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The Automata & the Engineer

Herbert Simon's Quest for the Governing Machine

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Per il professore Giorgio Israel.

Benché i nostri destini fossero uniti da quell'anno fatale del 1492,
ho mancato il nostro incontro.
Sono arrivato in ritardo, come la coscienza della nostra generazione.
I campi sanguinanti sono così prossimi
che le gocce cospargerebbero gli occhi.
Eppure, nessuno vede niente.
Tante informazione, ma così poca conoscenza.

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PREFACE

PREPARATORY RESEARCH

DRAFT: FRAMEWORK

SUBJECT-MATTER

In this thesis, I will trace the genealogy of Simon's ideas on the computer and computation to understand their influence on his views on automation. By doing this, I wish to inquire about Simon's pessimism on the prospects of human rationality and his delegation of decision-making to "more capable" systems such as machines and organizations.

Main question

What is Herbert Simon's concept of the computer, and how did this concept influence his ideas on automation?

Secondary Questions

What was the relation between the natural and the artificial for Simon, and how does this relation relate to his late-life project of a Science of the Artificial?

How does Simon's Science of the Artificial relate to his views on economics? And, is his Science of the Artificial compatible with neoclassical economics?

How do Simon's ideas on automation relate to his political views?

Did Simon draw a clear line between the natural and the artificial, and between the human and the inhuman? Likewise, did he subscribe to the unity of science thesis?

MOTIVATION

Following the intellectual debacle of the economics profession after the 2008 global financial crisis, behavioral economics presents itself as a credible alternative to the lack of realism of mainstream neoclassical theory. According to this view, behavioral economics incorporates certain results from psychology that would allow a more realistic mathematical modeling of human behavior. Since Henry Simon was the most important postwar neoclassical economist who kept a close eye on psychology (before it became again fashionable with the profession), I think it is worth to dedicate a thesis to his ideas.

The reason for writing on Simon is *not* to write another thesis on bounded rationality—I suspect that this interpretation of Simon's message is just a palatable reconstruction of his ideas by the economic mainstream. Unlike other neoclassicals of his generation, Simon came to fully embrace the postwar cyborg sciences, and even 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 also worth to study Simon for the wider importance of computer science concepts in popular culture.

Since one of the important aspects of Simon's vision of a *Science of the Artificial* is the computer—understood not just as a technology, but as an ontology, a vision, a political project, etc.—, this thesis will explore Simon's concept of the computer. Hence, the provisional title of the thesis: The Automata & the Engineer.

My aim is to project this thesis into a Ph.D dissertation around the theme of the governing machine: the automation of political decision making and the delegation of all political responsibility to machines.

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