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Technology-led Citizenship Individuation in Contemporary China After Planetarization: An Analysis Oriented by the Philosophical Perspectives of Bernard Stiegler and Yuk Hui

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TECHNOLOGY-LED CITIZENSHIP INDIVIDUATION IN CONTEMPORARY CHINA AFTER PLANETARIZATION:
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ABSTRACT

The *planetarization* of a single *cosmotechnics*, stirring a global nationalist resurgence and geopolitical conflicts also centered on technological rivalries, urges for a reflection on the impact of accelerated technological *concretization* on social systems and, particularly, on citizens. In this global scenario, the People's Republic of China (PRC) emerges as a technological superpower whose relationship with technology is increasingly scrutinized in ambivalent ways.

Arising from these considerations, this dissertation explores technology-led citizenship *individuation* in contemporary China drawing on the combined perspectives of philosophers of technology Bernard Stiegler and Yuk Hui. By framing a philosophical perspective to examine the co-constitutive relationship between citizenship and technics in the global present, this research looks at the contemporary Chinese context to assess citizenship transformation at the encounter with accelerated technologization. The study also stems from the hypothesis that contemporary China, although presented as a site of technological alterity, is part of global processes of synchronization and homogenization led by technology. The research aims at investigating the following questions: How is citizenship individuation being transformed by technological concretization in contemporary China? In which ways does technology constitute an agentic and discursive element molding citizenship in this country? Why might a study on this matter shed light on trends of citizenship transformation at the global level?

The first chapter, after having justified the urgency of the research and having introduced the integrated philosophical perspectives of Stiegler and Hui on technology, proposes the methodological lens of individuation to address technics as a constitutive dimension of citizenship and to evaluate, thus, technology-led citizenship transformations in contemporary China. The remaining part of the dissertation concentrates on three different subjects respectively subdivided in just as many chapters: the second chapter offers an examination of the technological concretization and technoscientific governmental rationalities synchronizing the post-Mao Chinese context with global tendencies of citizenship individuation since the economic reforms period and until more recent times; the third chapter embarks on an examination of the Chinese Social Credit System, which is dissected as a prototype of digital governance but also situated in a continuum of global technological trends shaping citizenship; the fourth and last chapter provides an analysis of techno-nationalist sociotechnical ecosystems and imaginaries forwarded in the country and influencing Chinese citizens' vision concerning the future.

The study shows that the synchronization of the PRC with the global temporal axis, driven by the planetarization of the technical system, has accelerated Chinese citizens' *disindividuation* and

proletarianization. The reflections conducted throughout this research allow to identify patterns and tendencies, previously individuated in hyper-industrial democracies, disrupting the individuation processes originating citizenship itself within the contemporary Chinese context too. Ultimately, the findings suggest that, although the PRC launches innovative prototypes of technology-led citizenship individuation and maintains a strong techno-nationalist vision toward the future influencing citizens' imaginaries, it still is a global-izing agent of an inherited modernization.

KEYWORDS: Citizenship; Technology; Contemporary China; Individuation; Philosophy of Technology.

NOTE ON CHINESE TERMS AND PROPER NAMES

For the purposes of this dissertation, Chinese terms will be presented using the Pinyin transliteration followed by the original Chinese characters for clarity on the first mention (e.g. *suzhi* 素质). Pinyin will be italicized, while the characters will not. All characters will be presented in simplified Chinese throughout the text. The tones will not be indicated in the Pinyin transliteration.

Proper names (people, places, etc.) will be an exception where Pinyin alone, not italicized, is considered sufficient. Chinese personalities, scholars and authors' proper names will be presented with the family name first and the given name last (e.g. Mao Zedong, or Zhang Chenchen) as in the common Chinese convention, which is a reversal of the Western one usually presenting the given name first and the family name last. Yuk Hui makes an exception: this author is normally referred to as in the Western convention and I maintained the trend.

INTRODUCTION

Research Questions, Hypothesis, and Objectives

Today, technology has become a disputed object of international geopolitical and economic competition. Concurrently, it remains a subject of passionate theoretical debate, with its "enthusiasts" confronting its detractors, often preventing a genuine dialogue on the topic.

The premises of this study stem from the observation that contemporary China emerges as a site of technological alterity onto which Western countries alternatively project their anxieties or aspirations concerning the question of technology. The popular image of present days' China as a supposedly privileged locus of technologization often portrays this country as a place where worrying anomalies of citizenship configuration are produced through indigenous technological concretizations and experiments in digital governance. Questioning these assumptions, the present dissertation explores the transformation of citizenship at the encounter with technological concretization in contemporary China. It does so by employing the lens of analysis of philosophy of technology and, particularly, the combined perspectives of Bernard Stiegler and Yuk Hui. The research aims at looking into the following questions: How is citizenship individuation being transformed by technological concretization in contemporary China? In which ways does technology constitute an agentic and discursive element molding citizenship in this country? Why might a study on this matter shed light on trends of citizenship transformation at the global level?

This study hypothesizes that contemporary China is part of global processes of synchronization and homogenization led by technology. By framing a philosophical perspective to examine citizenship at the encounter with the question of technology in a globalized world, this research looks at the contemporary Chinese context to assess the transformations citizenship is undergoing at the encounter with accelerated technologization. It does so by maintaining the peculiarities of the Chinese case while continuously situating them within a global scenario where planetary trends, dynamics, and tendencies must be detected.

Through an analysis of the impact of technological concretization on Chinese citizens, this dissertation aims at bringing out that technology is, at once, a *constitutive* and a *disruptive* element of political and social life, urging for a global reflection on its adoption. The time of "shock"[1] that we are witnessing, with the spread of international conflicts, the suspension of International Law and the radicalization of nihilist tendencies, must be carefully addressed. It reveals, among the central issues of today's politics, a misunderstanding of the function of technology and, consequently, the need to rethink alternative ways for its adoption.

[1] Bernard Stiegler, *States of Shock: Stupidity and Knowledge in the Twenty-First Century: Stupidity and Knowledge in the 21st Century*, trans. Daniel Ross (Cambridge ; Malden, MA: Polity Pr, 2014).

The introductory section elucidates the choice of keywords, delimits the areas of study and the scope of the research, and sets up the philosophical background and methodology adopted. After a synopsis of the dissertation, it ultimately clarifies the positionality from which the research has been conducted.

Definition of the Keywords: Citizenship, Technology, and China

Citizenship is a political category defining an institution comprehensive of rights (the political-legal status) but also of practices and acts as well (the performative and active dimension). More broadly, it is "the quality of an individual's response to membership in a community"[2]. Often regarded as the political category *par excellence*, citizenship can be looked at as "the heart of political philosophy since its origins"[3]. Even though citizenship studies are quite a recent interdisciplinary field[4], Western political-philosophical thought has looked at citizenship as an architectonic tool around which connecting the issues originating around the concepts of community, sovereignty and rights. Citizenship constitutes, thus, a fundamental political notion combining the individual membership of the state to its plural community. At the same time, it can be looked at as the pivot connecting the individual to society.

Citizenship reveals two essential constitutive ambivalences: first, it delineates at once the borders of belonging and the lines of exclusion and, second, it defines the modern state's framework for delegating power while also working as a catalyst for claims[5]. Citizenship has been analyzed in its Euro-American historical trajectory and philosophical interpretation from the Greek *polis* to the birth of the modern state. Its features have been crystallized during the century of the declarations of rights, which also initiated a long-lasting tradition of criticism to this category, seen as marking inclusion and exclusion among subjects[6]. In the aftermath of World War II, T. H. Marshall has notably delineated the evolutionary trajectory of citizenship, according to which this status sets up through the succession of civil, political and social rights[7]. In more recent times the post-nationality lens has

[2] *Merriam-Webster*, 'Citizenship', 21 October 2025, https://www.merriam-webster.com/dictionary/citizenship.
[3] Étienne Balibar, "Difficult Europe: Democracy under Construction" in *We, the People of Europe? Reflections on Transnational Citizenship*, trans. James Swenson, Translation/Transnation (Princeton University Press, 2004), p. 156.
[4] Engin Fahri Isin and Bryan Stanley Turner, *Handbook of Citizenship Studies* (London: Sage publ, 2002), see Chapter 1.
[5] These ambivalences are explored in Sandro Mezzadra, *Cittadinanza. Soggetti, ordine, diritto* (CLUEB, 2004).
[6] Karl Marx notably criticized the "rights of man" and the "bourgeois citizenship" in *On the Jewish Question* (Karl Marx, '"On the Jewish Question"', in *Marx: Early Political Writings*, ed. Joseph J. O'Malley, Cambridge Texts in the History of Political Thought, Cambridge University Press, 1994). The feminist movement has also repeatedly questioned the ways in which the model of citizen has been shaped on the male subject; in parallel, the post-colonial critique has shown how, during colonialism, citizenship has crystallized as a tool discriminating racialized people. More recent academic works have explored how citizenship works as a form of "legalized discrimination" (Andreas Wimmer, *Ethnic Boundary Making: Institutions, Power, Networks*, Oxford Studies in Culture and Politics, Oxford University Press, 2013), as a "birthright lottery" (Ayelet Shachar, *The Birthright Lottery: Citizenship and Global Inequality*, Harvard University Press, 2009), and even as a "totalitarian" status assignment and the imposition of the model of the "good citizen" (Dimitry Kochenov, *Citizenship*, The MIT Press Essential Knowledge Series, MIT Press, 2019).
[7] T. H. Marshall, *Cittadinanza e classe sociale* (Roma: Laterza, 2002).

assessed the potentials and limits of this concept linked to nation-state in a hyper-globalized world. On this regard, large attention, for example, has been dedicated to the multilevel experience of citizenship within the European Union as well as to its limits[8]. Another recent line of research, inspired by postcolonial theory, has started looking at the histories of citizenship in non-Western contexts[9] with the purpose of returning a more thorough and encompassing perspective of the experiences of political participation in the Global Souths and Easts, in their historical dimension as well as present juridical configuration and social practices. This growing body of research is important for conjugating, on the one hand, the global history of citizenship and, more broadly, of political participation and subjectification, with, on the other, the plural reinterpretation of this concept in recent times. In light of this, the globalization of citizenship calls for an analysis of its attributes across different sociocultural and political contexts.

The category of citizenship has been defining and constructing the anthropological differences linked to territorialization since the modern age, reinforcing the world's subdivision into nation-states. In this way, territoriality has been working as a catalyst of anthropological diversities. However, the transformative processes linked to modernity and globalization have led to the "redefinition of the sovereign nation-state as a result of global technological competition"[10]. As expounded more thoroughly in the dissertation, technological globalization synchronizes and homogenizes cultural differences, leading to the disappearance of the link between ethnicity and territoriality – the "myth" justifying the nation – and to a widespread sense of disorientation[11]. In this scenario, nationalisms and conflicts are re-emerging worldwide. This dissertation also aims at demonstrating that philosophy of technology offers a thought-provoking reading of this phenomenon.

Technology[12] is emerging as a highly debated topic in academic and public debate, as well as a disputed object of geopolitical and economic rivalry. The current research is also motivated by the belief that permanent innovation characterizing the digital technological revolution urges for an analysis of citizenship transformations led by technology. The category of technics, thus, will be

[8] Balibar, *We, the People of Europe?*; Étienne Balibar, *Citizenship* (Polity, 2015); Enrica Rigo, *Europa di confine. Trasformazioni della cittadinanza nell'Unione allargata* (Meltemi, 2007).
[9] Engin Isin, *Citizenship after Orientalism: Transforming Political Theory* (London: Palgrave Macmillan, 2016).
[10] Yuk Hui, 'Cosmotechnics as Cosmopolitics', *E-Flux Journal*, no. 86 (November 2017): 1–11, p.1.
[11] See subchapters 1.3 and 4.1. See also Bernard Stiegler, *Technics and Time. 2: Disorientation* (Stanford, Calif: Stanford Univ. Press, 2009).
[12] Throughout this dissertation, I rely upon the terminological classification made by Hui to distinguish between technics and technology: "*technics* refers to the general category of all forms of making and practice; *techne* refers to the Greek conception of it, which Heidegger understands as *poiesis* or bringing forth; and technology refers to a radical turn which took place during European modernity, and developed in the direction of ever-increasing automation, leading consequently to what Heidegger calls the *Gestell*". Yuk Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, Third corrected edition (Urbanomic, 2022), p. 4, footnote 3.

addressed as a philosophical theme but also as an agentic element to assess the impact of a globalizing technical system[13] on citizens.

For instance, the current organization of the global technical system is concretizing into emerging regimes of algorithmic and data-driven governance that are being implemented on a global level, integrating digital technologies into political processes. More broadly, the accelerated technological evolution of present times is generating large discussion regarding the impact of technological innovations[14] on societies and individuals. This research adopts the philosophical perspective on technics opened by the French philosopher Bernard Stiegler and widened by the Hongkonger philosopher Yuk Hui. Stiegler's interpretation of the human/technical entanglement has unveiled the indissolubly link perpetuating the co-evolution, through misadjustments, of social systems and technical systems[15], showing the advancement of the latter on the former. According to him, technological evolution is always ahead of societies, and these latter must make a theoretical and political effort to catch up with it. Today more than ever, we witness an impressive acceleration of technological innovation[16] that social systems have trouble adopting in a positive way. Stiegler expounds that, throughout history, technical revolutions have resulted in systematic reorganizations of the social systems and today we are faced with this type of urgent political challenge. At the same time, he discloses another important aspect of the human/technical relationship: the interplay of technics and humanity advances through a triple individuation co-producing psychic, collective and technical *individuation*. The passage from the individual to the community takes place *because of* technics and, at the same time, it is jeopardized by it. As it will be discussed more thoroughly later, technics constitutes the material circuits enabling the passage from the *I* to the *we* and back, being a constitutive element of citizenship.

Another issue linked to technologization is that accelerated processes of globalization, boosted by rapid technological innovation, catalyze nationalist tendencies, urging a reflection on top-down narratives regarding technology and on the processes of citizenship configuration. It is Yuk Hui who

[13] Bernard Stiegler retrieves this word from Bertrand Gille, see Bernard Stiegler, *Technics and Time 1: The Fault of Epimetheus*, trans. Beardsworth Richard and Collins George, 1 (Stanford, Calif: Stanford Univ. Pr, 1998), first part. It is useful to report Stiegler's definition of "technical system" provided in such work: "A technical system constitutes a *temporal unity*. *It is a stabilization of technical evolution around a point of equilibrium concretized by a particular technology* […] The evolution of technical systems moves toward the complexity and progressive solidarity of the combined elements. […] This globalization [*mundialization*] of such dependencies-their universalization and, in this sense, the deterritorialization of technics leads to what Heidegger calls *Gestell*: planetary industrial technics-the systematic and global exploitation of resources, which implies a worldwide economic, political, cultural, social, and military interdependence". Stiegler, *Technics and Time 1: The Fault of Epimetheus*, p. 31.

[14] For a difference between "innovation" and "invention" see Stiegler, *Technics and Time 1: The Fault of Epimetheus*, pp. 36-37.

[15] Stiegler, *Technics and Time 1*.

[16] The 2024 Global Innovation Index (GII) report by the World Intellectual Property Organization (WIPO) provides a snapshot of the current state of global innovation.

offers a thought-provoking perspective on such theme. According to his thesis, the impact of modern technology has been uneven in different sociocultural contexts resulting in the disappearance of the plurality of technical thoughts and genealogies existing before modernization. He advances that the disruptive power of technologization at the turn of the twentieth century has imposed Western epistemics and rationality worldwide through colonialism and imperialism. Following this reading, modernity is just on its way of being achieved, through the accomplishment of globalization processes in which technologization plays a pivotal role. This scenario results in the advent of the "planetary condition"[17] in which we witness "the end of unilateral globalization"[18], as Euro-America has lost its exclusive leading role in the modernization processes. The idea of the *planetary* refers to the fact that today the global technical system has emancipated itself from cultures, a separation that must be carefully addressed to avoid that "local", that is culturalist as well as nationalist (when not fascists) philosophical and political responses to globalization misinterpret the question of technology in our contemporaneity.

Within this global scenario, this study proposes to analyze the transformation of citizenship in the *People's Republic of China* (hereinafter PRC)[19]. The choice might be considered hazardous, as the PRC is not a liberal democracy where citizenship could be analyzed according to the consolidated parameters and the assessed trajectory of Euro-American states (although, to this regard, it is recognized that not even the "West" is uniform in its interior). However, in the last years, the scholarship on citizenship has dedicated consistent analysis to outline the traits of citizenship in the Chinese context, both in their historical-philosophical dimension and in their contemporary configuration[20]. This has been done also to dismantle the idea that China lacked an indigenous history of political participation and political-philosophical lexicon and reflection on the theme of citizenship[21]. After centuries dominated by orientalist assumptions, during which China (along with the Global Easts and Souths in general) was relegated to backwardness and denied the elaboration of modern political categories, considerable focus has been recently dedicated at restoring the history of modern China as well as the peculiarities of legal and social citizenship in the Chinese context. More

[17] Yuk Hui, 'Philosophy and the Planetary', *Philosophy Today* 64, no. 4 (2020): 865–69.
[18] Hui, 'Cosmotechnics as Cosmopolitics', p.1.
[19] Along the dissertation the official abbreviation "PRC" and the more general term "China" are, when appropriate, used interchangeably. However, the former is more adequate to discuss the Chinese modern state and its political system, while the latter, which is used to indicate the PRC in everyday language, also refers more broadly to the Chinese civilization, encompassing its culture, history, and geography.
[20] See, for example, Zhonghua Guo, ed., *The Routledge Handbook of Chinese Citizenship*, 1st ed. (London: Routledge, 2021).
[21] See Guo, *The Routledge Handbook of Chinese Citizenship*; Joshua A. Fogel, ed., *Imagining the People: Chinese Intellectuals and the Concept of Citizenship, 1890 - 1920*, Studies on Modern China (Armonk, NY: Sharpe, 1997); Zhonghua Guo and Sujian Guo, eds., *Theorizing Chinese Citizenship*, Challenges Facing Chinese Political Development (Lanham: Lexington Books, 2015).

importantly for this research, the People's Republic of China is nowadays an important actor of international politics and global economy, with a pivotal role in terms of technological design, production and commercialization, along with leadership's aspirations in this field. For this reason, the PRC has been selected because it is a country with an impressive technological innovation's rate[22] and a growing international influence regarding this matter. The technological acceleration taking place in the PRC, further boosted by Party-State authorities, positions the country as a privileged context in which to analyze new possible trends of citizenship evolution at the encounter with digital technologies and data-driven governance. As already remarked, the rising of China as a technological and economic superpower, along with other important global geopolitical changes (such as the advent of the so-called "multipolar world order"[23]), denotes the end of "unilateral globalization"[24]. With this scenario in mind, it can be advanced that new global-ising trends or paths of citizenship individuation might arrive from elsewhere than the "West".

Situating the Research

After having clarified the keywords contained in the research questions, the following paragraphs help situate the research, starting from what this study does not address.

(1) First, the notion of citizenship will not be considered in its juridical dimension within the PRC's legal framework. Citizens' rights and their implementation are surely an important aspect of the category of citizenship, even in authoritarian contexts where law is understood and implemented according to specific dynamics and rationalities, such as in the PRC[25]. However, this study does not strictly speculate on the juridical dimension of citizenship in China, nor on its updates at the encounter with technological advancements. At the same time, this is not a sociological study on citizens' practices and mobilizations in the PRC at the encounter with new technologies (as in the analyses concerning the online public sphere and digital activism).

(2) Second, this research does not compare the Chinese citizenship's regime with others in terms of technological governance. It is not a comparative study about forms of technological governance or regulation across different socio-political contexts, and the introduction of comparisons is proposed only when identifying possible global trends or discontinuities.

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[22] According to the Global Innovation Index made by the World Intellectual Property Organization (WIPO), in 2024 the PRC is the 11th in the GII rank and first among the upper middle-income economies: 'Global Innovation Index 2024 - GII 2024 at a Glance', accessed 25 October 2025, https://www.wipo.int/web-publications/global-innovation-index-2024/en/gii-2024-at-a-glance.html. Moreover, always according to WIPO, in 2019 China was the top filer of International Patents surpassing the US: 'China Becomes Top Filer of International Patents in 2019', accessed 25 October 2025, https://www.wipo.int/pressroom/en/articles/2020/article_0005.html.

[23] Michael A. Peters, 'The Emerging Multipolar World Order: A Preliminary Analysis', *Educational Philosophy and Theory* 55, no. 14 (6 December 2023): 1653–63.

[24] Hui, 'Cosmotechnics as Cosmopolitics', p. 1.

[25] See Rogier Creemers and Susan Trevaskes, eds., *Law and the Party in China: Ideology and Organization* (Cambridge, United Kingdom; New York, NY, USA: Cambridge University Press, 2020).

(3) Third, this is not a geopolitical analysis assessing culturalist or political differences or "destinies" between monolithic representations of Easts and Wests in relation to technology. On the contrary, its ultimate goal is to warn against the re-emergence of nationalistic narratives in a hyper-globalized world, and to address the root causes of the contemporary disorientation that threatens the very conditions enabling the constitution of citizenship itself.

The purpose of this study is, instead, to research citizenship individuation led by technological concretization in contemporary China. This is pursued, first, by assessing from a philosophical perspective the constitutive role of technics in shaping humankind and social systems; second, by exploring the impact of technological globalization on China's recent history and its technological thought; and third, by analyzing how specific technological rationalities and concretizations influence citizenship individuation in the country. For these reasons, the present work should be regarded as a study grounded in the field of philosophy of technology, while also incorporating contaminations from the disciplines of political philosophy and theory (particularly citizenship studies), and of area studies (sinology).

Philosophical Background and Methodology

The present research has stemmed from an intertwined analysis of the philosophical perspectives of Stiegler and Hui, whose combined reflections provide an innovative and thought-provoking insight to explore technology as a preeminent agent shaping citizenship in the Chinese context after technological globalization. The methodological lens of *citizenship individuation* (expounded in Chapter 1) has been formulated to innovatively research citizenship transformation in post-Mao China analyzing three different cases (Chapters 2, 3, 4): a study of top-down technological concretization synchronizing the post-Mao Chinese context with global tendencies of citizenship individuation in the post-1978 context; an examination of the Chinese Social Credit System as a prototype of emerging global trends of digital governance; an analysis of techno-nationalist sociotechnical imaginaries and ecosystems in contemporary China. The philosophical lens of individuation provides the methodological approach to investigate how citizenship is affected by the evolution of the technical system.

To construct the philosophical framework and methodology, a reading and interpretation of most of the philosophical works by Stiegler and Hui has been conducted. Their perspectives were further enriched by philosophical readings addressing the question of technology, written by other authors from contemporary Western philosophy (such as Gilbert Simondon, Michel Foucault, and Martin Heidegger). The Chinese philosophical tradition and its contemporary reinterpretation (see, for instance, the works of Wang Hui and François Jullien) were also taken into consideration to better

understand Yuk Hui's philosophical reflection, but also to grasp how the Chinese cultural heritage is currently instrumentalized in the PRC.

Beyond the use of these primary philosophical sources, the research also relied on secondary sources and data. A multidisciplinary corpus of research papers, essays, and books (mostly in English, but also in French and Italian, as well as translations from Chinese) was employed to broaden the philosophical lens. Depending on the specific topic addressed (e.g., citizenship in post-Mao China, the Chinese Social Credit System, China's techno-nationalism), a variety of academic sources were collected from online databases such as Google Scholar and JSTOR. The collected works span multiple fields of study, including citizenship studies, science and technologies studies, sinology, sociology and anthropology, digital studies, political theory, and, even, literary studies. The research was further enriched by non-academic secondary sources, such as reports from research institutes and think-tank, newspaper articles, official PRC documents and websites, and even contemporary Chinese novels. Finally, a research semester spent in Beijing in the spring of 2025 provided the opportunity to immerse in the country's technological habits and digital infrastructure.

Dissertation Overview

Chapter 1 is a theoretical chapter that outlines the philosophical background and methodology upon which the following analysis is based. It orients the reader within the philosophical framework through which citizenship will be examined in the Chinese context while also situating it within a global dimension. The first section (1.1) justifies the urgency of this research by explaining how technology is the central agent in the rise of geopolitical rivalries and of nationalist sentiments worldwide. It discusses the technological alterity of present days' China to dismantle techno-orientalist perspectives toward this country by situating it within a broader and interdependent global dimension. The second section (1.2) defines the conceptual framework that is adopted for the research by introducing the philosophies of Bernard Stiegler and Yuk Hui. It clarifies the role that technics plays both at a global level, within the processes of hyper-globalization producing the "planetary condition", and at a local level, within the Chinese philosophical and historical experience. The third section (1.3) presents a multilevel state of the art for approaching citizenship in the Chinese context considering the postcolonial approach, the "de-Westernism" lens, an overview of citizenship in post-Mao China, and scholarship on the impact of technology onto citizenship. The fourth section (1.4) introduces the concept of individuation, introduced by Gilbert Simondon and reinterpreted by Stiegler, as the philosophical and methodological lens employed to analyze citizenship.

The following three chapters focus on citizenship individuation in today's PRC in three separate ways. Chapter 2 reconstructs the processes of citizenship individuation that have unfolded in post-1978 China. During this phase, technology has produced the synchronization of the country with the

global temporal axis The first section (2.1) provocatively compares two conceptions of "spirit": the first one developed by Stiegler and the second one promoted by Chinese Party-State authorities during the economic transition until nowadays. This comparison expounds how societies' morals and "spirit" depend on technical concretization and how processes of citizenship individuation have been jeopardized by technological evolution in the PRC. The second section (2.2) examines the gradual adoption of a distinctive top-down technoscientific rationality in this country, until the present days' interest in digital governance, and its effects on processes of citizenship individuation.

Chapter 3 investigates the Chinese Social Credit System as a prototype of digital governance developed in the PRC, assessing whether it constitutes or not a technological anomaly within the global scenario. The first section (3.1) introduces three paradigms that reveal global governance tendencies steered by technical evolution: the dataist state, ordinal citizenship, and algorithmic governmentality. The second section (3.2) scrutinizes the Chinese Social Credit System to resize its infrastructure and mechanisms while arguing that it may constitute a fashionable example of effective digital governance on the international stage. The last section (3.3) discusses the model of citizen shaped by the Chinese Social Credit System and examines how this infrastructure affects processes of citizenship individuation and citizens' libidinal economy.

Chapter 4 addresses the resurgence of nationalist trends as a response to globalization and evaluates how technology functions both as an object of public discourse and an agentic ecosystem shaping Chinese citizens' individuation. The first section (4.1) expounds how the disappearance of the original nexus between ethnicity and technics under today's global technical system translates into emerging nationalist and reactionary dynamics driven by the tensions between nation-states and the planetarization of technology. The second section (4.2) situates contemporary Chinese techno-nationalism within broader global tendencies, showing how this narrative contributes to the formation of national sociotechnical imaginaries and partially closed digital ecosystems that, nonetheless, do not prevent the PRC to expand its digital infrastructure abroad. The concluding section (4.3) analyses national and nationalist sociotechnical imaginaries projecting Chinese citizens into a global future (over)determined by current technical concretization.

Following the concluding remarks, which outline the limits of this study and an orientation for future research, the dissertation also includes a glossary to assist readers in navigating the most recurrent philosophical terms.

Researcher Positioning

Even though I look at identity as a misleading concept failing to account for the complex metastable equilibrium occurring between *I/We* – since one never coincides to oneself, but only tends toward oneself, and in this sense identity represents a relation with a collective future rather than with

the past – as a PhD student based in Italy/Europe, I am aware that my research on Chinese citizenship may be biased by orientalist, techno-orientalist or otherwise prejudiced views toward this country and its political-philosophical heritage.

While elaborating and writing this dissertation I have sought to avoid a simplistic understanding of the PRC, its institutions and, above all, its citizens, by adopting the perspective of "Global China as method" proposed by Franceschini and Loubère[26]. This approach is grounded in the awareness that more often than not three misleading approaches are employed while researching the PRC: (1) othering and essentializing views "isolating" China in its supposed "uniqueness"; (2) moralistic perspectives that assume China should change (with "change" implicitly meaning becoming more like "us"); (3) a "whataboutism" attitude, implying that any critical approach with regards to the PRC is hypocritical since comparable issues can be detected in the "West" as well. As underlined by the two scholars,

> it is important to acknowledge that all these frames contain within them elements of truth – which is part of the reason why they are attractive for so many. It is undeniable that China, just like any other place, has its own historical, social, cultural, economic, and political 'characteristics'. As such, understanding Chinese dynamics requires a certain level of particularism and any analysis that is not historicized and contextualized will unavoidably be superficial and misleading. At the same time, however, China is obviously part of the world and therefore shapes and is shaped by broader dynamics[27].

Their methodological proposal, which I tried to adopt and to which this research aspires to add an additional element drawn from the perspective of the philosophy of technology, is to consider and understand China (and, importantly, the processes affecting its citizens' individuation) "not as a discrete unit but as part and parcel of the contemporary global capitalist system"[28]. Their approach is also inspired by Yūzō Mizoguchi's renowned article, "China as Method"[29], which warned sinologists against "reading China without China"[30]. Although I regard this dissertation as belonging primarily to the field of philosophy of technology rather than that of sinology *per se*, I agree with Mizoguchi's view:

> To take China as a method is to take the world as a goal. […] A world that takes China as method should not be such a world as this. A world that takes China as method would be a world in which China is a constitutive element. In other words, it would be a pluralistic world in which Europe is also one of the constitutive elements[31].

[26] Ivan Franceschini and Nicholas Loubere, *Global China as Method* (Cambridge: Cambridge University Press, 2022).
[27] *ivi*, p. 5.
[28] *ivi*, p. 1.
[29] Yūzō Mizoguchi, 'China as Method', *Inter-Asia Cultural Studies* 17, no. 4 (1 October 2016): 513–18
[30] *ivi*, p. 514.
[31] *ivi*, p. 516.

