

Readings In Political Cybernetics

Aims, contents, and methods

Cybernetics is both a historical scientific field and a general worldview. Martin Heidegger once famously proclaimed that cybernetics represents the end of philosophy, understood as Western Metaphysics. It is the end of philosophy because metaphysical thinking is overcome by the global technical system in which we live. It therefore encapsulates and influences many aspects of our lives: our work (think of electronic performance management), love life (think of all those dating apps), social life (think of social media), but also, and perhaps foremost, *political life*. It is even with political life that original cybernetic thinking started, namely in the work by philosophers like Plato and Aristotle, who likened political governance to the steering of a ship, in which the primary role was played by the *Kubernetes*, the pilot.

This course focuses on the political implications of the cybernetic worldview: how cybernetics informs our thinking about politics, but also how our political systems are shaped by cybernetic principles.

The course focuses on a number of core readings that should give students a comprehensive insight into the topic of political cybernetics. It starts with an exploration of the origins of political cybernetics in political philosophy. Continuing, it looks at a variety of philosophical critiques aimed at evaluating the significance of the cybernetic paradigm. The course then turns to exploring historical examples of cybernetic systems used in governance, such as Cybersyn in Chile. Following this, it looks at how cybernetics has impacted contemporary political and legal philosophy, such as the thought of Carl Schmitt. With this in mind, the course discusses several paradigmatic cybernetic systems that have emerged in the 21st century:

The course uses methods of philosophical reflection, argumentation, empirical and historical research, and political philosophy.

Teacher

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Assessment

- 25% of the grade will reflect your attendance. If you attend all the sessions, you will get the full grade for this part.
- 25% of the grade will consist of a presentation of one of the readings, which you will have to prepare with a fellow student. You get the full grade for this part if you:
 - Summarize the text in a structured and comprehensive manner.
 - Raise at least three well-informed critical points for in-class discussion.
- 25% of the grade will consist of half-term essay on a topic of your choosing. This essay will be max. 2000 words in length, and you get the full grade for this part if you:
 - Come up with an original and clear argument to defend.
 - Structure the essay in the proper way (with an abstract, introduction, core, and conclusion).
 - Use the readings in a convincing way to illustrate or strengthen your argument.

- Find 2-4 additional readings that illuminate parts of your argument.
- Apply proper referencing, with in-line citations and a correctly formatted bibliography.
- 25% of the grade will consist of an end of term essay on a topic of your choosing. This essay will be max. 2000 words, and the criteria for getting the full grade for this part are the same as for the first essay.

Minimum requirements

- You will need to attend at least 4 out of the 6 sessions.
- You will need to do the presentation of one of the readings.
- You will need to hand in the two essays.

Examination topics

- The basics of cybernetics
- Cybernetics as a political epistemology and ontology
- Cybernetics and computer science
- Cybernetic governance in Cybersyn
- Soviet experiments in cybernetic governance
- The influence of cybernetics on political theory
- Modern systems for cybernetic governance

Reading list

The following list is a selection of the readings:

- Winner, L. (1969). Cybernetics and Political Language. *Berkeley Journal of Sociology*, 14(1969), 1–17.
- Pickering, A. (2002). Cybernetics and the Mangle: Ashby, Beer and Pask. *Social Studies of Science*, 32(3), 413–437. <https://doi.org/10.1177/0306312702032003003>
- Medina, E. (2011). *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile*. MIT Press. <https://doi.org/10.1017/CBO9781107415324.004>
- Bates, D. (2020). The political theology of entropy: A Katechon for the cybernetic age. *History of the Human Sciences*, 33(1), 109–127. <https://doi.org/10.1177/0952695119864237>
- Reijers, W., Orgad, L., & Filippi, P. de. (2022). The Rise of Cybernetic Citizenship. *Citizenship Studies*, 1–20. <https://doi.org/10.1080/13621025.2022.2077567>
- Tiqqun. (2001). *The Cybernetic Hypothesis*.

