

Université Paris I Panthéon Sorbonne

UFR 02 : Sciences économiques

Master 2 : Économie et sciences humaines

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The Quest for the Governing Machine

The Rationality of Governance and the
Governance of Irrationality

Présenté et soutenu par :

CARLOS ALBERTO RIVERA CARREÑO

Directeur de mémoire :

JEAN SÉBASTIEN LENFANT

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Para una lectora lejana.

CONTENTS

Acknowledgements i

Preface v

PREPARATORY RESEARCH 1

First Sifting 3

[o/17] Key text 3

[o/23] Important text 17

[o/23] Ancillary text 33

[o/23] Boundary text 49

Draft: Framework 67

Main question 67

Motivation 67

Thesis Outline 70

Scope and interrelations 72

Research hypotheses. 75

Methodology 78

Debates & Controversies 78

Axes d'interpretation 82

Bibliography 85

ACKNOWLEDGEMENTS

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PREFACE

Even when applying different techniques of interpretation to texts, I have tried to understand how the circumstances of their production could inform their interpretation. Even just for the sake of consistency, shouldn't I apply the same standard to this Master's thesis? Shouldn't I provide the reader with the tools, the context, etc. that informed this research?

Pace Barthes, the author of these words is very alive. Knowing the tragedy of my country, one might ask me: Why do I wield the pen, as the Colombian fields bleed? Why not wield the sword? Or, perhaps, why not wield both? This text was written, certainly, to satisfy an earthly requirement: to obtain a Master's degree. But beyond that, what is the interest of writing for me?

Although this thesis is not a political pamphlet, it is grounded in political perplexities. To the recule of the state, who not only does not want to fund nor organize vast sections of economic activities, my generations witnesses a strange mix of "innovation", "entrepreneurship", and . If the political Left, of my parent's generation had an iron faith in the working class and the peasants to change society, today's

politically dissaffected youth has all hopes in private enterprise to solve the evils of the world.

As Oscar Wilde once remarked, “it is easier to have sympathy with suffering, than it is to have sympathy with thought”. Even thought,

As much as this document is intended to an academic audience, it is also intended to them and to my father: This is the beginning of a lifelong attempt to explain *¿Cómo fue que se jodio el país?*

Should they be right, this article is wrong.

Part

PREPARATORY RESEARCH

FIRST SIFTING

Subject-matter Lorem ipsum dolor sit amet

[0/17] KEY TEXT

1. [1/10] Solovey, Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature
 - ☐ Solovey, Cold War Social Science: Specter, Reality, or Useful Concept?
 - ☐ Tolon, Futures Studies: A New Social Science Rooted in Cold War Strategic Thinking
 - ☐ Isaac, Epistemic Design: Theory and Data in Harvard's Department of Social Relations
 - ☒ Heyck, Producing Reason
 - ☐ Cravens, Column Right, March! Nationalism, Scientific Positivism, and the Conservative Turn of the American Social Sciences in the Cold War Era

- ☐ Brick, Neo- Evolutionist Anthropology, the Cold War, and the Beginnings of the World Turn in U.S. Scholarship
 - ☐ Jones-Imhotep, Maintaining Humans
 - ☐ Bycroft, Psychology, Psychologists, and the Creativity Movement: The Lives of Method Inside and Outside the Cold War
 - ☐ Weidman, An Anthropologist on TV: Ashley Montagu and the Biological Basis of Human Nature, 1945–1960
 - ☐ Vicedo, Cold War Emotions: Mother Love and the War over Human Nature
2. [0/5] Jamie, The Open Mind: Cold War Politics and the Sciences of Human Nature
- ☐ Democratic Minds for a Complex Society
 - ☐ Scientists as the Model of Human Nature
 - ☐ Insituting Cognitive Science
 - ☐ Cognitive Theory and the Making of Liberal Americans
 - ☐ A Fractured Politics of Human Nature
- ☐ Miller, 1955, Toward a general theory for the behavioral sciences

3. [0/10] Supiot, 2012, La gouvernance par les nombres

☐ En quête de la machine à gouverner

- Poétique du gouvernement
- L'homme machine
- Du gouvernement à la gouvernance

☐ Les aventures d'un idéal: le règne de la loi

- Le *nomos* grec
- La *lex* en droit romain
- La révolution gregorienne
- *Common Law* et droit continental
- La tradition juridique occidentale

