King's College London | Department of Digital Humanities
Digital Governance

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THE COURSE

Digital technologies and the internet have created new challenges and opportunities for governance. Some argue that technology is a self-directing force that cannot be governed. Others celebrate possibilities for decentralised self-governance by online communities outside the reach of governments and corporations. Yet these possibilities are in large part available only because of centralised government and corporate investment in digital technologies - from smartphones, to social media platforms, to telecommunications infrastructure - and government regulation.

In this course, we will examine the problems and possibilities for digital governance that arise from the interaction between communities, governments, and corporations in the creation and operation of digital technologies and the internet. We will study these issues through a series of case studies involving key areas of digital governance.

At the end of the course, you will be able to:

— **Engage critically** with different models of digital governance, and with the theoretical, political and technical aspects that underpin them.

— **Develop critical responses** to emerging theoretical discourses, methodologies or practices, recognize and argue for a variety of approaches to them, and suggests new ones.

— **Achieve** a practical and actionable understanding of governance concepts.

STRUCTURE AND ASSESSMENTS

1. A final policy brief of 4,000 words that will address this question: How should digital technologies be governed?*

2. Weekly reading responses in the first part of the course, to engage critically with the readings and to start a conversation with your classmates, which will be continued in the seminars. The responses should be posted before the week's lecture on the course's forum; they should not be summaries of the readings, but rather your own perspective on the issue discussed, based on the readings. You're encouraged to engage in discussions with your classmates and respond to their posts.

3. Group presentation of policy papers during the second part of the course. Each week will list a number of policy papers related to the topic of the week's lecture, which are the starting point of your presentation to the class. You're expected to summarize the policy paper, contextualize it and link it with theory.

* *We don't expect you to address this question for all digital technologies - you should select a specific technology (e.g. blockchain) or policy area (e.g., privacy) to focus on. Your paper should explain details of the technology or policy area which are relevant to the problems of governance that you intend to discuss. You should describe how the technology or policy area is currently governed, using (as needed) the perspectives of technology, community, corporations, and states developed in the syllabus. You should discuss the implications of the particular governance arrangements that you've described: Is the mode of governance you've described desirable? Why/why not? How do you think it should be changed, and why? Draw from readings in the syllabus (and beyond) to make your arguments.*

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CLASS PLAN AND READINGS

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PART I: GOVERNANCE IN THEORY

Digital and internet governance are constantly evoked as key to decide the future of the internet. Should states and political powers regulate the internet, and to what extent? Or are tech corporations so powerful and with such a global span to make them the de facto regulators of the digital sector? Or has technology gained such momentum and autonomy as to become increasingly hard to regulate, as recent debates on AI seem to indicate?

In the first part of this course, we begin by defining key terms and key theories that are relevant to digital governance. We focus on the ambiguity of terminology, and on the fact that there isn't a single theory of digital or of internet governance, but rather a set of distinct approaches to governance that have different actors as their fulcrum: communities, states, technology itself, and corporations.

Week 1   **INTRODUCTION**

READINGS
- Chapter 1 in Bevir, M. 2013. *A Theory of Governance*. Retrieved from https://escholarship.org/uc/item/2qs2w3rb
- Fish, Adam, Luis F.R. Murillo, Lilly Nguyen, Aaron Panofsky, and Christopher M. Kelty. 2011. "Birds of the Internet: Towards a Field Guide to the Organization and Governance of Participation." *Journal of Cultural Economy* 4 (2): 158–87. https://doi.org/10.1080/17530350.2011.563069.