Sessions	
<p>Session #0</p> <p>10.10.2022</p> <p>12:15-13:15</p>	<p>Topic: Introduction and preparation</p> <p>Location: Online (Zoom link)</p> <p>Description: This session is <i>optional</i> to attend, and a recording will be shared online, yet it is <i>essential</i> that you pay attention to the content of this session. We will use the time to get to know each other and discuss the theme of the Political Cybernetics seminars. Additionally, and this is important, we will discuss how each session needs to be <i>prepared</i>, especially the student presentations. To this end, I will introduce the student groups and what you are expected, as a group, to prepare for the session that is assigned to you. If you fail to pay attention to this information, and therefore fail to prepare the presentation assigned to you, you will <i>not</i> get the points for this part of the assessment.</p>
<p>Session # 1</p> <p>20.10.2022</p> <p>13:15-17:15</p>	<p>Topic: The Origins of Political Cybernetics</p> <p>Location: Hörsaal. 2H NIG 2.Stock C0224</p> <p>Description: In this session, we will review early intellectual discussions of political cybernetics. Cybernetics is a field of research that emerged after World War Two, in the wake of the digital computing revolution. Seminal figures like Norbert Wiener established cybernetics as a science of communication and control of human, animal, and machine, giving it an incredibly broad scope. It was not surprising therefore that this view of phenomena was later applied to understand and prescribe governance processes. A leading figure in this regard has been Karl W. Deutsch, who envisioned politics as a communication system. We will discuss central elements of Deutsch's work, as well as an unknown but potent critique of this work, by Langdon Winner.</p> <p>13:15 Introduction 13:30 Student presentation reading 1 14:00 lecture – origins of political cybernetics 14:30 Break 1 14:50 lecture – Winner's critique of political cybernetics 15:20 Student presentation reading 2 15:50 Break 2 16:10 Discussion 17:15 End</p> <p>Core reading:</p> <ul style="list-style-type: none"> • Winner, L. (1969). Cybernetics and Political Language. <i>Berkeley Journal of Sociology</i>, 14(1969), 1–17. <p>Readings for student presentations:</p> <ol style="list-style-type: none"> 1. Mumford, L. (1965). Utopia , the City and the Machine. <i>Daedalus</i>, 94(2), 271–292. 2. Taylor, C. L., & Russett, B. M. (2020). Karl W. Deutsch: Pioneer in the Theory of International Relations. In <i>Pioneers in Arts, Humanities, Science, Engineering, Practice</i> (Vol. 25). Chapter 10.

Session # 2	Topic: Varieties of Cybernetic Critiques
11.11.2022	Location: Hörsaal. 2H NIG 2.Stock C0224
13:15-17:15	<p>Description: In this session, we investigate how critiques of political cybernetics have diversified while the field itself slowly ceasing to exist. Cybernetics had its heyday times in the 50's and 60's (in the West, in other places it has persisted for longer). Yet, cybernetic epistemologies have survived its initial hype, and were traced in later works by social scientists and philosophers. We will consider three of these works and discuss how they offer different perspectives on cybernetics, one in a neo-Marxist vein (Feenberg), one from a post-structuralist angle (Deleuze) and one from a sociology of science perspective (Pickering). Although cybernetics revolves around a recognizable epistemology, these critiques show that we can approach it in different ways, the main question being whether it is necessarily determining, opting for the category of control, or rather a form of bricolage, also harbouring potentials for human freedom.</p> <p>13:15 Introduction 13:30 Student presentation reading 1 14:00 lecture – cybernetics beyond the computer 14:30 Break 1 14:50 lecture – Pickering's appraisal: cybernetics as bricolage 15:20 Student presentation reading 2 15:50 Break 2 16:10 Discussion 17:15 End</p> <p>Core reading:</p> <ul style="list-style-type: none"> Pickering, A. (2002). Cybernetics and the Mangle: Ashby, Beer and Pask. <i>Social Studies of Science</i>, 32(3), 413–437. https://doi.org/10.1177/0306312702032003003 <p>Readings for student presentations:</p> <ul style="list-style-type: none"> Feenberg, A. (1990). Post-industrial discourses. <i>Theory & Society</i>, 19, 709–737. Deleuze, G. (1992). Postscript on the Societies of Control. <i>October</i>, 59, 3–7. <p>Assignment (submit on Moodle):</p> <ul style="list-style-type: none"> Pitch mid-term essay. Write a 250 words 'pitch' for your mid-term essay (see below). This pitch should describe (1) the topic of your essay, (2) the relevance of this topic, (3) the example or case you want to focus on. This might need some online research – though you can also take a case from the course materials, (4) the argument you intend to make in your essay, and (5) the expected structure of your essay.
Session # 3	Topic: Historical Examples of Cybernetic Experiments
25.11.2022	Location: Hörsaal. 2H NIG 2.Stock C0224
13:15-17:15	<p>Description: In this session, we will look at some fascinating examples of experiments with cybernetics as a mode of governance. Central will be the most famous example, which is undoubtedly</p>

