

Biopolitics

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ABSTRACT

Biopolitics is an interplay of the field of study between human biology and politics. It is a form of political wisdom taking into consideration the administration of life and a locality's populations as its subject. Biopolitics and biopower are of great importance on modern governance, they function together with other ideas related to power and governmentality developed by Foucault in the 1970s. This is also the political application of bioethics. This paper presents a brief introduction on biopolitics cum biopower and its relevance to humanity.

KEYWORDS: *Biopolitics, biopower, bioethics, governmentality, state policy, COVID-19 pandemic, nanotechnology*

How to cite this paper: Paul A. Adekunle | Matthew N. O. Sadiku | Janet O. Sadiku "Biopolitics" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-8 | Issue-6, December 2024, pp.627-635, www.ijtsrd.com/papers/ijtsrd72666.pdf



IJTSRD72666

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INTRODUCTION:

Biopolitics and biopower are two important modern forms of governance, as they function together with some other ideas related to power and governmentality developed by Foucault in the 1970s [1]. Biopower thus names the way in which biopolitics is put to work in society, and involves what Foucault describes as “a very profound transformation of the mechanisms of power” of the Western classic age.

In the work of Foucault, biopolitics is the style of government that regulates populations through “biopower” (the application and impact of political power on all aspects of human life) [2, 3]. Biopolitics, as shown in Figure 1, is a conceptual and operational framework for societal development, promoting bios (Greek for “life”) as the central theme in every human endeavor, be it policy, education, art, government, science or technology. This concept uses bios as a term referring to all forms of life on our planet, including their genetic and geographic variation as posited by Professor Agni Vlavianos Arvanitis [4, 5].

Biopolitics reflects the interplay and interdisciplinary studies relating biology and political science i.e. the

study of the relationship between biology and political behavior [6, 7], and while politics is also referred to as applied biology [8].

RELEVANCE TO HUMANITY

Biopolitics is to ensure security. Security is not simply public order. It is not to just codify the simple existence of political subjects, but also to consistently organize their interactions through ascriptions of rights. Biopolitics produces a series of political transformations meant to control mechanisms of circulation (e.g. human migration), to protect political subjects from risk of death, to incorporate traceability in order to be able to recognize unauthorized movements, and to alter the nature of the threat.

NATIONAL IDENTITY

Biopolitics is a possible conceptual approach to the study of nationalism and nation-building [9], which uncovers certain aspects of national identities that are not visible. What biopolitics can tell us is that national identity making necessarily implies disciplinary practices of controlling and regulating human lives as a precondition for aggregating a population into a single collective body. Michel

Foucault conceptualized the crux of biopower as a transition from the right to take life (the sovereign power's prerogative) to the state's investments in administering life, which is the crux of biopower. This shift implies a transfer from disciplining the individual body to disciplining the population as a whole through managing health, hygiene, nutrition, birth, and sexuality. In this sense, politics develops the so-called apparatuses of control aimed at improving, promoting, and managing life, which becomes a matter of government, thus making life no longer a private affair, but a matter of policy. Therefore, according to Foucault, biopolitics points to the ambition of modern power to administer, regulate, and optimize the human body and body politic as a whole, "to rationalize the problems presented to governmental practice by the phenomena characteristic of a group of living human beings constituted as a population: health, sanitation, birth rate, longevity, race" [10].

Biopolitics is said to be as a set of positive incitements versus sovereign power as a power to take lives – through sending people to battlefields, capital punishment, and so on.

The Italian philosopher and legal theorist Giorgio Agamben's theory of biopolitics critiques that of Foucault, citing his predecessor's supposition as overly simplistic and lacking legal framework [11]. Agamben's biopolitics is based on three types of life which are: natural life, political life, and bare life – tracing the birth of biopolitics back to Ancient Greece, opposing Foucault's focus on modernity. Ancient Greek philosophy details a separation of bios – meaning physical life, or the life of the body, and zoe – a divine, spiritual life that is eternal and immortal [12]. This distinction parallels the ancient Roman law of "homo sacer" – he who could be killed but not sacrificed.

