assess the adequacy of the AI Act", *The Law, Ethics & Policy of AI Blog*, 2 October 2023:

<https://www.law.kuleuven.be/ai-summer-school/blogpost/Blogposts/AI-administration-justice>

<sup>14</sup> Nathalie A. Smuha, *The Human Condition in An Algorithmized World: A Critique through the Lens of 20th-Century Jewish Thinkers and the Concepts of Rationality, Alterity and History* (December 2021). Available at SSRN: <http://dx.doi.org/10.2139/ssrn.4093683>

<sup>15</sup> Vallor, Shannon. (2016). "Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting." Oxford University Press; Vallor, Shannon. (Forthcoming).

should rethink what we hold in high regard as virtues of the policymakers, ‘tech bros,’ and academics, to reconsider what virtues we need today.

We have to focus on human power rather than technological power. The first step is to ensure a better understanding of the potential and distinctness of human power. By better comprehending the fundamental difference between human power and, for instance, AI power, we can effectively shape our technology politics.<sup>16</sup> This understanding is crucial to protect not only the rights and well-being of each individual but also to safeguard humanity. Through the history of technological progress, a specific understanding of what human powers – such as intelligence - were translated onto machines. Yet the dominant technocentric understanding of human intelligence and power was deeply reductionist. The prevailing interpretation of intelligence is reductive in that, for example, it does not account for how much we convey with our eye contact or gesturing or through communicative acts that are not captured in data, such as indigenous communities’ languages. A reductionist view of human potential is embedded into technology. We should be alarmed that a reductionist notion of human power might now influence what humanity is and can be and should be.

While DALLE-2 and ChatGPT can write perfect rhymes in perfect English and make images that are pleasing to the eye, what they cannot do is to make art that is unique to a specific human situated context – that speaks to the alternative, the minority, the awkward. We are not only increasingly locked in a material and political infrastructure, but also in a specific view of what humanity is, what is humanity’s potential, and what are the possible futures for humanity. Policies and laws should protect different aspects of our lives, such as privacy and human individual agency, but policies should also ensure that we continue having that open, authentically human future that we can ensure and define.

### **Against Technosolutionism**

Global technological diffusion processes are appropriated differently across the micro, meso, and macro levels in societies, with different trajectories and pathways of convergences. While we recognize the tendency to democratize Generative AI in order to oppose the Big Tech monopoly, we have to continuously question whether these models are as valuable as Silicon Valley tells us. People who develop these models call them ‘foundation’ models as if Generative AI constituted the foundations for everything, but it does not. Generative AI is a set of good predictions of text and pixels that has no connection to reality. Even its commercial applications require bringing in field experts and fine-tuning it.

There is a chance that the growing corporate battles over copyright laws might create barriers that will slow down these technologies.<sup>17</sup> Generative AI uses copyrighted material with no credit, no compensation, and no control for the people who created that material. We should encourage governments to rewrite the rules of corporate and intellectual property for Generative AI development. Perhaps watermarking Generative AI could be a good and timely solution. The counter argument to watermarking is that users and companies would find a way around it. Yet whenever there is a law, some people break it or walk around it. The argument that some will go above the speed limit does not mean we should not have laws like speed limits at all. The uncertainty around Generative AI does not mean that we should not try to avoid having the deep harms that can undermine human agency, democracy, and the rule of law.

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<sup>16</sup> Hasselbalch, G.: *Human Power – A Technology Politics for Humanity*, forthcoming

<sup>17</sup> [Pasquale, Frank. \(Forthcoming\)](#)

As scholars and critical thinkers, we must continuously question and challenge the globally widespread technosolutionist approach. We live in sociotechnical infrastructures in which Generative AI is embedded, and we have to make sure that we are continuously critical in both academic and daily space, even with our children. We should challenge technological convenience to recognize the critical, the valuable, and the human.