	<p>the Cybersyn experiment in socialist Chile, led by Stafford Beer. We will, however, also look at successful and unsuccessful projects in the US and the USSR. Reflections on these cases will raise questions as to whether we are not surrounded by organizations today (like Walmart, but also Facebook and Google) that implement some mode of political cybernetics.</p> <p>13:15 Introduction 13:30 Student presentation reading 1 14:00 lecture – cybernetics beyond the computer 14:30 Break 1 14:50 lecture – Pickering’s appraisal: cybernetics as bricolage 15:20 Student presentation reading 2 15:50 Break 2 16:10 Discussion 17:15 End</p> <p>Core reading:</p> <ul style="list-style-type: none"> • Medina, E. (2011). <i>Cybernetic Revolutionaries: Technology and Politics in Allende’s Chile</i>. MIT Press. https://doi.org/10.1017/CBO9781107415324.004 <p>Readings for student presentations:</p> <ul style="list-style-type: none"> • Gerovitch, S. (2008). InterNyet: Why the Soviet Union did not build a nationwide computer network. <i>History and Technology</i>, 24(4), 335–350. • Phillips, L., & Rozworski, M. (2019). <i>People’s Republic of Walmart</i>. Verso. Chapter 3. • Jill Lepore. (2020). <i>If Then: How One Data Company Invented the Future</i>. John Murray. Chapter 4. <p>Assignment (submit on Moodle):</p> <ul style="list-style-type: none"> • Draft mid-term essay ready. Submit an anonymized (no name in the document, nor in the file) max. 2000-word draft of your mid-term essay. See below for more instructions on the writing. Save your draft as a PDF in the following format: ‘studentnr_BG_Midterm_draft.pdf’
<p>Political Cybernetics Workshop (optional – whole day)</p> <p>02.12.2022</p>	<p>This workshop is <i>optional</i>, but you are very welcome to attend. It will be a gathering of some leading academics working on the topic of political cybernetics. The confirmed speaker is Vincent Blok.</p> <p>More information will follow.</p>
<p>Sessions # 4</p> <p>16.12.2022</p> <p>13:15-17:15</p>	<p>Topic: Cybernetics in Contemporary Political Philosophy</p> <p>Location: Hörsaal 31 Hauptgebäude, 1.Stock, Stiege 9 O1.202</p> <p>Description: In this session, we will investigate the influence of the cybernetic worldview on contemporary debates in political philosophy. Heidegger was not the only philosopher profoundly affected by cybernetics. Some eminent political thinkers of the 20th century, notably Schmitt, Arendt, and Foucault, have developed their political thinking in close interaction with the cybernetic paradigm. We will read and discuss some recent</p>