☐ Le rêve de l'harmonie par le calcul

- Les accords parfaits du nombre
- La fonction instituante de la discorde

☐ L'essor des usages normatifs de la quantification

- Rendre compte
- Administrer
- Juger

- Légiférer
- L'asservissement de la Loi au Nombre: du Gosplan au Marché total
 - Le renversement du règne de la loi
 - Le droit, outil de planification
 - L'hybridation du communisme et capitalisme
- Calculer l'incalculable: la doctrine Law and Economics
 - La théorie des jeux
 - La théorie de l'agence
 - Le théorème de Coase et la théorie des *property rights*
 - La *New Comparative Analysis* et le marché du droit
- La dynamique juridique de la gouvernance par les nombres
 - La gouvernance individuelle
 - La gouvernance de l'entreprise
 - La gouvernance étatique
 - La gouvernance européenne

- La gouvernance mondiale
- ☐ Les impasses de la gouvernance par les nombres
 - Les effets de structure de la gouvernance par les nombres
 - Les résistances du Droit à la gouvernance par les nombres
- ☐ Le dépérissement de l'état
 - La sacralité de la chose publique
 - La direction scientifique des hommes
 - L'inversion de la hiérarchie publique/privé
 - La loi pour soi et soi pour la loi
 - Sans foi ni loi: la société insoutenable
- ☐ Comment en sortir
- ☐ Ross, 1994, *Modernist Impulses in the Human Sciences, 1870-1930*
- ☐ Purcell, 1973, *The Crisis of Democratic Theory: Scientific Naturalism and the Problem of Value*
- ☐ Deutsch, 1963, *The Nerves of Government: Models of Political Communication and Control*
- 4. [0/15] Heyck, Herbert Simon: *The Bounds of Reason in Modern America*

- ☐ Unbounded rationality
 - ☐ The garden of forking paths
 - ☐ The Chicago school and the sciences of control
 - ☐ Mathematics, logic, and the sciences of choice
 - ☐ Research and reform
 - ☐ *Homo administrativus*, or Choice under control
 - ☐ Decisions and revisions
 - ☐ Structuring his environment
 - ☐ Islands of theory
 - ☐ A new model of mind and machine
 - ☐ The program *is* the theory
 - ☐ The cognitive revolution
 - ☐ *Homo adaptativus*, the Finite problem solver
 - ☐ Scientist of the artificial
 - ☐ The expert problem solver
5. [0/8] Heyck, Age of System: Understanding the development of modern social science
- ☐ The Organizational Revolution and the Human Sciences

- ☐ High modern social science: A bird's eye view
 - ☐ Patrons of the revolution: Ideas, Ideals, and Institutions in Postwar Social Science
 - ☐ The magical year 1956, plus or minus one
 - ☐ Producing reason
 - ☐ Modernity and social change in American social science
 - ☐ A model science?
 - ☐ History and Legacy, Tree and the Web
 - ☐ Heyck, Mind and Network
 - ☐ Heyck, Georges Miller, language, and the computer metaphor of mind
 - ☐ Heyck, Defining the Computer: Herbert Simon and the Bureaucratic Mind, Part 1
 - ☐ Heyck Defining the Computer: Herbert Simon and the Bureaucratic Mind, Part 2
6. [0/5] Ronald Kline, The Cybernetics Moment
- ☐ War and Information Theory
 - ☐ The Cybernetics Craze
 - ☐ The Information Bandwagon

☐ Machines as Humans

☐ Humans as Machines

7. [o/4] Maas, William Stanley Jevons and the Making of Modern Economics

☐ The Prying Eyes of the Natural Scientist

☐ Engines of Discovery

- Babbage and his calculating engines
- God is a programmer
- An intelligent machine
- Is the mind a reasoning machine?

