

# Cyborg, AI and "cyborgized" society: the advent of the hive society

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*Article by Maxime Derian, anthropologist, taken from the catalog for the "Aux frontières de l'humain" 2021-2022 exhibition at the Musée de l'Homme du Trocadéro à Paris, available for purchase in paper format.*

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*AI generated picture by Dall-E with a prompt by Maxime Derian*

A "cyborgized" being is a person whose body or mind has been modified by technology. The modification may be confined to the individual, but it's not out of the question that a eugenic desire may emerge to modify not only the individual, but also his or her descendants. Such a **cyborg** differs from AI (artificial intelligence) and the entirely robotic android - such as the "replicant" in Blade Runner (1982) - which are a mirrored humanity, a synthetic otherness.

While the cyborg remains a human - repaired, augmented or diminished - the emergence of metaphorical or real figures such as the latter, as well as hybrids, robots, drones and AIs, is the expression of a major anthropological mutation.

Indeed, beyond the question of the augmented human, transhumanism and the possibility of posthumanism, it seems topical to ask whether it isn't society itself that is becoming "**cyborgized**" on a global scale.

In such a case, rather than listing the anthropotechnical (human modification) technologies that have appeared since the invention of computers, it seems appropriate to anticipate and attempt to understand the ethical, political, economic and social issues emblematic of these technologies.

Hence the concept of the "**hive-society**"<sup>1</sup> to describe this possible major break in history, marked by the advent of an organization that would be administered above all by - and sometimes for - digital machines.

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In 1887, sociologist Ferdinand Tönnies<sup>2</sup> analyzed the transformation of human organization from the form of the community - where the group takes precedence - to society - where the individual takes precedence - under the influence of the Enlightenment and modernity. This transition has led to major anthropological upheavals, including the ecological upheavals of the Anthropocene<sup>3</sup>. To paraphrase Tönnies, who declared that "*the epoch of the community is succeeded by the epoch of society*", we could postulate that "*the epoch of society is succeeded by the epoch of the hive-society*".

In the hive-society, where the individual takes precedence, the fabric of the former society dissolves into a **decentralized aggregate of interconnected individuals forming a relatively homogenized population structured like a swarm** which, like ants, bees or termites<sup>4</sup>, is driven by stimuli emitted by a centralized control system, though not necessarily a state one.

The group once again takes precedence over the individual, but a different group, where the use of cognitive prostheses, social networks, autonomous vehicles, economic uberization, e-commerce and telecommuting, foreshadow even greater changes to come.

The scarcity of available natural resources, combined with constant and considerable development in the performance of available computer hardware, is prompting the search for digital and virtual escapes from desires and needs that will no longer be able to be satisfied by a growing proportion of the population due to increasing global demographics.

The hive is characterized by two criteria:

- **monopolistic hyper-concentration** generating socio-economical-sanitary inequalities, and
- **digital « swaddling »** by ubiquitous computing (computers, wearable devices, remote digital communication, satellites, IoT).

Indeed, some thirty billionaires currently share half of total human wealth and use powerful tools (Google, Amazon, Facebook, Apple, Baidu, Ali-baba, Tencent, Xiaomi) to administer the cognitive activity of billions of people. This inequality is unprecedented in the history of Homo sapiens.

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1 Derian, M. (2018). *Cognitive Prosthetics*. Elsevier.

2 Tönnies, F., & Loomis, C. P. (2002). *Community and society*. Courier Corporation.

3 Ruddiman, W. F. (2013). The anthropocene. *Annual Review of Earth and Planetary Sciences*, 41, 45-68.

4 Huxley, A. (2021). *Brave new world and brave new world revisited*. Wildside Press LLC.

Digital tools that reorganize social ties, cognitive prostheses (smartphones, computers, augmented reality interfaces, etc.), powerful algorithms (AI, big data) and robotics (drones, satellites, autonomous vehicles) are reconfiguring social activity in the form of gigantic continental swarms that I call « hives » (Western hive (Europe + US + partners), Chinese hive, Indian hive, Japanese hive, Russian hive, etc.).

The new citizenship within the hive would be expressed through the attainment of greater comfort (digital leisure, transport or home automation products) and security of life (medical monitoring, social control) as a result of technology, but at the price of the increasing abandonment of free will and the free movement of individuals, delegated to computerized systems, as illustrated in Steven Spielberg's film *Ready Player One* (2018).

To a certain extent, the Japanese otaku prefigures a cyborg society, resigned and tempted by digital withdrawal without a drop in economic productivity.

But how can we escape the feeling of "ultra-modern solitude" sung by Alain Souchon, all the stronger in times of health crisis linked to Covid-19? A collective awakening, paradoxically likely to take place through digital tools, could lead to a broad democratic public debate to assess the costs and benefits of the immense transformation underway in a healthy and dispassionate way, in order to limit some of its deleterious effects.

In future scenarios, hive societies are expected to compete on Earth to secure access to its finite resources. Unlike historical colonial empires, these "swarm" societies, incorporating human beings enhanced with cyborg-like technologies, would heavily rely on cognitive prostheses and Internet of Things (IoT) devices. Similar to pheromones in insects, the widespread use of digital equipment would envelop individuals, serving as the logistical foundation for social cohesion, political governance, and the preferred method of social and psychological control by leaders within these new social groups.

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The ethological analogy of a beehive highlights the progressive shift in social organization, where the significance of the individual as the foundation of the group, as prevalent since the Enlightenment, diminishes. Instead, greater emphasis is placed on a novel form of community shaped by digital technology and centered around emerging technological oligopolies.

Metaphorically speaking, these new human communities would metaphorically be led by "queens," representing centralized institutions comprised of individuals or oligarchies wielding Artificial Intelligence and exerting significant control over digital tools. The remaining population of these various hive societies would metaphorically consist of "workers," individuals permanently interconnected in real-time through cognitive prostheses, ubiquitous computing, and potentially the Metaverse.

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