CHALLENGES FACING BIOPOLITICS

Given the growing global connectivity of regional human communities (and States), they have acquired additional properties due to the fact that [13]:

1. People today live in a growing man-made environment with its attendant impact on population becoming more diverse. The body of humans "collects" from this environment an increasingly significantly pathogenic load that weakens the immune system or provokes atypical immune responses, causing an excessive response of the body to stimulation.
2. Human involvement in the turnover of an increasing number of biomes that exist on Earth, the creation of new ones and, the transformation or destruction of the regular ones, resulting in the

extraction and distribution of viruses, pathogens and micro-organisms from enclaves that never contacted with human population. They are not aimed at a person, but could change, as seen in the case of the COVID-19 virus. In this case, they become a new, frequently significant, and a threat to human health. The globalization of human society also means the "globalization of the evolution of diseases" with those of domestic animals.

3. Human activities causing devastating fires in the Amazon since the 2010s. This is also coupled with deforestation, the clearing of land for agribusinesses for pastures and soybean plantations. Tanks used by local residents to store water has now become the breeding grounds for mosquitoes that are carriers of diseases: feeding on the blood of both animals (for example, macaques) and people, and act as natural carriers of chikungunya, dengue fever, yellow fever, zika virus, Hantavirus, leptospirosis and many other infections.
4. Increase in the survival rate of patients, increase in the number of chronically ill people, and increase in life expectancy which has exacerbated the issue of maintaining an appropriate level of public health – causing unstoppable increase in the burden on health systems.
5. Risks for humanity are not only diseases with a high life risk, but also epidemics, pandemics with a relatively low mortality rate, causing serious consequences for all spheres of public life.
6. The growing competition between states intensifies rivalry between management practices and basic concepts of public policy, including biopolitics. The increasing interference of the state in the life of society, has become generally accepted that state structures are responsible for a huge layer of public life of people and preserving their health and overcoming the negative consequences of epidemics and pandemics. As such, the state naturally turns out to be "extreme", since it has both the significant resources for solving such tasks, and a centralized mobilization apparatus, and an apparatus of coercion.

BENEFITS OF BIOPOLITICS

Biopolitics is believed to be useful in human enhancement technologies, as shown in Figures 2 and 3. Human enhancement is the natural, artificial, or technological alteration of the human body in order to enhance physical or mental capabilities, as shown in Figures 4, 5 and 6 [14-16]. Three forms of human enhancement currently exist which are: reproductive,

physical, and mental [17, 18]. Computers, mobile phones, and internet [19] can also be used to enhance cognitive efficiency. Furthermore, notable efforts in human augmentation are driven by the interconnected Internet of Things (IoT) devices [20], including wearable electronics (e. g. augmented reality glasses, smart watches, smart textile), personal drones, on-body and in-body nanonetworks [21, 22].

Many different forms of human enhancing technologies are either on the way or are currently being tested and trialed. A few of these emerging technologies include: human genetic engineering (gene therapy), neurotechnology (neural implants and brain-computer interfaces), as shown in Figures 7, 8, and 9 [23], cyberware, strategies for engineered negligible senescence, nanomedicine – as shown in Figure 10 and 11, and 3D bioprinting.

Speculative technologies: Some other human enhancement technologies are still speculative, such as: mind uploading, excortex, and endogenous artificial nutrition; while Nick Bostrom has listed some additional capabilities that are expected to be physically possible in theory, given a sufficient technological level, such as [24]:

- Reversal of aging
- Cures for all diseases
- Arbitrary sensory inputs (e.g. generating subjective experience of taste without eating anything), and
- Precise control of personality, mood, motivation, and well-being.

CONCLUSION

Biopower which is the modern techniques and technology used to assert control over bodies, lives, and death forms an important concept in Foucault's critical theorization of modernity. Biopower is a broader concept than biopolitics, which mostly refers to political discourses and policies. The governmental power of biopolitics is brought to bear on surveillance, healthcare policies, population control measures, gender-based laws, and the implementation of biometric identification systems.

The use of biopolitics should be properly utilized for the benefit of humanity in the areas of genetic engineering, nanomedicine, neurotechnology, and other emerging fields.