CASE STUDY
- Badiei, F. 2021. "The tragedy of Internet Infrastructure in Afghanistan." RIPE Labs https://labs.ripe.net/author/farzaneh-badiei/the-tragedy-of-internet-infrastructure-in-afghanistan/

OPTIONAL READINGS
- Raymond, M. & DeNardis, L. 2015. "Multistakeholderism: Anatomy of an Inchoate Global Institution" *International Theory* 7.3 https://www.cambridge.org/core/journals/international-theory/article/multistakeholderism-anatomy-of-an-inchoate-global-institution/B69E6361B5965C98CFD400F75AA8DC53
- Lessig, L. 2001. "The Internet Under Siege" *Foreign Policy* https://www.dhi.ac.uk/san/waysofbeing/data/governance-crone-lessig-2001.pdf
- Drake, William J. 2008. "Introduction: The Distributed Architecture of Network Global Governance." In *Governing Global Electronic Networks: International Perspectives on Policy and Power*, edited by William J. Drake and Ernest J. Wilson, 1–79. MIT Press. https://ieeexplore.ieee.org/abstract/document/6285333

ASSIGNMENT
- Data Access Request *(due on Week 8)*

  Do a data access request to one or two companies of your choice. The assignment will be explained during the seminar, and then discussed on Week 8, but get started early as data requests can take up to a month to be fulfilled!

READING RESPONSE
- *(Due next week)*

  Benkler presents "commons-based peer production" as a mode of production distinct from that of corporate/government hierarchies or markets. Do you think that commons-based peer production can exist independent of corporate/government hierarchies or markets? Why/why not?

Week 2   **THEORIES OF GOVERNANCE BY COMMUNITY**

READINGS
- Benkler, Yochai. 2002. "Coase's Penguin, or, Linux and the Nature of the Firm." *Yale Law Journal* 112 (3): 369–446. https://www.benkler.org/CoasesPenguin.PDF

WATCH
- Elinor Ostrom on the myth of the tragedy of the commons: https://www.youtube.com/watch?v=ybdvjvIH-1U

CASE STUDY
- Hossain, Anushah. 2021. "Regional Open Source Software Communities: The View from Dhaka, Bangladesh." https://drive.google.com/file/d/1WF9KfzM3flG99x7md-mIStAYtnNdwq0iu/view

OPTIONAL READINGS
- Ostrom, Elinor. 2010. "Beyond Markets and States: Polycentric Governance of Complex Economic Systems." *American Economic Review* 100 (3): 641–72. https://doi.org/10.1257/aer.100.3.641 / https://www.jstor.org/stable/27871226
- Johnson, David R., Susan P. Crawford, and John G. Palfrey. 2004. "The Accountable Internet: Peer Production of Internet Governance." *Virginia Journal of Law and Technology* 9 (9). http://ssrn.com/abstract=529022

Week 2   *Continued*

READING RESPONSE   (Due next week)

In discussing the different types of internet access that the University of Chicago and Harvard implemented, Lessig writes that "The networks thus differ in the extent to which they make behavior within each network regulable. This difference is simply a matter of code—a difference in the software. Regulability is not determined by the essential nature of these networks. It is determined instead by their architecture" (Lessig 1999:27). Similarly, in suggesting that values are embodied in technology, Nissenbaum suggests that the intentions and backgrounds of those who build technology are then manifested in the technology itself and in its consequences on society. Winner, however, asks whether the consequences of technology in society "derive from an unavoidable social response to intractable properties in the things themselves, or is it instead a pattern imposed independently by a governing body, ruling class, or some other social or cultural institution to further its own purposes?" (Winner 1980:131). While Lessig and Nissenbaum see technological architectures as a key shaper of society, Winner shifts the attention to politics. Which of these two points do you favour and why?

Week 3   **THEORIES OF GOVERNANCE BY TECHNOLOGY**

WATCH BEFORE CLASS   Nussbaum, M. 2016. One Mouse per Child: https://www.youtube.com/watch?v=7p9iO-AvrbPw

OLPC Foundation. 2008. One Laptop Per Child Mission Part 1: Principles and Child Empowerment: https://www.youtube.com/watch?v=c-M77C2ejTw

READINGS   Lessig, L. 1999. "Part 1: Regulability" from *Code and Other Laws of Cyberspace* https://lessig.org/images/resources/1999-Code.pdf (read the entire section; these are short chapters, and very readable)