By focusing on how technology is not a mere instrument, but a constitutive element in the making and signification of our own world, this research also aims to contribute an additional perspective to their considerations. It argues that the concretization of a globalized technical system driven by financial rationales endangers the very constitution of a pluralistic world, which is also a concern advanced by Hui's philosophical reflection[32].

Ultimately, this dissertation represents a starting point for an individuation of thinking[33] taking place through a "deferred" dialogue between Stiegler and Hui's thoughts on technology. The two thinkers knew each other and their respective works (Hui completed his PhD under Stiegler's supervision) and also collaborated (for instance, Stiegler held a series of conferences in the PRC between 2016 and 2019 that was partly organized by Hui[34]). Through them, this dissertation seeks to stage a dialogue between one (post-)Western and one (post-)Eastern philosophy moving beyond territoriality and geopolitical binaries. In their respective research, in fact, both thinkers attempt to go beyond the notion of "belonging", by meditating on the "becoming homelessness" (*Heimatlosigkeit*) of philosophy, and by extension of citizens, after planetarization. They show that technology, as an urgent political theme, should lie at the core of philosophical questioning, while also originally *enabling* it.

[32] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*.
[33] This philosophical endeavor is presented in Yuk Hui, *Post-Europe* (Urbanomic, 2024).
[34] These lectures are collected in Bernard Stiegler, *Nanjing Lectures (2016-2019)* (Open Humanities Press, 2020).

CHAPTER 1: A GLOBAL APPROACH TO CHINESE CITIZENSHIP FROM THE PERSPECTIVE OF PHILOSOPHY OF TECHNOLOGY

OVERVIEW OF THE CHAPTER: The first chapter aims at justifying why it is impellent to conduct an analysis of technology-led citizenship individuation in contemporary China and at introducing the philosophical background and the methodological proposal to analyze this issue.

The first section explores the entanglement of global images returning an alleged technological alterity of present China. It investigates how the PRC is the object of externally and internally imposed inventions of futurities linked to the question of technology.

The second section introduces the philosophical background adopted, which relies on the thoughts of Bernard Stiegler and Yuk Hui. Both philosophers investigate the role of technology amidst the globalization processes but while Stiegler rewrites the Western philosophical interpretation of technics, Hui questions the presumption of universality of this concept and of its genealogy before globalization, reconstructing the history of Chinese technical thought from its origins until modernization.

The third section provides a multilevel state of the art from which this research at once stems and distances itself. It aims at situating the proposed study resuming overlapping narratives on modernization from which contemporary Chinese citizenship emerged, as well as approaches suggested to study it in recent scholarship; it also provides an overview of citizenship transformation in the PRC since 1978 and, ultimately, a short focus on the growing body researching the impact of technology on citizenship.

The last section advances a methodological proposal to study the entanglement of citizenship and technology through the concept of individuation, first introduced by Gilbert Simondon and reinterpreted by Stiegler. This approach is framed to analyze trends of citizenship transformation triggered by technological concretization both at the global level and at the situated one of the PRC.

1.1 THE TECHNOLOGICAL ALTERITY OF CHINA

This section explores the narratives returning an alleged technological alterity of today's China to unravel the entanglement of global overlapping discourses on technology and to show the urgence of a comprehensive reflection on such issue in philosophical and political terms. This preliminary exploration is useful to introduce the ways in which nationalism and technology intertwine, particularly regarding the Chinese case. At the same time, it reveals that technology constitutes a central theme of geopolitical narratives concerning the future, even though technics as a constitutive question is too often than not ill-posed.

Joys and Sorrows of Sinofuturism

The idea that "NeoChina arrives from the future" has already aged, but it has not been set aside yet. It was the accelerationist philosopher Nick Land in 1994, at the time a member of the CCRU (Cybernetic Culture Research Unit)[35], who evocated this image, speculating on a "planetary china-syndrome" and exalting "[t]he Superiority of Far Eastern Marxism [as] chinese materialist dialectic denegativizes itself in the direction of schizophrenizing systems dynamics, progressively dissipating top-down historical destination in the Tao-drenched Special Economic Zones" [36]. His obscure and provocative essay is at the origin of the concept of Sinofuturism, a term later coined by Steve Goodman in the 1998's essay "Fei Ch'ien Rinse Out: Sino-Futurist Under-Currency"[37]. Goodman defines Sinofuturism as "a darkside cartography of the turbulent rise of East Asia" while speculating about China's "underground banking network", cybernetics, Leibniz and the *I' Ching*. At the base of the Sinofuturist imaginary there is the fascination toward the rapid development of China as an economic and industrial power at the turn of the 21st century that metamorphosed the country into a privileged site of technological innovation, rampant productivity and temporal acceleration. Since the end of the 90s, the image of a futuristic and, most importantly, technologically advanced China, in which gargantuan urbanities are disseminated of skyscrapers illuminated by neon signs – sharing much of the cyberpunk aesthetics – has been consolidated and become popular in cultural studies, contemporary arts and popular culture nurturing stereotypes. As remarked by Virginia L. Conn, the speculation on Sinofuturism is "image-oriented" and it largely depends on digital media and visual culture, resulting into a sort of photographic grasp of the future and, for this reason, deterministic[38].

Today's China has become the object of a global watchfulness spanning from admiration to fear. Overlapping discourses in Euro-America alternately highlight with resentment and fear the rising and consolidating commercial, economic, military and technological power of the PRC or demands for a similar unbridled productivity and technologization process at home[39]. Mirroring narratives have been top-down disseminated in China depicting a glorious path toward modernization and technologization, crystallized in the ambitious "China Dream" [40], while denouncing the alleged attempts of Western countries to hinder the Chinese way toward the future, relying on a postcolonial

[35] A collective of cultural theorists established in the UK between the 90s and early 2000s.
[36] Nick Land, 'Meltdown', Cybernetic Culture Research Unit, accessed 25 October 2025, http://www.ccru.net/swarm1/1_melt.htm.
[37] Steve Goodman, 'Rinseout', Cybernetic Culture Research Unit, accessed 25 October 2025, http://www.ccru.net/archive/rinse.htm.
[38] Virginia L. Conn, 'Scry, the Beloved Country: Sinofuturist Forecasting and Accelerationist Aesthetics', *World Futures Review* 15, no. 1 (1 March 2023): 56–74, p. 58.
[39] Yuk Hui, 'On the Unhappy Consciousness of Neoreactionaries', *E-Flux Journal*, no. 81 (April 2017): 1–12.
[40] Zheng Wang, 'The Chinese Dream: Concept and Context', *Journal of Chinese Political Science* 19, no. 1 (2014): 1–13; Michael A. Peters, 'The Chinese Dream: *Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era*', *Educational Philosophy and Theory* 49, no. 14 (2017): 1299–304; William A. Callahan, *China Dreams: 20 Visions of the Future* (Oxford Univ. Press, 2013).

nationalist discourse[41].

Notably the spread of the COVID-19 pandemic further contributed to enrich the narrative of a technologically advanced China where robots work as nurses or walk the streets as uncanny dog to spread prevention measures with loudspeakers, the management of the crisis took place through QR codes, Artificial Intelligence (AI) and an imponent data management infrastructure, and hospitals are built in a week[42]. At the same time, as remarked by Anna Greenspan, COVID-19 also saw the combination of Sinophobia with technophobia[43], with the coronation of the image of China as a "digital dystopia".

These narratives consolidate a further step in the orientalist discourse: techno-Orientalism, which muses about the aesthetics and temporalities of technologization in Asia. Techno-Orientalism started consolidating in the 80s and 90s as an account about the rising economies of East Asia, particularly Japan and the Asian tigers[44], but which has more recently been targeted the PRC and of which Sinofuturism may represent a further elaboration[45]. It refers to "the phenomenon of imagining Asia and Asians in hypo- or hypertechnological terms in cultural productions and political discourse"[46], but "[w]hereas Orientalism, as a strategy of representational containment, arrests Asia in traditional, and often premodern imagery, techno-Orientalism presents a broader, dynamic, and often contradictory spectrum of images, constructed by the East and West alike, of an "Orient" undergoing rapid economic and cultural transformations"[47]. Apparently, this narrative evolves and thrives along with technological innovation: digital Orientalism, as a ramification of the techno-orientalist narrative, speculates on the alliances between Internet and authoritarianism in the PRC[48].

Waves and Undertows of Orientalism and Occidentalism

Sinofuturism shares both commonalities and divergences with Orientalist and Sino-Orientalist discourses. Notably Orientalism has been theorized by Edward Said as a colonialist discourse of power enacted by Western intellectuals, politicians and scholars and directed at depicting a monolithic

[41] Chenchen Zhang, 'Post-colonial Nationalism and the Global Right', *Geoforum* 144 (August 2023): 1–5.
[42] Bei Chen et al., 'Containing COVID-19 in China: AI and the Robotic Restructuring of Future Cities', *Dialogues in Human Geography* 10, no. 2 (2020): 238–41; Kelly Yu, 'Robot Dog Broadcasts Anti-Pandemic Measures in China', *South China Morning Post*, 31 March 2022, https://www.scmp.com/video/china/3172617/robotic-dog-equipped-loudspeaker-broadcasts-anti-pandemic-measures-eastern; Pratik Jakhar, 'Coronavirus: China's Tech Fights Back', *BBC News*, 3 March 2020, https://www.bbc.com/news/technology-51717164; 'Coronavirus: The Hospital Built in a Matter of Days', *BBC News*, 2 February 2020, https://www.bbc.com/news/in-pictures-51280586.
[43] Anna Greenspan, *China and the Wireless Undertow: Media as Wave Philosophy* (Edinburgh University Press, 2023).
[44] Gabriele De Seta, 'Sinofuturism as Inverse Orientalism: China's Future and the Denial of Coevalness', *SFRA Review* 50 (2020): 86–94, p. 91.
[45] *ivi*, p. 88.
[46] David S. Roh et al., eds, *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media*, Asian American Studies Today (Rutgers University Press, 2015), p. 2.
[47] *ivi*, p. 3.
[48] Maximilian Mayer, 'China's Authoritarian Internet and Digital Orientalism', in *Redesigning Organizations*, ed. Denise Feldner (Springer International Publishing, 2020), 177–92.

and cliched East in late with progress and with modernity to relegate it to backwardness, while negating its own representation[49]. The Orientalist narrative reminds us that the image of a futuristic and technologically advanced China is quite recent. A more specific form of Orientalism, Sino(logical)-Orientalism has been described by Daniel F. Vukovich[50] as an academic form of othering and of Orientalism spreading at the turn of 21st century and directed specifically toward the PRC in the post-Maoist era. The Sino-Orientalist tropes traced once again a political depiction of a "backward" post-socialist China in the way of becoming more and more similar to the West, embracing its allegedly universal values, such as liberalism and democracy, and by reflection reinforcing Western identity. According to Vukovich, Western leftist intellectuals as well as Chinese scholars established in the Euro-America have not been immune from perpetuating Sino-Orientalist discourses. In the same tradition of Orientalism and, more specifically, of Sino-Orientalism, Sinofuturism, along with techno-Orientalism, replicates othering accounts and narratives of power directed toward the PRC but with two fundamental differences: (1) first, it returns an image of China not in late with progress, but ahead of it, anticipating the West because more technologically advanced. There is a change of direction in which relegating the object of othering: the focus is thus on the temporality of future and on speed; (2) second, this discourse is not exclusively coming from outside China, but it is also produced within the country, as both artistic and popular speculation and official narrative. Regarding popular culture, one example is constituted by the flourishing of the science fiction literary and cinematic genre in the PRC since the 90s, reaching today the global audience (see 4.3). As suggested by video artist Lawrence Lek, within the Sinofuturist imaginary China even metamorphoses into "a science fiction that already exists"[51]. The popularity of the science fiction genre has even obtained the official endorsement of Chinese authorities *qua* reflection of the "China Dream"[52]. In this sense, Party-State authorities are not unfamiliar with the Sinofuturist imaginary, as it pairs well with the national projects directed to further boost technologization in the country[53] (see Chapter 4).

In parallel, the PRC also witnesses the consolidation of techno-nationalist discourses[54] enacting an exaltation of the Chinese modernization path, along with a victimhood narrative referring to

[49] Edward W. Said, *Orientalism* (Vintages books, 1979).
[50] Daniel F. Vukovich, *China and Orientalism: Western Knowledge Production and the P. R. C*, 1. publ, Post-colonial Politics 5 (Routledge, 2012).
[51] Quoted in Virginia L. Conn and Gabriele De Seta, 'Let A Hundred Sinofuturisms Bloom', in *The Routledge Handbook of Cofuturisms*, ed. Bodhisattva Chattopadhyay et al., Routledge Literature Handbooks (Routledge, 2023), p. 384.
[52] *ivi*, p. 380.
[53] To this regard, Virginia L. Conn even speaks about what could be defined as a "state-led Sinofuturism", see Conn, 'Scry, the Beloved Country', p. 66.
[54] Jun Zhang, 'Hardening National Boundaries in a Globally-Connected World: Technology, Development and Nationalism in China', *Journal of Contemporary Asia* 52, no. 5 (2022): 783–804.

alleged attempts coming from the West to hinder the technologization path of China[55]. Actually, as recounted by Evan A. Feigenbaum, the techno-nationalist approach has been recurrently adopted of Chinese decision makers, who have been appointed strategies of technological sovereignty and autocracy through times[56]. Today this approach translates, for example, into policies of cyber-sovereignty [57] and decoupling measures[58]. The technological self-reliance is a national ambition projected into the "Made in China 2025" policy, an industrial plan moving up from factory-based manufacturing to high-tech production promoting the 'indigenous innovation […] of core technologies'[59]. Moreover, the project of a "Digital China" is fostered by Party-State authorities to propose a model of modernization that should be different from the Western one and able to dismantle "the myth of Western modernization"[60] (to this regard, see 2.3). Chinese techno-nationalism at work is also epitomized by the alliance of the PRC's government with the hi-tech giant Huawei, which brings to light the Chinese aspiration to lead the 5G global sector[61] (an analysis of China's techno-nationalism will be the object of Chapter 4).

The Sinofuturist discourse produced within China, particularly in the nuances proposed by the authorities, shares some similarities with the Occidentalist tropes. Occidentalism has been described by Chen Xiaomei as "a discursive practice that, by constructing its Western Other, has allowed the Orient to participate actively and with indigenous creativity in the process of self-appropriation, even after being appropriated and constructed by Western Others"[62]. Even though she remarks that Occidentalism can function both as an emancipatory and disciplinary device, regarding the Party-State authorities' discourse on technology it seems directed to boost nationalism[63]. When analyzed as an unfolding assemblage, it emerges that Orientalism and Occidentalism are not opposite discourses, but co-constitutive and evolving narratives. Zhang Chenchen illuminates the underlying dynamics producing their entanglement this way:

> Occidentalism is constitutive of and not a reversal of Orientalism, in that neither should be reduced to an ahistorical inevitable partiality of any representation made by one society of another. Both are embedded in the global power structures that emerged out of the economic, political,

[55] Zhang, 'Post-colonial Nationalism and the Global Right'.
[56] Evan A. Feigenbaum, *China's Techno-Warriors: National Security and Strategic Competition from the Nuclear to the Information Age* (Stanford University Press, 2003).
[57] Greenspan, *China and the Wireless Undertow*, p. 79.
[58] Darren J. Lim and Victor Ferguson, 'Conscious Decoupling: The Technology Security Dilemma', in *China Dreams*, ed. Sharon Strange et al. (ANU Press, 2020).
[59] Greenspan, *China and the Wireless Undertow*, p. 106.
[60] Simone Pieranni, 'Il grande piano della Cina per il dominio sul digitale', Guerre di Rete, 15 March 2023, https://www.guerredirete.it/il-grande-piano-della-cina-per-il-dominio-sul-digitale/.
[61] Greenspan, *China and the Wireless Undertow*, p. 5.
[62] Xiaomei Chen, *Occidentalism: A Theory of Counter-Discourse in Post-Mao China* (Oxford University Press, 1995), p. 5.
[63] *ibid*.

and epistemic dominance of modern Europe and later the United States[64].

A Global-izing China

The Orientalist-Occidentalist discursive dyad has been revitalized and re-signified since the 90s, when geopolitical rivalries between Wests and Easts were spreading as a reaction to the economic growth of non-Western states and to globalization processes. Paradoxically, while East Asian states were becoming increasingly "similar" to the West – not in the pattern foreseen by Sino-Orientalism, but because of their involvement in the web of global capitalism – the discourse concerning the "clash of civilization"'[65] emerged. While commenting this phenomenon, anthropologist Aihwa Ong claims that Samuel P. Huntington's hypothesis, contained in the homonymous book[66], relied on a post-modernist discourse in which the Euro-America was fearing a become-masculine and self-confident Asia, which was in the past depicted and "orientalized" as weak and feminine[67]. Against the culturalist assumptions that Asian states would be incompatible to develop allegedly universal values such as democracy, she reminds that economic liberalism in the form of capitalism actually was a Western "value" that Asian states were assimilating, with a heavy impact on their population as long as social inequalities increased[68].

In this sense, there was a "becoming-sameness" inherent to the globalization process, but it was not linked to an embracing of Western-style democratization but to an enlarged participation to the global capitalist economy[69]. At the same time, East Asian states, which were becoming part and booster of globalization, were in some ways defensive about the idea that the West could impede their development. This is why they insisted that development, namely economic growth under global capitalism, must be considered a human right, undermining the Western-derived universalistic assumption of the discourse on human rights[70]. In doing so, they were producing and alternative modernity, in which the "alternative" put forward was not presented in opposition to capitalist rationalities[71].

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[64] Chenchen Zhang, 'Race, Gender, and Occidentalism in Global Reactionary Discourses', *Review of International Studies*, 24 April 2024, 1–23.
[65] Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order*, Simon&Schuster hardcover ed (Simon & Schuster, 2011).
[66] *ibid*.
[67] Ai-hwa Ong, *Flexible Citizenship: The Cultural Logics of Transnationality*, 5th printing (Duke Univ. Press, 2006), p. 190-191.
[68] *ivi*, Chapter 7.
[69] Mark T. Berger, 'Yellow Mythologies: The East Asian Miracle and Post-Cold War Capitalism', *Positions: Asia Critique* 4, no. 1 (1996): 90–126.
[70] Arif Dirlik, 'Developmentalism: A Critique', *Interventions* 16, no. 1 (2014): 30–48.
[71] Ong, *Flexible Citizenship: The Cultural Logics of Transnationality*, p. 35.

Nowadays, China is under the international scrutiny also because it is more and more "going out"[72], engaging and investing in political, economic, commercial and infrastructural projects outside of its borders, mostly in developing countries[73], but not only[74]. Since 2013, under the project of the "Belt and Road Initiative" (BRI)[75], the PRC has extended its development – and its idea of development – outside the Chinese territory. It can even be considered a sort of geographical expansion of its capital and influence, which underlies a logic of accumulation profiting both national authorities and companies in a public-private partnership (see 4.2). The PRC's attitude in this sense joins together neoliberalism and developmentalism[76]. The developmentalist logic of the PRC[77] shows that the country is now one of the main actors if not the leader of the global developmentalist trend, expanding its political, economic and technological influence outside the country with a neocolonial logic in which technology plays a fundamental role, also in terms of digital infrastructures, a field that China aspires to shape at the international level amplifying its data governance beyond its borders[78].

The presence on the global stage as a now consolidated political and economic power raises the disputed question of the relation of the PRC within the global capitalist system. Leaving aside recurring debates concerning the definition of the conjunction of the economic and political systems in the country[79], which will be addressed more thoroughly in the second chapter, it is fundamental to

[72] The "Going Global" (*zouchuqu* 走出去) strategy was launched in the late 1990s, while China's accession to the World Trade Organization (WTO) took place in 2001. See Hong Zhang, 'Builders from China: From Third-World Solidarity to Globalised State Capitalism', *Made in China Journal*, 1 December 2021, https://madeinchinajournal.com/2021/12/01/builders-from-china-from-third-world-solidarity-to-globalised-state-capitalism/.

[73] Ching Kwan Lee, *The Specter of Global China: Politics, Labor, and Foreign Investment in Africa*, 1st edition (University of Chicago Press, 2018).

[74] The economic aspirations of the BRI are also linked to the EU. See Nicola Casarini, 'The Future of the Belt and Road in Europe: How China's Connectivity Project Is Being Reconfigured across the Old Continent - and What It Means for the Euro-Atlantic Alliance', *IAI*, IAI papers, 2024.

[75] Maria Adele Carrai, 'The Chronopolitics of the Belt and Road Initiative and Its Reinvented Histories', *Made in China Journal*, 8 November 2021, https://madeinchinajournal.com/2021/11/08/the-chronopolitics-of-the-belt-and-road-initiative-and-its-reinvented-histories/.

[76]Ruben Gonzalez-Vicente, 'Make Development Great Again? Accumulation Regimes, Spaces of Sovereign Exception and the Elite Development Paradigm of China's Belt and Road Initiative', *Business and Politics* 21, no. 4 (2019): 487–513; Ruben Gonzalez-Vicente, 'In the Name of the Nation: Authoritarian Practices, Capital Accumulation, and the Radical Simplification of Development in China's Global Vision', *Globalizations*, 19 September 2022, 1–16.

[77] Dirlik, 'Developmentalism'.

[78] It is of particular interest the export of digital infrastructure via "digital diplomacy", see Richard Heeks et al., 'China's Digital Expansion in the Global South: Systematic Literature Review and Future Research Agenda', *The Information Society* 40, no. 2 (2024): 69–95. One of the most interesting projects fostered by the government is the "Digital Silk Road", see Matthew S. Erie and Thomas Streinz, 'The Beijing Effect: China's "Digital Silk Road" as Transnational Data Governance', SSRN Scholarly Paper no. 3810256 (Social Science Research Network, 3 February 2022).

[79] The official utterances are "socialist market economy" and "socialism with Chinese characteristics", however the post-1978 Chinese political economic configuration has originated large debate and a variety of definitions or taxonomies, among which we recount "state capitalism, see Xing Li and Timothy M. Shaw, 'The Political Economy of Chinese State Capitalism', *Journal of China and International Relations* 1, no. 1 (2013), "capitalism with Chinese characteristics", see Yasheng Huang, *Capitalism with Chinese Characteristics: Entrepreneurship and the State* (Cambridge University Press, 2008), and "infrastructural capitalism", see Ngai Pun and Peier Chen, 'Confronting Global Infrastructural Capitalism: The Triple Logic of the "vanguard" and Its Inevitable Spatial and Class Contradictions in China's High-Speed Rail Program', *Cultural Studies* 37, no. 6 (2023): 872–93.

point out that the alliances of power of China with global capitalism are undisputed[80], particularly if we consider the economic relations and practices that allowed it to become an industrial and technological superpower, among which can be recalled the establishment of the Special Economic Zones (SEZs) – those frontiers attracting foreign capitals where China was (re)making its economic and technological future[81] – and the proletarization of its own population[82].

In support of this, Arif Dirlik reminds that at the origin of the PRC's extraordinary economic growth there is the involvement of the country in the sphere of global capitalism, particularly in the form of corporate capital and exploitation of cheap labor[83]. As remarked by Franceschini and Loubère: "the point […] is not to argue for or against the idea that China should be narrowly defined as a capitalist country but rather to show how China is not an alternative to but rather an integral part of a global system that today works according to capitalist dynamics"[84]. Seemingly, Dirlik sustains that the purported alternative model proposed by China regarding development is far from being alternative and that, contrarily to the Sino-Orientalist rhetoric of the "becoming-sameness" of the PRC, namely the idea that the post-Maoist era should launch the democratization of the country, it is Western democracy, instead, that risks evolving into authoritarianism within the globalized capitalist panorama[85].

Contended Futurities, Imposed Dreams

The temporal conjunction of market-oriented reforms with accelerated industrialization and technologization, leading to the consequent initiation of the PRC to global capitalism, has made China a perpetrator of an inherited developmentalist discourse. The PRC has been defined the "prototype nation"[86] of developmentalism, that is: "a nation that can serve as the raw material for a new model (for instance, an alternative to established models of modern progress) or can generate demand for a particular kind of future (for instance, a nation's future freed from past and ongoing colonialism)"[87]. As remarked by Greenspan, the tides and flows of global capitalist modernity reveal that today the PRC is the privileged country where the fifth-generation mobile technology, namely the 5G

[80] Franceschini and Loubère, *Global China as Method*.
[81] Silvia M. Lindtner, *Prototype Nation: China and the Contested Promise of Innovation*, Princeton Studies in Culture and Technology (Princeton: Princeton University Press, 2020), p. 17.
[82] Ruben Gonzalez-Vicente, 'Make Development Great Again? Accumulation Regimes, Spaces of Sovereign Exception and the Elite Development Paradigm of China's Belt and Road Initiative', *Business and Politics* 21, no. 4 (December 2019): 487–513, p. 493.
[83] Arif Dirlik, *Complicities: the People's Republic of China in global capitalism*, Paradigm 53 (Chicago: Prickly Paradigm Press, 2017), p. 14.
[84] Franceschini and Loubère, *Global China as Method*, p. 6.
[85] Dirlik, *Complicities*, p. 45.
[86] Lindtner, *Prototype Nation*.
[87] Franceschini and Loubère, *Global China as Method*, p. 4.

infrastructure, joins the techno-capitalist fifth long cycle[88]. In a trajectory from discursively imposed backwardness, as in the Orientalist tropes, to aspirations of being the model and even the avant-garde, as in the Sinofuturist hypothesis, the PRC has become a sort of "influencer" of the future competing with other only apparently different futurities[89].

Large scholarly and international attention is, thus, dedicated to the promises advanced by the "China Dream" (*zhongguo meng* 中国梦)[90], a political imaginary through which Party-State authorities foster "the great rejuvenation of the Chinese nation" (*zhonghua minzu de weida fuxing* 中华民族的伟大复兴). The "China Dream" aims at projecting the nation from the collective trauma of the "century of humiliation"[91] into a prosperous future that aspires to restore China's glorious ancient past[92]. However, it has been remarked that it constitutes an imposed top-down imaginary, a nationalist dream regarding the future in which "[t]he politics of futurity is rendered one-dimensional, with the incorporation of everyone's memories, dreams, desires, times and lives into the state agenda as the kernel"[93]. This imaginary has been carrying on a "promise of happiness"[94] for Chinese citizens, partly mediated by a technological commitment, which reveals disciplinary, extractive, and exclusionary logics[95]. In this sense, the "China Dream" operates a sort of "temporal colonization" in which "[t]he past [...] is colonized by the future through its relationship to a future that reinvests it with anachronistic meaning"[96]. There is, thus, a "conservative" dimension in this national utopia or dream.

At the same time, the arc of China from a backward country to dictating developmental trends is a matter of national pride, but also of international rivalry, as the global competition, particularly in the field of technological innovation, has resulted into recursively triggered international "trade wars"[97], notably with the USA and the EU, and to a militarization race. In this sense, "[t]he PRC has become the engine of global capitalism, but only at the cost of becoming its captive"[98]. To situate

[88] Greenspan, *China and the Wireless Undertow*, p. 8.
[89] William A. Callahan, 'Dreaming as a Critical Discourse of National Belonging: China Dream, American Dream and World Dream', *Nations and Nationalism* 23, no. 2 (2017): 248–70.
[90] The introduction of the "China dream" into the official discourse of the PRC took place on 29 November 2012, two weeks after Xi Jinping became the general secretary of the CCP.
[91] From the Opium Wars (1839–1860) until 1945. See Zheng Wang, *Never Forget National Humiliation: Historical Memory in Chinese Politics and Foreign Relations*, Contemporary Asia in the World (Columbia University Press, 2012).
[92] Wang, 'The Chinese Dream'.
[93] Hyun Bang Shin et al., 'Whither Progressive Urban Futures? Critical Reflections on the Politics of Temporality in Asia', *City* 24, nos 1–2 (2020): 244–54, p. 246.
[94] Sara Ahmed, *The Promise of Happiness* (Duke University Press, 2010).
[95] Lindtner, *Prototype Nation*, Introduction.
[96] Virginia L. Conn, 'Photographesomenonic Sinofuturism(s)', *SFRA Review* 50 (September 2020): 79–85, p. 82.
[97] Chi Hung Kwan, 'The China–US Trade War: Deep-Rooted Causes, Shifting Focus and Uncertain Prospects', *Asian Economic Policy Review* 15, no. 1 (2020): 55–72; Brandon M. Boylan et al., 'US–China Relations: Nationalism, the Trade War, and COVID-19', *Fudan Journal of the Humanities and Social Sciences* 14, no. 1 (2021): 23–40; Helen Davidson, 'Xi Announces Plan for Chinese Economy to Counter Impact of US Trade War', World News, *The Guardian*, 25 April 2025, https://www.theguardian.com/world/2025/apr/25/xi-announces-plan-chinese-economy-us-trade-war.
[98] Dirlik, *Complicities*, p. 17.

China within this tangle of temporalities, Tenzin Jinba elucidates that the PRC's authorities inherit and bring forth different (hi)stories and narratives regarding past, present and future, in which China plays distinct roles:

> China is situated in her postcolonial conditions in such a way that these conditions largely define China's multi-faceted positioning as colonial agent, (semi-)colonial victim, recipient of colonialist ideology, overthrower of that ideology and its accompanying world-system, and contender for the "top place" within such a world-system[99].

As it has been pointed out, Sinofuturism is primarily a discourse or even a dispute about temporalities that are, cyclically, externally imposed and internally (often top-down) attributed to China. Paradoxically, today this contentious speculation about geopolitically locating the future coincides with China's "temporal synchronization with the Euro-American neoliberal present"[100]. This event is looked at as the "planetary", namely the accomplishment of the modernization and globalization processes initiated with colonization, in which the disruptive power of technology plays a crucial role[101]. Gabriele De Seta has elucidated how, instead, Sinofuturism replicates a "temporal othering" which is, at the same time, a "denial of coevalness"[102]: even though planetary synchronization has been carried out through globalization, China still represents – or is represented as – the other *par excellence*.