REFERENCES

[1] Stephen Legg, "Subject to truth: Before and after governmentality in Foucault's 1970," vol. 34, no. 5, <https://journals.sagepub.com/subject-to-truth-before-and-after>

- [2] M. Foucault (1999), J. R. Carrette (ed.), "Religion and Culture: Michel Foucault," Taylor & Francis, ISBN 0-415-92362-X.
- [3] M. Foucault (2007), "Security, Territory, Population," pp 1.
- [4] Global Marshall Plan Foundation, "Towards a World in Balance: A virtual congress for a better balanced world," pp 169. ISBN 3-9809723-7-2.
- [5] UNESCO Eolss Publishers Co. Ltd, (2001), "Our Fragile World: Challenges and Opportunities for Sustainable Development," vol. 1, pp.1027. ISBN 0-9534944-7-0.
- [6] R. Blank (2001), "Biology and political science"," Psychology Press. ISBN 978-0-415-20436-1.
- [7] T. Lemke (2011), "Biopolitics: An advanced introduction," NYU Press, pp 9-10. ISBN 978-0-8147-5241-8.
- [8] "Ernst Haeckel: the art of evolution – in pictures," The Guardian, 1 November 2017. ISSN 0261-3077.
- [9] Andrey Makarychev & Alexandra Yatsyk, 2016, "Biopolitics and nationalism identities: Between liberalism and totalization," pp. 1-7.
- [10] Foucault, Michael 1994. "Volume 1." In *The Birth of Biopolitics*, in Michael Foucault. *Ethics, Subjectivity and Truth*, edited by Paul Rainbow, 73-89. New York : Penguin Books.
- [11] A. Snoek (2010), "Agamben's Foucault: An overview," *Foucault Studies*: pp 44-67. doi: 10.22439/fs.v0i10.3123.
- [12] M. Meloni (2010), "Biopolitics for philosophers," *Economy and Society*, pp 39, no. 4, pp 551-66. doi: 10.1080/03085147.2010.510684.
- [13] A. S. Deyve, A. A. Khvoshchin, and S. I. Chernomorchenko, "Challenges of biopolitics caused by the COVID-19 pandemic," *Proceedings of the Research Technologies of Pandemic Coronavirus Impact (RTCov 2020), Advances in Social Science, Education and Humanities Research*, vol. 486, pp 401-407.
- [14] Buchanan (April 3, 2019), "Ethical issues of human enhancement," *Institute for Ethics and Emerging Technologies*.
- [15] M. Almeida, R. Diogo (2019), "Human enhancement," *Evolution, Medicine, and Public Health*, vol. 1, pp 183-189. doi: 10.1093/emph/eoz026. PMC 6788211.

- [16] R. Raisamo et al., (2019), "Human augmentation: Past, present and future," *International Journal of Human-Computer Studies*, vol. 131, pp 131-143. doi:10.1016/j.ijhcs.2019.05.008.
- [17] "Dorlands Medical Dictionary," January 30, 2008.
- [18] Lanni et al., (March 2008), "Cognition enhancers between treating and doping the mind," *Pharmacol, Res.* vol. 57, no. 3, pp 196-213. doi:10.1016/j.phrs.2008.02.004. PMID 18353672.
- [19] E. Landau (May 7, 2012), "So you're a cyborg – now what?" *CNN*.
- [20] R. Pirmagomedov and Y. Koucheryavy (September 27, 2019), "IoT Technologies for Augmented Human: A Survey," *Internet of Things*, vol. 14. ISSN 2542-6605. S2CID 202750140.
- [21] F. Akyildiz, F. Brunetti, C. Blazquez (August 22, 2008), "Nanonetworks: A new communication paradigm," *Computer Networks*, vol. 52, no. 12, pp 2260-2279.
- [22] "Human enhancement," Wikipedia, free encyclopedia, <https://en.m.wikipedia.org/human-enhancement>
- [23] Cinel, D. Valeriana, R. Poli (2019), "Neurotechnologies for human cognitive augmentation: Current state of the art and future prospects," *Frontiers in Human Neuroscience*, vol. 13. doi:10.3389/fnhum.2019.00013. PMC 6365771.
- [24] N. Bostrom (March 27, 2024), "Technological maturity," *Deep Utopia: Life and Meaning in a Solved World*, Ideapress. ISBN 978-1646871643.