Winner, L. 1980 "Do Artifacts Have Politics?" *Daedalus* 109,1 https://www.jstor.org/stable/20024652

Nissenbaum, H. 2001/. "How Computer Systems Embody Values" *Computer*, 34,3 https://dl.acm.org/doi/10.1109/2.910905, https://nissenbaum.tech.cornell.edu/papers/embodyvalues.pdf

CASE STUDIES   Microsoft Multipoint Case Study: https://services.just.edu.jo/Elearning/learningsuite/Software/Mouse Mischief Case Study - LeQuyDon.pdf

Warschauer, M., Cotten, S., Ames, M. 2011. "One Laptop Per Child Birmingham: Case Study of a Radical Experiment" https://www.researchgate.net/publication/254925200_One_Laptop_per_Child_Birmingham_Case_Study_of_a_Radical_Experiment

OPTIONAL READINGS   Dafoe, A. 2015. "On Technological Determinism: A Typology, Scope Conditions, and a Mechanism." *Science, Technology, & Human Values* 40,6. https://journals.sagepub.com/doi/full/10.1177/0162243915579283

Shilton, K. 2018. "Values and Ethics in Human-Computer Interaction." *Foundations and Trends® in Human–Computer Interaction* 12,2, pp 107-171. http://dx.doi.org/10.1561/1100000073

Ames, M. 2019. *The Charisma Machine: The Life, Death, and Legacy of One Laptop Per Child.* MIT Press. https://direct.mit.edu/books/book/4918/The-Charisma-MachineThe-Life-Death-and-Legacy-of

Week 3   ***Continued***   *(Due next week)*

READING RESPONSE   Can sovereignty, based on the state control of a specific territory, be compatible with the flow of data across boundaries that is a key characteristic of the internet? Are there other possibilities for states to exercise some form of control on the internet that is not based on sovereignty and is more aligned with the technological nature of the internet? Cite examples from at least two readings to argue your position.

Week 4   **Friday, 27 October**   **THEORIES OF GOVERNANCE BY THE STATE**

READINGS
- Couture, S. & Toupin, S. 2019. "What does the notion of "sovereignty" mean when referring to the digital?" *New Media & Society* 21,10 https://journals.sagepub.com/doi/abs/10.1177/1461444819865984
- Goldsmith, J. & Wu, T. 2006. "Why Geography Matters" and "How Governments Rule the Net" in *Who Controls the Internet? Illusions of a Borderless World*. Oxford University Press.
- Drezner, Daniel W. 2004. "The Global Governance of the Internet: Bringing the State Back In." *Political Science Quarterly* 119 (3): 477–98. http://www.jstor.org/stable/10.2307/20202392

WATCH
- Linda Bonyo, Parminder Jeet Singh, Joana Varon (2020) "Who Controls the Data? Perspectives on Digital Sovereignty from the Global South" https://www.youtube.com/watch?v=-DO_t84HUBo

CASE STUDY
- DG Digit. 2020. Study on Data Analytics for Member States and Citizens: https://joinup.ec.europa.eu/collection/study-data-analytics-member-states-and-citizens/download-reports (15 case studies on strategies and use of big data on the part of governments)

OPTIONAL READINGS
- Negro, L. 2002. ""China's Perspective on Internet Governance: A more Integrated Role in the Global Discussion?" *Journal of Chinese Political Science* https://link.springer.com/article/10.1007/s11366-022-09811-5

VIDEOS
- Kolozaridi, P. and Muravyov, D. (2021) "Contextualizing Sovereignty: A Critical Review of Competing Explanations of the Internet Governance in the (so-called) Russian Case." *First Monday* 26, 5. https://doi.org/10.5210/fm.v26i5.11687

READING RESPONSE   *(Due next week)*

Van Dijck, Poell, and de Waal's work examines the power of platforms in themselves, showing how the details of platforms (from algorithms to ownership structures) shape digital governance and broader public values. In contrast, Gorwa focuses on inter-organisational and international corporate governance relationships between platform companies and other entities. While of each of these perspectives offers critical insights, which do you think is more important for the analysis of digital governance? Why?

