# Technology & Global Social Justice

POLIS, Michaelmas 2022

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#### **DESCRIPTION**

This course is available to candidates on the POLIS MPhil and to any other postgraduate student for whom it is a permitted option.

Recent technological developments, such as digital platforms and Artificial Intelligence (AI), are usually cast as innovative tools for bringing about an interconnected, prosperous, and green planet. In this course we will assess the extent to which such optimistic accounts of the relationship between technology and society hold true; especially when analysed from perspectives of social justice emerging from marginalised and dissenting groups from different regions of the world. Theoretical proposals such as decolonial thinking, Black feminism and Indigenous knowledges will be employed to unpack how and when recent technological developments can become complicit with the structures of power that have shaped global relations since the emergence of European modernity.

As a whole, this course aims at (1) interrogating how the dominant understandings and applications of technology can reinforce global asymmetries and (2) exploring alternative imaginaries emerging from different regions of the world. When it comes to the learning aims, students who undertake this course will gain familiarity with cutting edge critical research on recent technological developments and strengthen their capacity to criticise and rethink technological developments, policies, and practices from the perspective of the philosophies and histories of struggle emanating from the Global North and the South.

#### COURSE ORGANISATION AND EXPECTATIONS

In the reading lists that follow, core (i.e., compulsory) readings are separated from supplementary readings. Ideally, students will come to class having done the core readings. 'Other material' has been included in some cases in order to provide students with further resources.

In the seminars we will critically unpack the readings and discuss how they speak to each other. Supplementary readings are included for students who may want to read further on each topic and may also come in handy when writing the assessed essays.

The course will be taught in seminar style. Regular attendance and participation are expected but not assessed. There will be a few slides on some occasions, but most of the time

the seminars will be based on the participation of students through purposedly designed questions and activities. Questions designed to prompt thought on the readings will be provided for students to reflect upon before the seminar.

The seminars will take place on Wednesdays from 13:00 to 15:00 in ARB S2. Exceptionally, the session on 26 October will be held between 12:00 and 14:00 in ARB 138.

#### ASSESMENT

Note: Deadlines, formal requirements and other specifications will be provided at the beginning of the term.

**Essay or manifesto (70% of course mark).** The main assessment for this course will be a 3000-word document to be submitted at the end of the term. Students can choose between:

- a) an essay assessing a technology-related development, policy or practice drawing on at least one of the concepts discussed in the course, or
- b) a manifesto outlining an alternative vision for thinking about technology in a way that addresses some of the issues discussed in the course.

Both the essay and the manifesto should have a title, put forward a main argument supported through substantial arguments and the citation of relevant literature.

**Abstract (formative).** Students are invited to submit an abstract of no more than **300 words** defining the type of document they plan on writing (*a* or *b*). This statement should contain at least a tentative title and the main argument. Students will receive written feedback around strengths and areas of improvement. This submission is not compulsory but strongly encouraged since it will allow students to improve their presentation and final essay.

**Presentations (30% of course mark).** Students will present a short summary of their essay or manifesto during one of the seminars.

#### **BACKGROUND READING**

The following books are for reference purposes, which means that they are not required but could be helpful as background reading. These books employ different theoretical and conceptual lenses to critically explore the connection between technology and global social justice.

Adas, M. (2014). *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance*. Cornell University Press.

Arora, P. (2019). *The Next Billion Users: Digital Life Beyond the West*. Harvard University Press.

Benjamin, R. (2019). Race After Technology: Abolitionist Tools for the New Jim Code. Polity.

Couldry, N., & Mejias, U. A. (2019). The Costs of Connection: How Data is Colonizing Human Life and Appropriating It for Capitalism. Stanford University Press.

Escobar, A. (2018). Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds. Duke University Press.

Katz, Y. (2020). *Artificial Whiteness: Politics and Ideology in Artificial Intelligence*. Columbia University Press.

## **WEEK 1: Data and Coloniality**

Wednesday 12 October / 13:00 - 15:00 / ARB S2

The increasing production and availability of digital data is usually presented as an unprecedented and innovative breakthrough. In our first seminar we will question this assumption by adopting a decolonial lens and interrogating the ways in which datafication relies on, reproduces or intensifies the global hierarchies that emerged in European colonialism. To do this, we will first unpack the concept of 'coloniality', after which we will turn to recent proposals seeking to expose the connections between data and coloniality. Finally, we will discuss the limitations of this approach by asking whether applying decolonial theory to the study of technology can depoliticise the struggle against coloniality. As a whole, this session aims at introducing decolonial thinking, which is the overall framework employed throughout this course, and identifying the strengths and limitations of this approach for the study of technology.