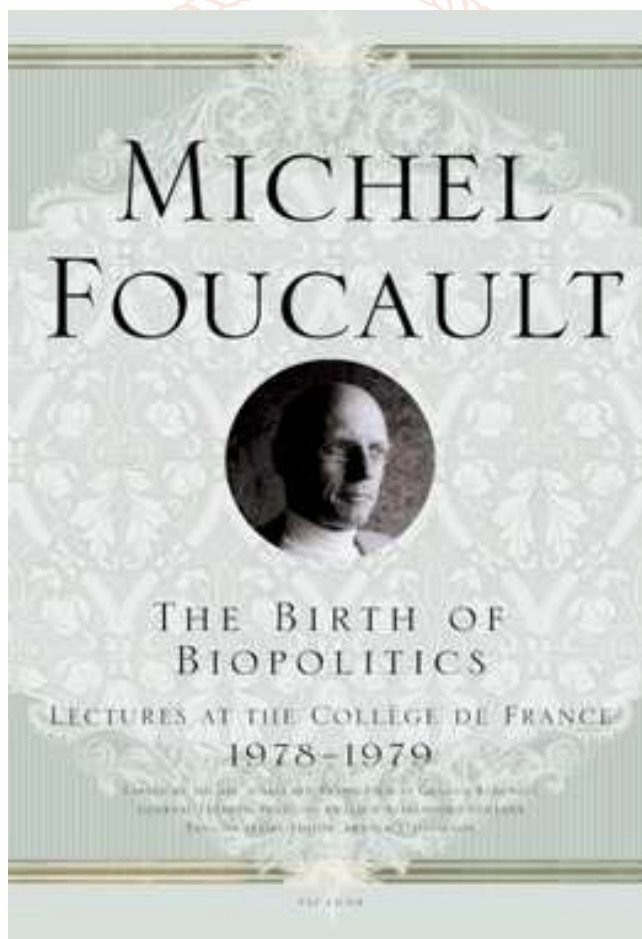


Figure 1. The Birth of Biopolitics.

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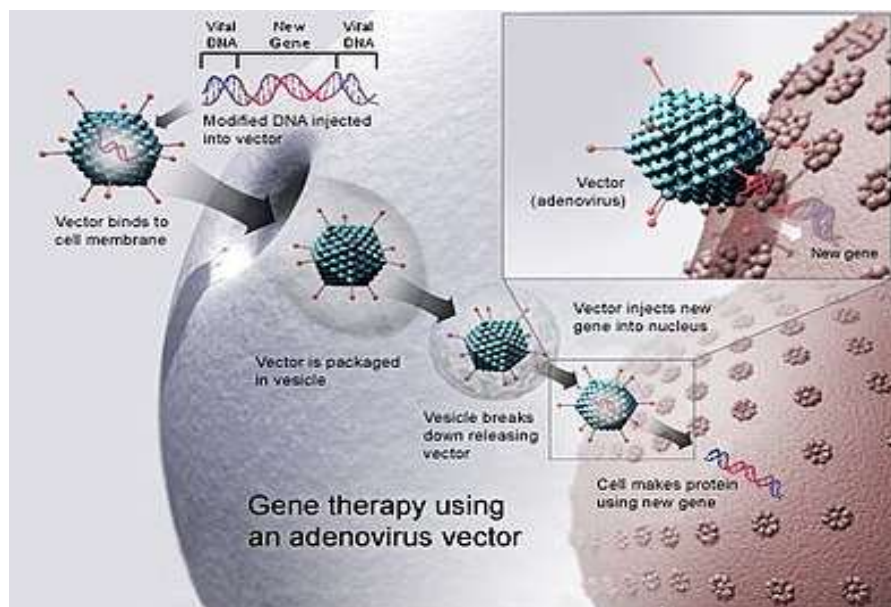