Week 5   **THEORIES OF GOVERNANCE BY CORPORATIONS**

READINGS
- Van Dijck, J., Poell, T. & de Waal, M. 2018. "Introduction" and "Governing a Responsible Platform Society" in *The Platform Society: Public Values in a Connective World*. Oxford University Press.

- Gorwa, Robert. 2019. "The Platform Governance Triangle: Conceptualising the Informal Regulation of Online Content." *Internet Policy Review* 8 (2). https://policyreview.info/articles/analysis/platform-governance-triangle-conceptualising-informal-regulation-online-content

CASE STUDY
- Zeng, J., & Kaye, D. B. V. 2022. "From Content Moderation to Visibility Moderation: A Case Study of Platform Governance on TikTok." *Policy & Internet*, 14, 79– 95. https://doi.org/10.1002/poi3.287

OPTIONAL READINGS
- Mao, T. & Wen, Y. 2021. "The Paradox of Platform Monopoly between Tencent and Facebook: Theory, Practice and Governance" GIGANET Symposium. https://www.giga-net.org/2021SymposiumPapers/(Mao&Wen,2021)The Paradox of Platform Monopoly in Tecent and Facebook.pdf

- Petelka, J., Oreglia, E., Finn, M., and Srinivasan, J. 2022. "Generating Practices: Investigations into the Double Embedding of GDPR and Data Access Policies." *Proc. ACM Hum.-Comput. Interact.* 6, CSCW2, Article 518 https://doi.org/10.1145/3555631

- Van Dijck, Jose. 2021. "Seeing the forest for the trees: Visualizing platformization and its governance." *New Media & Society* 23(9): 2801-2819. https://journals.sagepub.com/doi/pdf/10.1177/1461444820940293

READING WEEK

PART II: GOVERNANCE IN PRACTICE

In this second part, we focus on how the theories of governance we explored in the first part look like in practice. Governance is the result of the interplay of the different actors in the socio-technical systems we examine, so there is no 'pure' example of governance only by community, or state, or technology, or corporations. Each specific instance of governance sees these parts interact, with some prevailing and some more in the background. In this section, we look at the instantiations of governance by different actors and their limits.

Week 6   **GOVERNANCE BY COMMUNITY IN PRACTICE**

READINGS
- Russell, Andrew L. 2006. "'Rough Consensus and Running Code' and the Internet-OSI Standards War." *IEEE Annals of the History of Computing* 28 (3): 48–61. https://doi.org/10.1109/MAHC.2006.42

- Reagle, Joseph M. 2007. "Do As I Do: Authorial Leadership in Wikipedia." In *Proceedings of the 2007 International Symposium on Wikis - WikiSym '07*, 143–56. Montreal, Quebec, Canada: ACM Press. https://doi.org/10.1145/1296951.1296967

OPTIONAL READINGS
- Braman, Sandra. 2009. "Internet RFCs as Social Policy: Network Design from a Regulatory Perspective." *Proceedings of the American Society for Information Science and Technology* 46 (1): 1–29. https://doi.org/10.1002/meet.2009.1450460254

- Shaikh, Maha, and Ola Henfridsson. 2017. "Governing open source software through coordination processes." *Information and Organization* 27.2: 116-135. https://www.sciencedirect.com/science/article/pii/S1471772716301816

Week 6	*Continued*

- Kreiss, Daniel, Megan Finn, and Fred Turner. 2011. "The Limits of Peer Production: Some Reminders from Max Weber for the Network Society." *New Media & Society* 13, no. 2: 243–59. https://doi.org/10.1177/1461444810370951

POLICY PAPERS

The Tao of the IETF. https://www.ietf.org/about/participate/tao/

Linux Governance. https://wiki.p2pfoundation.net/Linux_-_Governance

Wikipedia Administration. https://en.wikipedia.org/wiki/Wikipedia:Administration

GROUP PRESENTATION

(Due this week)

Each of these policy documents represents an important case that has been termed as an instance of Benkler's commons-based peer production. For each of these policy documents, consider the questions:

- What is being governed?
- Who is able to participate in governance?
- How is participation structured?
- How is community organised? Why does this matter?
- How is commons-based peer production organised? Why does this matter?