☐ The Machinery of the Mind

- The Logical Abacus
- The Logical Machine
- The machine of the mind
- Induction - the inverse of deduction
- To decide what things are similar

☐ The Image of Economics

- Bridging the natural and the social
- Mechanical dreams

- Economics as natural science

8. [1/8] Mirowski, Machine Dreams

☒ Cyborg Agonists

☒ Rooms with a view

☒ Where the cyborgs are

☒ The natural sciences and the history of economics

☒ Anatomy of a cyborg

☒ Attack of the cyborgs

☒ The new automaton theatre

☐ Some Cyborg Genealogies; or How the Demon Got Its Bots

☐ The little engines that could've

☐ Adventures of a red-hot demon

☐ Cybernetics

☐ The devil that made us do it

☐ The advent of complexity

☐ John von Neumann and the Cyborg Incursion into Economics

☐ Economics at one remove

- ☐ Purity
- ☐ Impurity
- ☐ Wordliness
- ☐ The Military, the Scientist, and the Revised Rules of the Game
 - ☐ What did you do in the war, daddy?
 - ☐ The cyborg character of science mobilization in the WWII
 - ☐ Operations Research
 - ☐ The Ballad of Hotelling and Schultz
 - ☐ SRG, RAND, Rad Lab
- ☐ Do Cyborgs Dream of Efficient Markets?
 - ☐ From Red Vienna to Computopia
 - ☐ The Goals of Cowles, and Red Afterglows
 - ☐ Every Man His Own Stat Package
 - ☐ On the Impossibility of a Democratic Computer
- ☐ The Empire Strikes Back
 - ☐ Previews of Cunning Abstractions

- ☐ Its a World Eat World Dog: Game Theory at RAND
- ☐ The High Cost of Information in Postwar Neoclassical Theory
- ☐ Rigor Mortis in the First Casualty of War
- ☐ Does the Rational Agent Compute?
- ☐ Core Wars
 - ☐ Inhuman, All Too Inhuman
 - ☐ Herbert Simon: Simulacra vs Automata
 - ☐ Showdown at the OR Corral
 - ☐ Send in the Clones
- ☐ Machines Who Think vs Machines that Sell
 - ☐ Where is the Computer Taking Us?
 - ☐ Five Alternative Scenarios for the Future of Computational Economics
 - ☐ The Hayek Hypothesis and Experimental Economics
 - ☐ Gode and Sunder Go Roboshoppin
 - ☐ Contingency, Irony, and Computation

9. [0/17] Mirowski, The Knowledge We Lost in Information
- ☐ It's not Rational
 - ☐ The Standard Narrative and the Bigger Picture
 - ☐ Natural Science Inspirations
 - ☐ The Nobels and the Neoliberals
 - ☐ The Socialist Calculation Controversy as the Starting Point of the Economics of Information
 - ☐ Hayek Changes his Mind
 - ☐ The Neoclassical Economics of Information Was Incubated at Cowles
 - ☐ Three Different Modalities of Information in Neoclassical Theory
 - ☐ Going the Market One Better
 - ☐ The History of Markets and the Theory of Market Design
 - ☐ The Walrasian School of Design
 - ☐ The Bayes-Nash School of Design
 - ☐ The Experimentalist School of Design
 - ☐ Hayek and the Schools of Design

- ☐ Designs on the Market: The FCC Spectrum Auctions
 - ☐ Private Intellectuals and Public Perplexity : The TARP
 - ☐ Artificial Ignorance
10. [2/4] Backhouse, New Directions in Economic Methodology
- ☐ McCloskey, How to Do a Rhetorical Analysis, and Why
 - ☐ Lawson, A Realist Theory for Economics
 - ☒ Mirowski, What are the Questions?
 - ☒ Henderson, Metaphor and Economics
- ☐ Backhouse, The unsocial social science: Economics and Neighboring Disciplines Since 1945
11. [0/3] Backhouse, They History of the Social Sciences since 1945
- ☐ Ash, Psychology
 - ☐ Backhouse, Economics
 - ☐ Bevir, Political Science
- ☐ Gigerenzer, Mind as Computer: Birth of a Metaphor
- ☐ Marshall, Minds, Machines and Metaphors