#### Core Reading:

- Quijano, A. (2007). Coloniality and Modernity/Rationality. Cultural Studies, 21(2–3), 168–178.
- Couldry, N., & Mejias, U. A. (2019). *The Costs of Connection: How Data is Colonizing Human Life and Appropriating It for Capitalism*. Stanford University Press. [Chapter 1: The Capitalization of Life Without Limit]
- Tuck, E., & Yang, K. W. (2012). Decolonization is Not a Metaphor. *Decolonization: Indigeneity, Education, & Society, 1*(1), 1–40.

## Supplementary Reading:

- Couldry, N., & Mejias, U. A. (2021). The Decolonial Turn in Data and Technology Research: What is At Stake and Where is it Heading? *Information, Communication & Society.*
- Kwet, M. (2019). Digital Colonialism: US Empire and the New Imperialism in the Global South. *Race and Class*, 60(4), 3–26.
- Maldonado-Torres, N. (2016). Colonialism, Neocolonial, Internal Colonialism, the Postcolonial, Coloniality, and Decoloniality. In Y. Martínez-San Miguel, B. Sifuentes-Jáuregui, & M. Belausteguigoitia (Eds.), *Critical Terms in Caribbean and Latin American Thought: Historical and Institutional Trajectories* (pp. 67–78). Palgrave.

- Milan, S., & Treré, E. (2019). Big Data from the South(s): Beyond Data Universalism. *Television & New Media*, 20(4), 319–335.
- Oyedemi, T. D. (2021). Digital coloniality and 'Next Billion Users': The Political Economy of Google Station in Nigeria. In *Information Communication and Society* (Vol. 24, Issue 3, pp. 329–343).

# WEEK 2: Platform Labour and Imperialism

Wednesday 19 October / 13:00 - 15:00 / ARB S2

Digital platforms of all kinds, ranging from Facebook to Uber, depend on usually precarious and invisible human labour. Furthermore, new power dynamics come to play as such platforms get deployed globally while, most of the time, responding to the interests and views of actors located in the Global North. In this week we will ask to what extent a Marxist-inspired understanding of imperialism can illuminate the global labour asymmetries associated with the rise of platform labour. This approach will be contrasted with an empirical study focusing on the hopes and fears of platform workers and emergent forms of activism in the Global South. During the seminar, we will discuss the strengths and limitations of an imperialist framework for analysing platform labour with a focus on its capacity to account for the reality of different contexts.

# Core Reading:

- Fuchs, C. (2016). *Digital Labor and Imperialism*. Monthly Review. https://monthlyreview.org/2016/01/01/digital-labor-and-imperialism
- Graham, M., & Anwar, M. A. (2019). The global gig economy: Towards a planetary labour market? *First Monday*, 24(4).
- Soriano, C. R. R., & Cabañes, J. V. A. (2020). Entrepreneurial Solidarities: Social Media Collectives and Filipino Digital Platform Workers. *Social Media and Society*, 6(2).

## Supplementary Reading:

- Irani, L. C., & Silberman, M. S. (2013). Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13)*, 611–620.
- Jin, D. Y. (2013). The Construction of Platform Imperialism in the Globalization Era. *Communication, Capitalism & Critique*, 11(1), 145–172.
- Muldoon, J. (2022). *Platform Socialism: How to Reclaim our Digital Future from Big Tech*. Pluto. [Chapter 6: Building Civic Platforms]
- Qiu, J. L., Gregg, M., & Crawford, K. (2014). Circuits of Labour: A Labour Theory of the iPhone Era. *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 12(2), 564–581.
- Soriano, C. R., & Cabañes, J. V. (2019). Between "World Class Work" and "Proletarianized Labor": Digital Labour Imaginaries in the Global South. *The Routledge Companion to Media and Class*, 213–226.