Week 7

GOVERNANCE BY TECHNOLOGY IN PRACTICE

READINGS

- Reijers, Wessel, Fiachra O'Brolcháin, and Paul Haynes. 2016. "Governance in Blockchain Technologies & Social Contract Theories." *Ledger* 1 (December): 134–51. https://doi.org/10.5195/ledger.2016.62
- Mathew, Ashwin J. 2016. "The Myth of the Decentralised Internet." *Internet Policy Review*. https://doi.org/10.14763/2016.3.425

OPTIONAL READINGS

- The MarkUp Pixel Hunt series (on tracking the Facebook pixel and what it tracks): https://themarkup.org/series/pixel-hunt/page/2 (start at the end)
- Gehl, R.W. and Zulli, D. (2022) "The Digital Covenant: Non-centralized Platform Governance on the Mastodon Social Network", *Information, Communication & Society*. Advance online publication. Available at: https://doi.org/10.1080/1369118X.2022.2147400
- DeNardis, Laura. 2013. "Internet Points of Control as Global Governance." *Internet Governance Papers*, https://www.cigionline.org/sites/default/files/no2_3.pdf

POLICY PAPERS

- Arnbak, Axel M, Nico A N M Van Eijk, and Universiteit Van Amsterdam. 2012. "Certificate Authority Collapse: Regulating Systemic Vulnerabilities in the HTTPS Value Chain." In Proceedings of the 40th Research Conference on Communication, Information and Internet Policy (Telecommunications and Policy Research Conference). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2031409
- Dodd, Nigel. 2018. "The Social Life of Bitcoin." Theory, Culture & Society 35 (3): 35–56. https://doi.org/10.1177/0263276417746464
- Satoshi Nakamoto's paper outlining Bitcoin: http://satoshinakamoto.me/bitcoin.pdf
- The original DNS specification (focus on sections 1 to 3.2, and 4.1-4.2): https://datatracker.ietf.org/doc/html/rfc1034
- The Mozilla Root Store Policy, specifying how certificate authorities are maintained in Mozilla products (focus on sections 2 and 3): https://www.mozilla.org/en-US/about/governance/policies/security-group/certs/policy/

Week 7   *Continued*

GROUP PRESENTATION   *(Due this week)*

These papers are all quite technical - while you should try to understand the technology as best as you can, focus on examining the forms and claims of governance that are apparent in each of these documents. Consider these questions:

- What structures and rules of governance are apparent in these systems?

- How does the form of the technology influence the form of governance?

- What is the role of governance in enabling the stable function of technology?

Week 8   **GOVERNANCE BY STATE IN PRACTICE**

READINGS
- Arsène, Séverine. 2015. "Internet Domain Names in China: Articulating Local Control with Global Connectivity." *China Perspectives*, no. 4 (104): 25–34. https://www.jstor.org/stable/44091113

- Salamatian, Loqman, Frédérick Douzet, Kavé Salamatian, and Kévin Limonier. 2021. "The Geopolitics behind the Routes Data Travel: A Case Study of Iran." *Journal of Cybersecurity* 7 (1). https://doi.org/10.1093/cybsec/tyab018

OPTIONAL READINGS
- "Tech Regulations in China Brings In Sweeping Changes." *MERICS*, Nov 3, 2021, https://merics.org/en/short-analysis/tech-regulation-china-brings-sweeping-changes

- Pohle, J. & Thiel, T. 2020. "Digital Sovereignty" *Internet Policy Review* 9,4 https://policyreview.info/pdf/policyreview-2020-4-1532.pdf