- ☐ Vicedo, Cold War emotions: The war over human nature
- 12. [o/1] Dupuy, Aux origines des sciences cognitives
 - ☐
- ☐ Chomsky, The Cold War & the University: Toward an Intellectual History of the Postwar Years
- ☐ Mikulark, "Cybernetics and Marxism-Leninism" in The Social Impact of Cybernetics, ed. Charles Dechert
- ☐ Israel, Meccanicismo
- ☐ Israel, La machina vivente: contre le visionne meccanicistiche del uomo
- ☐ Edwards, 1996, The Closed World: Computers and the Politics of Discourse in Cold War America
- 13. [o/9] Amadae, Rationalizing Capitalist Democracy: The Cold War Origins of Rational Choice Liberalism
 - ☐ Managing the National Security State: Decision Technologies and Policy Science
 - ☐ Arrow's Social Choice and Individual Values
 - ☐ Buchanan and Tullocks' Public Choice Theory
 - ☐ Riker's Positive Political Theory
 - ☐ Rational Choice and Capitalist Democracy

- ☐ Adam Smith's System of Natural Liberty
- ☐ Rational Mechanics, Marginalist Economics, and Rational Choice
- ☐ Consolidating Rational Choice Liberalism 1970-2000
- ☐ From the Panopticon to the Prisoner's Dilemma

[0/23] IMPORTANT TEXT

- § [1/11] Solovey, Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature
- ☐ Solovey, Cold War Social Science: Specter, Reality, or Useful Concept?
 - ☐ Tolon, Futures Studies: A New Social Science Rooted in Cold War Strategic Thinking
 - ☐ Martin-Nilsen, "It Was All Connected": Computers and Linguistics in Early Cold War America
 - ☐ Isaac, Epistemic Design: Theory and Data in Harvard's Department of Social Relations
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 - ☐ Les aventures d'un idéal: le règne de la loi
 - Le *nomos* grec
 - La *lex* en droit romain
 - La révolution gregorienne
 - *Common Law* et droit continental
 - La tradition juridique occidentale
 - ☐ Autres points de vue sur les lois
 - ☐ Le rêve de l'harmonie par le calcul
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 - Rendre compte
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- ☐ La résurgence du gouvernement par les hommes
- ☐ De la mobilisation totale à la crise du Fordisme

- Le compromis Fordiste
- La déconstruction du droit du travail
- Les voies d'un nouveau compromis
- ☐ De l'échange quantifié à l'allégeance des personnes
 - La mobilisation totale au travail
 - Les nouveaux droits attachés à la personne
- ☐ La structure des liens d'allégeance
 - L'allégeance dans les réseaux d'entreprises
 - L'allégeance des multinationales aux États impériaux
- ☐ Comment en sortir
- ☐ Hughes, 1958, *Consciousness and Society: The Reorientation of European Social Thought, 1890-1930*
- ☐ Ross, 1994, *Modernist Impulses in the Human Sciences, 1870-1930*
- ☐ Purcell, 1973, *The Crisis of Democratic Theory: Scientific Naturalism and the Problem of Value*
- ☐ Butsch, 2008, *The Citizen Audience: Crowds, Publics, and Individuals*

- ☐ Deutsch, 1963, The Nerves of Government: Models of Political Communication and Control
- ☐ Cohen-Cole, 2009, The Creative American: Cold War salons, social science, and the cure for modern society.
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 - ☐ The Information Bandwagon
 - ☐ Machines as Humans
 - ☐ Humans as Machines
 - ☐ Cybernetics in Crisis
 - ☐ Inventing an Information Age
 - ☐ Two Cybernetic Frontiers
- § [0/1] Koyré, Études d'histoire de la pensée philosophique
 - ☐ Les philosophes et la machine
 - L'appréciation du machinisme
 - Les origines du machinisme
- § [0/5] Maas, William Stanley Jevons and the Making of Modern Economics
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- Induction - the inverse of deduction
- To decide what things are similar

☐ The Laws of Human Enjoyment

- The factory system and the division of labor
- Ruskin's aesthetic-driven criticism of the factory system
- Mill and the gospel of work
- Work and fatigue

☐ The Image of Economics

- Bridging the natural and the social
- Mechanical dreams
- Economics as natural science