#### Other material:

• DigiLabour. (2022). *Working for Click Farm Platforms in Brazil - Episode 1 & 2*. https://www.youtube.com/c/DigiLabour

# **WEEK 3: Algorithmic Injustice**

Wednesday 26 October / 12:00 - 14:00 / ARB 138

Algorithms have become a key tool for digital platforms. Today, algorithms undertake a broad range of tasks such as structuring the results of search engines and managing workers on platforms (i.e., Uber and Deliveroo). In this week we will turn to Black feminist thought, and more specifically to the concept of the 'matrix of domination', to scrutinise the alleged neutrality of algorithmic sorting, examine how it affects marginalised groups and understand how different demographic and identity axes interact to create specific forms of discrimination. Research on the Google search engine will be employed to illustrate the application of such a framework. Finally, we will critically reflect on the relevance of technology issues in the broader struggle for anti-racism and social justice.

#### Core Reading:

- Collins, P. H. (1990). *Black Feminist Thought: Knowledge, Consciousness and the Politics of Empowerment*. Unwin Hyman. [Chapter II: Knowledge, Consciousness, and the Politics of Empowerment]
- Noble, S. U. (2018). *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York University Press. [Chapter 2: Searching for Black Girls]
- Gangadharan, S. P., & Niklas, J. (2019). Decentering Technology in Discourse on Discrimination. *Information, Communication & Society*, 22(7), 882–899.

# Supplementary Reading:

- Benjamin, R. (2019). *Race After Technology: Abolitionist Tools for the New Jim Code*. Polity. [Chapter 2: Default Discrimination]
- Crenshaw, K. (1991). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics. In K. T. Bartlett & R. Kennedy (Eds.), *Feminist Legal Theory* (pp. 57–80). Routledge.
- D'Ignazio, C., & F. Klein, L. (2020). Seven Intersectional Feminist Principles for Equitable and Actionable COVID-19 Data. *Big Data and Society*.
- Myers West, S. (2020). Redistribution and Rekognition: A Feminist Critique of Algorithm Fairness. Catalyst: Feminism, Theory. *Catalyst: Feminism, Theory, Tecnoscience*, 6(2), 1–24.
- Steele, C. K. (2021). *Digital Black Feminism*. New York University Press. [Chapter 2: Black Feminist Technoculture, or the Virtual Beauty Shop]

# Other material

• O'Neil, C. (2018). *The Truth About Algorithms*. The Royal Society for Arts, Manufactures, and Commerce. <a href="https://vimeo.com/284939950">https://vimeo.com/284939950</a>

• Silva, T. (2020). *Algorithmic Racism Timeline*. https://tarciziosilva.com.br/blog/destaques/posts/algorithmic-racism-timeline/

# WEEK 4: Tech for Good and the Critique of Development

Wednesday 2 November / 13:00 - 15:00 / ARB S2

Society's perception of technology has acquired an increasingly dystopian tinge over recent decades. Data, algorithms, and AI have come to be seen as synonymous with control exercised by states and big technology corporations. Amidst this context, some actors are purposedly seeking to develop technologies that could improve people's lives. 'Tech for good', 'civic tech' as well as 'ethical' and 'humane' technology groups have been forming in order to create responsible technologies. This week, we will take a critical look at such initiatives, with a focus on their deployment in the Global South and humanitarian initiatives. While different frameworks have been proposed to understand the limitations of 'tech for good', we will turn to the critique of development as proposed by Arturo Escobar and the role attributed to modern science and technology to solve the world's problems. Based on this, we will take a historical lens and reflect on the power dynamics involved in decisions regarding what constitutes a problem, who is entitled to solve it and what should be the role of technology in these processes.

# Core Reading:

- Escobar, A. (1995). *Encountering Development: The Making and Unmaking of the Third World*. Princeton University Press. [Chapter 2: The Problematization of Poverty: The Tale of Three Worlds and Development]
- Greene, D., Hoffmann, A. L., & Stark, L. (2019). Better, Nicer, Clearer, Fairer: A
  Critical Assessment of the Movement for Ethical Artificial Intelligence and Machine
  Learning. Proceedings of the Annual Hawaii International Conference on System
  Sciences, 2019-Janua, 2122–2131.
- Madianou, M. (2019). Technocolonialism: Digital Innovation and Data Practices in the Humanitarian Response to Refugee Crises. *Social Media and Society*, *5*(3).

# Supplementary Reading:

- Birhane, A. (2020). Algorithmic Colonization of Africa. SCRIPT-Ed, 17(2), 389–409.
- Magalhães, J. C., & Couldry, N. (2021). Giving by Taking Away: Big Tech, Data Colonialism and the Reconfiguration of Social Good. *International Journal of Communication*, 15, 343–362.
- Morozov, E. (2013). To save Everything, Click Here: Technology, Solutionism, and the Urge to Fix Problems that Don't Exist. Public Affairs. [Chapter 1: Solutionism and its Discontents]
- Rességuier, A., & Rodrigues, R. (2020). AI Ethics Should Not Remain Toothless! A Call to Bring -back the Teeth of Ethics. *Big Data and Society*, 7(2).
- Ricaurte, P. (2022). Ethics for the Majority World: AI and the Question of Violence at Scale. *Media, Culture and Society*.