	<p>commentaries on the work of those thinkers that explicitly illuminate the role of cybernetics in their thinking.</p> <p>13:15 Introduction 13:30 Student presentation reading 1 14:00 lecture – cybernetics and 20th century political philosophy 14:30 Break 1 14:50 lecture – cybernetics in Schmitt, Arendt, and Foucault 15:20 Student presentation reading 2 15:50 Break 2 16:10 Discussion 17:15 End</p> <p>Core reading:</p> <ul style="list-style-type: none"> • Bates, D. (2020). The political theology of entropy: A Katechon for the cybernetic age. <i>History of the Human Sciences</i>, 33(1), 109–127. https://doi.org/10.1177/0952695119864237 <p>Readings for student presentations:</p> <ul style="list-style-type: none"> • Simbirski, B. (2016). Cybernetic Muse: Hannah Arendt on Automation, 1951–1958. <i>Journal of the History of Ideas</i>, 77(4), 589–613. https://doi.org/10.1353/jhi.2016.0032 • August, V. (2021). Network concepts in social theory: Foucault and cybernetics. <i>European Journal of Social Theory</i>, 1–21. https://doi.org/10.1177/1368431021991046 <p>Assignments (submit on Moodle):</p> <ul style="list-style-type: none"> • Review mid-term essay. You will receive an email with an anonymized draft of a fellow student. Use the attached review document to prepare your review. Make sure that your review is both critical (i.e., do not only celebrate how good the essay is, but also indicate points of improvement) and constructive (i.e., on those points of improvement, offer <i>concrete</i> advice on how to do better). • Pitch end-of-term essay. Write a 250 words ‘pitch’ for your end-of-term essay. This pitch should describe (1) the topic of your essay, (2) the relevance of this topic, (3) the example or case you want to focus on. This might need some online research – though you can also take a case from the course materials, (4) the argument you intend to make in your essay, and (5) the expected structure of your essay.
<p>Mid-term essay</p> <p>Submission deadline: 16.12.2022</p>	<p>Your mid-term essay will take the form of an ‘op-ed’ that discusses a particular issue pertaining to the themes discussed in this course. Central to your essay should be a ‘case,’ like a thought-provoking event or a politically relevant feature of a governance system having explicitly or implicitly been developed from a cybernetics perspective. This can, for instance, Cybersyn, the Soviet Internet, or the cybernetic governance of an entity like Google. You can pick a case direct from the course, but you will gain bonus points if you find the case yourself through online research (e.g., related to a recent event).</p> <p>In writing your essay, keep the following things in mind:</p> <ul style="list-style-type: none"> • Don’t write more than 2000 words, or less than 1700 • Your audience will be the general public, keep this in mind. Don’t make the language too complicated, and try to write in an accessible style

	<ul style="list-style-type: none"> • Add references as footnotes. You can use hyperlinks for online sources (e.g., newspaper articles), but use proper referencing (e.g., APA style) for academic sources. • Develop a clear argument about the case. For instance, ‘I argue that the reputation mechanisms on Amazon are a clear case of cybernetic governance.’ • The best op-eds will be short-listed for publication of the ‘Cyber Prometheus’ blog: https://cyber-prometheus.blogspot.com/
<p>Session # 5</p> <p>13.01.2023</p> <p>13:15-17:15</p>	<p>Topic: Modern Systems for Political Cybernetics</p> <p>Location: Hörsaal 3B NIG 3.Stock B0315</p> <p>Description: In this session, we will continue the discussions started in session 3, focusing not on historical but on contemporary examples of sociotechnical cybernetic systems that operate in a political context. We will reflect foremost on the emergence of a phenomenon that might be called cybernetic or ordinal citizenship, which emerges not only in authoritarian societies (e.g., China) but also in liberal democracies (e.g., the Netherlands). Central will be a reflection on cases of sociotechnical systems: the Social Credit System in China, smart city development in Europe, and algorithmic decision-making systems in governments like the Netherlands (e.g., the SyRI citizen risk scoring system). We will reflect on how, even though they do not explicitly appeal to the cybernetic paradigm, these systems implement a cybernetic form of governmentality.</p> <p>13:15 Introduction 13:30 Student presentation reading 1 14:00 lecture – political cybernetics in 21st century sociotechnical systems 14:30 Break 1 14:50 lecture – cybernetic citizenship in China, the US, and the Netherlands 15:20 Student presentation reading 2 15:50 Break 2 16:10 Discussion 17:15 End</p> <p>Core reading:</p> <ul style="list-style-type: none"> • Reijers, W., Orgad, L., & Filippi, P. de. (2022). The Rise of Cybernetic Citizenship. <i>Citizenship Studies</i>, 1–20. https://doi.org/10.1080/13621025.2022.2077567 <p>Readings for student presentations:</p> <ul style="list-style-type: none"> • Krivý, M. (2018). Towards a critique of cybernetic urbanism: The smart city and the society of control. <i>Planning Theory</i>, 17(1), 8–30. https://doi.org/10.1177/1473095216645631 • Fourcade, M. (2021). Ordinal Citizenship. <i>British Journal of Sociology</i>, February, 1–20. https://doi.org/10.1111/1468-4446.12839 <p>Assignment:</p> <ul style="list-style-type: none"> • Draft end-of-term essay ready. Submitted an anonymized (no name in the document, nor in the file) max. 2000-word draft of your mid-term essay. See below for more instructions on the writing. Save your draft as a PDF in the following format: ‘studentnr._BG_Endterm_draft.pdf’