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 - ☐ Impurity
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 - ☐ Operations Research
 - ☐ The Ballad of Hotelling and Schultz
 - ☐ SRG, RAND, Rad Lab
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 - ☐ Every Man His Own Stat Package
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- ☐ Core Wars
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 - ☐ Showdown at the OR Corral
 - ☐ Send in the Clones
- ☐ Machines Who Think vs Machines that Sell
 - ☐ Where is the Computer Taking Us?
 - ☐ Five Alternative Scenarios for the Future of Computational Economics
 - ☐ They Hayek Hypothesis and Experimental Economics
 - ☐ Gode and Sunder Go Roboshoppin

- ☐ Contingency, Irony, and Computation
- ☐ Mirowski, More Heat than Light
- ☐ Mirowski, Against Mechanism
- § [0/17] Mirowski, The Knowledge We Lost in Information
 - ☐ It's not Rational
 - ☐ The Standard Narrative and the Bigger Picture
 - ☐ Natural Science Inspirations
 - ☐ The Nobels and the Neoliberals
 - ☐ The Socialist Calculation Controversy as the Starting Point of the Economics of Information
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- ☐ Private Intellectuals and Public Perplexity : The TARP
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- ☐ Israel, La machina vivente: contre le visionne meccanicistiche del uomo
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[0/23] ANCILLARY TEXT

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 - ☐ Les philosophes et la machine
 - L'appréciation du machinisme
 - Les origines du machinisme
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 - Work and fatigue

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§ [o/8] Mirowski, Machine Dreams

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- ☐ En quête de la machine à gouverner
 - Poétique du gouvernement
 - L'homme machine
 - Du gouvernement à la gouvernance
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 - Le *nomos* grec
 - La *lex* en droit romain
 - La révolution gregorienne
 - *Common Law* et droit continental

- La tradition juridique occidentale
- ☐ Autres points de vue sur les lois
- ☐ Le rêve de l'harmonie par le calcul
 - Les accords parfaits du nombre
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 - Rendre compte
 - Administrer
 - Juger
 - Légiférer
- ☐ L'asservissement de la Loi au Nombre: du Gosplan au Marché total
 - Le renversement du règne de la loi
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 - L'hybridation du communisme et capitalisme
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 - La gouvernance étatique
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 - ☐ Backhouse, Economics
 - ☐ Bevir, Political Science
 - ☐ Gigerenzer, Mind as Computer: Birth of a Metaphor
 - ☐ Marshall, Minds, Machines and Metaphors
 - ☐ Vicedo, Cold War emotions: The war over human nature
 - ☐ Dupuy, Aux origines des sciences cognitives
 - ☐ Chomsky, The Cold War & the University: Toward an Intellectual History of the Postwar Years
 - ☐ Mikulark, "Cybernetics and Marxism-Leninism" in The Social Impact of Cybernetics, ed. Charles Dechert
 - ☐ Israel, Meccanicismo
 - ☐ Israel, La machina vivente: contre le visione meccanicistiche del uomo
 - ☐ Edwards, 1996, The Closed World: Computers and the Politics of Discourse in Cold War America
- ## § [0/9] Amadae, Rationalizing Capitalist Democracy: The Cold War Origins of Rational Choice Liberalism

- ☐ Managing the National Security State: Decision Technologies and Policy Science
- ☐ Arrow's Social Choice and Individual Values
- ☐ Buchanan and Tullocks' Public Choice Theory
- ☐ Riker's Positive Political Theory
- ☐ Rational Choice and Capitalist Democracy
- ☐ Adam Smith's System of Natural Liberty
- ☐ Rational Mechanics, Marginalist Economics, and Rational Choice
- ☐ Consolidating Rational Choice Liberalism 1970-2000
- ☐ From the Panopticon to the Prisoner's Dilemma

DRAFT: FRAMEWORK

MAIN QUESTION

In this thesis, I will study the genealogy of Simon's ideas on the computer and computation, and their importance for his views on automation.

MOTIVATION

The motivation for this thesis is a deep feeling that there is something wrong with today's society and that given that economics plays such an important cultural role in mediating people's understanding of the nature of political problems, it is necessary to understand what is wrong with economics to understand what is wrong with society at large.