#### Other Material

- Microsoft. (2019). AI for Good. https://www.youtube.com/watch?v=COQtCga6uuk
- Google. (2019). Accelerating social good with artificial intelligence: Insights from the Google AI Impact Challenge. 1–46.
  <a href="https://services.google.com/fh/files/misc/accelerating\_social\_good\_with\_artificial\_intelligence\_google\_ai\_impact\_challenge.pdf">https://services.google.com/fh/files/misc/accelerating\_social\_good\_with\_artificial\_intelligence\_google\_ai\_impact\_challenge.pdf</a>

# WEEK 5: Infrastructure, Indigeneity and the Environment

Wednesday 9 November / 13:00 – 15:00 / ARB S2

The production and management of vast amounts of data required to train algorithms and power AI has encompassed an explosive increase in the extraction of minerals as well as the deployment of energy- and water-intensive data centres and other measures, with a concrete impact on local communities and the environment. Against such a backdrop, this week we will turn to Indigenous knowledges to unpack technology's relation to land and the environment. More concretely, we will question whether initiatives seeking to develop so-called 'green' technologies can tackle the root causes underpinning the climate crisis and the extent to which such developments speak to Indigenous ways of relating to land. The two case studies discussed this week will pertain to the Lickan Antay communities living in the Atacama Desert, Chile.

## Core Reading:

- Liboiron, M. (2021). *Pollution Is Colonialism*. Duke University Press. [Introduction]
- Tapia, D., & Peña, P. (2020). White Gold, Digital Destruction: Research and Awareness on the human Rights Implications of the Extraction of Lithium Perpetrated by the Tech Industry in Latin American Ecosystems. In *Technology, the environment and a sustainable world* (pp. 160–164). Global Information Society Watch. https://giswatch.org/node/6247.
- Lehuedé, S. (2022). Territories of Data: Ontological Divergences in the Growth of Data Infrastructure. *Tapuya: Latin American Science, Technology and Society*.

## Supplementary Reading:

- Brodie, P. (2020). Climate extraction and supply chains of data. *Media, Culture and Society*, 42(7–8), 1095–1114.
- Mosco, V. (2014). *To the Cloud: Big Data in a Turbulent World*. Paradigm. [Chapter 3: Selling the Cloud Sublime]
- Hogan, M. (2015). Data Flows and Water Woes: The Utah Data Center. *Big Data and Society*, 2(2), 1–12.
- Starosielski, N. (2015). *The Undersea Network*. Duke University Press. [Chapter 6: Cabled Depths: The Aquatic Afterlives of Signal Traffic]
- Todd, Z. (2016). An Indigenous Feminist's Take on The Ontological Turn: "Ontology" Is Just Another Word for Colonialism. *Journal of Historical Sociology*, 29(1), 4–22.

# **WEEK 6: Digital Sovereignty**

Wednesday 16 November / 13:00 - 15:00 / ARB S2

Having discussed some of the main issues regarding recent technological developments, from this week onwards we will focus on alternative visions of technology. In particular, in week 7 we will discuss digital sovereignty, an approach that has become increasingly influential in policymaking and activism as a means to tackle the hegemony of the United States. Yet, the diversity of articulations makes it difficult to pinpoint what such a principle actually means in practice. To address this point, we will trace the emergence of digital sovereignty in the last two decades in different contexts and discuss their similarities and divergences. In so doing, we will compare their underlying sovereign subjects and political projects in order to interrogate their capacity to advance global social justice in the field of technology.

#### Core Reading:

- Couture, S., & Toupin, S. (2019). What Does the Notion of "Sovereignty" Mean when Referring to the Digital? *New Media & Society*, 21(10), 2305–2322.
- Budnitsky, S. (2020). Russia's great power imaginary and pursuit of digital multipolarity. *Internet Policy Review*, 9(3), 1–25.
- Padilla, M. (2017). Technological Sovereignty: What Are we Talking About? In *Technological Sovereignty Vol. 2* (pp. 3–14). Descontrol.

