

# AI Philosophy: Sources of Legitimacy to Analyze Artificial Intelligence

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**Abstract**—The following pages aim to reflect upon how to analyze the governance of artificial intelligence in a comparative perspective. In doing so, a dashboard is developed for the analysis and for eventual comparisons between democratic and non democratic regimes. The Gil dashboard of legitimacy would allow us to assess key features that determine the governance model for artificial intelligence at the national level, for local governments and other participant actors. The framework also allows us to appraise aims of the governance strategy, and what aims are left aside. The work opens windows to discuss 1) the complex reality of AI command and control 2) uncertainties about future society and the polity against AI development and 3) cultural values enshrined in countries' AI development. The theoretical framework could be of use to advance case studies globally, and comparative endeavors.

**Keywords**- *Artificial intelligence; governance; philosophy; ethics; political theory*

## I. INTRODUCTION

This work aims to present a general framework to analyze artificial intelligence (AI), and to discuss legitimacy and governance from political theory as a stream of philosophy. As such, the work addresses questions related to command and control, that are at the base of political and social power and of technical engineering in global societies. In section two, the methodology is introduced. In the third section, the theoretical framework follows. This theoretical framework is based on the sources of legitimacy to analyze artificial intelligence. Here we are bringing to the fore political theory to address a contemporary problem. This part of the work presents an eight dimensional view of sources of legitimacy, based on the works by Max Weber and Craig Matheson [6][7]. In the fourth section, method as source of change and legitimacy the Gil dashboard on legitimacy are presented. The Dashboard has been developed in a wider context that is not addressed in this short article. The wider context aims to compare the AI regulatory framework of China, the European Union and the United States [1]-[5], which is the endeavor the author is currently devoted to in the draft of a book. The selection of cases, the European Union, the United States and China has been made by their relevance for the development of AI globally today. The case of China has been included because as a political

scientist doing comparative politics, the fine line of including most different cases is very important to know better the most equal cases, such as the United States and the European Union, both with democratic components. Today we focus on the theoretical dashboard that has been developed to make the comparisons. In the fifth and last section conclusions are presented, followed by acknowledgments

## II. METHODOLOGY

The methodology of the general work –the book that the author is writing about artificial intelligence- includes a discussion about the objective of the work, definitions from different perspectives, and questions related to the social basis of knowledge. Additionally, it includes the research approach to the selection of articles reviewed for the work tackled. Finally, the work includes a theoretical framework allowing for a comparison of the three cases, and eventually, a bigger number of cases. For the purpose of comparison of the three main cases in the book of reference, the selection of works started by a search in scopus with the terms artificial intelligence AND China in 2020, 2021, 2022. This brought about 776 works. The selection was further refined under the social sciences category, with 170 documents published matching the query. These works were reviewed looking for governance and legitimacy as topics for retrieval and further work, identifying 37 source articles. Once first relevant works were identified, the reference list of these works became a main source of materials, whether those were included in the scopus database or not, as detailed knowledge became crucial to build up the study. Google scholar was also utilized, searching for the first 10 works on artificial intelligence and social sciences, the 10 most cited works, and the ten most recent ones. These works were reviewed searching for interesting insights. Proquest database has also been consulted, with the query artificial intelligence in the Financial Times newspaper. Specific articles on the query were of value to identify authors with new ideas on artificial intelligence nowadays and how AI affects governance. As a result, these searches brought about information from comparative reports with general information on the United States [1], the work on Europe [2][3], and on China and China local AI ecosystems [4][5] –which I focus on for the purpose of this brief paper.

This research and discussion have been pursued without the aid of artificial intelligences or data bases in the process of ideas. Research and discussion are the result of a human mind. There is no use of any big data software, organic life engineering, or cyborg aid. Thus, at this stage, the results of the work are solely the responsibility of a human author’s mind. At a future stage, it could be explored whether there are interesting possibilities from non natural intelligences to broaden the scope and findings of this research.

III. THEORETICAL FRAMEWORK OF AI PHILOSOPHY: THE SOURCES OF LEGITIMACY TO ANALYZE ARTIFICIAL INTELLIGENCE

The following work tries to unveil a complex reality, 1) where there are new rules attached to command and control and 2) to bring to light new ways of thinking. A framework for analysis, the Gil dashboard for legitimacy is developed. The dashboard allows for comparisons of most similar and most different cases. The theoretical framework is in the intersection between values and AI development, and allows to unveil how AI is mediating problems related to coordination and control, what uncertainties about the future society and the polity different countries face against AI development, and what could we say about different cultural values.

We depart from the work on legitimacy from Max Weber -for whom there exist three types of domination, charismatic, traditional and rational or legal [6]. This framework was revised by Matheson [7] in 1987, nearly a century after Weber started writing. Matheson qualifies and opposes Max Weber theory on legitimacy. Later on, and departing from Matheson, this work develops a theoretical framework to allow for the comparison of AI legitimacy bases in the European Union, the United States and China - and could be valuable for the analysis of developing countries, and countries in the global south.

Weber distinction among the three types of domination differentiating three types of domination, charismatic, traditional and rational or legal is based on the legitimacy of the power-holder. The work by Matheson nearly a century later includes eight types of domination, including the perspective of both the power holders and the power subjects. The main critique that Matheson introduces to Weber's work is that democracy and its effects along the XX century are not reflected in Max Weber typology. Matheson reaches new layers of granularity for the study of the polity and society with his revised proposal. From Matheson’s critique of Weber I develop the following table: The table explains visually the eighth types of domination. This would be an eight dimensional view of sources of legitimacy.