Figure 2. Human Enhancement

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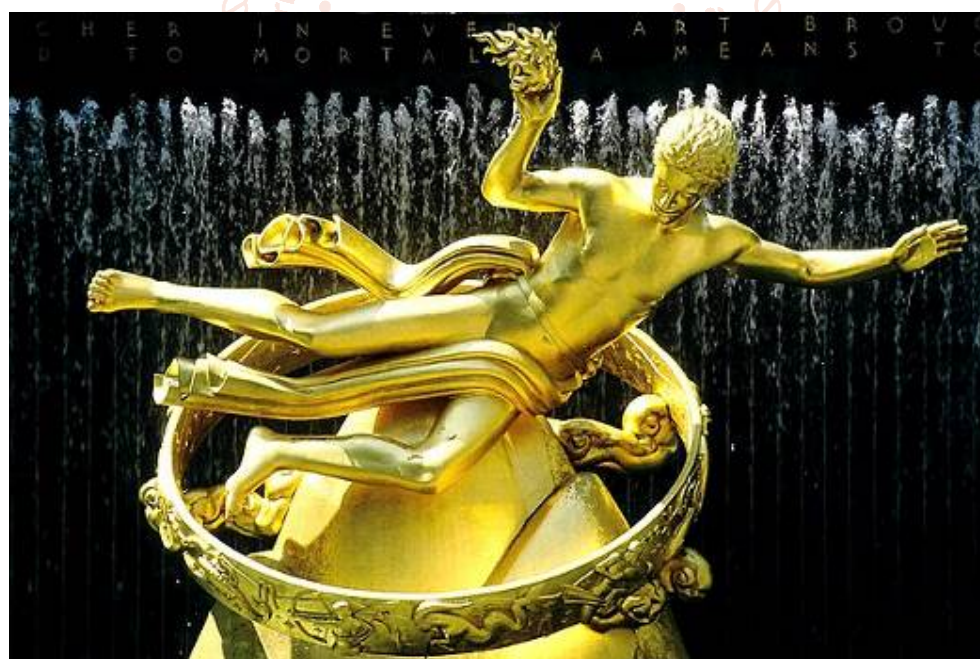


Figure 3. Human Enhancement.

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Figure 4. Intelligence amplification

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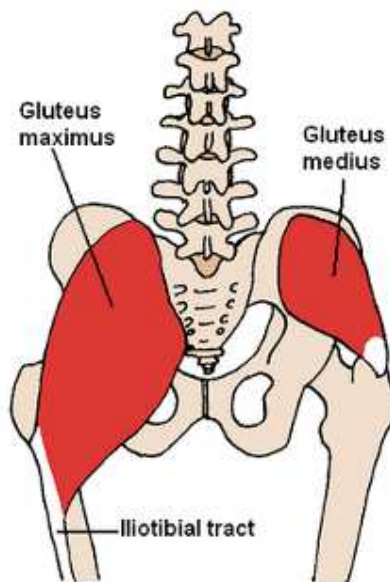


Figure 5. Buttock augmentation

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Figure 6. Body modification (human)

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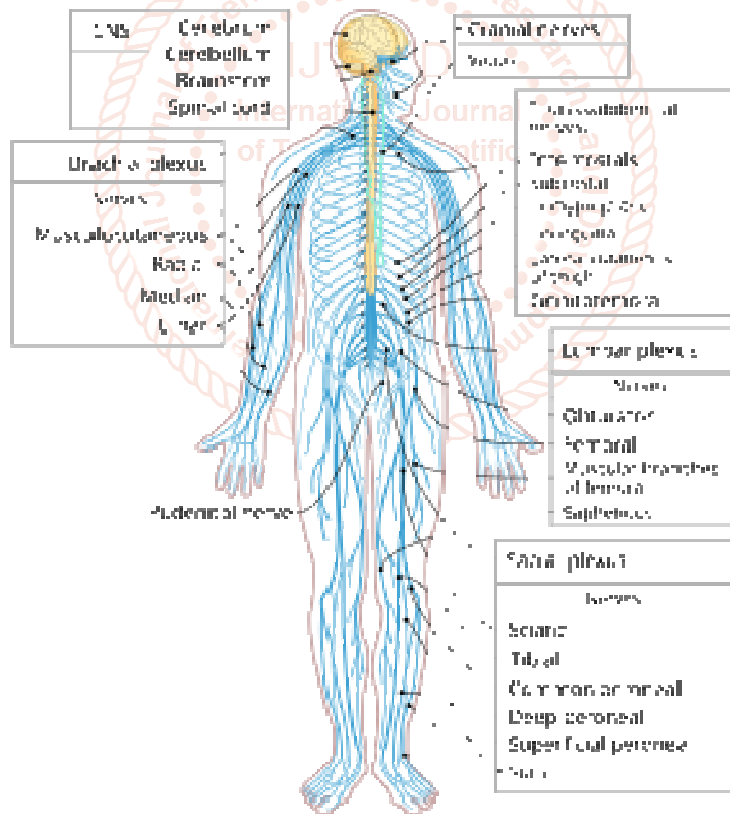