An entanglement of overlapping narratives reinforces the idea of China as a place with a peculiar and privileged, even fatalistic and deterministic relation with technologization: a country where technology is ahead of times, where technology *comes from*, in spatial but also temporal terms. It is of course a narrative shift in terms of discourse of power, a new understanding of *cardinality*, highly destabilizing Euro-America and apparently empowering the Global South, this last, however, cumbersomely overshadowed by the PRC. In this scenario, the question of technology plays a crucial role, and it could not be different, as the spatial-temporal references are in themselves technological, as it will be more thoroughly discussed later (1.2). This is why the global contemporary disorientation producing these often-antagonistic narratives must be the object of a philosophical meditation on technology and on its relationship with the revival of nationalisms on a global level (the object of Chapter 4). As already remarked by Ong, "globalization, with its transnational flows and networks, engenders crises or renewal in national identities, either of which can revive racial consciousness"[103]: it is believed that a further insight on the role of technology in such process is impellent.

As we have seen, two apparently opposite phenomena intertwine: (1) on one side, we witness the

[99] Jinba Tenzin, 'Rethinking the Rise of China: A Post-colonial Critique of China and a Chinese Critique of the Post-colonial', *Journal of Historical Sociology* 35, no. 1 (2022): 83–106.
[100] Conn and De Seta, 'Let A Hundred Sinofuturisms Bloom', p. 378.
[101] Hui, 'Philosophy and the Planetary'.
[102] De Seta, 'Sinofuturism as Inverse Orientalism: China's Future and the Denial of Coevalness'.
[103] Ong, *Flexible Citizenship*, p. 59.

accomplishment of the global technological synchronization, which Yuk Hui calls "the planetary", as a worldwide homogenization tendency through technology, of which the entrance of the PRC into global capitalism constitutes a relevant step; (2) on the other, an image of an "othered" China persists, along with the re-emergence on a global scale of nationalisms, whether they be "defensive nationalisms" enacted by the Euro-America or "postcolonial nationalisms" enacted by the Global Easts and South. In fact, the resurgence of nationalist tendencies on the international scene is not limited to China (even though, of course, Chinese nationalism has its own history and evolutive distinctiveness), this is why it is urgent to investigate the role of technology regarding the recent nationalistic tendency spreading worldwide[104] (the object of the last chapter). If the globalization process tends to neutralize differences synchronizing experiences, the reasons for the rise of nationalisms, leading today to militarization races and to the explosion of conflicts disrespectful of International Law, must be carefully investigated. This is why it is urgent to make sense of the impact of technologization on the construction of imaginaries (and even futurities) shaping citizens' expectations and actions, in order to scrutinize the role of technology in shaping the global future(s). To do so, it is preliminarily necessary to unravel the function of technology within the globalization processes and, more broadly, the knot of technics and human.

1.2 COSMOTECHNICS: GLOBALIZATION AS TECHNOLOGIZATION

Modernity [...] invented one world out of the many worlds.
Arif Dirlik [105]

Science, technology, and modernization are not characteristic of Chinese culture. They are like alien entities. If we buy into them, we turn ourselves into monsters, and that is the only way we can get along with Western notions of progress.
Han Song[106]

This section illustrates the philosophical background upon which this dissertation relies. This study has been inspired by the philosophical reflections of Bernard Stiegler and Yuk Hui on technics.

Stiegler's thought enables us to think technics beyond simplicist ethical or functional perspectives. His analysis allows for a deep insight of the mechanisms through which technics and humanity co-make world, shedding light on the urgence of addressing technics as a common political question –

[104] Zhang Chenchen has investigated the links between the rise of post-colonial nationalisms and the "global right". See Zhang, 'Post-colonial Nationalism and the Global Right'.
[105] Arif Dirlik, 'Timespace, Social Space, and the Question of Chinese Culture', *Boundary 2* 35, no. 1 (2008): 1–22, p. 20.
[106] Song Han, 'Chinese Science Fiction: A Response to Modernization', *Science Fiction Studies* 40, no. 1 (2013): 15–21, p. 20.

as the question initiating politics itself. His critical philosophy exhorts for a *passage à l'acte*[107] of thought to rethink our future by rethinking technology, which, at the same time, opens to the possibility of *desiring* the future. Hui's philosophical work allows us to think technics beyond a single (technological) history and after the "becoming homelessness" of thought, to reconstitute locality and "technodiversity" beyond flattening nationalistic perspectives.

Technological Unconsciousness

The questions informing this section are the following: does the PRC maintain a peculiar relation with technology? Is China a technological other? Which is the link between globalization and technology? To answer them, it is necessary to make a definition of what technology is and a clarification of its role with regards to globalization. These issues have been the subject of philosophical meditation for almost one century. In the introduction to *The Question Concerning Technology in China. An Essay in Cosmotechnics*, the philosopher of technology Yuk Hui quotes an interrogation posed by Martin Heidegger in his *Black Notebook* (1946-1948), which states: "If communism in China should come to rule, then one can assume that only in this way does China become 'free' for technology. What is this process?"[108]. Here the German philosopher speculates about the technologization of China and, according to the reading made by Hui, wonders about the consequences of an eventual "incapacity" of the country to *transform* it.

Heidegger's contribution to the interpretation of technics in philosophical thought is notorious: according to him, the essence of technics is production, bringing-forth (*poiesis*) as a form of unveiling (*aletheia*); however, he advances that "modern machine-powered" technology challenges such conception, as it enacts a "revealing which orders" nature, this last reduced to "standing-reserve": the essence of modern technology has, thus, become *Ge-stell* ("enframing") [109]. As remarked by Hui, Heidegger takes for granted that technics (as in the concept derived and re-formulated since the Greek *techne*), like science, is somehow international, arriving at speculating about a "homecoming" of the thought to overcome the disruptive power of modern technology after cybernetics. Regarding this the following questions are worth raising: Which is the relation of technology with thought? Is technics international or "local"? And, consequently, what does a reflection on technology have to do with nationalism? The following paragraphs aim to clarify the role of technology within the modernization processes, trying to offer an alternative perspective through the works of philosophers of technology Bernard Stiegler (1952-2020) and Yuk Hui (1985), whose work has inspired this dissertation.

[107] Bernard Stiegler, *Acting Out*, Meridian, Crossing Aesthetics (Stanford University Press, 2009).
[108] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 6.
[109] Martin Heidegger, 'The Question Concerning Technology', in *Martin Heidgger: Basic Writings*, ed. David Farell Krell (Harper & Row, 1977), 287-317.

The philosophical reflection of Stiegler is aimed at waking up Western thought from its "technological unconsciousness". According to him, technics is the "unthought", even though the history of Western philosophy is intimately intertwined with the speculation on technics. Because questions on the nature of men are "unproductive" – as we are not able to define a nature of *Man*, but we can only muse about the *world of men*[110] – and because contemporary interrogations about our world are urgently posed to us by technology, his meditation starts with a question of definition: "what is technics?". Relying on the research of the anthropologist André Leroi-Gourhan, Stiegler advances the thesis that "technics is the invention *of* man". Humanity constitutes at the same time the subject and the object of a co-constitutive relationship with technics, as the evolution of man is deeply co-dependent on the evolution of technics. Technics and humankind are both simultaneously a *what* and a *who*, an object and a subject, a product and a producer in a "transindividuation process" co-generating both.

In his speculation, technics constitutes an "exteriorized memory" impressed on the objects by men since the flints. The primitive technics of stone cutting was, in fact, at the same time the condition of possibility and the consequence of the evolution of the brain cortex: the "hominization" process took place through an "instrumental maieutics"[111] instructing and modifying the nervous system and enabling its evolution. Relying on this, Stiegler expounds that the individual development is made possible by three kinds of memory: genetic memory, individual/nervous memory, external/technological memory – this last enabling the human break of the tie between species and memory. He calls "epiphylogenesis"[112] the sedimentation process of various kinds of memory enabling *individuation* (inspired, as we are going to see in 1.4, by the philosophical work of Gilbert Simondon). In this sense technics, *qua* technical objects, constitutes *both* the depository of a past which we cannot live but can nevertheless experience *and* the way through which we anticipate future, through which we deal with the un-anticipable, of which death is the last and most preeminent event. Here Stiegler discloses the intimate relation between technics and time to the point where time is identified with technics. In this sense, a progressive analysis of the history of what he calls "hypomnesic" memory, that is, of the technological objects specifically developed to support human memory – from writing itself and, thus, the book, to hypomnesic digital technologies, such as big data – is fundamental to better clarify the entanglement of humankind and technics. Considering technics as external memory, from flints, to languages and writings, through artifacts, books, machines, to computers and smartphones, has a massive epistemological impact not only on

[110] Hannah Arendt, *The Human Condition*, 2nd ed (University of Chicago Press, 1998).
[111] Stiegler, *Technics and Time 1*, pp. 158-160.
[112] *ivi*, pp. 175-177.

biological and evolutionary terms, but also on ontological and metaphysical terms.

Prometheia* and *Epimetheia

To support his analysis Stiegler reinterprets one of the foundational myths of Western philosophy, the myth of Prometheus as recalled in the *Protagoras* by Plato[113]. Notably the myth narrates the origin of men along with the origin of technics in Greek mythology. One of the two protagonists of the story is often forgotten: Epimetheus, the less known brother of the titan Prometheus, plays in fact a significant role. At the beginning of the myth, the gods want to deliver qualities to the living beings and assign this task to Prometheus. Epimetheus prays his brother to let him accomplish the task, Prometheus accepts and Epimetheus – whose name literally means "to think in late" – starts assigning animals their qualities: claws, furs, etc. Once he arrives to humans, he realizes that he has already distributed and exhausted all the available qualities. Prometheus, thus, decides to steal technical knowledge and fire from Olympus to donate them to a humanity without qualities in order to allow humans to be able to survive and to live: the origin of technics. The story concludes with the punishment of Prometheus by the gods.

According to the interpretation of the myth made by Stiegler, at the origin of humankind there is a sort of "*défault qu'il faut*", a necessary lack, guilt or fault, an oblivion, forgetfulness, even carelessness, amended or fixed by technics. As men are "without qualities", to live they must create prosthesis, they must put themselves outside of themselves. *Prometheia* and *Epimetheia* come to constitute two exemplary figures of Western technics (even though the former is more notorious): anticipation and oblivion, calculation and "stupidity", foresight and carelessness. These two figures embody the way in which humanity relates with the future through technics, they enable life as delimited by our relationship with death, by the ultimately failing attempt to postpone death. This dynamic relationship with past and future never takes place at the sole individual level: the *what* of technics holds a function of conjunction between the *we* and the *I*. This way, Stiegler exposes the deep relation between ethnicity and technics. According to him, ethnicity consists in the repetition of the rhythm of a *we* (the ethnics group) enabled at the level of the *what* and constituting a "calendarity", a routine, a convention programming and inspiring the individual, who nonetheless never coincides with the *we*, who differs from that *we*. The idiomatic style of an ethnic group is, thus, both territorial *and* deterritorializing, as style is contemporarily connected to a locality while also encompassing it. Interestingly, he also points out that "[t]he unity of the ethnic group is governed by the relation to time, more precisely, the relation to a collective future sketching in its effects the reality of a common becoming"[114]. In this sense, ethnicity relates more with the idea of future than with that of past, of

[113] Plato, *Protagoras* (Cambridge University Press, 2008).
[114] Stiegler, *Technics and Time 1*, p. 55.

heritage. At the same time, he points out how hypomnesic technics – the technologies we use to support exteriorized memory – constitutes a system of references, of context, which allows an epoch as world of men to exist and to *consist*. According to this interpretation, "Every epoch is characterized by the technical conditions of actual access to the already-there that constitute it as an epoch"[115]. The impellent issue, he tells us, is detecting which are the conditions opening to the constitution of a new epoch enabled by contemporary technology.

A Global *Epokhality*

According to Stiegler, it is not a mere case that the constitutive movement of Western philosophy, with Plato's accounts of Socrates, takes place at the encounter with writing, as the fixation into material objects of language, the exteriorization of the flux of speech (a stage of *grammatization*, see also 2.1). The diffusion of the technique of writing constituted for the Greek ancient society an "epokhality", a "suspension", in which a profound technical rearrangement of memory – from *anamnesis* to *hypomnesis* – took place, and which the philosophers of the *polis* discussed[116]. At the same time, Stiegler identifies writing as the condition enabling the fixation, the inscription of laws as the moment of edification of the *polis*, a conjunction originating the figure of the citizen. In this sense, he wants to point out how deep changes in the technical system are at the origin of social disruptions as well as of social reorganizations.

Moving to our time, he suggests that the concretization of technologies opening to the digital revolution have originated another moment of "epokhality" (following different others, such as the one initiated with the Industrial Revolution at the turn of the 18th century with the consequent reorganization of the economy into capitalism and the upheaval of the work system). After the advent of digital technologies, technics is once again transforming our relationship with the past – a mnemotechnical rearrangement – and with the future – a rearrangement of desire. Stiegler points out that speed is the characterizing feature of contemporary technology[117]: from industrial to digital technologies, technics evolves too fast, imposing rapid changes and even permanent innovation to social systems, which fail to *adopt* the new technologies and simply *adapt* to them.

Western-led globalization in the form of colonization was made possible by the transcendental force of its technology boosting capitalism, in an evolution disrupting peoples and territories. Following the analysis by Stiegler, Western technology has become globalized in a movement that has eroded boundaries. Above the connection between ethnicity and technics was presented in terms

[115] *ivi*, p. 236.
[116] For instance, it is one of the themes discussed in Plato's dialogue *Phaedrus*. See Plato, *Phaedrus* (Cambridge University Press, 2011).
[117] Stiegler, *Technics and Time 1*, p. 84.

of a dynamic relationship of a community's common future. Stiegler also notices that "the advancement of technics over ethnicity" is always disruptive but original as well[118] (the "epokhality" described above). However, the effects of contemporary technology on ethnicity are deleterious and possibly leading to an end of ethnicity as we know it[119], with the consequence that "the individual would no longer be networked, properly speaking, within a heritage"[120]. If we consider the fact that "The ethnic group [...] is less a past than a becoming"[121], we can understand that disputes about the futures are nowadays deeply connected with nationalist claims (looking at nation-states as the inheritors and "protectors" of ethnicity[122]) that, at the same time, make revitalize the past. Thus, with globalization, technology has become an "external system" eroding ethnicity and national boundaries:

> This globalization [*mundialization*] of such dependencies – their universalization and, in this sense, the deterritorialization of technics leads to what Heidegger calls *Gestell*: planetary industrial technics-the systematic and global exploitation of resources, which implies a worldwide economic, political, cultural, social, and military interdependence[123].

As a result, the system of cardinality upon which the West constructed and coercively disseminated its forms of "orientation" has fallen apart because too "efficient". It is a process affecting both space and time: homogenization and synchronization are the effect of this deterritorialization of technology provoking a "loss of context"[124], a collapse of social systems triggered by the global unification under a single technical system.

Against a Universal Technical Thought

The meditation of Yuk Hui on the philosophical history of technical thought in China adds further insight to this analysis, which is limited to reconstituting the role of technics in Western thought. Instead, the Hongkonger philosopher sights to investigate whether the function of technics has always been "international", even before globalization, or whether different systems of thought originated different (histories of) technics – and vice versa (if we accept, along with Stiegler, that the way in which we think is inevitably conditioned by the technical system). For Hui, it is not only a matter of ethnicity and of technical tendencies and facts[125], but a more profound and far-reaching issue.

Hui's case-study is China and the analysis of the Chinese technical philosophical thought, technics as a "philosophical theme" of Chinese thought, from ancient times to modernity. His reflection starts

[118] Stiegler, *Technics and Time 2*, p. 73.
[119] *ivi*, p. 74.
[120] *ivi*, p. 75.
[121] André Leroi-Gourhan quoted in Stiegler, *Technics and Time 1*, p. 55.
[122] See Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.
[123] Stiegler, *Technics and Time 1*, p. 31.
[124] Stiegler, *Technics and Time 2*, p. 117.
[125] For an explanation of technical tendencies and technical facts see Stiegler, *Technics and Time 1*, pp. 46-49.

with the premise that Prometheus does not constitute a universal figure of technics[126] and, in fact, in Chinese mythology there were different myths of the origins in which technics were donated by mythical gods-like ancient sovereigns to men[127]. In the Chinese tradition, thus, technics is not tragically stolen and there is not a "rebellious" story of the origin of technics. This upholds the idea that the Greek *techne* is not a concept that emerged alike in all cultures.

Proceeding from the analysis that Heidegger conducts about technics in ancient Greek philosophy, Hui points out that concepts such as violence and *dike* are not preeminent in Chinese ancient traditional thought, which, instead, has always been privileging harmony. To further explore structural differences between ancient Greek and Chinese thought, Hui highlights that, while the former prioritizes the laws (*nomoi*) and is largely influenced by geometry, Chinese thought has instead always emphasized resonance (*ganying* 感应) as "(1) a homogeneity in all beings, and (2) an organicity of the relation between part and part, and between part and whole"[128]. In this sense, Chinese thought has been defined as "correlative" because it insists on exploring patterns and models of "resonance". Moreover, abstraction *qua* geometry did not constitute a theme of speculation in Chinese ancient philosophy, which privileged calculus and correlation. At the same time, Hui points out that the concept of time developed differently in ancient China, not as a linear progression, but as an "ensemble of *eras*, of seasons and of epochs"[129], as "occasions" (*shi* 时). Therefore, Hui advances the idea that questions of time and of history have not been central in Chinese thought[130], advancing that Chinese thought developed "only historiography, without historical consciousness"[131]. He, thus, suggests that the reconstruction of a Chinese technological thought cannot take place in parallel as the one made by Stiegler for the Western one, in which the question of technics as time was pivotal. Based on these observations, thus, Hui makes this hypothesis: "Scientific and technical thinking emerges under cosmological conditions that are expressed in the relations between humans and their milieus, which are never static. For this reason, I would like to call this conception of technics *cosmotechnics*"[132]. In this sense, and this is his fundamental thesis, he accepts, along with Stiegler,

[126] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 12-13.
[127] *ivi*, pp. 14-15.
[128] *ivi*, p. 28.
[129] Marcel Granet, *Il pensiero cinese*, trans. Giorgio Raimondo Cardona (Adelphi, 2018), p.65.
[130] Hui specifies that the Chinese conception of time was more concrete than abstract, a trait which did not impede the development of calendars nor the mechanical production of clocks (see Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 210-11, note 18). Regarding the difference with a linear conception of time and history, Wang Hui has defined as "the propensity of the times" (*shishi* 时势) the Confucian/Chinese understanding of time, a concept, developed particularly starting from the Song dynasty (960-1279), according to which time "does not proceed in a linear fashion, nor is it empty. It is, rather, an account of the natural unfolding of history and its internal dynamics, something not dependent upon any teleology". Hui Wang, *The Politics of Imagining Asia*, trans. Theodore Huters (Harvard Univ. Press, 2011), p. 79.
[131] Hui, *Post-Europe*, p. 42.
[132] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 18.

that the somatic function of technical objects *qua* prosthesis is universal, while rejecting, however, the idea of a "cosmological universality" of the technical apparatuses[133].

The Chinese Cosmotechnics

According to Hui, the Chinese cosmotechnical thought has been produced by a continuously elaborated relationship between *Dao* (道), the "Way", and *Qi* (器), the instruments. *Dao* is a cardinal concept in Chinese philosophical thought. Commonly translated as "Way", according to the sinologist Marcel Granet *Dao* can be understood as the "regulatory Power" irreducible to a substance or to a primigenial force; it is a "pivot" constituting the "rhythm of Space-Time"[134]. The character *Qi*, commonly translated as "utensil", is composed by four mouths surveyed by a dog and represents the spatialized form of technics[135]. According to Hui's thesis, Chinese holism has combined *Dao* and *Qi* into a peculiar technical thought. Confucianism and Daoism, the two major schools of Chinese philosophy, have been speculating about the *Dao* to explore the cosmological order and its coherence with the moral one. The Confucianist and the Daoist thoughts respectively emerge as cosmological speculations on the *how* and on the *what*:

> In Confucianism, *Dao* is recognized as the coherence between the cosmological and moral orders; this coherence is called *zi ran* (自然), which is often translated as 'nature'. In modern Chinese the term refers to the environment, to the wild animals, plants, rivers, etc. that are already given; but it also means acting and behaving according to the self without pretention, or letting things be as the y are. This self, however, is not a *tabula rasa*, but emerges out of, and is nourished and constrained by, a certain cosmic order, namely Dao. In Daoism, on the other hand, '*Zi ran* is the law of *Dao* (道法自然)' was both the slogan and the principle of a philosophy of nature[136].

As highlighted by Hui, moral's meditations are central in Chinese cosmological thought. Seemingly, François Jullien has pointed out that, while Greek philosophy and the Western philosophical tradition largely focus on the question of "being", Chinese philosophy prioritizes and explores questions about how "to live"[137]. The story of the butcher Pao Ding, as narrated in the *Zhuangzi* (a classical text of the Daoist thought), mentioned by Hui, epitomizes the Daoist cosmotechnical vision. When asked about his technical ability by a prince, Pao Ding asserts that in order to cut the animal's flesh is not sufficient to use a good knife, as the knowledge of the *Dao* of the animal is fundamental to guide the knife to avoid bones and tendons and preserve its blade. After having listened to Pao Ding's words, his interlocutor affirms: "Now I know how to *live*"[138]. According to the Daoist tradition, thus, there is a superiority of the *Dao* compared with the efficiency of the

[133] *ivi*, p. 216.
[134] Granet, *Il pensiero cinese*, pp. 243-244
[135] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 99.
[136] *ivi*, p. 65.
[137] François Jullien, *Essere o vivere: il pensiero occidentale e il pensiero cinese in venti contrasti* (Feltrinelli, 2017).
[138] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 102-103.

technical object, the *Qi*. In the Confucianist tradition, instead, the technical object has an important role in the praxis of *Li* (礼), rites/rituals, which according to Confucius are practices to perfectionate morality. *Li* is not just a mere set of formalities, but a way to practically cultivate the personality of the *junzi* (君子), the Confucian man of virtue, with social implications, under the rule of the *Dao*, radiating across the entire society. This leads to a further clarification of the Chinese cosmotechnics as "a relational thinking of the cosmos and human being, where the relation between the two is mediated by technical beings"[139] established on a moral cosmology. To support his thesis, Hui presents Chinese traditional medicine as an example of this cosmotechnics that looks at the body as reflecting the cosmos and its harmony. The Chinese technique of landscape painting also foresees a moral-technical bond (which even becomes a moral-aesthetical bond) to perfectionate the painting technique. The brush becomes, then, the vehicle of vital energy with which instilling the painting, while morality is essential to lead the brush[140]: "When man allows himself to be dulled by things, he allows himself to be captured by dust. When he allows himself to be dominated by things, his heart-mind becomes tired and polluted. A tired heart-mind creates a sterile painting and ends up destroying itself. Brush and ink become blocked if they are covered in dust"[141].

China and Modernization

Hui's investigation proceeds with a chronological and historical analysis of the elaboration of the *Dao*/*Qi* relationship within Chinese philosophy, in a reconstruction of its technical thought. His aim is also that of giving a further perspective about the so-called "Needham question", which questions why modern technology, such as industrialization, did not emerge in China like in Europe, even though the country had previously seen the emergence of important technical inventions such as the compass and the gunpowder. Hui notices that cultural, social and political disruptions – in terms of the "epokhality" described by Stiegler – were at the origins of further elaborations of the *Dao*/*Qi* tie in Chinese thought. This, for example, happened during the Tang dynasty (618-907) in response to the introduction of Buddhism in China, when the philosophical meditations to address the encounter with this foreign thought led to the incorporation of elements from the Buddhist tradition within the Chinese thought paving the path for the flourishing of Neo-Confucian philosophy.

A major moment of epokhality coincided with the irruption of Western modernity in China. According to Hui, when Western colonial powers subjugated China at the end of the Opium Wars (after 1860), a rupture of the *Dao*/*Qi* relationship took place with the consequent adoption of Western

[139] *ivi*, p. 63.
[140] François Jullien, *Vivre de Paysage, Ou, L'impensé de La Raison*, Bibliothèque Des Idées (Gallimard, 2014); Shitao, *Discorsi sulla pittura del Monaco Zucca Amara*, Ed. integrale, ed. Marcello Ghilardi (Jouvence, 2014).
[141] Shitao, *Discorsi sulla pittura del Monaco Zucca Amara*, p. 135 (my translation).

technology and technological thinking. Hui investigates the causes of this "adaptation" to Western thought. At the end of the 19th century, the Chinese intellectuals were worried about the technological strength of Western powers that humiliated the country with a semi-colonization process. During this time, the Chinese intellectuals started considering a way to conjugate the Chinese tradition with Western technology. This attempt was, for example, at the origin of the "Self-Strengthening movement (*ziqiang yundong* 自强运动)" (c. 1865-1891), which embraced the two slogans "learning from the West to overcome the West" and "Chinese learning for fundamental principles and Western learning for practical application"[142]. Hui advances that the "Self-strengthening movement" sees the beginning of the identification of the *Dao* with the Chinese thought or, more broadly, with theory, and of the *Qi* with Western technology as practical application, introducing a materialist interpretation in which, for example, "*Qi* becomes a mere thing controlled and mastered by *Dao*. *Dao* is mind, and *Qi* is its instrument. In this conception, *Qi* becomes a pure tool"[143].

To this unruly period dates the introduction of the telegraph in China, which epitomizes the gradual process of adoption of Western technology: at the beginning the telegraph was considered an alien instrument, looked at as a mysterious power and destroyed by the population. Eventually it was accepted in the country, urged by military needs, with a movement of mediation from the semi-colonized border zones of the country to the center[144]. However, the adoption of this technology came at the condition that the telegraphic infrastructure would be produced within China. According to Greenspan, in this sense, Chinese techno-nationalism has an origin that must be dated back to this moment[145]. Eventually, the irruption of Western colonization and modernization through technology originated a social and political mobilization that led to the fall of the Qing Dynasty (1911).

Even though some scholars look at the elaboration of modernity in China as a "different modernity"[146], Hui points out how such attempt of overcoming this epokhality through this type of binary (the duality and separation of theory/practice) is wholly "cartesian"[147]. In the end, the process of adoption of Western technology realized the substitution of the Chinese "holism" as an organicist thinking with Western "mechanicism"[148]. After the establishment of the Chinese Republic (1912), the progressive introduction into China of Western thought, facilitated by those intellectuals who had studied abroad and returned to the country, led to the spreading of Western political concepts and scientific theories, such as scientism, social Darwinism and Marxism. This is also the period in which

[142] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 153.
[143] *ivi*, p. 154.
[144] Greenspan, *China and the Wireless Undertow*, p.79.
[145] *Ibid*.
[146] The reconstruction of Chinese modernity "from within" has been conducted by different scholars among which Wang Hui, as discussed more thoroughly in section 1.3 of this chapter.
[147] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 152.
[148] *ivi*, p. 158.

political concepts such as democracy and citizenship begin to be translated and discussed in China, as analyzed more thoroughly in 1.3. The flourishing intellectual and students' debates of this period flowed into the "May Fourth Movement" (1919), which advocated for the spreading of science and democracy against traditional forms of authority.

According to Hui, the last moment in which Chinese intellectuals attempted to think the process of adaptation to Western technology dates to the 1935, with the publication of the "Manifesto for a China-Oriented Cultural Development (*zhongguo tiwei de wenhua jianshe xuanyan* 中国体位的文化建设宣言)". It was an attempt to stir reflection on the necessity to further think the Westernization of China and the binary proposed by the "Self-Strengthening movement". This proposal was, however, rejected with the certainty that the Chinese culture would not have been affected by those deep changes [149]. The underlying belief was that Chinese thought could continue constituting the background, while Western technology could provide the instruments to throw China into modernization.

Later on, and particularly since 1949, when the Communist Party took the power and the People's Republic of China was established, the study of philosophy of technology and of science started to be based on Friedrich Engels' essay *The Dialectics of Nature*, a text that is still an important reference for Science and Technology Studies (STSs) in the country[150]. Chinese traditional thought, instead, started to be relegated to "functional aesthetics"[151], with the role of tradition cyclically relegated to backwardness (such as for example during the Cultural Revolution when symbols of traditional culture were destroyed and erased) or used for instrumental[152] or commercial purposes (this topic will be discussed more thoroughly in Chapter 2).

According to Hui, modernity did not happen in China as conceived and understood in the West, suggesting that in the country modernization took place "without modernity"[153], that is, in an accelerated way. While the postcolonial thought has shed a different light on the account about modernity and China, reconstructing Chinese modernity from within (see 1.3), Hui makes notice that one of the weaknesses of the postcolonial analysis is that it considers technics somehow as international – as if technics as an element of philosophical speculation and of cosmological

[149] *ivi*, p. 163.
[150] *ivi*, p. 160. See also Qian Wang, ed., *Chinese Philosophy of Technology: Classical Readings and Contemporary Work* (Springer, 2020); Changshu Chen, *An Introduction to Philosophy of Technology*, First American edition (Homa & Sekey Books, 2015); Yuanlin Guo, 'The Philosophy of Science and Technology in China: Political and Ideological Influences', *Science & Education* 23, no. 9 (2014): 1835–44.
[151] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 163.
[152] In particular, Confucianism has been revitalized in the post-Maoist period with disciplinary purposes in a period of transition, see Arif Dirlik, 'Confucius in the Borderlands: Global Capitalism and the Reinvention of Confucianism', *Boundary 2* 22, no. 3 (1995): 229–73.
[153] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 291.

construction developed alike in all cultures – without being able to assess the disruptive role that technology has been playing throughout the globalization process. Therefore, he advances that the postcolonial reconstruction is not sufficient to wholly assess the impact of modernization in China. According to Hui, Chinese modernization *via* technology was rapidly diluted in the 20th century, leading to the destruction of the forms of its "moral cosmotechnics" with massive implications for present-day China. Following his interpretation, the Chinese "technological unconsciousness" throwed the country into an unbridled and accelerated modernization process leading to disorientation and to a definite separation of its technological system from its moral cosmology.