- Hollis, D. 2021. "A brief primer on international law and cyberspace" *Carnegie Endowment for International Peace* https://carnegieendowment.org/files/Hollis_Law_and_Cyberspace.pdf

POLICY PAPERS   *(Choose one)*

- Attrill, N. & Fritz, A. 2021. "China's Cyber Vision: How the cyberspace administration of China is building a new consensus on global internet governance." *Policy Brief Report* No.52/2021, ASPI. https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2021-11/Chinas cyber vision.pdf

- Wheeler, T. 2021. "A focused federal agency is necessary to oversee Big Tech." *Brookings* https://www.brookings.edu/research/a-focused-federal-agency-is-necessary-to-oversee-big-tech/

- Epifanova, A. 2020. "Deciphering Russia's 'Sovereign Internet Law': Tightening Control and Accelerating the Splinternet." *DGAP Analysis*. Berlin: Forschungsinstitut der Deutschen Gesellschaft für Auswärtige Politik e.V. https://www.ssoar.info/ssoar/bitstream/handle/document/66221/ssoar-2020-epifanova-Deciphering_Russias_Sovereign_Internet_Law.pdf

GROUP PRESENTATION   *(Due this week)*

Present the key cases and arguments from these papers, drawing from the theoretical perspectives on governance by the state and digital sovereignty in the readings for this section of the module. Do you agree with the analysis in these papers? Why/why not? How have they changed your perspective on the role of the state in digital governance?

Week 9 GOVERNANCE BY CORPORATIONS IN PRACTICE

READINGS
- Bradford, A. 2020. "The Brussels Effect: Introduction" Oxford University Press
- Khan, L.M. 2018. "Sources of Tech Platform Power." 2 *Geo. L. Tech. Rev.* 325. *Copy and paste link into browser:* heinonline.org/HOL/LandingPage?handle=hein.journals/gtltr2&div=24&id=&page=

OPTIONAL READINGS
- Liu, J. and Yang, L. 2022. ""Dual-track" Platform Governance on Content: A Comparative Study between China and the United States." *Policy & Internet*, 14,2. https://onlinelibrary.wiley.com/doi/full/10.1002/poi3.307
- Bradford, A. 2012. "The Brussels Effect" *Northwestern University Law Review,* Vol. 107, No. 1, 2012, *Columbia Law and Economics Working Paper No. 533*, Available at SSRN: https://ssrn.com/abstract=2770634 (this is the original paper)
- Frana, P. 2018. "Telematics and the Early History of International Digital Information Flows." *IEEE Annals of the History of Computing*, 40,2. https://muse.jhu.edu/article/700661
- Friederici, N., & Lehdonvirta, V., 2021. *The Strategic Guide to Responsible Platform Business*. Alexander von Humboldt Institute for Internet and Society. https://graphite.page/hiig-platformalternatives/#index

POLICY PAPERS
- "Unlocking digital competition: Report of the digital competition expert panel" 2019 (UK) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf (This is a long paper, focus on the introduction, summary, and chapter 1)
- Facebook Oversight Board decisions: https://oversightboard.com/decision/
- Ranking Digital Rights 2022 Telco Giants Scorecard https://rankingdigitalrights.org/tgs22

GROUP PRESENTATION
(Due this week)

For each case, consider the following questions:

- What is the problem being addressed?
- Who is able to participate in governance?
- How is participation structured?
- What role do corporations play?
- How would you analyse your case through perspectives from this week's readings?
- (For the Facebook Oversight Board, pick one decision)

CONCLUSION

READINGS
- Clark, D. 2016. "The Contingent Internet" *Daedalus* 145(1): 9-17 https://direct.mit.edu/daed/article/145/1/9/27098/The-Contingent-Internet
- Ostrom, E. 2010. "Beyond Markets and States: Polycentric Governance of Complex Economic Systems." *American Economic Review* 100 (3): 641–72. https://doi.org/10.1257/aer.100.3.641 / https://www.jstor.org/stable/27871226