Given this, I am interested in the context in which economic ideas originate; I am interested in the interactions between economic ideas, ideas in other sciences, utopian political

ideas, and wider “pop-culture” understandings and receptions of those ideas.

In today’s society, in which the future utopia is construed as the apotheosis of technological revolution—and *not* political revolution—, and in which the utopian discourse of trans-humanism joins corporate discourses on innovation and neoliberal panegyrics on entrepreneurship, we can see a relation between a certain conception of politics and the place and role that machines will play there, and in getting us there.

In the case of economics, following the intellectual debacle of the 2008 global financial crisis, in which those economists who gleefully took refuge in baroque mathematics were scorned for the empiric irrelevance of their theories, behavioral economics was presented as an alternative version to mainstream economics that would finally present a more realistic version of economics, by integrating certain ideas from Psychology, to better understand economic problems, or more simply, reality.

The reason for writing a thesis on Henry Simon is *not* to write another thesis on bounded rationality. Rather, the reason for focusing on Simon is because he was one of the first economists to embrace the postwar cyborg sciences, and because he played a key role in the foundation of the field of artificial intelligence. Given that artificial intelligence presents itself as the next holy grail of science in our

generation, I think that it is worth to study Simon, due to the foundational role he played.

Particularly, I am interested in Simon because he was more *cyborg* than other postwar economists. Even though the economists close to the Cowles Commission embraced certain aspects of the cyborg sciences, such as a version of Game Theory, they were more conservative in their willingness to question to the Walrasian model, to which Simon wasn't attached.

In the end, Simon distanced himself from mainstream economics, to build a project of the sciences of the artificial, in which new modes of organizing society were envisioned based on his theories on artificial intelligence.

I believe that one aspect worth discussing of Simon is an ontological understanding of his idea of nature, society, the human, and the artificial. Being a cyborg, these domains blur in his work, and I believe this has important consequences for his vision of organization, and its political and economic consequences.

Since one of the important aspects of his vision is his idea of the computer, this thesis will explore Simon's vision of the computer. Thus the title of the thesis: The computer in the thought of Henry Simon.

The idea is to project this thesis into a Ph.D dissertation around the theme of the governing machine: the automa-

tion of political decision making and the delegation of all political responsibility to machines.

I am interested in the wider cultural influence of the ideas of economists.

Particularly, today's futuristic utopias, in which technological change, but not political change, is wished seem to me to be very problematic. c

Generally speaking, I am interested in ideas; specially, in the way that people come to understand and define their political utopias, and their definitions of nature and society.

Roughly speaking, with this thesis, I expect to understand better the épistémè of our time.

THESIS OUTLINE

Introduction

In the introduction, I will discuss the importance of economic metaphors

Chapter 1: What is the importance of the computer for economic theory?

I will discuss the importance of the computer for economic theory in the twentieth century, specially in the work of Simon.

Chapter 2: The genealogy of Computer (Metaphor) in Simon's Work

In this chapter, I will trace the genealogy of the computer concept in Simon's work, and how it evolved.

Chapter 3: The influence of the computer for Simon's thought on automation

In this chapter, I will discuss the influence of the computer concept in Simon's work, particularly in its relation with Simon's ideas on automation.

Conclusion

SCOPE AND INTERRELATIONS

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RESEARCH HYPOTHESES.

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METHODOLOGY

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BIBLIOGRAPHY

This is a thematic bibliography organized around keywords. To facilitate reading, the booktitles are highlighted in blue.

The Brain

Casey, Gerard and Aidan Moran (1989). “The Computational Metaphor and Cognitive Psychology”. In: *Irish Journal of Psychology* 10.2, pp. 143–161.

Crowther-Heyck, Hunter (1999). “George A. Miller, Language, and the Computer Metaphor of Mind”. In: *History of Psychology* 2.1, pp. 37–64.

Marshall, John (1977). “Minds, Machines and Metaphors”. In: *Social Studies of Science* 7.4, pp. 475–488.