A Globalized Cosmotechnics

Thanks to the analysis made by Hui, we can start to look at modernization as a process that has perhaps just started to be accomplished and, consequently, to be questioned about, also providing a consistent criticism against the post-modernist claims. In this perspective, the entrance and growth of the PRC within global capitalism (post 1978) is a pivotal step of this process, as it accomplishes the "planetarization" of technology not only in material terms, but also in "cosmotechnical" ones, realizing the "universalization of a particular epistemology"[154]. Hui shows, in fact, that the presumption that there has always been existing a universal technical thought – the Promethean one – is a "subtle form of colonialism"[155] that reinforces the contemporary cosmotechnics: global capitalism transitioning to a form of "Promethean accelerationism". As advanced by Hui, the concept of "cosmotechnics" is useful to "to reopen the question of technology by undoing certain translations that were driven by the search for equivalence during modernization"[156].

The rise on a global level of forms of nationalisms and, more recently, of conflicts opposing alleged monolithic Wests and Easts and reiterating an account of differences and binaries, which are nowadays more pretended than authentic (for example, the techno-orientalist and techno-nationalist narratives), stirs reflection on the role of technology within the globalization process. According to Hui, there is a misunderstanding of the question of the global and the local while addressing the question of technology nowadays. Looking at the local as an essentialized place of resistance against globalization is misleading, as the local is a product of globalization. In this sense, "solutions" that foresee a reinforcement of demarcations or delimitations of borders (in spatial terms, as exclusion and inclusion processes, as well as in culturalist terms) do not manage to address properly the problematics triggered by technology[157]. At the same time, a simple return to indigenous cosmologies

[154] Hui, 'Cosmotechnics as Cosmopolitics', p. 1.
[155] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 12.
[156] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 2.
[157] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 242.

or traditional metaphysics may not be able to address the issues set off by contemporary technological concretization[158]. To stress these two points, Hui wants to show how past attempts to overcome modernity "going back home" have flowed into forms of conservative thoughts. On one side, in Europe, there has been Heidegger's proposal of a "homecoming" of thought, which possibly led the philosopher to postulate antisemitic and racist positions[159]; on the other, in Japan, the philosophical outcomes of the School of Kyoto, which was active before WWII and was influenced by German philosophy along with reinterpreted elements of Japanese philosophical tradition, proposed a sort of "accelerationist" solution to address modernity that led, in Hui's interpretation, to the exaltation of the "total war" and to fascism in Japan. In this sense, these attempts to overcome modernity can be looked at as "conservative revolutions" or "metaphysical fascisms" advocating for a return to or for a preservation of traditional forms of culture as a sort of resistance against outside "enemies". As warned by Hui, our present is somehow reiterating these kinds of pursuits: the EU and the USA closing the borders to migrants and perpetuating new forms of nationalisms with the establishment of far-right governments, the "conservative revolution" in Russia led by the thought of Aleksandr Dugin, even the PRC's "China Dream" insisting on culturalist features of its path toward the future, while internally Orientalizing minorities, represent more or less directly a conservative response to globalization *qua* technologization. As a matter of fact, Heidegger's interpretation of the question of technology has received success in the West and in the East as well because, according to Hui, it describes a process that is concrete and epitomized in the "turistification" or commercialization of traditional sites or of forms of life[160]. At the heart of this process lies a contradiction: contemporary technology enables to more and more efficiently preserve the past through (digital) archives, (online) museums, and many other forms of conservation, even though often combined with commercial or consumerist purposes; the paradox is, however, that the more we preserve the more we seem to "miss" in terms of heritage, because of the technologization process *qua* synchronization and homogenization[161].

The power of the analyses made by Stiegler and Hui is twofold: on one side, they provide a (post-)phenomenological perspective of the co-constitutive relation of humanity and technics that can shade new light on the impact of technological globalization. Hui, in particular, offers an additional

[158] The term is derived by Simondon and resumed by Stiegler. See Gilbert Simondon, *On the Mode of Existence of Technical Objects*, First edition, trans. Cécile Malaspina and John Rogove, with Univocal Publishing (Univocal Publishing, 2017).
[159] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 232-234.
[160] This process is also highlighted by Stiegler: "[…] cultural particularities have been lost, becoming either objects for heritage museums or for the curiosity of tourists (that is, objects integrated into the methods of marketing), or symbols of struggles for so-called 'identity'". Bernard Stiegler, *What Makes Life Worth Living: On Pharmacology*, English edition (Polity, 2013), p. 30-31.
[161] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 234-235.

insight on the disruptive consequences of the modernization process in the PRC (and, more generally, in non-Western contexts), stirring further reflection on simplicist narratives about imposed Chinese futures. On the other, they manage to expound the links between the development of contemporary forms of nationalism following globalization, unveiling the primary role of technology in the process of disorientation spreading worldwide and affecting humanity beyond geopolitical binary oppositions. Hui notices that "[t]he universalization of European philosophy is thus *pharmacological* in the sense that, although it may lead to broader conversations, its dominance can also close down any path to a more profound dialogue"[162]. In other words, with globalization we have a "common language" to assess and confront the challenges posed by technology that must, however, be open to explore new possibilities, new ways for its adoption, starting from acknowledging that in the past there was a plurality of cosmotechnical thoughts. Therefore, an analysis of the current processes of globalization and technologization must take place through a repositioning of the PRC in the temporality of a present that is unsettling on a global scale. Nevertheless, as we have seen, a dispute on temporalities and on the theme of technology is taking place internationally. It is a dispute about the future, even about the possibility of the future, which is raised in misleading geopolitical terms. In such dispute, technological unconsciousness plays a disruptive role. To further analyze the implications of this contention, I will consider the intricate relation between the *we* and the *I* through technics. The proposal is that of researching this entanglement discussing some aspects of "citizenship individuation" in the PRC.

1.3 MULTILEVEL PERSPECTIVES TO STUDY CHINESE CITIZENSHIP

Historically speaking, the idea of Asia is not Asian but, rather, European.
Wang Hui[163]

This section provides a multilevel and multidisciplinary state of the art to clarify the prospects from which this research at once arises and distances itself. In order to analyze the contemporary crystallization of citizenship led by technology in China, it is necessary to prior construct a state of the art based on four dimensions, summarized as follows: (1) the research needs to be situated in a continuum of overlapping narratives concerning modernity/modernization, which must comprehend the indigenous history of Chinese citizenship, as well as its re-elaboration at the encounter with Western thought. (2) This requires a rethinking of the study of the category of citizenship, traditionally analyzed based on its Western trajectory. (3) The analysis carried on in this dissertation stems from

[162] *ivi*, p. 195.
[163] Wang, *The Politics of Imagining Asia*, p. 22.

(and distances itself from) the rich multidisciplinary literature on the post-1978 Chinese citizenship, of which it is, thus, believed necessary to provide an overview. (4) At the same time, this study, at once, arises and separates itself from the growing body of global citizenship studies directed at assessing the impact of technology on the contemporary configuration of citizenship; for this reason, this research field is also briefly summarized.

Denying Modernity, Translating Modernity, Catching up with Modernity

A reflection on citizenship in China must problematize two overlapping dynamics productive of entangled discourses: (1) the Western construction of China as an essentialized other, imposing culturalist and orientalist narratives, and (2) the process of "translating modernity" taking place in China since the second half of the 19th century, in which the re-elaboration of Western modernity from within China also included forms of self-Orientalism as a "self-doubting or self-negation of Chinese modernity"[164].

As already reminded, Western epistemics have notably depicted monolithic representations of non-Western contexts under the umbrella term of "Orient". In this sense, non-Western countries have constituted terms of comparison, of "orientation", to look at the West, becoming a universal, and to all "the Rest" understood as a set of variations on the dominant theme. This view, inaugurating Western modernity, consolidated during the Enlightenment, when China started to constitute an antithesis *par excellence* (for instance, Montesquieu considered the Chinese people as "servile subjects"[165]). During the same period, modernization started to be established as the dominant narrative and epistemological framework through which analyzing alleged universal processes and political concepts. According to Wang Hui, a scholar of Chinese intellectual history, three central themes emerged in the Western discourse of modernity: empire, nation-state, and capitalism[166]. The fact that China was understood in the Euro-America as an empire without history (as history, and the idea of the progress of history, was deemed a prerogative of the nation-state[167]) and still relegated to an agrarian economy raised culturalist questions about the peculiarities of the Chinese context[168]: China was seen as not having the conditions to produce modernity.

While trying to support the thesis regarding the causes for the development of capitalism in Europe and North America and not elsewhere, Max Weber notably used Imperial China as an alterity *par excellence*[169]. He sustained that Confucianism would have hindered the development of a Chinese

[164] *ivi*, p. 101.
[165] See Hilde De Weerdt, 'Citizenship and Subjecthood in the Historiography of Imperial China', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021).
[166] Wang, *The Politics of Imagining Asia*, p. 24.
[167] *ivi*, p. 83.
[168] *ivi*, p. 24.
[169] Max Weber, *The Religion of China*, First Free Press Paperback Edition, trans. Hans H. Gerth (Free Press, 1968).

capitalist spirit and, consequently, that the Chinese cities could not be able to produce the figure of the modern citizen as it appeared in Europe. However, Wang Hui points out that Weber's view was deeply influenced by his own understanding of modernity, by his "mind-set of modernity", along with a lack of direct knowledge of Chinese history and thought[170]. The main feature of this perspective of modernity is the conception of a historical linear time:

> Modernity became a way station in the progression toward the future and the new age used its relationship with the future to differentiate itself from the past. A historical image of a uniform historical progress was formulated out of this and as part of this historical image the present became a process of perpetual renewal[171].

Against this perspective influenced by the orientalist tradition, Wang undertakes an analysis of China's modern times from the perspective of Chinese history and thought to return it an account of modernity from within[172]. Wang points out that for Weber talking about China was just a way to talk about the West itself, asserting that "narratives of "particularism" are universal particularism, while all the narratives of "universalism" are particular universalism"[173]. Interestingly, the post-colonialist reconstruction also maintains that elaborations of modernity in China took place along with other Eastern countries such as Japan, resulting not only as a West-imposed discourse, but also as an East-East dialogue[174].

Postcolonial reconstruction is extremely valuable as it expounds the assemblages of narratives that have constituted global systems of power and of subjection. However, its weakness is that it underestimates the pivotal role of technology before and after modernization, in particular by presuming an international dimension of the concept of technics before globalization[175]. Instead, as remarked by Hui, different systems of thought/cultures originated (and were originated by) distinctive cosmotechnics, in the sense that the metaphysical horizon stemmed from the material concretization. According to this view, the concretization of the capitalist technical system in Western societies must be looked at as a stage of the concretization of its peculiar (cosmo)technical thought, whose "efficiency", in terms of synchronization and homogenization, originated the processes of globalization.

The irruption of Western semi-colonization in China, as already seen, coincides with the progressive adoption of Western technological thought and practice, to the detriment of the Chinese cosmotechnics. In the same period, namely late Qing China, political concepts such as citizenship are

[170] Wang, *The Politics of Imagining Asia*, Chapter 6.
[171] *ivi*, p. 277.
[172] Hui Wang, *The Rise of Modern Chinese Thought*, ed. Michael Hill (Harvard University Press, 2023).
[173] Wang, *The Politics of Imagining Asia*, p. 88.
[174] Greenspan, *China and the Wireless Undertow*, p. 41.
[175] This point is advanced by Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 56-57.

re-elaborated in the country at the encounter with Western modernization[176]. As anticipated above, in the second half of the 19th century, Chinese intellectuals confronted and reinterpreted Western philosophical thought and political concepts, urged by a desire of political change and reform. The discussions that followed originated the already mentioned "Self-Strengthening Movement" (also known as the Westernization movement) (c. 1865-1891) and the "*Wuxu* Reform" (also known as the Hundred Days' Reform) (1898), respectively focusing on the modernization of science and technology and of the political and cultural system. This is a moment of restless intellectual discussion leading to some institutional reforms' attempts in late-Imperial China.

During this period, personalities such as Liang Qichao (1873-1929), a paramount reformist thinker of those years, undertook a peculiar elaboration of Western modernity's key concepts, such as the state, democracy and citizenship. In this sense, the work of the Chinese intellectuals of the time contributed to originate a "translated modernity", of which they were the privileged interpreters[177] through processes of "creative translation"[178]. For example, Liang Qichao[179] rendered the word "citizenship" as *guomin* (国民), combining the two characters of *guo* (state) and *min* (ordinary individuals), placing emphasis on the role of state in discussing this term. As it has been remarked, "through hero translation, Liang created the modern Chinese citizen concept"[180]. Interestingly, Greenspan also noticed that Liang Qichao advanced the necessity that the creation of a Chinese nation-state required the spreading of a linear and progressive understanding of time and history[181]. She remarks that his travel diaries, dating back to the end of the 19th century, constitute "the first popular Chinese texts to be marked with Gregorian dates, effecting a paradigmatic change in time-consciousness"[182].

As already anticipated while exposing Hui's thesis, the irruption of Western modernity in China was going to radically unsettle the Chinese cosmotechnical thought. Between 1890 and 1920, the word citizen was translated in three different ways: the above-mentioned *guomin*, *gongmin* (公民), public + ordinary individuals, and *shimin* (市民), city + ordinary people, denoting "a protean period

[176] This does not mean that a political reflection on citizenship within the Chinese thought did not take place previously to this moment, as showed, for instance, by: Hilde De Weerdt, 'Considering Citizenship in Imperial Chinese History', *Citizenship Studies* 23, no. 3 (2019): 256–76; Guo, *The Routledge Handbook of Chinese Citizenship*, Chapter 22; Isin, *Citizenship after Orientalism*, Chapter 13.
[177] Tani E. Barlow, 'Zhishifenzi [Chinese Intellectuals] and Power', *Dialectical Anthropology* 16 (1991), pp. 209–232.
[178] Zhonghua Guo, 'Towards De-Westernism in Citizenship Studies: Implications from China', *Citizenship Studies* 26, nos 4–5 (2022): 480–90, p. 486
[179] Zhang, 'Situated Interpretations of Nationalism, Imperialism, and Cosmopolitanism', p. l.
[180] Guo, 'Towards De-Westernism in Citizenship Studies', p. 486.
[181] Greenspan, *China and the Wireless Undertow*, p. 92.
[182] *ibid*.

of transformation in the use of language in China, especially political and social language"[183]. Since 1912, with the foundation of the Republic of China, and later, with the establishment of the People's Republic of China in 1949, the concept of citizen was cyclically re-elaborated and enriched with various interpretations brought about by Party-State institutions and by the people, with an ideological shift since the post-1978, as discussed more thoroughly later.

The problematization of the introduction and re-elaboration of the modernization discourse in China is a fundamental starting point for the analysis of Chinese citizenship for different reasons: (1) the encounter with modernization originated the trauma of colonization, arising a sense of humiliation and self-perception of backwardness with regards to the West; (2) the urgency to catch up with Western progress (and the Western idea of progress) flowed into the translation, re-elaboration and adaptation of Western political and philosophical concepts to China, which were also at the origins of movement and demands for reforms at the turn of the 20th century; (3) the adoption of modernity, in terms of processes of rationalization and disenchantment, as well as of Western science and technology resulted in an "oblivion" of the traditional thought, separating the technologization process from the Chinese cosmotechnics at the cost of this last, as advanced above while expounding the thesis of Yuk Hui.

For all these reasons, studies on Chinese citizenship must undertake a departure from "classical" approaches to the theme. In this sense, the standard definition of citizenship as a status defining the belonging to a national community and entitling civil, political, and social rights[184], is a limiting interpretation of the concept for at least three reasons: (1) the characterization of citizenship in these terms entirely derives from the Western experience of the concept leaving out many experiences and histories of citizenship which divert from the ones situated in modern Western Europe; (2) the understanding of citizenship as a legal status neglects all those practices and acts of participation to the political community that prescind that same status; (3) the attention to the national level neglects a deeper comprehension of local and situated dimensions of citizenship, also when considering the peculiar history of the Chinese state and, more generally, the transformations that nation-states are undergoing globally.

[183] Peter Harris, 'Citizens and Citizenship in China: How These Ideas Emerged', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021).

[184] Notably, English sociologist T. H. Marshall's elaboration of the concept of citizenship constitutes a milestone of citizenship studies. See T. H. Marshall, *Cittadinanza e classe sociale* (Laterza, 2002). His fundamental thesis regards the evolutive character of citizenship, supporting the idea that the status of citizen would gradually mitigate the differences among social classes, so that, according to his metaphor, society as a skyscraper of different floors could have become in the future more like a one floor building. Marshall looks at citizenship as a legal status, comprehensive of rights and duties, linked to a national community. To sustain his thesis, he epitomizes the modern history of English citizenship. His text outlines some concepts that since then have been associated to citizenship: nation, status, and, most importantly, the idea of an evolution of rights, of an alleged progressive, linear path linked to citizenship.

Orienting Citizenship Studies in the Chinese Context

Regarding the Chinese case, Guo Zhonghu has advanced the necessity of an intertwined approach to operate a "de-Westernism in citizenship studies"[185] conciliating the two approaches of "citizenship after Orientalism"[186] and "acts of citizenship"[187]. The former aspires to return the complexity of histories of citizenship in non-Western countries, with "the task of decolonizing citizenship in political theory"[188]. To this aim, the contribution of postcolonial theory is fundamental as it unfolds the power dynamics of universalistic narratives intrinsic to modernization, colonialism and imperialism. The dominant assumption in the field of political theory was that citizenship is a concept and set of practices developed in the West, while non-Western peoples were relegated to the status of "subjects": "European colonial and imperial projects proceeded with assumptions that understood colonial subjects as not only without history but also without political subjectivity"[189]. The second proposal suggests looking at citizenship not only as a legal status (formal citizenship) or a set of practices (substantive citizenship) but also as a plurality of individual and/or collective performative "acts". These acts can be accomplished also by those who are not legally entitled to the status and, what is more, this approach restores citizens' agency also in non-democratic contexts. This perspective could help to approach citizenship to everyday bottom-up politics, claims and practices:

> Theorizing acts means investigating everyday deeds that are ordinarily called politics. But acts of citizenship are also ethical (as in courageous), cultural (as in religious), sexual (as in pleasurable) and social (as in affiliative) in that they instantiate ways of being that are political. These ways of being constitute the existential conditions of possibility of acts[190].

With this twofold perspective in mind and beyond the Marshallian description of an "evolutionary" path of citizenship, Guo defines the Chinese case as a "dispersal model" that "never took a specific element as its coherent structure"[191]. According to his analysis, citizenship in China emphasized different elements in a trajectory that did not follow the purported linearity of the Western one, distinguishing different phases and axes of citizenship's evolution in China, which also derived from the elaboration of the concept amidst Chinese intellectuals and, since 1949, by the Party-State authorities' agenda (and its contestation). To this regard, the focus on acts of citizenship, namely on "how actors […] turn themselves into rights claimants in specific sites"[192], helps dismantling the idea that non-Western citizens lack agency, a preconception frequently adopted when analyzing citizenship in non-democratic contexts.

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[185] Guo, 'Towards De-Westernism in Citizenship Studies', pp. 480–90.
[186] Isin, *Citizenship after Orientalism*.
[187] Isin and Nielsen, *Acts of Citizenship*.
[188] Isin, *Citizenship after Orientalism*, p. 4
[189] *ibid*.
[190] *ivi*, p. 3.
[191] Guo, 'Towards De-Westernism in Citizenship Studies', p. 485.
[192] *ivi*, p. 486.

The publication in 2021 of *The Routledge Handbook of Chinese Citizenship*[193] further epitomizes a consolidated interest on the study of citizenship in China conciliating this twofold perspective. In the introduction to this work, the author denounces an orientalist epistemology toward non-Western citizenships. More importantly, this work fosters the need to go toward a global perspective concerning citizenship[194].

Citizenship in post-Mao China

For the scope of this research, the following paragraphs will provide a state of the art of the multidisciplinary research on contemporary Chinese citizenship. It will focus on the attributes and peculiarities of citizenship in China after 1978, namely the aftermath of the so-called "reform and opening-up" period[195], a political phase which will be more thoroughly addressed in Chapter 2.

1978 marks a turning point in the history of the PRC: Party-State authorities launch a gradual opening to market economy starting the interaction of China with global capitalism. This moment, thus, constitutes a watershed in the history of the PRC: even though it cannot be considered in isolation as a clear-cut rupture with the past, the massive economic and social changes succeeded since than have profoundly shaped the post-socialist Chinese citizen. During this period, "[d]evelopment has commonly served as the political epistemological platform for postcolonial nations' framing of capitalism"[196]. The power of the development narrative relied on consolidating in a period of transition and of deep changes in society[197]. In such context, "developmental citizenship"[198] represents a paradigm of governance in post-socialist societies, like the Chinese one, in which former socialist citizens are asked to develop individual "qualities" and skills to catch opportunities, as well as risks, under the promise of rapid economic growth and personal gain. As it has been underlined, "developmental citizenship" is also a kind of political citizenship, even though

[193] Guo, *The Routledge Handbook of Chinese Citizenship*.
[194] Zhonghua Guo, 'Introduction: Navigating Chinese Citizenship', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021).
[195] The post-Maoist period is not considered as isolated from the Maoist years, which instead largely contributed to shape the concept of citizenship in the PRC afterwards. 1949 sees the foundation of the People's Republic of China (PRC) establishing the authority of the Communist Party of China (CPC), in which, formally, each member had, and still has, equal status. During the Maoist period, on one side there was a weakening of the concept of citizen to the advantage of *qunzhong* (mass) and *renmin* (people), at the expenses of *gongmin* (citizen) – a further translation of citizenship combining *gong* (public) and *min* (ordinary people) diffused during Maoism – with an emphasis on class struggle and collectivism. However, these years also contributed in a way to the expansion of the concept of citizenship with notions such as "revolutionary citizenship". Moreover, to analyze the modes of citizenship in the Maoist era, scholars have proposed the concept of "differentiated citizenship". It refers to the household registration system, more known as *hukou* (户口), which established that the enjoyment of social rights was linked to the documented residence, with severe limitations to the possibility of changing it. In concrete, this system established a differentiation of rights enjoyed by people living in the cities and those in the countryside. See, for instance, Guo, *The Routledge Handbook of Chinese Citizenship*, pp. 63–76.
[196] Chang Kyung-Sup, 'Why Developmental Citizenship, Why China? An Analytic Introduction', *Citizenship Studies* 24, no. 7 (2020): 847–55, p. 848.
[197] Ong, *Flexible Citizenship*.
[198] Kyung-Sup, 'Why Developmental Citizenship, Why China?', pp. 847–55

applied within authoritarian governance, because it leverages on a nationalist sentiment to boost economic growth with promises of prosperity[199]. However, "developmental citizenship" also represents an abrupt and rapid transformation into a citizen-consumer style of subjectification, resulting in the formation of a sort of "consuming-class"[200]. Developmental citizenship, in this sense, contributes to create "aspirational futures", namely it shapes expectations of good life which are continuously postponed (this issue is thoroughly discussed in Chapter 2)[201].

Another perspective through which citizenship has been analyzed in this peculiar transitional phase of the PRC is provided by the anthropologist Aihwa Ong. In the 90s, when the economic growth of the so-called "Asian tigers" was under international scrutiny (as they represented a peculiar bond of authoritarianism and capitalist development with high rates of economic growth[202]), she studied the peculiarities of "flexible citizenships" and of the late capitalist ties among Asian states, their citizens and the Chinese diaspora[203]. Her research intervenes in the discourse about globalization and about the increased flexibility of global capitalism and its subjects. Ong claims that, despite globalization and the transcendental force of capitalism, the nation-state was not becoming weaker or less powerful, and that new narratives of pastoral powers were being developed to produce subjects who could attract foreign capitals. In this context a redefinition of the relation between these states and their citizens took place: "Élite narratives construct a balance between rights/freedoms and obligations/duties whereby the state ensures the conditions for economic accumulation in return for tolerable constraints and the selective repression of citizens' rights"[204]. In other words, according to this rationality the middle class was eager to renounce individual rights under the promise of economic growth. This re-elaboration of capitalism has produced "flexible" understandings of citizenship with an instrumental use of cultural essentialism for disciplinary purposes.

Understood in this way, the developmental model in post-Maoist China hardly appears unique: Ong advances that Chinese decision makers largely took inspiration from the developmental model of "Asian tigers". Relying on this analysis, she claims that liberalism as a set of rationalities can differently develop in or adapt to unalike contexts: while in some Western countries the welfare state was established to deal with class conflict, in other non-Western and post-developmentalist contexts different relations between states and (newly middle-class) citizens emerged, such as "pastoral care […] to produce citizens attractive to capital"[205]. She sustains that the illiberal trends in East Asia

[199] *ivi*, pp. 847–55.
[200] Dirlik, *Complicities*, p. 14.
[201] Samuel Berlin, 'Cultures of Labour: Aspiration, Developmental Futures and the Materiality of Memory after Chinese Economic Reform', *Social & Cultural Geography*, 26 April 2024, 1–21.
[202] Dirlik, *Complicities*, p. 30.
[203] Ong, *Flexible Citizenship*.
[204] *ivi*, p.70.
[205] *ivi*, p. 201.

emerged because of the development of the liberal economy, rejecting thus the culturalist explanation. Vanessa Fong resumes this way the trends of citizenship's configuration in post-reform China:

> Chinese leaders tried to combine the pastoralism associated with Confucian and socialist models of governance and the neoliberalism associated with First World models of governance by maintaining social stability through limits on civil and political rights, freeing up the marketplace, attracting foreign business, and promoting certain state-valorized personal qualities as keys to individual upward mobility and the attainment of dominant ideals of social and cultural citizenship[206].

In the aftermath of 1978, two "technologies of subjectification"[207] have been framing the Chinese social context, as they were (re)invented parallelly and functionally to the transformation of citizenship in China: *suzhi* (素质) and *hukou* (户口). The concept of *suzhi* will be analyzed more thoroughly in the second chapter (2.3), here it is anticipated that it constitutes a distinctive top-down instrument of China's "transformational citizenship" [208] . *Hukou* refers to the Household Registration/Responsibility System. It was established during the Maoist period, in the second half of the 50s. Since then, *hukou* has been foreseeing that the enjoyment of social rights is linked to the documented residence, with severe limitations to the possibility of changing the residential status. In concrete, this system establishes a differentiation of the social rights enjoyed by people living in the cities and those established in the countryside, largely favoring the former. *Hukou* has been looked at as one of the main causes for the Chinese "locally-differentiated citizenship regime"[209] or "multi-level citizenship"[210], with large diversity between cities and countryside in terms of rights and access to services. After 1978, researchers, particularly in the field of migration studies, have demonstrated how the system of *hukou* boosted economic development in China, fostering internal migration toward industrializing areas and providing low-cost workforce without the need to provide social rights[211]. More recently, the research on *hukou* has stressed the rise of an opposite trend, namely the relaxation of *hukou* restrictions to boost urbanization[212], along with the emergence of subtle practices

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[206] Vanessa L. Fong, ed., *Chinese Citizenship: Views from the Margins*, 1. publ, Routledge Studies on the Chinese Economy 18 (Routledge, 2006).
[207] Chenchen Zhang, 'Hukou and Suzhi as Technologies of Governing Citizenship and Migration in China', in *Handbook on Governmentality*, ed. William Walters and Martina Tazzioli (Edward Elgar Publishing, 2023), pp. 335–51.
[208] Delia Lin, *Civilising Citizens in Post-Mao China: Understanding the Rhetoric of Suzhi*, First issued in paperback, Routledge Contemporary China Series 169 (Routledge, 2018), Chapter 2.
[209] Sophia Woodman, 'All Citizenship Is Local: Using China to Rethink Local Citizenship', in *Citizenship and Place: Case Studies on the Borders of Citizenship*, ed. Cherstin M. Lyon and Allison Goebel, Frontiers of the Political, London New York (Rowman & Littlefield International, 2018); Sophia Woodman, 'The Dynamics of Localized Citizenship at the Grassroots in China', *Citizenship Studies* 26, 4–5 (2022): 712–17.
[210] Samantha A. Vortherms, 'Hukou as a Case of Multi-Level Citizenship', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021). To this regard, *hukou* has been compared to the governance of migration in the Global North, see, for instance, Zhang, 'Hukou and Suzhi as Technologies of Governing Citizenship and Migration in China'.
[211] Dorothy J. Solinger, *Contesting Citizenship in Urban China: Peasant Migrants, the State, and the Logic of the Market*, Studies of the East Asian Institute, Columbia University (University of California Press, 1999).
[212] Xiang Wang, 'Permits, Points, and Permanent Household Registration: Recalibrating *Hukou* Policy under "Top-Level Design"', *Journal of Current Chinese Affairs* 49, no. 3 (2020): 269–90.

of dispossession of the rural land to transfer it from the peasant population, attracted by the easing in the access to the urban *hukou*, to the hands of big owners[213].

The scholarship on Chinese citizenship has also focused on the peculiar practices of citizens' education. This issue was deemed important in China since the end of 19th century, when intellectuals were translating and re-elaborating concepts and values linked to citizenship: "Education was to play a critical role in training the future citizens in public-mindedness, devotion to comrades, and respect for tradition and institutions"[214]. Since then, Chinese authorities have dedicated particular attention to mold "model" citizens. Part of the research after 1978 has been dedicated to education in the context of China's internal migration[215]. Since Xi Jinping came to power in 2012, socialist citizenship education underwent a revival within the Party-State agenda, with a focus on school's curricula to foster patriotism [216]. Chen Sicong sustains that boosting cultural self-confidence is a governing technique under Xi[217] coherent with the developmentalist logic. Official discourses, such as the "China Dream", aim to raise national and individual self-confidence to bring together individual and national aspirations in the framework of patriotic education. Understood in this way, cultural confidence establishes a particular relation and certainty about future[218].