Figure 7. Neuroscience

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Figure 8. Implant (medicine)

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Figure 9. Microchip implant (human)

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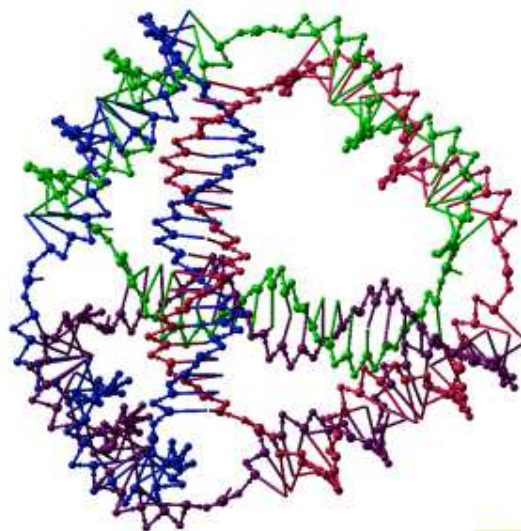
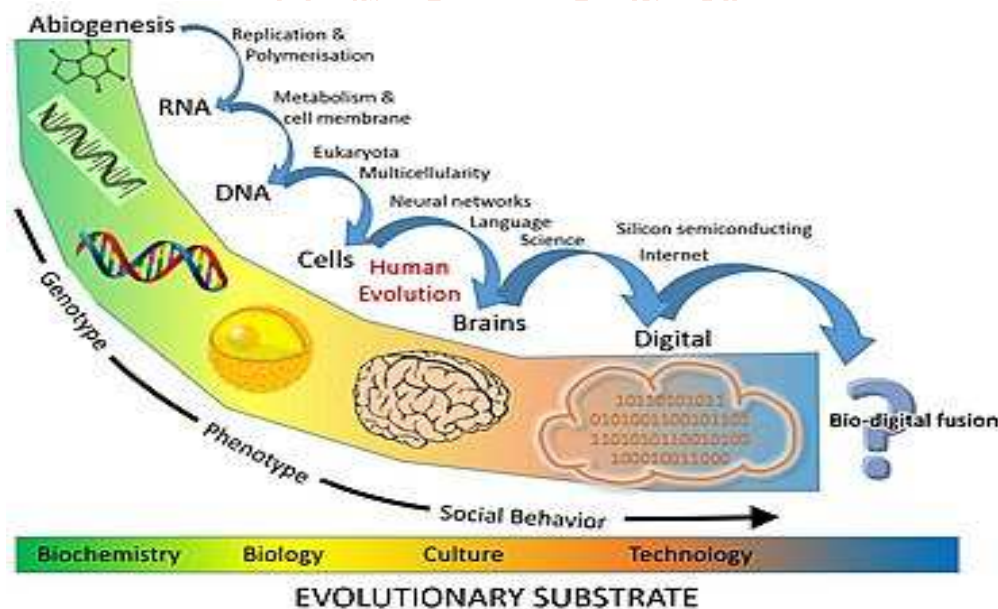


Figure 10. DNA nanotechnology

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based on: Gilling, M. R., Hilbert, M., & Kemp, D. J. (2016). Information in the Biosphere: Biological and Digital Worlds. *Trends in Ecology & Evolution*, 31(3), 180–189. <http://escholarship.org/uc/item/38f4b731>

Figure 11. Technological singularity

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