The Cold War

- Heyck, Hunter (2012). "Producing Reason". In: *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*. Ed. by Mark Solovey and Hamilton Cravens. New York: Palgrave Macmillan. Chap. 6, pp. 99–116.
- (2014). "The Organizational Revolution and the Human Sciences". In: *Isis* 105.1, pp. 1–31.
- Jones-Imhotep, Edward (2012). "Maintaining Humans". In: *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*. Ed. by Mark Solovey and Hamilton Cravens. New York: Palgrave Macmillan. Chap. 10, pp. 175–195.
- Rohde, Joy et al. (2012). *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*. Ed. by Mark Solovey and Hamilton Cravens. New York: Palgrave Macmillan.
- Weidman, Nadine (2012). "An Anthropologist on TV: Ashley Montagu and the Biological Basis of Human Nature, 1945–1960". In: *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*. Ed. by Mark Solovey and Hamilton Cravens. New York: Palgrave Macmillan. Chap. 12, pp. 215–232.

The Computer

- Campbell-Kelly, Martin et al. (2014). *Computer: A History of the Information Machine*. Westview Press.
- Dasgupta, Subrata (2014). *It Began with Babbage: The Genesis of Computer Science*. Oxford University Press.
- Edwards, Paul (1997). *The Closed World: Computers and the Politics of Discourse in Cold War America*. Cambridge: MIT Press.
- Gigerenzer, Gerd and Daniel G. Goldstein (1996). “Mind as Computer: Birth of a Metaphor”. In: *Creativity Research Journal* 9.2, pp. 131–144.
- Heyck, Hunter (2008a). “Defining the Computer: Herbert Simon and the Bureaucratic Mind–Part 2”. In: *Annals of the History of Computing, IEEE* 30.2, pp. 52–63.
- (2008b). “Defining the Computer: Herbert Simon and the Bureaucratic Mind–Part 2”. In: *Annals of the History of Computing, IEEE* 30.2, pp. 52–63.
- Lévy, Pierre (1992). *La machine univers: Création et culture informatique*. Points-Sciences. Seuil.
- Mirowski, Philip (2002). *Machine Dreams: Economics Becomes a Cyborg Science*. Cambridge University Press.

Metaphors

- Hodgson, Geoffrey et al. (1994). *Natural Images in Economic Thought: "Markets Read in Tooth & Claw"*. Ed. by Philip Mirowski. Cambridge University Press.
- Mayr, Otto (1989). *Authority, Liberty and Automatic Machinery in Early Modern Europe*. Johns Hopkins University Press.
- Riskin, Jessica (2003). "The Defecating Duck, or, the Ambiguous Origins of Artificial Life". In: *Source: Critical Inquiry* 29.4, pp. 599–633.
- Schaffer, Simon (1994). "Babbage's Intelligence: Calculating Engines and the Factory System". In: *Critical Inquiry* 21.1, pp. 203–227.
- (1999a). "Enlightened Automata". In: *The Sciences in Enlightened Europe*. Ed. by Jan Golinski, William Clark, and Simon Schaffer. Chicago: University of Chicago Press. Chap. 5.
- Thompson, Edward (1967). "Time, Work-Discipline, and Industrial Capitalism". In: *Past & Present* 38, pp. 56–97.

Herbert Simon

- Heyck, Hunter (2005). *Herbert Simon: The Bounds of Reason in Modern America*. Baltimore: Johns Hopkins University Press.
- Simon, Herbert (1965). *The Shape of Automation for Men and Management*. New York: Harper & Row Publishers.

- (1990). “Invariants of Human Behavior”. In: *Annual Review of Psychology* 41, pp. 1–19.
- (1996). *The Sciences of the Artificial*. 3rd ed. Cambridge: MIT Press.

Simon, Herbert and Allen Newell (1958). “Heuristic Problem Solving: The Next Advance in Operations Research”. In: *Operations Research* 6.1, pp. 1–10.

The Social Sciences

Backhouse, Roger, Philippe Fontaine, et al. (2010). *The History of the Social Sciences since 1945*. Ed. by Roger Backhouse and Philippe Fontaine. Cambridge University Press.

Dupuy, Jean-Pierre (2005). *Aux origines des sciences cognitives*. Poches Sciences. La Découverte.

Miller, James G. (1955). “Toward a General Theory for the Behavioral Sciences”. In: *American Psychologist* 10.9, pp. 513–531.