Studies on citizenship in the post-1978 context have also focused on the configuration of Chinese civil society and on its forms of active[219] and bottom-up[220] citizenship. Scholarship has researched, for example, the non-confrontational forms of claiming enacted by Chinese citizens, who decline them into multiple practices:

> Since the Reform and Opening-Up, many new kinds of citizenship acts have appeared, embodied in a series of repertoires, such as 'making petitions collectively' (*jiti shangfang*), 'taking walks collectively' (*jiti sanbu*), 'kneeling before government buildings collectively' (*jiti xiagui*), 'enjoying the cool near government buildings collectively' (*jiti chenliang*), and 'sitting in the public square collectively' (*jiti jingzuo*), each having the connotation of 'rightful resistance', a concept coined by O'Brien and Li (2006)[221].

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[213] Joel Andreas and Shaohua Zhan, '*Hukou* and Land: Market Reform and Rural Displacement in China', *The Journal of Peasant Studies* 43, no. 4 (2016): 798–827.
[214] Fogel, *Imagining the People*, introduction.
[215] Eli Friedman, *The Urbanization of People: The Politics of Development, Labor Markets, and Schooling in the Chinese City* (Columbia University Press, 2022).
[216] Carolyn L. Hsu et al., 'The Construction and Performance of Citizenship in Contemporary China', *Journal of Contemporary China* 31, no. 138 (2022): 827–43.
[217] Sicong Chen, 'From Confident Subject to Humble Citizen: Reimagining Citizenship Education in Contemporary China', *Discourse: Studies in the Cultural Politics of Education* 45, no. 1 (2023): 1–16.
[218] *ivi*, pp. 8-9.
[219] Małgorzata Jakimów, 'Activist Citizenship in Non-Western and Non-Democratic Contexts: How to Define "Acts of Citizenship"', *Citizenship Studies* 26, 4–5 (2022): 505–11; Sophia Woodman and Zhonghua Guo, *Practicing Citizenship in Contemporary China*, 1° edizione (Routledge, 2018); Canglong Wang, 'Right, Righteousness, and Act: Why Should Confucian Activists Be Regarded as Citizens in the Revival of Confucian Education in Contemporary China?', *Citizenship Studies* 26, no. 2 (2022): 146–66.
[220] Ying Xia and Bing Guan, 'Practicing Democratic Citizenship in an Authoritarian State: Grassroots Self-Governance in Urban China', *Citizenship Studies* 21, no. 7 (2017): 809–23.
[221] Guo, 'Towards De-Westernism in Citizenship Studies', p. 487.

Finally, another line of research has highlighted the local participative dimension of citizenship in today's China[222], particularly in terms of the involvement of urban citizens into the management of neighborhood communities and with regards to the aspect of homeownership rights[223].

The rich scholarship on post-Maoist citizenship in the PRC demonstrates an increasing interest toward the peculiarities of citizenship in this context. Such scholarship has been further enriched in recent years with analyses concerning the impact of technologization in the country and the constitution of a peculiar digital ecosystem influencing Chinese citizens' lives.

Citizenship and Technology

In recent years, a growing body of citizenship studies' literature regarding the Chinese context has begun to research the impact of the introduction of Internet in the country and the merging of digital technologies into its governance infrastructure. This flourishing of studies has also been directed at assessing the risks and perils of the emerging regimes of "dataveillance" [224] and of "state surveillance"[225] infrastructures in the PRC.

Zooming out for a moment from the Chinese case, it must be remarked that an increasing part of citizenship studies has been directed at assessing the impact of technological innovation on citizenship configuration worldwide. For instance, the advent and global diffusion of Internet have raised attention on how the digital ecosystem and online practices are shaping citizens' participation and lives[226]. The interest for an evaluation of the role of technology in citizenship evolution has been further stirred by the advent of different forms of digital governance, accelerated during the COVID-19 pandemics (2020-2023[227]), raising questions and concerns regarding technocratic surveillance approaches to citizenship worldwide[228].

An expanding line of research has been analyzing the influence of digital technologies on citizenship, particularly to assess the impact of algorithmic-driven or data-driven forms of

[222] Woodman, 'The Dynamics of Localized Citizenship at the Grassroots in China', pp. 712–17.
[223] Chong Zhang, 'Citizen Participation in Chinese Urban Governance', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021).
[224] For a clarification of the term "dataveillance" see Jose Van Dijck, 'Datafication, Dataism and Dataveillance: Big Data between Scientific Paradigm and Ideology', *Surveillance & Society* 12, no. 2 (2014): 197–208. For an analysis of the Chinese "dataist" state see Chapter 3.
[225] Josh Chin and Liza Lin, *Surveillance State: Inside China's Quest to Launch a New Era of Social Control* (St. Martin's Press, 2022).
[226] Karen Mossberger et al., *Digital Citizenship: The Internet, Society, and Participation* (The MIT Press, 2007); Guangyu Shi et al., 'A Systematic Review of Digital Citizenship Empirical Studies for Practitioners', *Education and Information Technologies* 28, no. 4 (2023): 3953–75.
[227] According to the World Health Organization (WHO)'s timeline. See 'Listings of WHO's Response to COVID-19', WHO, accessed 25 October 2025, https://www.who.int/news/item/29-06-2020-covidtimeline.
[228] Igor Calzada, 'Emerging Digital Citizenship Regimes: Pandemic, Algorithmic, Liquid, Metropolitan, and Stateless Citizenships', *Citizenship Studies* 27, no. 2 (2023): 160–88.

governance[229]. One portion of scholarship has been addressing how economic and digital rationalities are shaping a new configuration of "ordinal citizenship" mediated by (often automated) ranking and scoring systems[230]. Other scholars have been focusing on investigating forms of digital governance[231] and their impact on access to rights[232]. Some lines of research look positively at the introduction of digital innovations in terms of an expansion of the space of citizenship[233]. Other approaches are less optimist and warn against the perils of "dataveillance"[234]. Concerning the local dimension, a growing attention is dedicated to assessing how the inclusion of AI technologies impacts practices of citizenship in smart cities[235].

Regarding the Chinese case, particular attention has been dedicated to the role of Internet in the PRC and, also, to the use of social networks to assess how they contributed to change civil society and citizens' practices in China[236]. For instance, in the last decade, the bond of offline and online practices has originated a wave of feminist mobilization in the country that the Party-State has tried to suffocate[237]. A considerable interest has been concurrently dedicated to analyzing the different localized experiences and experimentations of smart cities' governance[238].

Greater focus, both academic and mediatic, has been directed to research the configuration and implementation of the Chinese Social Credit System (CSCS), an assemblage of projects expanding the digital governance in the PRC. A state-of-the-art discussion regarding this initiative will be provided for in Chapter 3. Here it is interesting to bring the attention to the fact that the CSCS has contributed to popularize the image of an "Orwellian" China, alimenting the techno-orientalist

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[229] John Cheney-Lippold, 'Jus Algoritmi: How the National Security Agency Remade Citizenship', *International Journal of Communication* 10 (2016): 22; Filippo Bignami et al., 'Data-Driven Citizenship Regimes in Contemporary Urban Scenarios: An Introduction', *Citizenship Studies*, 1 December 2022, 1–15.
[230] Marion Fourcade, 'Ordinal Citizenship', *The British Journal of Sociology* 72, no. 2 (2021): 154–73.
[231] Arne Hintz et al., *Digital Citizenship in a Datafied Society* (Polity Press, 2019).
[232] Luci Pangrazio and Julian Sefton-Green, 'Digital Rights, Digital Citizenship and Digital Literacy: What's the Difference?', *Journal of New Approaches in Educational Research* 10, no. 1 (2021): 15–27.
[233] Liav Orgad and Rainer Baubock, 'Cloud Communities: The Dawn of Global Citizenship?', SSRN Scholarly Paper no. 3195715 (Social Science Research Network, 1 June 2018).
[234] Van Dijck, 'Datafication, Dataism and Dataveillance'.
[235] Dorien Zandbergen and Justus Uitermark, 'In Search of the Smart Citizen: Republican and Cybernetic Citizenship in the Smart City', *Urban Studies* 57, no. 8 (June 2020): 1733–48; Peter A. Johnson, Pamela J. Robinson, and Simone Philpot, 'Type, Tweet, Tap, and Pass: How Smart City Technology Is Creating a Transactional Citizen', *Government Information Quarterly* 37, no. 1 (1 January 2020): 101414; Maroš Krivý, 'Towards a Critique of Cybernetic Urbanism: The Smart City and the Society of Control', *Planning Theory* 17, no. 1 (1 February 2018): 8–30.
[236] Yueping Zheng et al., 'Chinese Digital Citizenship', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021); Jacques deLisle et al., eds, *The Internet, Social Media, and a Changing China* (University of Pennsylvania Press, 2016); James Griffiths, *The Great Firewall of China: How to Build and Control an Alternative Version of the Internet* (Zed Books, 2019).
[237]Altman Yuzhu Peng, *A Feminist Reading of China's Digital Public Sphere* (Palgrave Macmillan, 2020); Leta Hong Fincher, *Betraying Big Brother: The Feminist Awakening in China* (Verso, 2018).
[238] Jelena Große-Bley and Genia Kostka, 'Big Data Dreams and Reality in Shenzhen: An Investigation of Smart City Implementation in China', *Big Data & Society* 8, no. 2 (2021): 1–14; Simon Marvin et al., 'Urban AI in China: Social Control or Hyper-Capitalist Development in the Post-Smart City?', *Frontiers in Sustainable Cities* 4 (October 2022): 1–11.

imaginary. The booming of international attention dedicated to this project validates the hypothesis that the PRC has come to represent an anomalous site where to analyze forms of technology-assisted citizenship's "deviations". To assess this evolving configuration and its impact, the paradigm of "cybernetic citizenship" has been advanced to describe the evolution of global citizenship at the encounter with data-driven or algorithmic governance and, more broadly, with surveillance capitalism, and to show that the global re-emergence of the cybernetics rationales is deeply affecting citizenship[239].

As delineated at the beginning of this chapter, in order to assess the transformations of citizenship in the Chinese context, it is fundamental to situate the PRC within a global scenario. This is fundamental to avoid othering perspectives perpetuated in both temporal and spatial terms. Franceschini and Loubère remark that what is crucial for an analysis of citizenship in today PRC is acknowledging that, for at least four decades, China has been an actor in the complicated and evolving entanglement of global capitalism and its rationales[240]. To assess their point, they individuate two misleading approaches which can help situate an analysis of trends of citizenship's evolution led by technology in the PRC: (1) the re-purpose of orientalist visions about China in the digital narrative, in which fears and miscomprehension about technological innovation are projected into a "digital Orientalism" depicting a futuristic and dystopian China separated from the rest of the world; (2) the failure to acknowledge that digital trends, in the form of ordinal and algorithmics governance, exist in the West as well as part of global trends[241].

The multiple perspectives through which Chinese citizenship has been analyzed so far are insightful in terms of assessing (1) its emergence from a disputed modernity and its post-1978 recent evolution; (2) the growing interest toward the impact of technological innovations on the configuration of the category of citizenship. However, such angles are considered insufficient when it comes to assess the profound implications and challenges that technological globalization is (im)posing as underlined by both Stiegler and Hui. They fail to assess that technology is a constitutive element of the *I/We* relation, and not a mere instrument or object of governance, with the result that there is a misinterpretation of the profound transformations affecting the technical system and resulting in deep misadjustments of the social ones. Moreover, the perspective from which Hui observes the Chinese modernization allows to situate the Chinese case within a global dimension of technology-led disorientation without failing to recognize the distinctiveness of the Chinese experience.

[239] Wessel Reijers et al., 'The Rise of Cybernetic Citizenship', *Citizenship Studies*, 20 May 2022, 1–20.
[240] Franceschini and Loubère, *Global China as Method*.
[241] Fourcade, 'Ordinal Citizenship'.

The remaining part of this chapter is devoted to proposing the philosophical lens from which this study examines the configuration of citizenship and its transformation under the perspective of philosophy of technology. In order to analyze global trends of citizenship evolution, a clarification on the co-constitutive role of technology in citizenship configuration is thus needed. It is a proposal to research and situate the study of citizenship in contemporary China from a philosophical perspective, to unravel the entanglement of technology and human and to show the impact of technological evolution on the political sphere, at the individual, collective, geopolitical, and global level.

1.4 CITIZENSHIP INDIVIDUATION AND TECHNOLOGY: A METHODOLOGICAL PROPOSAL

This section aims at providing the philosophical lens and methodology from which citizenship will be observed. The philosophical background clarifying how technics should be addressed as a philosophical theme in Western thought and in the Chinese philosophical experience has already been expounded in 1.2. Here, the purpose is delineating an interpretation of the concept of citizenship supported by Stiegler's thought on technics. The intent is going beyond an understanding of citizenship as a fixed category or a contended product of different experiences of modernization, to further extricate the complexities of its configuration and functioning, originally and continuously mediated by technics.

Individuation

For the scope of this research, a preliminary analysis of the concept of citizenship under the perspective of philosophy of technology in the contemporaneity is crucial. Citizenship is here interpreted as a non-fixed and far-reaching political-philosophical category, the pivot of the individual access to the construction of the collective. The reflection below is thus preparatory to the analysis of some contemporary and situated processes of citizenship formation, evolution and disruption in the PRC, which can enlighten global tendencies of citizenship transformation.

The concept of citizenship will be engaged from an oblique perspective: the conditions enabling the very possibility of citizenship, as participation in the socio-political life, will be considered through the continuously reactivated processes of *transindividuation* co-producing the individual and the collective. These processes, Stiegler shows, are enabled and mediated by technics. The premise, thus, is that the conditions for the formation and reconfiguration of citizenship (as a category comprehending both the individual and her participation in the political community) cannot be considered outside the technical system in which they emerge. This because technics gives place to the conditions for the passage from the *I* to the *we*, and back, enabling the possibility of citizenship itself. Such thesis is advanced by Stiegler while relying on the philosophical hypothesis of Gilbert

Simondon (1924-1989) contained in the work *L'individuation psychique et collective* (*Psychic and Collective Individuation*).

Simondon's elaboration of the concept of individuation is an original reference to interpret the relations elapsing between the psychic individual and the collective individual, the *I* and the *we*. He proposes the perspective of individuation to conciliate psychology with sociology. His philosophical speculation proceeds from recognizing that philosophical theories that pose the *a priori* existence of a substance or a first principle, as well as the pre-eminence of any hylomorphic approach, fail to give an account of the "becoming of being". Simondon wants to show that an individuation principle that is anterior to individuation itself does not exist: individuation does not have a principle[242]. At issue there is also the impossibility to delineate, in many different scientific domains, the ultimate "element", to single out a stable individual as an object of study:

> It is impossible to isolate a monad, a psychological atom, or a human group understood as a totality, that is, as a sort of social universe. In sociology there is no 'humanity', in psychology an ultimate element is missing; both in the search for the elements that make up the interiority of the individual, and in the research aimed at larger social groups, we always move on the level of correlations[243].

He, thus, operates an overturning of perspective, proposing "*to know the individual through individuation rather than individuation starting from the individual*"[244]. To categorize different kinds of individuals, one must discriminate among the differences that occur in their individuation process. Simondon, in fact, refers to the "individual" not only to talk about the human individual but to refer to "everything that can be a support of relation [as it] already shares the same mode of being as the individual"[245]. His aim is that of formulating a philosophical theory of individuation that can be transversal to different scientific domains[246]. According to Simondon's thesis, the living (organisms, animals and, more specifically here, humans) is not the *result* of an individuation (as for example the crystal, which just exists as the continuation of a single, initial individuation), but the "actor" *and* the "theater" of a continuous, permanent, process of individuation: "*the living being conserves within*

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[242] Gilbert Simondon, *Individuation in Light of Notions of Form and Information: Volume II: Supplemental Texts*, Supplement edition, trans. Taylor Adkins (University of Minnesota Press, 2020), pp. 1-2.
[243] Translated from the Italian edition: Gilbert Simondon, *L'individuazione psichica e collettiva*, ed. Paolo Virno (DeriveApprodi, 2021), p. 45.
[244] Simondon, *Individuation in Light of Notions of Form and Information*, p. 3.
[245] *ivi*, p. 2.
[246] In this sense, he expounds that also physical individuals (such as the crystal or the molecule) individuate themselves, even though their individuation process differs from the one of living individuals. The individuation of the crystal, for example, takes place once and for all, it preserves a memory of the past, of the moment of crystallization condensing individuation in a sole moment. Interestingly, in a previous work – Gilbert Simondon, *On the Mode of Existence of Technical Objects*, First edition, trans. Cécile Malaspina and John Rogove, with Univocal Publishing (Univocal Publishing, 2017 – he had already demonstrated that technical objects can be considered individuals too. In this case, he talked about the individuation of the industrial technical object as a "concretization" process. However, he sustains that technical objects only tend to individuation: they can be part of a system of relations and adapt to their environment but cannot modify themselves through the individuating process.

itself an ongoing activity of individuation; it is not merely a result of individuation, like the crystal or molecule, but a theater of individuation"[247]. The living, thus, amplifies individuation, which is not the case of, for example, the technical object: "In the living being there is *an individuation by the individual* and not merely an operation resulting from an individuation completed in a single stroke, as though it were a fabrication"[248].

When the living human individual encounters a problematic in which she is a constitutive part, an unresolved element, and deals with it through action, psychic individuation (an *I*) takes place; in this sense, psychic individuation is a second individuation following the living individuation, even though Simondon wants to overcome the psychosomatic duality by expounding the irreducibility of the two kinds of individuations. However, psychic individuation fails to encompass the whole individuating process: the psychic individual cannot alone, as a single element, find a solution to her own problematic. The problematic can only be undertaken through relating with the collective, through participating in the collective (the *we*). In this sense, group individuation takes place because of a feeling of incompleteness within the psychic individual: it takes place as both a substitution and an overflowing. Importantly, the psychic and the collective must not be considered as isolated elements in relation, but as polarities of a spectrum constituting the theater of continuously reactivated individuation processes. This way Simondon highlights again that the point of departure of his analysis is individuation and not individuals.

Individuation processes amidst the psychic and the collective individuals are not "stable", neither they represent the result of some kind of synthesis. They exist and endure as "metastability", opening to further accesses to individuation. Individuation, thus, proceeds from metastability to metastability, in a permanent process through which "the living preserves a metastability necessary to life[249]. Individuation advances through a process of "dephasing", as the continuously reproduction of a contention of forces. In this sense, Simondon operates a process of "relocation" of the individual within the being, identifying three levels or phases of human individuation: the living (the physical/biological level, with the coming to life as a first moment of individuation), the psychic (the *I*) and the collective (the *we*)[250].

At this point, Simondon introduces the pre-individual as a fundamental concept to understand individuation, because it poses the conditions for individuation itself. He claims, in fact, that "[t]he genesis of the individual is not a creation, i.e. an absolute advent of the being, but an individuation

[247] Simondon, *Individuation in Light of Notions of Form and Information*, p. 7.
[248] *ibid*.
[249] *ibid*.
[250] *ivi*, p. 9.

within the being"[251]. In this sense, the pre-individual is not as a cause or a principle. Instead, it must be considered as a bearer of potentials, potentials that are released and reorganized through individuation without exhausting the process. Consequently, life can be considered a moment of individuation that does not exhaust the charge of individuation, which is, instead, continuously activated and activating. The pre-individual lingers, it persists. Furthermore, it supports the transindividual space enabling the passages from psychic to collective individuation (and vice versa): "[…] the individual has conserved the pre-individual with it, and all individuals together thus have a sort of unstructured ground based upon which a new individuation can occur. The psychosocial is transindividual: it is this reality that the individuated being carries, this charge of being for future individuations"[252]. Simondon here manages to reconcile psychology with sociology and to expound the phases of psychic individuation and collective individuation as polarization amidst the transindividual releasing the potentials preserved by the pre-individual.

Stiegler's Threefold Individuation

Stiegler's thesis proceeds from a reinterpretation of the pre-individual and of the transindividual in Simondon's theory of individuation. According to Stiegler, Simondon has managed to analyze with rigor the processes of technical concretization and of psychosocial individuation, however, he has considered the two of them as separate and not co-constitutive locations of individuation. Stiegler remarks that in *Du Mode d'Existence des objets techniques*[253], Simondon had acutely described the process of individuation of the industrial technical object. To briefly resume Simondon's analysis, the individuation of the industrial technical object is a process of *concretization*, namely a process tending to the concrete and all-comprehensive integration of the parts and functions of the machine in "a *quasi*-biological dynamic: while the living being *maintains* its unity, the technical object tends toward it"[254].

This does not mean that there is a sort of ineluctability of the concretization of the industrial technical object, but that a contention takes place amidst the sociotechnical environment. As remarked by Stiegler, "*effective* technical objects result from a compromise with the environments [*milieux*]. The philosophy of Simondon is a thought of forces – forces which oppose each other but which thereby compose (transductively) and can only be thought on the condition of going beyond the oppositional schemes themselves"[255]. Stiegler wants to point out that the technical system precedes

[251] *ivi*, p. 299.
[252] *ivi*, p. 340.
[253] Simondon, *On the Mode of Existence of Technical Objects*.
[254] Bernard Stiegler, 'Temps et individuations technique, psychique et collective dans l'œuvre de Simondon', *Intellectica. Revue de l'Association pour la Recherche Cognitive* 26, no. 1 (1998): 241–56, p. 244 (my translation).
[255] *ivi*, p. 245 (my translation).

society, anticipating the psychosocial. Consequently, social systems always have to catch up with technics, namely they have to make an effort to adopt it. Most importantly, according to Stiegler, Simondon fails to figurate that it is the technical system to constitute the substratum, the condition, enabling the transindividual[256]. The process of epiphylogenesis, previously mentioned as a core concept of the philosophy of Stiegler (1.2), illuminates the mode of operation of the transindividual processes. Since the technical system allows the exteriorization of memory, epiphylogenetic memory as a kind of external memory adds up to nervous memory and species memory amidst the human species. Humanity is, thus, prosthetic: there is something of herself outside of herself. The preservation of selected memories from the past enables the possibility of making experiences not directly lived, it constitutes a pre-"lived" in which the individuation of the psychosocial individual takes place. Relying on Simondon's analysis, Stiegler wants to identify the conditions enabling the access to the pre-individual, that bearer of potential released by the psychic individual:

> If we say that the individual is himself inscribed in a process of individuation larger than himself, in the case of the animal, this will be the individuation of the species, and in the case of the human, the individuation of a history (or more precisely, a *closely-woven* network of histories). The question then arises of specifying the conditions for the *preservation* of an individuality larger than psychic individuals: through them, but larger than them, and here, *outside* of them. This larger element is, for the less large individual, an *already-there* prosthetic, that is to say: instantiated in the technical objects constituting a world (the "natural" objects themselves being, as objects, already inscribed in the circuits of technicality-finality), supports of tradition and knowledge, of a "historical" past[257].

The pre-individual understood in this configuration constitute the depository of memories, of "stories", preserved in the technical system, particularly in the mnemotechnical objects (such as the book, but also, in our present, databases).

Simondon himself highlights the role of memory amidst the individuation process, remarking that: "The being that remembers is more than the ego; it is more than the individual; it is the individual plus something else" [258]. However, it is Stiegler who guesses that the pre-individual is supported/supplemented by technical objects preserving a past that the individual has not lived but can somehow experience and that projects her into the future. According to this interpretation, the set of relations between the two polarities of psychic individuation and collective individuation is affected by technical individuation too: preserving the past and imagining the future is a collective process enabled, or better, constituted by technics. Therefore, a threefold individuation takes place, a

[256] "*This 'anticipation' of technical-objective identities over psycho-social identity is not taken into consideration by Simondon*. It corresponds to what Leroi-Gourhan and Gille each conceived in their own way as *an originality of technology with respect to society*. The tension thus created between the already and the not yet constitutes the temporal ecstasy that binds past, present, and future, where the individual always remains in the future". Stiegler, 'Temps et individuations technique, psychique et collective dans l'œuvre de Simondon', pp. 247 (my translation).
[257] Stiegler, 'Temps et individuations technique, psychique et collective dans l'œuvre de Simondon', p. 249 (my translation).
[258] Simondon, *Individuation in Light of Notions of Form and Information*, p. 320.

transindividuation process that is at once technical, psychic and collective: "It follows from epiphylogenesis that what *allows* the transductive relationship of the psychic and the social *is technical individuation*. From then on, psychic, social and technical individuations are inseparable. The transductive relationship is here ternary"[259]. In this sense, with the evolution of the technical system, the conditions to access the pre-individual, originating transindividuation processes, evolve themselves:

> […] noetic psychic individuation, that is, thinking, is conditioned by technical individuation – but not determined by it: the technical artifact always opens up a field of indefinite possibilities. This field of possibilities ranges from the worst to the best, because the technical artifact – for example, writing – is a *pharmakon*: a poison that can become a remedy, or vice versa[260].

Simondon's philosophy is thus "reorganized" by tying technical individuation and psychosocial individuation though an exposition of the pivotal role of technics amidst the transindividuation process.

Citizenship Individuation in the Hyper-Industrial Epoch

Stiegler's analysis is valuable because it shades light on the constitutive role of the technical system on the individuation processes. His work helps to unveil the disorientation generated by the contemporary misadjustment between the social system and the technical one, showing how the permanent technological innovation alters the metastability of individuation processes. This alteration takes place because technological innovation produces a variety of infrastructures of "retentional systems" in which "our memories […] pass into machines" (for instance, with spell checkers we do not need anymore to remember how to spell a word)[261]. Stiegler advances that the technological globalization operates an "industrialization of memory" altering attention and desire[262], initiated with analog technologies and mass media and brought forth and, even, enhanced by digital ones. The consequence is a destabilization of the threefold transindividuation process, in which the hegemonic and leading form of individuation has become the technical one[263], with the consequence that social systems fail to adopt technology in a positive way and simply adapt to it. The process of technological adoption, instead, requires time and thinking, both unsettled by permanent innovation.

Stiegler sustains that citizenship, the political transindividuation process *par excellence*, the joint of the individual and the collective, is massively influenced by the present configuration of the

[259] Stiegler, 'Temps et individuations technique, psychique et collective dans l'œuvre de Simondon', p. 251 (my translation).
[260] Stiegler, *Nanjing Lectures (2016-2019)*, p. 26.
[261] Bernard Stiegler, *For a New Critique of Political Economy*, trans. Daniel Ross (Polity, 2010), p. 30.
[262] *ivi*, p. 31.
[263] Paolo Vignola further explains this point in Paolo Vignola and Sara Baranzoni, eds., *Aut aut. Bernard Stiegler. Per una farmacologia della tecnica* (Il Saggiatore, 2016), pp. 26-28.

technical system[264]. At the same time, he also recounts that the history of Western citizenship originated in a moment of technological disruption, when the adoption of writing, a *hypomnesic* technics looked suspiciously because considered inferior with regards to *anamnesis* (this issue is notably addressed by Plato in *Phaedrus*[265]), and of written laws (potentially interpretable by anyone) enabled the emergence of the political figure of the citizen in the *polis*[266]. In parallel, one could look at Hui's *The question concerning technology in China* as a first attempt to reconstruct the Chinese philosophical history of psychosocial individuation, originated by its moral cosmotechnics and producing its distinctive sociotechnical experience and history of citizenship.

Focusing on contemporaneity, Stiegler advances that the hyper-industrial technologization is continuously *proletarianizing* citizens worldwide. Proletarianization is a core concept of Stiegler's philosophy, which he derives from Marxism but interprets in a distinctive way. A discussion of this concept is provided for in the second chapter (2.1), here it is just anticipated that, for Stiegler, proletarianization refers to the systematic dispossession of different human faculties forwarded by the accelerated technological concretization of hyper-industrial societies. In the collected *Nanjing Lectures*, a series of conferences he lectured in China between 2016 and 2019, he claims:

> The proletarianization of the gestures of work amounts to the proletarianization of the conditions of the worker's subsistence. The proletarianization of sensibility, of sensory life, and the proletarianization of social relations, all of which are being replaced by conditioning, amounts to the proletarianization of the conditions of the citizen's *eksistence*[267].

It is important to remark that Stiegler does not demonize technology *per se*, the issue is rather understanding technics as a *pharmakon*, namely as bearers of both noxious and curative potentials. Each time a substantial shift occurs in the technical system, it is necessary a reorganization of the social one, which should be the most impellent chore of politics nowadays. In other words, the urgent task is to *think* in which ways a positive appropriation of new technologies is made possible. According to him, this involves a "new critique of political economy"[268] that allows for a rethinking of technologies and their adoption.

To sum up, this section aimed at introducing and proposing the individuation entanglement, which Stiegler derives from Simondon, to analyze trends of citizenship transformation in the global present

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[264] "The effectiveness of technicity, in other words, is *constitutive* (in the phenomenological sense of the word), as technical individuation, of psychic and collective individuation. A "positive appropriation of the past" is immediately affected by the positive possibilities of an *access* to the past. All hermeneutic possibilities are there concealed. Not only the "impossibilities", that is to say the "limits" due to this facticity, but also the possibilities of constitution by individuation: one could show, for example, that alphabetic writing is the inaugural condition of history insofar as it makes possible a completely new type of psychic and collective individuation: citizenship (which the current associated informational environment is perhaps in the process of eliminating". Stiegler, 'Temps et individuations technique, psychique et collective dans l'œuvre de Simondon', p. 255 (my translation).

[265] Plato, *Phaedrus*.

[266] Stiegler, *Technics and Time 2*, p. 39.

[267] Stiegler, *Nanjing Lectures (2016-2019)*, p. 20.