<p>Session # 6</p> <p>27.01.2023</p> <p>13:15-17:15</p>	<p>Topic: The Vanguard of Critique</p> <p>Location: Hörsaal 3B NIG 3.Stock B0315</p> <p>Description: In this session, we will reflect on some of the most advanced contemporary philosophical critiques of political cybernetics. Importantly, we discuss how these critiques do not only arise from academic works, but also from activist circles, such as expressed in works by Tiqqun, of which we will read the <i>Cybernetic Hypothesis</i>. We will then turn to a new branch in philosophy of technology, pioneered in the work of Yuk Hui, that aims to go beyond Heidegger's powerful critique. It urges us to look beyond the paradigm of Western metaphysics, to other more diverse traditions of thought like Daoism in China. As Hui argues, we have to reflect on the basic tendency of cybernetic systems to overcome contingency by means of recursivity. This we might achieve by adopting certain innovative philosophical ideas, such as cosmotechnics and technodiversity.</p> <p>13:15 Introduction 13:30 Student presentation reading 1 14:00 lecture – the cybernetic hypothesis 14:30 Break 1 14:50 lecture – recursivity, cosmotechnics, and technodiversity 15:20 Student presentation reading 2 15:50 Break 2 16:10 Discussion 17:15 End</p> <p>Core reading:</p> <ul style="list-style-type: none"> • Tiqqun. (2001). <i>The Cybernetic Hypothesis</i>. <p>Readings for student presentations:</p> <ul style="list-style-type: none"> • Hui, Y. (2020). Machine and Ecology. <i>Angelaki - Journal of the Theoretical Humanities</i>, 25(4), 54–66. https://doi.org/10.1080/0969725X.2020.1790835 • Riis, S. (2013). The Ultimate Technology: The End of Technology and the Task of Nature. <i>Artificial Life</i>, 19, 471–485. https://doi.org/10.1162/ARTL <p>Assignment:</p> <ul style="list-style-type: none"> • Review end-of-term essay. You will receive an email with an anonymized draft of a fellow student. Use the attached review document to prepare your review. Make sure that your review is both critical (i.e., do not only celebrate how good the essay is, but also indicate points of improvement) and constructive (i.e., on those points of improvement, offer <i>concrete</i> advice on how to do better).
<p>End of term essay</p> <p>Submission deadline: 15.02.2022</p>	<p>Your end-of-term essay will take the form of a short academic paper, in which you focus on one of the themes of this course. The point is to develop an original argument about a real-world sociotechnical system that draws from the paradigm of political cybernetics. You can choose, amongst others, from the following themes:</p> <ul style="list-style-type: none"> • Show how contemporary sociotechnical systems operate according to cybernetic principles (e.g., network, recursive feedback) • Trace the history of emerging technologies to their basis in cybernetics (e.g., tracing neural nets to their origin in cybernetics) and what this reveals about the political use of such technologies

- Re-interpreting a thinker of technology in light of political cybernetics (similar to the works we read on Schmitt, Arendt, Foucault)

In writing your essay, keep the following things in mind:

- Don't write more than 2000 words, or less than 1700
- Add in-text references (author-date) and add a reference list (APA style)