TABLE I. THE EIGHT DIMENSIONAL VIEW OF SOURCES OF LEGITIMACY, BY OLGA GIL

Dimension	Definition of the dimension
Convention	Norms, rules: legal or customary rules that prescribe forms of behavior
Contract as basis of legitimacy	Mutual rights and obligations. The theory of consent as the basis of obligations
Basis of legitimacy in a conformity with universal principles: natural law	Theories of natural law, aka, the existence of a natural order superior to man-made law
Sacredness of authority	Power-holder or his/her norms considered to be sacred divine right of reigns. For Max Weber it could also be an attribute of an office rather than a person
Legitimacion by expertise	Technical expertise, in the vein defended by Saint-Simon, Taylorian theories, or historic laws
A popular mandate in a constitutional democracy	Popular mandate: a claim to democratic election in accordance with constitutional procedures. Based on constitutionalism, power holders elected in accordance with constitutional procedures. Here we find a distinction between polulist democracies, where the will of a majority rules, and constitutional democracies, where there will of the majority is limited by a constitution
Personal relation	Domination in which there are close ties between power-holders and power-subjects such as personal authority or paternal authority relationships
Personal quality of the power holder	Domination based on the personal quality of the power holder, by virtue of which he/she can claim a right of command

Having AI in mind and looking at this framework for the analysis of the cases selected, observations about new sources of legitimacy out of the scope of the table above can be drawn. A first one would be coercion as an instrument for legitimacy. A second source of legitimacy would be AI development outside the umbrella of the state, based in ethics codes. For instance, an applied comparison of national AI strategies in nine countries, including China and the United States finds that national AI strategies have an approach towards AI governance that entails cooperation among the public sector, industry and academia and is based on ethics [8]. For this purpose cooperation is achieved with voluntary mechanisms including best practices, codes of conduct, and guidelines.

IV. METHOD AS A SOURCE OF CHANGE AND LEGITIMACY

A third source of legitimacy would be linked to method. Matheson's approach to sources of legitimacy reviews Max Weber work making important contributions. However, the search of improved democracies through method as a source of legitimacy -a type of legitimacy based in experimenting

with method and in an active process, not only based in a popular mandate, to reach better results- is not included in Matheson analysis. Method is the base to reach new knowledge following the scientific revolution in Europe. Method, in contrast, has not been explored as a feature to improve democratic governments. The result is that there has not been an appraisal of method as a way to reach better results in democratic regimes. An example of the dangers and limitations of not including method as a source of improved legitimacy is the work comparing national AI strategies in nine countries, including China and the United States [8], stressing the lack of concrete mechanisms for inclusion of civic society and public engagement in AI control. Moreover, at the core of a general approach to use ethic guidelines as an efficient measure to prevent or reduce harm caused by AI the general argument is for its higher flexibility, as opposed to hard regulations that could represent an obstacle to economic and technical innovation [8] [9], or other means of legitimacy.

These new sources of legitimacy will be incorporated in the previous table in order to develop a new table, the Gil Dashboard, allowing us to analyze artificial intelligence from a comparative perspective. The sources of legitimacy are incorporated close to the category that is more akin to the concept, if any. Additions are included in bold text.

TABLE II. THE GIL DASHBOARD: THIRTEEN SOURCES OF LEGITIMACY TO ANALYZE AI

Dimension	Definition of the dimension
Convention	Norms, rules: legal or customary rules that <b>prescribe forms of behavior</b>
Contract as basis of legitimacy	Mutual rights and obligations. The theory of consent as the basis of obligations
Basis of legitimacy in a conformity with universal principles: natural law	Theories of natural law, aka, the existence of a natural order superior to man-made law
Sacredness of authority	Power-holder or his/her norms considered to be sacred divine right of reigns. For Max Weber it could also be an attribute of an office rather than a person
Legitimation by <b>human</b> expertise	Technical expertise, in the vein defended by Saint-Simon, Taylorian theories, or historic laws
<b>Legitimation based on an algorithm</b>	<b>Legitimation based on macrodata –hindering the idea of individual liberty</b>
A popular mandate in a constitutional democracy	Popular mandate: a claim to democratic election in accordance with constitutional procedures. Based on constitutionalism, power holders elected in accordance with constitutional procedures. Here we find a distinction between populist democracies, where the will of a majority rules, and constitutional democracies, where there will of the majority is limited by a constitution
<b>Improved democracies through method</b>	<b>A type of legitimacy based not only in a popular mandate but experimenting with method and in a continuous process in order to reach better results, including accountability</b>

Dimension	Definition of the dimension
<b>Regimes -non democracies-developed through method</b>	<b>A type of legitimacy based on experimenting with method and a continuous process to justify objectives and reached results</b>
Personal relation	Domination in which there are close ties between power-holders and power-subjects such as personal authority or paternal authority relationships
Personal quality of the power holder	Domination based on the personal quality of the power holder, by virtue of which he/she can claim a right of command
<b>Coercion</b>	<b>The use of power to influence someone to do something they do not want to do, from exerting fear to nudging as positive reinforcement</b>
<b>Societal cooperation, excluding the polity</b>	<b>Development of mechanisms of cooperation among the public sector, industry and academia: cooperation is achieved with voluntary mechanisms including best practices, ethical codes of conduct, and guidelines</b>

V. CONCLUSIONS

This work allows us to unveil a complex reality from the perspective of philosophy, political theory and sociology, where AI brings new rules attached to command and control to governance in general. The Gil dashboard proposed shows how AI is mediating problems related to coordination and control in governance. This theoretical dashboard could be also useful to apply in a comparative perspective, in countries in Asia, western countries and countries in the global south. The dashboard brings to light new ways of thinking in methodological terms [10]. It also allows to address and reflect upon the following changes of present societies:

- a) What uncertainties about the future society and the polity countries face against AI development?
- b) What can it be said about cultural values?
- c) What may we find in the intersection between values and AI development?

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