[268] This is the theme which he addresses in Stiegler, *For a New Critique of Political Economy*.

and, particularly, in contemporary China. It is considered an engaging methodological lens for at least three reasons: (1) first, individuation is at the same time a descriptive theory and a methodological perspective to address psychosocial phenomena that does not offer a simply anthropological look but a description of the phases and processes of individuation and their link with technical individuation. Technics emerges not as an external or collateral factor but as a constitutive element of psychosocial individuation. In this sense, what Stiegler manages to point out is that the psychosomatic and social impact of technics maintains a universal dimension, while this is not necessarily the case for technical thought, which, instead, could originate (from) different cosmotechnics as showed by Hui. (2) Second, this framework provides a lens of analysis going beyond culturalist and essentializing visions that have been looking at the West as a place producing a dimension of politics centered on the individual, while at the East as insisting on the collective one. Citizenship individuation, instead, puts the accent on the compresence of the *I/We* polarization, continuously mediated by technics. (3) Third, with the neutralization of cosmotechnical diversity under capitalist globalization – a "planetary condition" in which the current technical system, a common background, produces a tendency to homogenization – Stiegler's triple individuation process provides a common framework to analyze the impact of contemporary technologies on the transformation of citizenship worldwide. In other words, the globalization of technology has resulted in the crystallization of a single technical system (and technical thought) whose effects can by analyzed in different contexts. The need to assess the impact of (technological) globalization through a common framework is also underlined by Arif Dirlik, who claims: "*The recognition of commonality also calls for a more complicated understanding of responsibility for these problems, which may appear in different guises in different societies but also articulate the contradictions of a global capitalism to which no outside exists except in its interior*"[269].

This first theoretical chapter oriented the analysis by justifying the research and by constructing its conceptual and methodological framework.

The first section has justified why it is impellent to dismantle the technological alterity attributed to contemporary China, which is produced by global overlapping narratives targeting technology, which often misread the role of technology in the processes of globalization.

This led to the second section, which has introduced the combined philosophical perspectives of Stiegler and Hui to clarify the role of technics in constituting social systems and the mechanisms of synchronization and homogenization produced by technological globalization. Modernization, according to the interpretation made by Hui, has produced the disappearance of a plurality of traditional cosmotechnics and the imposition of a unique technical thought, global capitalism. Among

[269] Dirlik, *Complicities*, p. 78.

these global trajectories, the Chinese case has been situated by introducing its unique traditional cosmotechnics and the impact of its oblivion with modernization.

The third section has presented a multilevel perspective to construct a state of the art to address Chinese citizenship acknowledging the discourses from which it emerged, recent approaches to study it, its post-1978 evolution launching it into the global contemporaneity, and its transformation at the encounter with technological concretization. However, these perspectives were deemed insufficient to analyze the constitutive nexus between technics and citizenship and to formulate a paradigm of analysis for the global present.

The fourth section, thus, has introduced the philosophical methodology this study proposes to investigate citizenship in a globalized world and, specifically, in the Chinese context. This methodological approach allows us to shed light on the constitutive link between the political and technology at different levels, starting from the individual and proceeding to the collective dimension (what remains or is becoming of the national level), until the global scale, addressing the impact of technological globalization.

CHAPTER 2: A TECHNOLOGICAL MAKING OF CITIZENS IN POST-MAO CHINA

OVERVIEW OF THE CHAPTER: This chapter aims at reconstructing the processes of citizenship individuation taking place in post-1978 China and at interpreting the synchronizing role that technology has played during this phase through the philosophical perspective delineated so far. It does so by (1) exploring two conceptions of "spirit", the first one advanced by Stiegler and the other pursued by Chinese Party-State authorities since the economic reforms, and (2) by examining the progressive adoption of a distinctive technoscientific governmental rationality in the PRC.

The first section introduces the "market vs morality" debate, which has questioned the impact of the opening to market economy in the PRC on citizens' moral attitude, to expound that, within this discussion, the role of technology is a forgotten element. This same section, then, proposes Stiegler's concepts of *spirit* and *proletarianization* to look at citizens' individuation in the post-Mao Chinese context. The second section explores how Party-State authorities engaged in molding the Chinese citizens' spirit from 1978 until nowadays. It outlines the top-down revival of cultural tradition and efforts of moral construction, as well as the social impact of the techno-economic shift through the proletarianization lens. The third section investigates how a technoscientific governmental rationality has been embraced by Party-State authorities to "engineer" the Chinese citizens since 1978. It explores how technology, as a theme and as a mean, has been interpreted and employed by the Chinese Party-State for governance purposes until more recent times.

2.1 QUESTIONS OF SPIRIT AND POLITICAL ECONOMY

All those values, rising and falling, constitute the great stock market of human affairs.
Among them, the unfortunate value of spirit has not ceased to fall.
Paul Valéry[270]

This section introduces the debate concerning the impact of the market economy on societal morality, which received considerable attention in post-1978 China, that is, when the country started the transition to a "socialist market economy". The perspective from which this discussion was carried on, however, has failed to acknowledge the effect that technological concretization has been playing within the Chinese post-socialist society. This is why Stiegler's interpretation of the concepts of *spirit* and *proletarianization* is introduced as a perspective through which analyzing global process of citizenship individuation (or *dis*individuation, as we are going to see). The employment of these concepts is, thus, proposed to analyze the Chinese case.

[270] Quoted in Bernard Stiegler, *The Decadence of Industrial Democracies*, trans. Daniel Ross and Suzanne Arnold, Disbelief and Discredit 1 (Polity Press, 2011), p.1.

Market Versus Morality: The Forgotten of Technology

During the "reform and opening-up" (*gaige kaifang* 改革开放), which was launched in 1978[271], the PRC confronted the destabilizing processes catalyzed by the structural changes of the economy in the country, which shifted from a collectivist and planned type to a market-oriented one[272]. With particular reference to the acceleration of this process during the 90s, Thomas Boutonnet connotates the newly introduced "socialist market economy", the Chinese official utterance, as a "capitalist economy whose access is restricted and controlled by the Chinese Communist Party"[273].

The post-1978 economic conversion triggered a variety of social processes, among which the decollectivization after the reform of the agriculture, a growth of internal rural to urban migration, and a considerable increment of unemployment with the privatization of State-owned enterprises (particularly since 1994). These changes in the country's labor configuration set off substantial social transformations. The acceleration of the reform process was led by the establishment of Special Economic Zones (SEZs) to experiment the gradual opening to market economy and to attract foreign investment. The economic opening was, thus, first trialed at the borders, a strategy which would become the core of the Chinese developmental success. Regarding the pivotal role of the SEZs in molding the contemporary Chinese citizens, anthropologist Silvia M. Lindtner affirms:

> How did the CCP [Chinese Communist Party] get people to perform this drastic self-transformation from revolutionary subjects into economic agents? How did it convince people to give up socialist support structures such as the "iron rice bowl" (the guarantee of life-long employment) and the *danwei* system (the "work unit," i.e., work-based communes that provided living space, meals, medical care, socialization, and ideological indoctrination, all in one small geographic area)? To "reform" its people, the CCP established so-called Special Economic Zones (SEZ), i.e., spatially bounded zones in which economization, privatization, and foreign direct investment were encouraged, while they remained at first still prohibited (or at least not enabled) in the rest of the country. In 1979, Deng Xiaoping declared Shenzhen a SEZ (alongside Zhuhai, Shantou, and Xiamen)—a laboratory to "feel out" how far away from socialist structures and values China could move without changing its essential character[274].

Lindtner expounds that the SEZs were the "prototypes" of what would have become of the Chinese nation: these experimental territories represented the "displacements" of a *technological* promise that

[271] More precisely, it is the Third Plenary Session of the Eleventh Central Committee of the Chinese Communist Party (18-22 December 1978) that opens this process.
[272] For an economic description of the four phases of economic reforms see Xiahui Liu, 'Structural Changes and Economic Growth in China over the Past 40 Years of Reform and Opening-Up', *China Political Economy* 3, no. 1 (2020): 19–38. See also Gregory C. Chow, 'Economic Reform and Growth in China', *Annals of Economics and Finance* 5, no. 1 (2004): 127–52; and Alok Ray, 'The Chinese Economic Miracle: Lessons to Be Learnt', *Economic and Political Weekly* 37, no. 37 (2002): 3835–48.
[273] Thomas Boutonnet, 'From Local Control to Globalised Citizenship: The Civilising Concept of Wenming in Official Chinese Rhetoric', in *Global Fences: Literatures, Limits, Borders*, ed. Corrado Neri and Florent Villard (Institut des Etudes Transtextuelles et Transculturelles, 2011): 79-103, p. 87.
[274] Lindtner, *Prototype Nation*, p. 21.

would mold the aspirations of Chinese citizens while occluding the social misery they generated[275]. The object of this chapter will be considering how technological concretization has operated such displacement from the philosophical perspective delineated so far.

In the reform years, the Party-State authorities were concerned about managing, "taming", the economic transition to address eventual social disorders that could emerge from it. The issue for Chinese decision makers was to guide and to "bridle" the modernization process and its impact on society, to manage it *rationally* as a "planned modernization"[276]. For instance, the enduring goal of the CCP starting from this period has been at once boosting economic growth and maintaining political stability[277], with the idea that the former would positively impact on the latter. Nowadays, this twofold goal needs to confront with a decelerated rate of economic growth and, as sustained in this chapter, with broader global processes of societal *dis*individuation[278].

The scholarship has largely investigated the "reforms and opening-up" times to disclose the Chinese economic miracle resulting from this transition[279]. This economic and social changeover has been astonishingly rapid when compared to Western countries: in around thirty years the PRC has reached a degree of industrialization that European countries have established in two centuries[280]. It has been generally recognized that this transition raised the living standards of the Chinese citizens, even though it also led to an increased economic disparity among the population[281]. The reflection carried on in this chapter stems from a specific issue debated by social theorists, namely the impact of market economy on societal morals, a theme which has received large attention regarding the Chinese case.

In post-1978 China, in fact, an enduring debate emerged among cadres, intellectuals and society revolving around the perception that the reorganization of the economy after the Maoist period (but, more interestingly for this study, the cosmotechnical revolution initiated since modernization) was deeply affecting society and people's values, with negative implications for societal morals and values. Maoist morality had been described as a sort of "politicized version of the ethic of divinity" [282], constructed on the cult of Mao and on voluntarism, in which, however, elements of the Confucian

[275] Lindtner, *Prototype Nation*, Introduction. For an analysis of the subjectification processes at the encounter with the introduction of global capitalism and its labor dynamics in the SEZs see also Sandro Mezzadra and Brett Neilson, *Border as Method, or, the Multiplication of Labor* (Duke University Press, 2013), chapter 7.
[276]Børge Bakken, *The Exemplary Society: Human Improvement, Social Control, and the Dangers of Modernity in China*, Studies on Contemporary China (Oxford University Press, 2000), p. 2.
[277] Yunxiang Yan, 'The Politics of Moral Crisis in Contemporary China', *The China Journal* 85 (January 2021), p. 17.
[278] A concept of Stiegler's philosophy that has been already introduced in 1.4 and that will be more thoroughly discussed 2.1.
[279] Ray, 'The Chinese Economic Miracle'.
[280] Cheryl Long and Xiaobo Zhang, 'Patterns of China's Industrialization: Concentration, Specialization, and Clustering', *China Economic Review* 23, no. 3 (2012): 593–612, p. 593.
[281] See Ray, 'The Chinese Economic Miracle', p. 3842.
[282] Yan, 'The Politics of Moral Crisis in Contemporary China', p.10.

moral tradition coexisted, even though not openly endorsed to avoid repression[283]. To emphasize the persisting impact of Maoist moral patterns during the economic reforms, it must be remarked that, since 1978, a lot of discussions regarding the immorality of moonlighting (i.e., having a second often-illicit job beyond regular employment) emerged, denoting that "[t]he previous ethical definitions of good and right were subverted by the drive for market success, deepening the moral confusion"[284]. This activity, judged immoral because personal gain was deemed selfish, started to be considered legal only from the 90s. The perception of a moral shift within Chinese society was also linked to broader phenomena more or less directly connected with market reforms: the emergence of individualistic values, a changing family structure, sexual liberation, and increasing consumption practices. In 2002, John J. Hanafin, while describing the various positions of Chinese intellectuals regarding the market vs morals dispute, argued that:

> [a]lthough it is generally accepted by Chinese theorists that what they term morally negative phenomena are not something new to China, it is also acknowledged that the growth of these has been intensified by the introduction of a market economy. It can be argued, however, that the problems China is experiencing today are in large part a consequence of the free-market system adjusting to cultural and social forms that are unsuited to it at the present time. […] If one grants that the introduction of the free-market system in England broke down 'feudal structures and replaced them with 'rational' structures conducive to the efficient functioning of the markets,' then a case can be made that a similar process is happening in China today. Consequently, it can be argued that the ethical problems that China is experiencing in its introduction of a market economy can be largely seen as an effect of its adjustment to this type of economy[285].

The anthropologist Yan Yunxiang highlights that there has been a long-lasting ambivalent perspective in China regarding the introduction of market economy and its impact on morals: "While concerns with moral deterioration primarily caused by the transition to a market society prevailed from the 1980s to the 2010s, the counterargument of moral improvements due to the same transitional process were persistent during the same period"[286]. Indeed, the relation between the market and morals has been lastingly disputed among Western social theorists as well; however, Yan has remarked that nowhere like in the post-Maoist China this discussion took a similar political significance[287].

Does market affect morality? Fourcade and Healy[288] have resumed the three broad perspectives employed by social theorists to interpret the tie of (capitalist) market and morals: (1) a liberal vision of a "civilizing market" fostering virtue ethics, cooperation, freedom, and creativity; (2) a critical understanding of market as a "commodified nightmare" producing envy, coercion, exclusion, and

[283] The Confucian and, more broadly, traditional heritage was repressed during the Maoist years, with particular brutality during the Cultural Revolution (1966-1976), because associated with the feudal/imperial tradition.
[284] Yan, 'The Politics of Moral Crisis in Contemporary China', p. 16.
[285] John J. Hanafin, 'Morality and the Market in China: Some Contemporary Views', *Business Ethics Quarterly* 12, no. 1 (2002): 1–18, p. 13.
[286] Yan, 'The Politics of Moral Crisis in Contemporary China', p. 3.
[287] *ivi*, p. 16.
[288] Marion Fourcade and Kieran Healy, 'Moral Views of Market Society', *Annual Review of Sociology* 33, no. Volume 33, 2007 (2007): 285–311.

populism; (3) a more neutral approach in which the effects of the market are seen as depending respectively on cultural legacies, on the establishment and functioning of different institutions, and on sociocultural contexts. To these consolidated views, they add more contemporary and nuanced understandings, above all the idea that markets are more and more "moralized", as the value, worth or behaviors of economic actors (from citizens to nations) are judged, categorized and normalized according to allegedly moral principles and classifications whose meanings are influenced by economic rationality, to the point that "the intertwining of market activity and moral valuation is so pervasive that recent studies have argued that the image of a clean division between market and non-market spheres is of limited utility"[289]. Markets, in this sense, are generating new moral categories based on their rationales.

This chapter aims to investigate this last phenomenon, that of capitalist markets as "scientific and moral projects"[290], as it emerges as pivotal in the top-down making of Chinese citizens since the reform era – a process, however, which also differs from Western trajectories as it is largely mediated by the role of the CCP in conducting morality. The core questions this chapter aims to answer are: how has the opening to market economy affected the *individuation* of the Chinese citizens? How has morality as a theme been addressed, managed and "constructed" by Part-State authorities during the transitional society of the reform era? Which is the role of technology in this process? The objective is that of demonstrating that the disputed relation of market and morality – of (infra)structure and superstructure – is insufficient to give an account of the impact of hyper-industrial transformations on societies and citizens globally and, more specifically, regarding the Chinese case. To do so, the analysis will rely on the critique that Bernard Stiegler has posed to hyper-industrial capitalism thriving in industrial democracies, in which he advances that technology is often forgotten or misinterpreted while studying these dynamics, to determine whether such critique can be applied to non-western and non-democratic contexts too.

Before delving more deeply into the specificities of the Chinese case, it is necessary to delineate what this chapter will address as morals. To do so, the last part of this section introduces the concept of "spirit" in Stiegler's thought. This core notion of his philosophy is deemed useful as it encompasses a broader meaning with regards to morals, including moral motives shared by societies, (the desire for) virtuous behaviors, the production and reproduction of culture, ideals and beliefs, and their cross-generational transmission. The employment of the word spirit is also a pretext, as it is a central term in the philosophical reflection of Stiegler on technics and, at the same time, as it evocates core official utterances of the PRC from the reform era until now. From the "spiritual civilization" (*jingshen*

[289] *ivi*, p. 300.
[290] *ibid*.

wenming 精神文明) to the "Chinese spirit" (*zhongguo jingshen* 中国精神), in fact, Party-State authorities have employed an evolving assemblage of "ideological tools"[291] to mold Chinese citizens since the market reforms (2.2). This approach has been mediated by a technoscientific rationality in which technology as a theme and as an instrument emerges as a fundamental element of contemporary Chinese governance (2.3).

Of course, the parallelism between the concept of spirit in Stiegler and the one upheld by the official expressions of the PRC is a pretext to explore discrepancies. Yet, it is intriguing that, in such a rationalized world, it is possible to delve into social issues regarding the impact of the economic configuration and the central role of technics following these two understandings of "spirit". As argued in the next section, an exploration of the concept of spirit in Stiegler reveals that it is misleading to think in distinct and isolated terms of the market, of morals (which he understands in terms of the question of authority, the super-ego, and its critique) and, above all, of technology. At the same time, issues of spirit (of a top-down construction of a "Chinese spirit") are strictly linked to processes of citizenship individuation led by technology in the PRC that this dissertation aims to explore.

After an introduction of Stiegler's thought on the constitutive role of technology in discussing the impact of consumer capitalism within hyper-industrial societies, this chapter will focus on the twofold approach enacted by Chinese decision makers to govern citizenship transformations during the frenzied pursuit of modernization occurring during the market reforms.

The hypothesis animating this chapter is that it is possible to apply the analysis Stiegler conducts regarding the processes of *dis*individuation in Western industrial democracies to post-socialist China, without discarding the distinctive features distinguishing the unique path of this latter. In doing so, this chapter contributes to identifying global patterns to corroborate the idea that the planetarization of technology tends to synchronize and homogenize social systems. Regarding the Chinese case, it is an even more accelerated process that, as sustained by Hui, has dissolved its moral cosmotechnics and led to the interiorization of the capitalist/Promethean one.

For a Political Economy of Spirit

According to Stiegler, and crucially for this analysis, the concept of spirit[292] is linked to "the technical organization of matter" and, consequently, to the political economy, namely the arrangement, production and reproduction of social life. Desire and reason (desire *for* reason) – spirit, or the "life

[291] Beatrice Gallelli, 'Jingshen: A Governmental Keyword in 21st-Century China', in *Discourse, Rhetoric and Shifting Political Behaviour in China* (Routledge, 2023), p. 84.
[292] In French, *esprit*. In the English translations of Stiegler's works, sometimes this word is also translated as "mind".

of the mind"[293] – are constitutively enabled, that is, supplemented and re-produced through technics via the processes of transindividuation described in the previous chapter (1.4). Stiegler speculates on these ideas in different works, particularly in the series of books *Disbelief and Discredit*[294] and in the books *For a New Critique of Political Economy* (2010) and *The Re-Enchantment of the World* (2014)[295]. For the scope of the following analysis, it is believed that Stiegler's remarks are helpful to delineate trends and threats of contemporary forms of citizenship (dis)individuation in which the contemporary concretization of technology under the hyper-industrial political economy plays a disruptive role.

The focus of the French philosopher is to address "spiritual misery" affecting Western hyper-industrial societies during the first decades of the 21st century. He wants to expound that the "the fall of the value spirit"[296] is generated by the gradual and incessant *proletarianization* of society, a process which leads to nihilist and self-destructive behaviors. As discussed in the first chapter, globalization via technology produces a homogenizing effect that allows for the employment of Stiegler's philosophical tools for an analysis of global processes, even though situated[297]. Hui has advanced, in fact, that globalization has instituted or even imposed a single, planetary cosmotechnics, which works according to capitalist rationalities and dynamics, producing an increased tendency to synchronization[298]. It is a process underlined also by Stiegler, who remarks that "Western societies are undergoing the effects of the fact that technologies that originated from their own mode of production have now been exported, giving rise to industrial competitors"[299]. The gradual opening to market economy in post-Maoist China (since 1978) is a pivotal step of this global process. The entrance of this country into the World Trade Organization (WTO) (2001) represents perhaps its culmination. Today we are witnessing the exhaustion of this course, with the recurrent triggering of "trade wars"[300]. To this must be added the exacerbation of international data politics[301] that reveals an emerging predominant role of digital technologies for governance purposes. Quoting an expression

[293] Stiegler refers to Hannah Arendt, *The Life of the Mind: The Groundbreaking Investigation on How We Think*, ed. Mary McCarthy (Houghton Mifflin Harcourt, 1981) with regards to his interpretation of spirit. See Bernard Stiegler, *The Re-Enchantment of the World: The Value of Spirit against Industrial Populism*, Philosophy, Aesthetics and Cultural Theory (Bloomsbury, 2014). He also gives a critical insight of the opposition between *otium*/*negotium* according to Arendt in Stiegler, *The Decadence of Industrial Democracies*, Chapter 3.
[294] Stiegler, *The Decadence of Industrial Democracies*; Bernard Stiegler, *Uncontrollable Societies of Disaffected Individuals*, trans. Daniel Ross, Disbelief and Discredit 2 (Polity, 2013).
[295] Stiegler, *For a New Critique of Political Economy*; Stiegler, *The Re-Enchantment of the World*.
[296] Here Stiegler quotes French poet Paul Valéry, the author of the above epigraphs. See Stiegler, *The Decadence of Industrial Democracies*, p. 1.
[297] Interestingly, Stiegler sometimes speculates on the peculiarities of the processes of individuation in China, see for instance Stiegler, *The Decadence of Industrial Democracies*, p. 18.
[298] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*; Hui, 'Philosophy and the Planetary'.
[299] Stiegler, *What Makes Life Worth Living*, p. 89.
[300] See footnote 97.
[301] Lizhi Liu, 'The Rise of Data Politics: Digital China and the World', *Studies in Comparative International Development* 56, no. 1 (2021): 45–67.

by Stiegler, globalization as a never-ending economic war has become an "apocalypse without God"[302].

In this extremely rational(ized) and "disenchanted" world, what is the meaning of discussing about the value of "spirit"? This word, in fact, evokes something abstract, a bygone dualism (matter/spirit), and even the religious domain. To explore Stiegler's view of spirit, two preliminary elucidations are necessary. First, we cannot talk of spirit as something that properly exists but which, instead, *consists*. To expound the difference between existence and consistence Stiegler makes the example of law and justice: law exists as an ensemble of written norms, justice does not exist and perhaps will never, but it *consists* as an idea, an ideal, that makes people, citizens, pursue the critique of existent laws or ask for the establishment of new ones[303]. Second, spirit, similarly to a phantom or a ghost, does not exist but "re-appears" and its return is supplemented and enabled by the exteriorization of memory through technology. This is the important intuition of Stiegler concerning spirit, namely that it:

> *is not some vapor floating between the souls* that it would either cloud over or inspire: *spirit is what the technical organization of matter, that is, what the exteriorization of memory, as tertiary retention, induces as a form of life called ex-sistence*, such that only consistences, projected as the motives of its unachievable and as such in-finite future, enable it to individuate itself[304].

With the word "spirit", thus, Stiegler refers to the ensemble of motives, ideals, ideas, shared meanings, to those "objects of belief", that project social groups into the future. Even though there were and there are religious spirits, Stiegler shows that spirit is not simply a transcendental concept linked or limited to religions or metaphysics. As Max Weber notoriously remarked[305], there was a spirit of capitalism, produced by the Protestant ethics, which transformed religious belief in calculated trust. Between the two World Wars the French poet Paul Valéry, which is often quoted by Stiegler, speculated on the "crisis of the spirit" affecting the "European civilization"[306]. Interestingly, this connection between "spirit" and "civilization" is re-elaborated in late Qing China and, also, resumed by the Chinese official discourse during the reform era, see 2.2.

Stiegler evocates all these usages of the word spirit to connotate it as the ensemble of values and ideals transmitted as well as contested through generations, and characterizing an epoch. According to his interpretations, spirit is reproduced according to transindividuation processes: "psychic and collective individuation is *the manner in which a society forms a body* and *unites itself*, while at the same time inheriting an experience of the past, what is often called recognition, but also, and more broadly, knowledge"[307]. In this sense, through the concept of spirit he sheds light on the importance

[302] Stiegler, *What Makes Life Worth Living*, p. 10.
[303] For a deepening of the concept of *consistence* see Stiegler, *The Decadence of Industrial Democracies*, p. 48.
[304] Stiegler, *Uncontrollable Societies of Disaffected Individuals*, pp. 70-71.
[305] Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (CreateSpace Independent Publishing Platform, 2013).
[306] Paul Valéry, *La crise de l'esprit, la politique de l'esprit, le bilan de l'intelligence* (Books on Demand Editions, 2018).
[307] Stiegler, *The Re-Enchantment of the World*, p. 7.

of intergenerational flows of transmission of knowledges and values and, also, advances how "taking care" of these processes is a practice that occurs *through* technics[308]. Technologies, mnemotechnics or "spiritual instruments" mediate and supplement the transmission of knowledge, of motives, of objects of desire, so that this understanding of spirit cannot be considered idealist but neither materialist, as the supports, the relations, and the ideas are all co-produced according to the dynamics of triple individuation.

The book is the mnemotechnology *par excellence*: its history demonstrates that it paved the way to new forms of transmission of knowledge and of psychic and collective individuations (from Ancient Greece's *hypomnemata*, through the printed Bibles of the Reform, to the accountant books which marked the evolution of capitalism). Considering the book as a "spiritual instrument"[309], its spirit consists in what

> would overflow the instrumentality and the instrumentalizable, the instrument being on the side of the material, that is, of the contingent and corruptible, which precisely disappears in the corruptible, whereas, on the contrary, the spiritual is what returns, resists, *consists*: re-appearing, not disappearing[310].

"Spiritual" technologies, thus, allow for the cultivation of *singularities*, for the passage from psychic to collective individuation and vice versa. In this sense, the cultivation of the self as discussed by Michel Foucault[311] is, according to Stiegler, "first of all a practice of *hypomnemata*, that is, a technique of the self"[312] exercised through technical objects.

Of course, if we follow Hui's interpretation, it can be advanced that the Chinese history of "spiritual instruments" differs from the Western one[313]. According to Hui's thesis, before globalization, different cosmotechnical thoughts originated dissimilar types and settings of psychosocial individuation, which produced and were produced by a peculiar relationship with spiritual instruments (a plurality that, he advances, should be reinvented). Nowadays, however, the becoming-sameness of the technological systems has erased this "cosmotechnical diversity" and imposed a homogeneous (socio)technical environment. In the words of Stiegler, "Capitalism is a stage of Western psycho-social individuation, now planetarized, depending upon a technical becoming which has itself become planetary, and, more precisely, upon a generalization of grammatization

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[308] Care as an attentional form mediated by technics is one of the central themes of Stiegler, *What Makes Life Worth Living*.
[309] Regarding this, Stiegler affirms: "the epoch of the book arises as a rupture with the world of spirits, the latter giving way to the Spirit. And hence occurs the construction of the metaphysics of the One". Stiegler, *Nanjing Lectures (2016-2019)*, p. 102.
[310] Stiegler, *The Re-Enchantment of the World*, p. 84.
[311] Michel Foucault, 'Technologies of the Self', in *Technologies of the Self. A Seminar with Michel Foucault* (Tavistock Publications, 1988).
[312] Stiegler, *The Decadence of Industrial Democracies*, p. 52; subjectification in Foucault is comparable to individuation in Stiegler.
[313] One example of this individuation process mediated by moral/spiritual technics in China can be considered the technique of landscape painting, see for example: Shitao, *Discorsi sulla pittura del Monaco Zucca Amara*; and Jullien, *Vivre de Paysage, Ou, L'impensé de La Raison*; Yuk Hui, *Art and Cosmotechnics* (e-flux books, 2021).

throughout technical becoming and throughout the entire world"[314]. For this reason, it is here believed that Stiegler's analysis is useful to address citizenship individuation in contemporary China, too.

Nowadays, technologies of the spirit have come to constitute an "industrial system of cognitive and cultural technologies"[315] and are exploited for productive and consumerist purposes through the integration of mnemo-technologies into design and marketing processes. This took place with the introduction of advertisement creating industrial tertiary retentions, namely those mnemotechnical objects produced by media. Stiegler claims that since technical objects constitute the material support through which psychosocial individuation is re-produced, an "ecology" of cognitive and cultural technologies is imperative: "insofar as it is constituted by *hypomnemata*, that is, by tertiary retentions, the question of spirit becomes an industrial question, and a question of political economy, given that such *hypomnemata* have now become the basic operating system of the hyper-industrial apparatus"[316]. The transmission and contestation of beliefs, ideals, and motives is an issue of political economy because this process is deeply affected by the ways in which the rationality of the current political economy, hyper-industrial capitalism, approaches the design, the production and the marketing of technologies, and this rationality is, according to Stiegler, irrational.

What Spirit in Hyper-Industrial Societies?

Based on these premises, what Stiegler contends is that today there is a reason for "spiritual misery", which manifests itself in a variety of psychosocial diseases leading to *dis*individuation, namely, to the destabilization of the equilibriums of psychosocial individuation. His hypothesis is that spiritual misery is linked to how technical individuation takes place nowadays. The capitalist economic system works according to speculative rationalities, which control behaviors via marketing, that must be critiqued and reverted:

> Tertiary retention exists in all human societies. It conditions individuation, as symbolic sharing [*partage*], which makes possible the exteriorization of individual experience in epiphylogenetic traces. When it becomes industrial, however, tertiary retention constitutes technologies of control that fundamentally alter symbolic exchange: resting on the opposition of producers and consumers, these technologies make possible the hyper-synchronization of calculated conscious time, and the decomposition of time itself, that is, of individuation[317].

In other words, if spirit is produced and re-produced, *individuated*, through technologies, spiritual misery has its roots in a process of *grammatization* that today has reached a limit. With grammatization Stiegler refers to the gradual exteriorization of human faculties via technics, to "the process through which the flows and continuities which weave our existences are *discretized*: writing,

[314] Stiegler, *The Decadence of Industrial Democracies*, p. 49.
[315] Stiegler, *Uncontrollable Societies of Disaffected Individuals*, p. 93.
[316] *ivi*, p. 79.
[317] Stiegler, *The Decadence of Industrial Democracies*, p. 118.

as the discretization of the flow of speech, is a *stage* of grammatization"[318]. Grammatization, in this sense, is the "technical history of memory"[319].