## Supplementary Reading:

- Becerra, M., & Waisbord, S. R. (2021). The curious absence of cybernationalism in Latin America: Lessons for the study of digital sovereignty and governance. *Communication and the Public*, 1–13.
- Creemers, R. (2020). China's Conception of Cyber Sovereignty: Rhetoric and Realization. In D. Broeders & B. van den Berg (Eds.), *Governing Cyberspace: Behavior, Power, and Diplomacy* (pp. 107–144). Rowman & Littlefield.
- Kukutai, T., & Taylor, J. (2016). Data sovereignty for indigenous peoples: current practice and future needs. In *Indigenous Data Sovereignty: Toward an Agenda*. Australian National University Press.
- Mueller, M. L. (2020). Against sovereignty in cyberspace. *International Studies Review*, 22(4), 779–801.
- Pohle, J. (2020). *Digital sovereignty: A new key concept of digital policy in Germany and Europe [Research Paper]*. Konrad Adenauer Stiftung. <a href="https://www.kas.de/en/single-title/-/content/digital-sovereignty">https://www.kas.de/en/single-title/-/content/digital-sovereignty</a>

# **WEEK 7: Autonomy & Ubuntu**

Wednesday 23 November / 13:00 - 15:00 / ARB S2

In this week we will ask: Is it possible to think of alternatives way of approaching technology that do not reproduce coloniality? Where shall we look for such alternative visions? To respond these questions, we will first connect our inquiry with broader debates on 'post-development visions' and 'designs for transition' taking place in different contexts. After that, we will turn to the applications of two of such visions to the field of technology (Ubuntu from Southern Africa and autonomy from Latin America) and discuss how these visions stand in relation to the dominant understanding of technology. As a whole, this week addresses the question of who is able to shape technological futures and what perspectives informed by ideas circulating in the Global South would look like.

#### Core Reading:

- Kothari, A., Salleh, A., Escobar, A., Demaria, F., & Acosta, A. (2019). Finding Pluriversal Paths. In A. Kothari, A. Salleh, A. Escobar, F. Demaria, & A. Acosta (Eds.), *Pluriverse: A Post-Development Dictionary* (pp. xxi–xl). Tulika Books.
- Mhlambi, S. (2020). From Rationality to Relationality: Ubuntu as an Ethical & Human Rights Framework for Artificial Intelligence Governance. *Carr Center Discussion Paper*. <a href="https://carrcenter.hks.harvard.edu/publications/rationality-relationality-ubuntu-ethical-and-human-rights-framework-artificial">https://carrcenter.hks.harvard.edu/publications/rationality-relationality-ubuntu-ethical-and-human-rights-framework-artificial</a>
- Bravo, L. (2017). A Seed Sprouts when it is Sown in Fertile Soil. In *Technological Sovereignty Vol.* 2 (pp. 109–122). Descontrol. <a href="https://sobtec.gitbooks.io/sobtec2/">https://sobtec.gitbooks.io/sobtec2/</a>

# Supplementary Reading:

- Costanza-Chock, S. (2018). Design Justice: towards an intersectional feminist framework for design theory and practice. *Proceedings of the Design Research Society* 2018.
- Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Duke University Press. [Chapter 6: Autonomous Design and the Politics of Relationality and the Communal]
- Mavhunga, C. C. (2017). Introduction: What Do Science, Technology, and Innovation Mean from Africa? In C. C. Mavhunga (Ed.), *What Do Science, Technology, and Innovation Mean from Africa* (pp. 1–28). MIT Press.
- Sánchez Benítez, Y. (2021). *A New AI Lexicon: Tequiologies*. AI Now. https://medium.com/a-new-ai-lexicon/a-new-ai-lexicon-tequiologies-38f100255820
- Sursiendo. (2022). *Digital Communality: A Permaculture Ethics Perspective*. https://sursiendo.org/docs/comunalidad/Digital\_Communality\_permaculture\_ethics\_s ursiendo2022.pdf

#### Other material

• Krishnan, A., Abdilla, A., Moon, A. J., Souza, C. A., Adamson, C., Lach, E. M., Ghazal, F., Fjeld, J., Taylor, J., Havens, J. C., Jayaram, M., Morrow, M., Rizk, N., Ricaurte Quijano, P., Çetin, R. B., Chatila, R., Dotan, R., Mhlambi, S., Jordan, S., & Rosenstock, S. (2021). *AI Decolonial Manyfesto*. https://manyfesto.ai/