As already expounded (1.2), human and technics are co-produced and, thus, grammatization must be conceived as an original phenomenon which, however, has been accelerating in the last centuries, preventing the re-interiorization of the exteriorized fluxes. Since the Industrial Revolution, the introduction of machines in the factories has led to the dispossession of the *savoir-faire* of workers whose knowledge was transferred to the machine-tool, of which they became "servants"[320], originating the proletariat. After the Second World War and since Keynesianism, consumerism has been prompting a second type of proletarianization, that of *savoir-vivre*, namely a gradual dispossession of practical knowledge, everyday habits and existential motives. This type of proletarianization is represented by the middle class, which starts to be progressively affected by and addicted to mass consumption practices resulting in "the submission of existence to standardized behavioral models of consumption"[321]. This is not a process exclusively regarding Western societies: even though consumerism came from the US and rapidly spread to all Western societies, with the rising of a "global middle class" and the globalization of the industrial technical system, this has gradually become a planetary phenomenon – even though there are distinctive features of, for instance, the Asian middle class(es)[322] and, more importantly for this study, of the Chinese middle class (see 2.2). Under this particular interpretation of the proletariat and its relation with technics[323], Stiegler opposes the idea of a gradual dissolution of the proletarian class and, instead, advances that the processes of proletarianization are advancing and spreading together with technical concretization: "[t]he consumer is the new proletarian figure, and the proletariat, very far from disappearing, is a condition from which it has become nearly impossible to escape"[324].

As a more recent example of this tendency, he claims that the latest digital innovations seem to lead to another type of dispossession, that of *savoir-théoriser/penser*[325], according to which the ability of thinking (of producing a theory) is gradually exteriorized into machines, networks and digital systems. In this sense, Stiegler remarks that "new forms of grammatization […] constitute new forms of proletarianization"[326], that is, novel technological products represent a further exteriorization of

[318] Stiegler, *For a New Critique of Political Economy*, p. 32.
[319] *ivi*, p. 30.
[320] "The proletarian, we read in Gilbert Simondon, is a *disindividuated* worker". Stiegler, *For a New Critique of Political Economy*, p. 37.
[321] Stiegler, *The Decadence of Industrial Democracies*, p. 35.
[322] Tamio Hattori et al., 'Introduction: The Emergence of the Asian Middle Classes and Their Characteristics', *The Developing Economies* 41, no. 2 (2003): 129–39.
[323] This topic is largely discussed Stiegler, *For a New Critique of Political Economy*.
[324] Stiegler, *The Decadence of Industrial Democracies*, p. 35.
[325] Bernard Stiegler, *Nanjing Lectures (2016-2019)*, pp. 17-18 and p. 187.
[326] Stiegler, *For a New Critique of Political Economy*, p. 11.

human knowledges, which, when not re-interiorized by inventing and adopting novel technological practices, further exacerbate proletarianization. At the same time, he expounds how proletarianization must be understood "not only in terms of ownership of the means of production […], but also in terms of the ownership of the means of life itself"[327]. Alienation, thus, regards both the mode of production *and* the mode of consumption. This process is further boosted insofar as control industries generate *collective* secondary retentions, replacing the inherited pre-individual[328] and originating "tertiary protentions"[329], which prompt drives and compulsions[330]. The passage from analog to digital technologies upgraded the degree of "efficiency" with regards to this control of behaviors. To this regard, Stiegler remarks how consumerist consumption has submitted the technical system to the economic system, to the detriment of the social one. As a result, within the hyper-industrial political economy, consciousness has become a commodity serving the market[331].

In this scenario, Stiegler claims that capitalism has "lost its spirit" because it has destroyed desire[332], its motive, and has reduced it to the mere exploitation of (consumption) drives; at the same time, capitalism has reduced belief to trust, to a calculable object. Stiegler believes that this type of calculation of the future carried on by the capitalist ratio leads to no (desire for) future, to the systematic failure of long-term forms of technological adoption (this assumption will be discussed in Chapter 3). Yet, the exploitation of the processes of grammatization is not a destiny: Stiegler advances that a reorganization of the political economy might counterbalance the entropic effect of a drive-based capitalism which nowadays shows psychosocial and ecological limits[333]. Another political economy should be reinvented to initiate processes of *adoption* of new technologies against the destructive tendency that simply *adapts* to technical concretization[334], namely a tendency that exploits the acceleration of the evolution of technology, that is, the rule of permanent innovation.

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[327] Berlin, 'Cultures of Labour', 4.
[328] Stiegler, *The Decadence of Industrial Democracies*, p. 113.
[329] The concept is introduced by Yuk Hui, see Yuk Hui, *On the Existence of Digital Objects*, Electronic Mediations 48 (University of Minnesota press, 2016), chapter 6.
[330] The distinction between desire and drive, which Stiegler derives from Sigmund Freud, is expounded in Stiegler, Stiegler, *The Lost Spirit of Capitalism*.
[331] Stiegler, *The Decadence of Industrial Democracies*, p. 29.
[332] Stiegler meticulously analyze the tangle of desire and technology, to expound how desire can be invested into the technical object to channel drives and feel *consistences*: "The object of desire is desired to the point of inverting the goals of the drives that support it, but this is so only because it does more than just exist: it consists, and, as such, it infinitizes itself, that is, it exceeds all calculation. To desire is to invest in an object, and to experience its consistence, and hence, to destroy desire is to liquidate all attachment and all fidelity, that is, all trust and confidence – without which no economy is possible. And ultimately, it is to liquidate all belief, and therefore, all credit". Stiegler, *Nanjing Lectures (2016-2019)*, p. 16.
[333] Stiegler, *What Makes Life Worth Living*, p. 89.
[334] As seen in 1.4, concretization is the process of individuation of technical objects. It is a term that Stiegler derives from Simondon.

The current direction seems, however, opposite, as what can be observed is "the continuous "drop in the value of spirit" *that has become the very principle of a capitalism*[335] which exploits desire reducing it to "drives". This political economy does not engage in a long-term perspective as it develops technologies of control instead of technologies of individuation (namely, technologies of spirit), particularly through the exploitation of attentional and libidinal forms. In other words, it does not engage in transforming the usage of new technologies into practices allowing for processes of psychosocial individuation. The point is that, according to Stiegler's interpretation, desire is strictly influenced by the industrial political economy and that, consequently, there should be an *economy of desire*. Desire must be understood as a form of investment of one's drives onto an object that exists, but which also allows for an experience of *consistence* going beyond calculation. This process, according to Stiegler, opens to individuation processes. The destruction of this economy of desire has an impact on psychosocial individuation as, for instance, the liquidation of desire leads to the liquidation of justice and law, as well as to the liquidation of ethics[336]. Under the perspective of a "libidinal economy", thus, the issue is more the desire for justice than justice *per se* (this topic is analyzed in Chapter 3).

Stiegler sets forth that temporality is mediated by technology: that our desire for or our belief in the future is influenced by technological instruments, which also enable the transmission and questioning of different forms of knowledges, in a metastable equilibrium of consistences. While criticizing a capitalism become drive-based, Stiegler expounds that calculation has a limit: the calculation of trust destroys belief/fidelity and leads to a *dis*individuated society. According to him this process of rationalization, having reached a limit, must be diverted to reverse that gradual dispossession of several types of knowledge affecting everyone, to introduce new processes of adoption regarding technology. Stiegler has recurrently urged public power to revers these tendencies by "pursuing a politics of the sociopathology in which spirit consists in the epoch of its industrialization, and [of doing so] *by taking action to struggle against the decline of its value*"[337].

The confrontation between Stiegler's conception of spirit and the set of governance discourses and practices which have been unfolding in the PRC since the market reforms – which in part and curiously went under the official utterances of "spiritual civilization" and, today, of "Chinese spirit" – could provide an interesting meditation on the matter of citizenship individuation in which the roles of the industrial economy and of technology emerge as pivotal. As we are going to see, the Chinese paradigm constitutes a thought-provoking case where the concept of proletarianization advanced by

[335] Stiegler, *The Re-Enchantment of the World*, p. 4.
[336] Stiegler, *Uncontrollable Societies of Disaffected Individuals*, pp. 24-25.
[337] Bernard Stiegler, *The Lost Spirit of Capitalism*, trans. Daniel Ross, Disbelief and Discredit, volume 3 (Polity, 2014), pp. 91-92.

Stiegler can be researched, particularly in terms of the governance practices and rationales enacted by Party-State authorities to manage the economic and social transition.

The Chinese case is engaging because it shows how technology is both established as a crucial developmental factor and employed under a technoscientific rationality to mold the Chinese citizens. Regarding the Chinese transitional context of citizenship individuation, technology emerges as a ubiquitous theme and tool. However, its constitutive function in terms of psychosocial individuation is often "forgotten" or overlooked. This is why it is deemed important to analyze the introduction of market-oriented economy in the PRC, namely the accelerated changes on the matters of production and consumption and the strategies enacted by Chinese authorities to address them following Stiegler's perspective. Even though his diagnostic analysis was mainly directed toward industrial democracies, according to Hui, Stiegler had already hypothesized that "China and the West [were] on the same sinking boat of industrial capitalism, that they [had] all submitted their fate to calculability"[338]. The following analysis aims at validating such hypothesis.

2.2 THE MOLDING OF CITIZENS' SPIRIT DURING MARKET REFORMS

The advantage of Chinese culture is it caters to the ultimate spiritual needs and behavioral choices of human needs without resorting to religion.
Xu Xianming[339]

This section reconstructs the top-down narratives and initiatives addressed to mold citizens in post-Maoist China. It does so by analyzing how the concept of "spirit" has been employed and reinterpreted by Party-State authorities to manage the transitional phase of economic reforms until nowadays. During this phase, Chinese decision makers have recurrently resorted to traditional culture to reinvent moral patterns, a revival which is analyzed through the philosophical perspective delineated so far. Later, this section provides an investigation on the role of the Party in interpreting morality on behalf of the Nation. Lastly, it analyses the impact of the introduction of market rationalities on Chinese citizens employing Stiegler's proletarianization lens.

Spiritual Civilization

The "reforms and opening-up" phase, initiated since 1978 and resulting in China's current position as an economic and industrial superpower, determines a unique acceleration of the processes of modernization taking place in the PRC. After the Maoist period and the turbulent years of the Cultural Revolution (1966-1976), the Party's faction of economic reformists led by Deng Xiaoping (1904-

[338] Hui, *Post-Europe*, p. 57.
[339] Xu Xianming quoted in Delia Lin and Susan Trevaskes, 'Creating a Virtuous Leviathan: The Party, Law, and Socialist Core Values', *Asian Journal of Law and Society* 6 (February 2019): 41-66, p. 44.

1997) resulted victorious within the internal political struggles of the CCP. As already remarked, with the introduction of market-oriented economy [340] the Chinese leadership was concerned with maintaining authority and political stability within the country. At the same time, the molding of a new type of citizen was deemed necessary to respond to the new market needs. In part, this shift was already addressed in 1.3, while describing the scholarship on developmental citizenship. Here the focus will be on the peculiar combination of culturalist elements and of a technoscientific rationality molding the Chinese citizen in the midst of market reforms. These processes led to distinctive strategies and projects of citizens' construction that are believed thought-provoking when analyzed through the perspective of philosophy of technology delineated so far, representing a peculiar and situated process of citizens' proletarianization which was also managed by the Party-State. This section will explore the Chinese decision makers' conceptions of "spirit" and "civilization" and the employment and reinterpretation of these discursive concepts for governance purposes mediated by discourses on ideology and morality until more recent times.

Regarding the Party-State authorities' approach during the reform decades, it must be remarked that it has operated through a binary strategy: during this period, in fact, it can be observed among the different enacted narratives a "paradoxical re-emergence of tradition" accompanied by a renewed "scientistic belief"[341]. The first component of this twofold approach will be addressed in this section (2.2), while the second in the following one (2.3), even though it must be reminded that they unfolded simultaneously.

The revival of tradition in post-Maoist China is looked at as paradoxical for two reasons. First, Chinese traditional culture had officially and concretely been rejected, suppressed and even materially destroyed under Mao, with distinctive ferocity during the "ten years of chaos" of the Cultural Revolution (1966-1976), as it was considered an Imperial and feudal heritage and, thus, anti-revolutionary[342] (see, for instance, the campaign "*pi Lin pi Kong* 批林批孔", "criticize Lin (Biao), criticize Confucius" [343]). Second, the concept of tradition apparently clashes with ideas and perspectives of modernization, as it suggests a return to the past. Regarding this last point, however, Børge Bakken demonstrates, in *The Exemplary Society* (2000), that during the transitional phase of the economic reforms "'tradition' [could] also serve transforming purposes" while "'modernization' [could] mean stability and order"[344]. In other words, he points out that in times of structural changes,

[340] Regarding the Chinese case, it must be remarked that the state maintains a key role in the market economy.
[341] Bakken, *The Exemplary Society*, p. 5.
[342] For an historical account of the Cultural Revolution see Guido Samarani, *La Cina contemporanea. Dalla fine dell'impero a oggi. Nuova ediz.* (Einaudi, 2017), chapter 11.
[343] This campaign was directed against Lin Biao (1907-1971), an important CCP leader accused of treason during the Cultural Revolution, and against Confucius, one of the pivotal thinkers of Chinese traditional thought. Regarding this campaign see Yan, 'The Politics of Moral Crisis in Contemporary China', pp. 8-9.
[344] Bakken, *The Exemplary Society*, p. 5.

"conservative utopias"[345] might emerge, in which selected memories of the past are reinterpreted to control the future.

Deng Xiaoping, paramount leader of China between 1978-1989, managed the socio-economic changeover introducing the ideological framework of the "two civilization" (*liangge wenming* 两个文明)[346]: in parallel to the project of establishing the "material civilization" (*wuzhi wenming* 物质文明), namely the transition to the market economy, the techno-industrial growth of the country and the initiation to mass consumption, he forwarded the necessity of building a "spiritual civilization" (*jingshen wenming* 精神文明), a "civilizing of minds"[347] able to counterbalance the disorders and the disorientation stirred by the modernization processes to accompany the Chinese citizens to extricate themselves within a new competitive labor market and a changing society. The concept of "spiritual civilization" was first mentioned by Deng at the "Fourth Chinese Literature and Arts Workers Representative Conference" (October 1979), an occasion to address and rehabilitate intellectuals after the antagonistic times of the Cultural Revolution[348]. However, both the Chinese words for "civilization" (*wenming* 文明), and "spirit" (*jingshen* 精神) had already been the object of a debate among Chinese intellectuals at the turn of the 20th century.

The introduction and interpretation of the term "civilization" dates back to the late Qing dynasty. According to Wang Gungwu[349] the word "civilization" has been translated into Chinese as *wenming* (文明) from the Japanese language, which in turn derived it from the French at the end of the 19th century[350]. The French word is also quite recent, as it dates back to the 18th century. The Chinese word for civilization does not share the Latin root *civis* (citizen); instead, it brings the attention to a language and literacy dimension (*wen* 文), as well as to an idea of brightness (*ming* 明). *Wenming* is, in fact, a term derived from the *I Ching*[351] and it identifies "humane" or educated rather than "martial" attitudes distinguishing China from "barbarians"[352]. Interestingly, both the Chinese words for "culture" and

[345] *ivi*, p. 18.
[346] A first reference to the material and spiritual civilization was made at the Third Plenum of the Communist Party's Eleventh Central Committee in 1978 (the meeting that launched the first part of market reforms across the nation), see Friedman, 2004, 701. During the 12th National Congress of the Communist Party of China in September 1982, the theory of the "two civilizations" was officially.
[347] Boutonnet, 'From Local Control to Globalised Citizenship: The Civilising Concept of Wenming in Official Chinese Rhetoric', p. 80.
[348] Gallelli, 'Jingshen'.
[349] Gungwu Wang, 'The Chinese Urge to Civilize: Reflections on Change', *Journal of Asian History* 18, no. 1 (1984): 1–34.
[350] See also Mingming Wang, 'To Learn from the Ancestors or to Borrow from the Foreigners: China's Self-Identity as a Modern Civilization', *Critique of Anthropology* 34, no. 4 (2014): 397–409.
[351] The *I Ching* or *Book of Changes* is one of the Five Classics of Chinese thought, the other are: the *Classic of Poetry*, the *Book of Documents*, *The Book of Rites*, *The Spring and Autumn Annals*.
[352] Wang, 'To Learn from the Ancestors or to Borrow from the Foreigners', p. 401.

"civilization" imply an insistence on the idea of transformation, on "changing others for the better"[353]. To this regard, it is important to remark that during the 19th century, the term "civilization" in both Japan and China was associated with Western ideas of modernity and development, with which Asian countries needed to "catch up". Under this perspective, the concept of civilization discloses a classificatory assumption according to which not all cultures can be defined civilization, but only those at a higher phase of social and technological development, which are thus "destined" to include other cultures within their path of progress, revealing "expansionist" and, also, colonialist ambitions[354]. Under this developmental understanding, this term also started to evocate, among other things, order, improvement[355], and even social Darwinism[356]. As for "spirit", it emerged as an essential component to mold the Chinese national identity within the intellectual discussions of late Qing dynasty: while the material, technological modernization was considered simple to achieve, the "spiritual" component of modernization, broadly understood in terms of culturally, politically and socially educating the people, was deemed more arduous[357]. In this sense, this word shared some common connotations with the civilizing ideals.

In the 80s, the "spiritual" within Deng's "spiritual civilization" too forms a binary dimension together with matter ("material civilization"), suggesting a twofold of infrastructure/substructure and superstructure, to pursue at once economic growth and ideology. This binary of course relied on the Party's interpretation of Marxist thought[358]. As remarked by Sara Friedman, this dual focus must be understood as the Party-State's ideological approach to manage economic reforms: "The division of *wenming* [civilization] into material and spiritual components justified Deng Xiaoping's call for renewed attention to economic forces without altogether eliminating the relevance of the ideological field"[359]. Regarding this, it must be remarked that, since Deng's leadership, the concept of "spiritual civilization" is often further connotated as "*socialist* spiritual civilization", referring precisely to an ideological dimension which has been maintained in the transitional era until now[360].

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[353] Wang, 'The Chinese Urge to Civilize', p. 4. The civilizing "urge", in this sense, could be directed from élites to uneducated people, but also from the Chinese to the non-Chinese.
[354] *ivi*, p. 2.
[355] Bakken, *The Exemplary Society*, p. 58. Doyon points out that via the "two civilizations" theory China appropriates and re-signifies the Western notion of "civilization". Nicholas Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', *The China Journal*, no. 60 (2008): 83–109, p. 89.
[356] Beatrice Gallelli, 'Dalla "Civiltà Spirituale" Allo "Spirito Cinese": Strategie Di Governance Nella Cina Post-Maoista', *Sulla via Del Catai* 27 (2023), p. 35.
[357] *ibid*.
[358] Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', pp. 87-88.
[359] Sarra L. Friedman, 'Embodying Civility: Civilizing Processes and Symbolic Citizenship in Southeastern China', *The Journal of Asian Studies* 63, no. 3 (2004): 687–718, p. 701.
[360] It is important to underline that, despite the marketization of the economy, the ideological dimension has not disappeared from the official discourse of post-Mao China. The persistence of the ideological dimension during this phase and until nowadays is also pointed out in Rogier Creemers, 'Party Ideology and Chinese Law', in *Law and the Party in China: Ideology and Organisation*, ed. Rogier Creemers and Susan Trevaskes (Cambridge University Press, 2020).

To explore more deeply the discourse on "spiritual civilization", it is helpful to expound its three key components, which has been resumed as: 1) the necessity of raising the overall "quality" (*suzhi*) of the Chinese citizens (this concept is investigated more thoroughly in 2.3); 2) the importance of culture (*wenhua*), understood in terms of educational issues but also of the re-emergence of a national cultural tradition; 3) the already mentioned broad concept of civility or civilization (*wenming*), implying developmental values[361]. The wide discursive tool of "spiritual civilization" has been interpreted as a project of "cultural engineering" (*wenhua gongcheng* 文化工程) within the state-sponsored quest for modernity[362]. According to the sinologist Beatrice Gallelli, "the construction of the 'spiritual civilization' has been the umbrella under which 'soft' techniques of governance are to be implemented"[363]. One of the concrete manifestations of this ideological approach has been represented by the "charters of civilization", big propaganda billboards displayed in urbanities. These charters shared the urban space dedicated to advertisement[364] and even its rationalities, as they constituted forms of "public interest advertising"[365]. These billboards would recite slogans such as "The civilized citizen passionately loves the country, passionately loves Beijing, promotes the Harmony of the nation and preserves its stability"[366]. The combined use of *wenming* and *jingshen* was, thus, protean: from official utterances to street posters, it gave rise to a variety of narratives, which would be adapted in meaning and formulation through times[367].

As already remarked at the beginning of this chapter, the introduction of the "spiritual civilization" must be connected with a sweeping narrative spreading in the PRC during the 80s and 90s that claimed that economic growth was producing a social decay and a moral vacuum within the Chinese society: a sort of "spiritual slide"[368]. This tide of mistrust was perceived as "a crisis experienced by many individuals as a collapse of reciprocity and trust, triggered by social problems such as corruption, food safety, unethical business practices, and selfishness and lack of civic virtues"[369]. The market versus morality debate took distinctive importance in the transitional PRC, given that the opening to market economy had a profound impact on the Chinese society, leading to structural social transformations, particularly regarding the organization of labor.

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[361] Friedman, 'Embodying Civility', p. 702.
[362] Luigi Tomba, 'Of Quality, Harmony, and Community: Civilization and the Middle Class in Urban China', *Positions: Asia Critique* 17, no. 3 (2009): 591–616, p. 606.
[363] Gallelli, 'Jingshen', p. 84.
[364] Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', p. 108.
[365] Yan, 'The Politics of Moral Crisis in Contemporary China', p. 23.
[366] Boutonnet, 'From Local Control to Globalised Citizenship: The Civilising Concept of Wenming in Official Chinese Rhetoric', p. 89.
[367] Gallelli, 'Jingshen', p. 84.
[368] Bakken, *The Exemplary Society*, p. 20.
[369] Anna Iskra et al., 'Remaking the Self: Spirituality, Civilization and the Chinese Quest for the Good Life in the Reform Era', in *Handbook on Religion in China*, ed. Stephan Feuchtwang (Edward Elgar Publishing, 2020), p. 69.

These changes would deeply affect people's minds and citizens' attitudes and aspirations. Regarding this process, Yan Yunxiang has remarked that "China and Western Europe were both forced into the current round of individualization through the impact of globalization, especially due to the global triumph of neoliberalism and the capitalist mode of production"[370]. He claims, thus, that the three dimensions constitutive of "individualization" (a term which must not be confused with individuation[371]) in Western industrial societies could be applied to the Chinese case of the reforms era to describe the shifts in the relations connecting individuals, society and the state: 1) the "liberating" one, 2) the "disenchantment" one, and 3) the "control/reintegration" one[372]. Retracing similarities in the two individualization trajectories does not imply a mere translation of Western paradigms to the Chinese case. Yan warns against an inaccurate application of the Western neoliberal logics to the post-socialist Chinese case, while, nevertheless, allowing for the exploration of likenesses:

> It is logically impossible to practice neoliberalism without political liberalism because the former derives from the latter and holds the autonomy and natural rights of the individual to be the core of its theoretical reasoning. Yet, it is possible for a society to undergo the individualization process without political liberalism and classic individualism because this reconfiguration of social relations can be carried out by other mechanisms, as revealed in the Chinese case[373].

His reflection is important for this study as it denotes that it is possible to outline similar tendencies with regards to the impact of hyper-industrial societies globally, even though it is fundamental to situate these processes and to keep in mind divergences. Indeed, the main difference between the trajectory of Western liberal democracies and that of China relies in that Chinese individualization did not take place within a liberal political system. On the contrary, the role of the Party was central in managing the opening to market economy in the country and this phase cannot be looked at as a retreat of the State from citizens' lives as in the neoliberal paradigm[374]. Nevertheless, and more interestingly for the purposes of this study, the individualization processes in Western countries and in the PRC also share structural similarities: above all, the "disenchantment" component of modernization, which regarding China can be understood as a twofold process: (1) an "ideological

[370] Yunxiang Yan, 'The Chinese Path to Individualization: The Chinese Path to Individualization', *The British Journal of Sociology* 61, no. 3 (2010): 489–512, p. 507.
[371] Here the concept must not be confused with that of "individuation" in Simondon or Stiegler, but must be understood as those processes leading to the creation of the modern individual. Yan derives the concept from Ulrich Beck's theory of second modernity and modernization, see Yan, 'The Chinese Path to Individualization', p. 489. Regarding Western societies, Beck delineated four features characterizing the processes of "second individualization": "The individualization thesis highlights the following four basic features of this individualization process: (1) Detraditionalization or 'losing the traditional'; (2) Institutionalized disembedding and reembedding; (3) Compulsory pursuit of a 'life of one's own' and the lack of genuine individuality; (4) The internalization or psychologicalization of risks due to the precarious freedoms and uncertainties that the individual is facing". Quoted in Yan, 'The Chinese Path to Individualization', p. 506.
[372] Yan, 'The Chinese Path to Individualization', p. 507.
[373] *ivi*, pp. 508-509.
[374] Andrew Kipnis, 'Neoliberalism Reified: Suzhi Discourse and Tropes of Neoliberalism in the People's Republic of China', *Journal of the Royal Anthropological Institute* 13, no. 2 (2007): 383–400.

disenchantment" taking place after the Maoist period[375], (2) but also as "the loss of traditional security with respect to practical knowledge, faith and guiding norms"[376]. With regards to this process, it has been already argued that the globalization of the Western capitalist cosmotechnical thought and its rationales, and rationalization, have played a pivotal role (see 1.2). With this scenario in mind, it is intriguing to reflect on the motives of the top-down retrieval of culture and tradition that has been forwarded by Chinese decision makers during the reform era and until nowadays.

Chineseness: Bringing back Tradition

The 90s are looked at as the key moment of transition from a planned toward a market-oriented economy. In 1992, Deng Xiaoping made the renowned "southern tour" of China's coastal industrial areas and SEZs. In the same year, the Fourteenth Party Congress sanctioned the development of a "socialist market economy"[377]. While, during the Dengist period, "spiritual civilization" was more linked to socialist ideology, under Jiang Zemin (China's top leader between 1993-2003) this narrative was enriched with cultural and nationalistic components[378]. Nicholas Dynon interprets this retrieval of Chinese traditional culture as a strategy to address change that was similar to that adopted during late-imperial times: "[e]choing moderate late Qing dynasty calls for modernization based on a Chinese philosophical core, "Chineseness" was to be presented as a prerequisite to the type of social and economic development that would reflect the potential of the Chinese people"[379].

In the rapidly evolving social context of reform era, Party-State authorities resorted to traditional values, such as those advanced by Confucianism (for instance, filial piety[380]), to restore social trust, restrict economic individualism and reinforce their rule through a "depoliticized cultural nationalist rhetoric"[381]. This proved to be all the more effective as a sort of "spiritual thirst" was observed among Chinese society in that period, which led people to resort to different types of spiritual practices and self-cultivation habits[382]. These practices, according to Iskra et al., must be understood as "modern forms of self-construction", also influenced by flows of a "globalizing spirituality", which the Party-State authorities might have surfed to reconstruct a national identity based on recurrent cultural

[375] Bin Zhao, 'Consumerism, Confucianism, Communism: Making Sense of China Today', *New Left Review*, no. I/222 (April 1997): 43–59.
[376] Ulrich Beck quoted in Yan, 'The Chinese Path to Individualization', p. 490.
[377] Elaine Jeffreys and Gary Sigley, 'Governmentality, Governance and China', in *China's Governmentalities*, ed. Elaine Jeffreys (Routledge, 2009), p. 3.
[378] Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', p. 92.
[379] *ivi*, p. 94.
[380] For a more recent analysis of a re-emergence of the value of filial piety within the top-down discourse of the CCP, see Ying Miao, 'Romanticising the Past: Core Socialist Values and the China Dream as Legitimisation Strategy', *Journal of Current Chinese Affairs* 49, no. 2 (2020): 162–84, p. 175.
[381] *ivi*, p. 164.
[382] Iskra et al., 'Remaking the Self'.

patterns[383]. Indeed, self-cultivation doubtlessly constitutes a "cultural memory" of Chinese traditional thought[384].

Within the thriving intellectual discussion of the reforms period, some Chinese thinkers even looked positively at the reconstituting of a "Confucian ethic" boosting at once economy and citizens' integrity, which would have functioned like the "Protestant ethic" driving capitalism in Western countries[385]. Similarly, one cadre advanced the necessity of introducing a "revolutionary religion" to canalize the developmental ethic into production[386]. As already remarked (1.1), in the last decades of the twentieth century the economic success of East Asian states was decoded as the product of a sort of "Confucian capitalism"[387] based on discipline and collectivism. This culturalist interpretation, however, has been rejected by several scholars, who denounced it as both externally biased, when considering culturalist interpretations from the West, and internally instrumental, when used by governments to develop market-driven labor disciplining rationalities[388]. In support of this last view, Ong interprets the Confucian/Chineseness revival in post-Mao China as functional to the establishment of economic relations among Chinese transnational identities and to the refashioning of social norms facilitating the market, including a patriarchal and gender dimension of labor division[389].

In more recent years, the top-down refashioning of traditional cultural elements has been persisting. During the Hu-Wen administration (2003-2013)[390], the introduction of the official utterance of a "(socialist) harmonious society" (*hexie shehui* 和谐社会) has been analyzed as a further cultural revival because evocating a Confucian formulation[391]. With its pacificatory tone, the "harmonious society" responded to emerging social divides and addressed individualistic behaviors originated by the economic reforms. As remarked by Dynon, however, the rhetoric of harmony within the "social civilization" was aimed at neutralizing socio-economic conflicts and disparities[392]. Another ideological addition during Hu's administration is the concept of "ecological civilization" (*shengtai*

[383] *ivi*, p. 69.
[384] Lin, *Civilising Citizens in Post-Mao China*, chapter 2. See also François Jullien, *Vital Nourishment: Departing from Happiness* (Zone Books, 2007).
[385] Bakken, *The Exemplary Society*, p. 24. This debate is also described in Jing Wang, *High Culture Fever: Politics, Aesthetics, and Ideology in Deng's China*, First Edition (University of California Press, 2020), p. 66.
[386] Bakken, *The Exemplary Society*, p. 65.
[387] Geir Sigurðsson, 'Frugalists, Anti-Consumers, and Prosumers: Chinese Philosophical Perspectives on Consumerism', in *The Changing Landscape of China's Consumerism* (Elsevier, 2014), p. 132.
[388] Sigurðsson, 'Frugalists, Anti-Consumers, and Prosumers'. See also Ong, *Flexible Citizenship*, chapter 2.
[389] Ong, *Flexible Citizenship*, pp. 40-41.
[390] When Hu Jintao was general secretary of the CCP and Chinese president and Wen Jiabao was Premier.
[391] Jiawen Ai, 'Two Sides of One Coin: The Party's Attitude toward Confucianism in Contemporary China', *Journal of Contemporary China* 18, no. 61 (2009): 689–701, p. 696.
[392] Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', p. 105.

wenming 生态文明)[393]. This notion resorts to Chinese traditional philosophy to sustain that its distinctive interpretation of the relation between humans and nature can lead the Chinese national path for a sustainable future. In this sense, it represents another top-down utterance that refashions Chinese traditional philosophy to shape an aspirational future for the Chinese nation (a more thorough analysis of this ideological axis is provided for in 4.3)..

The remodeling of traditional concepts delineated so far must be understood as a set of strategies to respond to society's renewal while keeping it orderly and more efficient: at once governed and self-governed. As remarked by Lin Delia, "Prevailing political discourses in post-Mao China – namely, civilization (*wenming*), *suzhi*, harmonious society (*hexie shehui*) and the current China Dream (*zhongguo meng*) – share a common focus on civilizing and cultivating citizens for socialist nation building"[394]. In this sense, the culturalist endorsements can be interpreted as the continuous refashioning of a conservative utopia[395] which the Party-State has been reformulating since 1978, and which today crystallizes into Xi Jinping's "China Dream".

In more recent years, in fact, the concept of "spiritual civilization" has undergone a further refashioning. With Xi (China's top leader since 2013), there has been a shift of the meaning and use of *jingshen*, now identified with the "Chinese spirit" (*zhongguo jingsen* 中国精神) and linked to the broad narrative of the "China Dream" (see 1.1). Nowadays, the official interpretation of the "Chinese spirit" unfolds into the "national spirit" (*minzu jingshen*) and the "spirit of the times" (*shidai jingshen*). The latter relates to bringing forth the discourse on modernization linked to economic growth and reforms, and to mold behaviors boosting the national economy[396]. The former is associated to patriotism and, more broadly, with the process of re-evaluation of traditional culture which by now reveals a poised attitude revealing an increased "cultural confidence" (*wenhua zixin* 文化自信), to the point that "Chineseness" must be defended from "de-sinicization"[397]. The national and international strategy narrative is insisting on the grandeur of China's five-thousand years of civilization and, in the latest years, even of its "superiority"[398].

In post-socialist China, the reappearance of tradition is top-down employed to engineer a "Chinese spirit". This resurgence of tradition, however, must be read against its culturalist interpretations, as

[393] In the official discourse, we can recount up to four civilizations: material, spiritual, political, and ecological. The "political civilization", not addressed here, refers to the ideological reconsolidation of Marxist and Socialist ideology within the Party during the post-Mao transitional phase, see Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology'.
[394] Lin, *Civilising Citizens in Post-Mao China*, chapter 5.
[395] The exploration of the idea that utopias can also engender conservative programs is explored in Bakken, *The Exemplary Society*, p. 18.
[396] Gallelli, 'Jingshen', 89.
[397] *ivi*, p. 93.
[398] *ivi*, p. 100.

also remarked by Bakken who claims that "[t]he transmission of culture and tradition is reflexive, not determinist, and there is nothing in tradition that forces the system into the pattern it forms today"[399]. Moreover, this resurgence must be deconstructed considering the impact of the global technical system with regards to the consistence of this revival. According to the philosophical interpretation delineated so far, the progressive involvement of nation-states in a homogenized economic system is intensified by the concretization of the technical system, which is more and more globalized to the point that it becomes a sort of planetary background. In this sense, the reappearance of traditional patterns in post-socialist China should not be interpreted as a renewal or a reinvention of its moral cosmotechnics, namely that comprehensive view of the cosmos and of morality mediated by a distinctive (cosmo)technical system discussed by Hui (1.2). If that were the case, it would mean that modernization and globalization processes in China, mediated by an accelerated evolution of technologies, took place without affecting people's minds. The assumption, instead, is that the contemporary technical system concretizing in China is not substantially or *cosmotechnically* different from elsewhere and that the PRC is, instead, becoming a champion of its (globalized) rationales.

Following Yuk Hui's interpretation, under a planetary cosmotechnical system converging toward sameness, it is at the very least doubtful to look at Chinese top-down boosted cultural confidence as an alternative model to the current technoscientific rationalities. Culture and values are not fixed "objects": to understand the broad umbrella term of tradition as a fixed ensemble persisting and ready to be used through times would mean to reproduce culturalist assumptions and, at the same time, to deny the role of the contemporary technical concretization. Regarding the reform era, Bakken has talked instead of a bidimensional "control aspect of culture", both past and future-oriented: "without the precedence of tradition and myth, a culture will be deprived of memory, and thereby also deprived of an important 'binding' element in society. On the other hand, without foresight it will be deprived of its dreams and ideas for a future society: deprived of an idea about where to go"[400].

As claimed by Dirlik, the "articulation of native culture into a capitalist narrative" was at the origin of the East Asian Confucian revival[401]. The "spirit" of civilization, in this sense, does not exist as a fixed continuum, however it might *consist* as an ensemble of ideals, motives, and values. Regarding the Chinese case, the consistence of the Chinese spirit is a recurrent dream emerging from a remodulation of the past forwarded by the CCP. Therefore, the peculiarity of the Chinese paradigm,

[399] Bakken, *The Exemplary Society*, p. 9.
[400] *ivi*, p. 17.
[401] Arif Dirlik, *The Post-colonial Aura: Third World Criticism in the Age of Global Capitalism*, Nachdr. (Westview Press, 2010), p. 92. See also Dirlik, 'Confucius in the Borderlands: Global Capitalism and the Reinvention of Confucianism'.

today become a sort of "dreamland" of modernity, must be traced back to the role of the Party as the mediator and engineer of its spirit.

A "Virtuous Leviathan"[402]

As discussed so far, Party-State authorities have resorted to the refashioning of traditional culture as one of the strategic elements to rationally manage the modernization shift. The fall of societal trust, whether it was used as an instrumental rhetoric or observed as an objective phenomenon, was administered giving form to a distinctive type of pastoral approach, in which the Party takes on the role of moral compass of the people. The CCP has maintained its guiding role with respect to the Chinese transitional society steering the nation through changing times. To this regard, Jeffreys and Sigley have remarked that "within all this discussion on the changing function of government in China, the continued importance and necessity of the CCP is not in question"[403]. Its legitimacy also relies on its performance in maintaining stability and in realizing economic growth[404]. The following paragraphs aims at delineating some features which nowadays make the CCP a "virtuous Leviathan"[405].

In contemporary China, a consolidating interpretation of the law, which resorts to both traditional philosophy and socialist ideology, constitutes an important element of those processes integrating morality into the governance of the PRC. The understanding of the law in China diverges from the Western/liberal traditions, which are represented by the two broad umbrella of the common law and civil law, and it is today presented as a valid alternative to them. Under Xi's administration this alternative model is demonstrating a renewed confidence supported by its long-lasting philosophical and historical tradition, particularly the two schools of thought of Confucianism and Legalism, whose philosophies contributed to molding a peculiar example of legal family concretized during Imperial times[406].

From a cultural tradition viewpoint, law and morality had not as defined boundaries in China as in Western societies. In fact, Confucianism and Legalism, the two most influencing traditions of imperial China's statecraft, understood law and morality as reinforcing each other, even though they look at the authority of rules and at the nature of man in opposite ways[407]. The character *fa* (法), normally

[402] This subtitle is inspired by Lin and Trevaskes, 'Creating a Virtuous Leviathan'.
[403] Jeffreys and Sigley, 'Governmentality, Governance and China', p. 24.
[404] Miao, 'Romanticising the Past', p. 164.
[405] Lin and Trevaskes, 'Creating a Virtuous Leviathan'.
[406] Dingxin Zhao, *The Confucian-Legalist State: A New Theory of Chinese History*, Oxford Studies in Early Empires (Oxford University Press, 2015).
[407] For Confucians the moral principles and rites outweigh orders, while for Legalists the rules of the authorities should predominate, see Yongxi Chen, 'A Déjà Vu?' The Social Credit System and Fajia (Legalism)', *Verfassungsblog: On Matters Constitutional*, ahead of print, Fachinformationsdienst für internationale und interdisziplinäre Rechtsforschung (TEST), 28 June 2019.

translated as "law", in ancient China referred to legal codes but also to "institutions". As Stephen C. Angle points out:

> [b]ecause of the fusion between the moral order and institutions, there were no independent, "procedural" criteria by which justice was regularly assessed. What ultimately mattered was putting in place virtuous people who would see that the institutions of the state and society functioned so as to bring about the Way, based on the ability rooted in their own virtue to perceive the demands of the Way in any given situation[408].

In addition to this, it needs to be remarked that centralized power was a distinctive feature of the Confucian and Legalist philosophical-political interpretation[409]; for instance, according to the Confucian tradition "political legitimacy and moral authority are two sides of the same coin"[410].

In the last decades, these elements of Chinese traditional philosophy have been resorted to as a legitimate source for the CCP to articulate a system of governance different from the Western one and originating according to a "law-morality amalgam"[411] with its roots in a "combination of Confucian ethics and Legalist regulations and technics"[412]. This rediscovery was initiated since 2001 under Jiang Zemin, when a renewed interest in incorporating law and morality was stressed[413], resulting into the initial establishment of what ca be defined as "virtue politics"[414]. As it has been explained by Lin and Trevaskes[415], today the CCP has integrated the two concepts of "governing the country by moral virtue" (*yide zhiguo* 以德治国) and "governing the nation according to law" (*yifa zhiguo* 依法治国) in its configuration of the legal system, in contrast with the Western concept of the rule of law. This framework is today at the core of the architecture of the Chinese socialist rule of law. Most importantly, Xi Jinping's leadership, in continuity with his precursors, understands the law as an instrument in the hands of the Party, and not above it. According to this interpretation, the leadership of the Party becomes central in interpreting and applying the law, and it is legitimated by its exemplary conduct.

As a further contribution of Xi's though within this interpretative process, there has been the incorporation within the legal system of the "Core Socialist Values (CSVs)" (*shehui zhuyi hexin jiazhiguan* 社会主义核心价值观), twelve "sanctioned moral virtues"[416] aimed at boosting "civic

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[408] Stephen C. Angle, *Contemporary Confucian Political Philosophy: Toward Progressive Confucianism* (Polity, 2012), p. 61.
[409] See Anne Cheng, *Storia del pensiero cinese*, ed. Amina Crisma (Einaudi, 2021).
[410] Lin and Trevaskes, 'Creating a Virtuous Leviathan', p. 49
[411] Delia Lin and Susan Trevaskes, 'Law–Morality Ideology in the Xi Jinping Era', in *Law and the Party in China: Ideology and Organization*, ed. Rogier Creemers and Susan Trevaskes (Cambridge University Press, 2020), p. 122.
[412] Lin and Trevaskes, 'Creating a Virtuous Leviathan', p. 49
[413] *ivi*, p. 42.
[414] *ivi*, p. 51.
[415] Lin and Trevaskes, 'Law–Morality Ideology in the Xi Jinping Era'.
[416] Lin and Trevaskes, 'Creating a Virtuous Leviathan', p. 42. The twelve CSVs are: Prosperity, Democracy, Civility and Harmony (National Core Socialist Values), Freedom, Equality, Justice and Rule of Law (Societal Core Socialist Values), Patriotism, Dedication, Integrity and Friendship (Citizens Core Socialist Values), see Michael Gow, 'The Core Socialist Values of the Chinese Dream: Towards a Chinese Integral State', *Critical Asian Studies* 49, no. 1 (2017): 92–116.

morality"[417] within a triple national, societal, and citizen dimension[418]. It has been remarked that the narrative promoting the CSVs evocates moral patterns taken from the Chinese tradition and the Confucian thought, such as benevolence, virtue and filial piety[419]. In the last years, the CSVs have been displayed among cities on big billboards and boosted via advertising-like campaigns[420]. Part of the discourse on the CSVs revolves on what can been defined a romanticized idea of tradition to foster legitimacy[421]. Moreover, since the 2010s, CSVs have started to be incorporated within the law-making and the judicial processes. For instance, the Supreme People's Court, the highest court of the PRC, has issued guiding principles directed at inferior courts to orient them with the incorporation of the CSVs into their judgments. As a result, today the Chinese legal system holds a political-educative function[422]. This denotes that the role of ideology is receiving a newly found importance[423] and, also, that moral patterns taken from cultural memories legitimate this entire process. The CCP's goal is that of engineering a "China-style mode of governance" able to be competitive with other models in terms of historical relevance as well as efficiency.

At the core of the "rule by virtue" system lies the idea that the CCP represents the moral compass of the people. According to such understanding of law and governance, "concentrated power, which is virtuous in nature, is a more effective accountability mechanism than separation-of-power type arrangements"[424]. In this sense, as remarked by Lin and Trevaskes, "'[g]overning the nation by moral virtue' […] means that the government assumes the obligation to construct morality as a means of governing the nation"[425]:

> The Party leadership is today communicating to its citizens a model of best-practice governance that offers a clear alternative to the Western liberal model of governmental accountability. Rather than continue to play a reactive or defensive propaganda game with the West on the issue of values and human rights, the Party has changed its strategy by much more confidently asserting its alternative vision of good governance. This alternative version entails an assumption that in China effective governance does not need dispersed power arrangements and independent checks and balances. Rather, it requires strong and virtuous Party supervision and leadership over all aspects of decision-making across the state[426].

The "law-morality amalgam" has come to constitute a pivotal instrument of governance in Xi's China.

[417] Miao, 2020.
[418] Gow, 'The Core Socialist Values of the Chinese Dream'.
[419] Miao, 'Romanticising the Past', p. 171.
[420] *ivi*, p. 166.
[421] *ivi*, p. 172.
[422] Lin and Trevaskes, 'Creating a Virtuous Leviathan', p. 55.
[423] Creemers, 'Party Ideology and Chinese Law'.
[424] Lin and Trevaskes, 'Law–Morality Ideology in the Xi Jinping Era', p. 126.
[425] *ivi*, p. 132.
[426] *ivi*, 2020, p. 123.

As already mentioned, according to such an interpretation of governance, the Party is considered above the law, it "leads over everything"[427]. It has been advanced that today the CCP can be looked at as a sort of "virtuous Leviathan", in which its role as moral compass of the nation serves to legitimate its superiority with respect to the law. The iconic image of the Leviathan comes from Hobbes' homonymous essay, in which the English philosopher laid the foundations for a political-philosophical theory to legitimate the role of the sovereign in the modern state[428]. Regarding the application of this image to the Chinese case, the Party would constitute the country's common power, a sort of commonwealth, and the general secretary the core of that power, the sovereign[429]. In Hobbes' disputed interpretation, the legitimacy of the Leviathan absolute power relied on the social contract as a necessary step to leave the state of nature. In the Chinese context, the Party's moral posture comes at constituting a quasi-transcendental legitimacy function, imbued with culturalist assumptions.

As advanced by Xu Xianming, a Chinese legal scholar quoted by Lin and Trevaskes: "[t]he advantage of Chinese culture is it caters to the ultimate spiritual needs and behavioral choices of human needs without resorting to religion" [430]. This statement exemplifies how culturalist assumptions are resorted to legitimate governance practices. The underlying assumption is that Chinese culture is a sort of fixed continuum, an adamant "spiritual" background persisting through times without being affected by the organization of the sociotechnical system. Hui, on the contrary, has demonstrated that the evolution of technology has operated a global rupture of the metaphysical unities, namely the dissolution of "a unity between practice and theory, or more precisely a *form of life* that maintains the coherence (if not necessarily the harmony) of a community"[431]. This dissolution has affected cosmotechnical thoughts on a planetary level, a disruption in which the globalized technical system has become a uniform background. The Chinese resort to tradition, thus, maintains nationalistic connotations that must also be understood in terms of an active or productive response to technological globalization processes (this issue is further discussed in Chapter 4).

The Chinese case is a peculiar experiment that integrates law and morality within modern governance practices. The image of a virtuous China is emerging also internationally, particularly as the Chinese government is interested in spreading a positive and responsible image of the country within the global arena. For instance, with regards to the "trade wars", the Party-State authorities aim

[427] The expression "the Party leads over everything" has been added to the Party Constitution, Lin and Trevaskes, 'Law–Morality Ideology in the Xi Jinping Era', p. 121.
[428] Thomas Hobbes, *Leviathan*, ed. Christopher Brooke, Penguin Classics (Penguin Books, 2017).
[429] Lin and Trevaskes, 'Creating a Virtuous Leviathan', p. 45.
[430] Xu Xianming quoted in Lin and Trevaskes, 'Creating a Virtuous Leviathan', p. 44.
[431] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 33.

at presenting the PRC as the trustworthy part and even moral (and economic) winner of the commercial conflict, with some success[432].

The question is to understand how this law and morality pairing might be looked at as a response, perhaps a pre-emptive strategy, to broader social processes linked to globalization. One central theme regarding the Chinese case is that, as continuously remarked, it differs from Western countries in that the Party covers a decisive pastoral role. The CCP plays a central part in shaping and enforcing the super-ego of the Chinese nation, in molding its "spirit". Once again, it must be asked which is the role of technology in this process. In its critique of hyper-industrial democracies, Stiegler had advanced that governments responses to social *dis*individuation would foresee "hygienist" approaches with a tendency to authoritarianism[433]. He refers to this non-shared transition from laws to orders by showing that these latter do not *consist* as an ideal of justice for citizens:

> The fact remains that the automatic or regressive super-ego that manifests itself through these prohibitive measures occurs when authority is so *lacking* that it is replaced with authoritarianism and police measures, which *further intensifies this deficiency*: the law, when it is imposed, or compulsively endured, when it is not desired as the idea of what is just, ceases to be the law, becoming merely a sterile order, that is, without future, and thus a factor in the serious disorders to come[434].

Regarding the Chinese case, the freezing of morality, namely, its top-down interpretation by the Party can be interpreted in terms of an "automation" of the super-ego taking place not only through this peculiar interpretation of the law, but also through broader imaginaries linking the citizens to the nation, such as the developmental "China Dream", as well as, of course, authoritarian practices. At the same time, this automation is fostered by the introduction of innovative programs of digital governance (see Chapter 3).

Here it is not advanced that the centralization of power operated by the CCP is simply a "hygienist" response to these processes taking place in China. Doing so would mean to underestimate the historical and political processes that have concretized in the actual political system of this country. What is interesting to notice, instead, is that this moralizing discourse mediated by authoritarian practices, a peculiar understanding of the law and, as discussed in 2.3, a distinctive role of technology, is more and more presented as an efficient alternative model, which is becoming influent outside of China. However, this model of efficiency, and its technological rationale, must be the object of

[432] David Cohen, 'Trade War Is about More than Just Trade, China's Official News Agency Argues', *POLITICO*, 11 May 2025, https://www.politico.com/news/2025/05/11/xinhua-china-trade-position-00340489; Giovanna Coi, 'US Popularity Collapses Worldwide in Wake of Trump's Return', *POLITICO*, 12 May 2025, https://www.politico.eu/article/usa-popularity-collapse-worldwide-trump-return/.
[433] Stiegler, *The Lost Spirit of Capitalism*, p. 91.
[434] *ibid*.

philosophical reflection that goes beyond a reductionist opposition between democracy and authoritarianism, especially when considering the democratic crisis affecting Western countries[435].

If we follow Stiegler's analysis, processes of automation of the super-ego (he understands this last as the ensemble of morality, motives and ideals constituting an authority and, also, its critique), *dis*individuate citizens in different ways: (1) first and obviously, because citizens are automatically excluded from the processes of ideation and interpretation of the law and, more importantly, of morality; (2) second, because, according to Stiegler, the "automation" of authority is not sustainable in terms of an "ecology" of desire, leading instead to social disindividuation. As he has curiously remarked during a series of conferences he lectured in the PRC between 2016 and 2019, the disruptive processes forwarded by technology "short-circuits and bypasses social systems, even including the Chinese Communist Party"[436]. Perhaps, thus, it is not coincidence that Party members too are targeted by surveillance mechanisms enhanced by technology in contemporary China (as discussed in Chapter 3).

In order to provide a more general description of the disindividuation processes affecting Chinese citizens, the last part of this section analyses how the frenzied pursuit of modernization has impacted them, in terms of their proletarianization and "loss" of spirit. On one side, there is the pivotal role of the Party as the ultimate moral interpreter, a sort of embodied super-ego, on the other, there are gradual processes of societal disindividuation led by the disruption operated by the introduction and expansion of hyper-industrial markets.

China's Rising Middle Class: A Gradual Proletarianization

So far, the focus has been on the top-down "pastoral" management of the "reforms and opening-up" phase until more recent times. This section focuses, instead, on the impact of the introduction in the country of the market economy and of its technical system on Chinese citizens. The intent is to reconstruct the gradual processes of proletarianization to apply Stiegler's critique of hyper-industrial societies to post-Mao China.

One of the goals of the reforms policies has been to boost the economic growth of the country by increasing production but also consumption. As resumed by Luigi Tomba while researching the emergence of the Chinese urban middle class at the turn of the 21st century:

> [t]he rationale behind the policy to stimulate consumption stems first and foremost from the need to sustain economic growth. As much as the initial stage of reform in the eighties entailed a "liberation of productive forces", the present drive away from "heavy production and light consumption" […] is hailed as the necessary "liberation of consumption forces". A recurrent

[435] Nicholas Vinocur, 'Western Democracies Face Crisis of Confidence Ahead of Big Votes, Poll Shows', *POLITICO*, 11 December 2023, https://www.politico.eu/article/Western-democracies-face-crisis-of-confidence-ahead-of-big-votes-poll-shows/.
[436] Stiegler, *Nanjing Lectures (2016-2019)*, p. 70.

> opinion in China's academic literature is that the traditionally low consumption rate […] constitutes a major bottleneck for economic development[437].

The anthropologist Yan Yunxiang has remarked that in parallel to the rationalization processes produced by the introduction of market-oriented economy, a "liberating" component concerning desire can be observed regarding different domains, from sexual practices to consumption, which started to shape the Chinese individual since post-1978[438]. Here it is interesting to linger on the consumption dimension as a process affecting desire. According to Lisa Rofel, who has analyzed the refashioning in Chinese women's mentalities at the turn of the 21st century,

> consumption, one of their measures of freedom, is not just about pleasure. It is a post-socialist technology of the self by which Chinese young women and, by metonymic association, the Chinese nation, enable themselves to transcend the specificities of place and identity and be part of the "world." […] Consumption is about embodiment, embodying a new self. At the heart of this embodiment is *desire*[439].

The Maoist period (1949-1976) is often regarded as frugalist because individual consumption was immolated for national productive goals[440]; for instance, during socialist China it was considered an accomplishment for a household to have one of the "three big items", (*sandajian* 三大件), most often indicating the wristwatch, sewing machine, or bicycle[441]. In contrast, since the reform era the swift diffusion of consumerist practices was encouraged by the government and gradually spread by the growing number of self-employed citizens (*getihu* 个体户) as a status symbol. This was a rapid social phenomenon, as the figure for this newly introduced kind of private businesses increased from 150,000 in 1978 to more than 14 million ten years later[442]. More generally, between 1995 and 2012, the Chinese middle class raised from less more than 17% to almost 55% of the country's population[443]. In this scenario, wealth and, more generally, consumption practices were associated with the emergence of a cosmopolitan identity which needed to be balanced with its "Chinese characteristics"[444].

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[437] Luigi Tomba, 'Creating an Urban Middle Class: Social Engineering in Beijing', *The China Journal* 51 (January 2004): 1–26, p. 7.
[438] Yan, 'The Chinese Path to Individualization'.
[439] Lisa Rofel, *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture* (Duke University Press, 2007), p. 118.
[440] Zhao, 'Consumerism, Confucianism, Communism', pp. 44-45.
[441] For an analysis of consumer practices during Maoism see Karl Gerth, 'Consumerism in Contemporary China', in *Faith, Finance, and Economy*, ed. Tanweer Akram and Salim Rashid (Springer International Publishing, 2020), pp. 75–105.
[442] *ivi*, p. 92.
[443] When considering middle class in terms of consumer power. See Chen Chen and Bo Qin, 'The Emergence of China's Middle Class: Social Mobility in a Rapidly Urbanizing Economy', *Habitat International* 44 (October 2014): 528–35, p. 531. According to Pew's income classification, in 2018 the Chinese middle class counted 707 million people, 50.8% of the population, with an increase of almost 48%. Data provided for in Jacque Schrag, 'How Well-off Is China's Middle Class?', *ChinaPower Project*, 26 April 2017, https://chinapower.csis.org/china-middle-class/.
[444] Rofel, *Desiring China*, p. 119.

Within a "global consumer culture"[445], the Chinese middle class was defined in terms of a consumer class[446]. Mass media and advertisement practices, of course, played a role in spreading consumerist habits in transitional China, particularly among the urban youths and well-educated people[447]. At the same time, the consumer mindset started to be instilled also in the developmental coastal territories propelling China's economic growth, where internal migrant workers were socialized to the norms of mass consumption[448]. This confirms Stiegler's assumption that consumption in hyper-industrial societies is mediated and stirred by the evolution of a globalized sociotechnical system exploiting libidinal energies and attention through technologies. Also in the Chinese case, in fact, "[m]edia changes are an integral part of the insurgence of a consumer society"[449]. Indeed, the development of mass media and the thriving of the advertising industry have been "intimate partners" in the Chinese transitional context too[450].

The distinctive features characterizing the appearance of the Chinese middle class can be detected in the peculiar functions of a "compressed industrialization" and "rapid urbanization"[451]. At the same time, its emergence was partly favored by the government. To this regard, Tomba has shown, for example, how urban professionals working in public sectors were privileged by state's housing policies to give shape to a highly consuming-oriented class[452]. This denotes the emergence in the PRC of the type of "consumer citizen"[453].

Within this context, the "spiritual civilization" has also been looked at as a governance discursive tool to address citizens' inability to integrate the new economy and to incite them to adapt to market's logics. In fact, as remarked by Thomas Boutonnet,

> [t]his program does not blame social disruptions on the economic reforms launched decades ago nor on the capitalist economy that became particularly extreme in 1990s China, it rather locates the crux of the problem on the failure of Chinese people to integrate and apply these new rules, and therefore asks them to accompany modernization with a better attitude and a "correct" […] morality[454].

[445] Hye-Jin Paek and Zhongdang Pan, 'Spreading Global Consumerism: Effects of Mass Media and Advertising on Consumerist Values in China', *Mass Communication and Society* 7, no. 4 (2004): 491–515, p. 491.
[446] Chen and Qin, 'The Emergence of China's Middle Class', p. 530. See also Schrag, 'How Well-off Is China's Middle Class?'.
[447] Paek and Pan, 'Spreading Global Consumerism', p. 509.
[448] Ong, *Flexible Citizenship*, p. 40.
[449] Paek and Pan, 'Spreading Global Consumerism', p. 494.
[450] *ivi*, p. 508.
[451] Chen and Qin, 'The Emergence of China's Middle Class', p. 533.
[452] Tomba, 'Creating an Urban Middle Class', p. 25.
[453] The propagation of this "ideal-type" of global citizenship is observed in Bryan S. Turner, 'Contemporary Citizenship: Four Types', *Journal of Citizenship and Globalisation Studies* 1, no. 1 (2017): 10–23. However, Turner advances that "consumer citizenship" comes at the retreat of the state, while the Chinese case epitomizes that this type can also emerge when the state maintains a predominant political function.
[454] Boutonnet, 'From Local Control to Globalised Citizenship: The Civilising Concept of Wenming in Official Chinese Rhetoric', p. 93.

State-sponsored individualization has, thus, privatized social inequalities[455], reducing them to a mere consequence of the inability of citizens to successfully partakes in market's dynamics[456]. The official discourse until now has been that of positively spread entrepreneurial agency and an ideal of permanent innovation under a rationale that overlaps making products and making oneself[457].

The point is to show that, even though postponed and carried on within a different political system, China's frenzied embracement of the market economy can be looked at as producing the proletarianization of *savoir-vivre* of its citizens[458]. Their encounter with consumerist and money-oriented rationalities affect desire and originate a "spiritual void" and the "depersonalization of social and familial relations"[459] (proletarianization understood in terms of labor and *savoir-faire* was a process already initiated with the industrialization of the country). Moreover, this has been a process that took place in an astonishingly rapid way: as already mentioned, the PRC reached within three decades the same industrialization level that Wester countries established in two centuries. Besides, if we follow Hui's analysis, it must be recognized that this process has been even more disruptive in the Chinese context, as it entailed the eradication of its distinctive cosmotechnics.

At the same time, the loss of *savoir-vivre* of Chinese citizens must also be understood as the introduction of a developmental imaginary mediated by the sociotechnical system and influencing their vision of "aspirational futures" through times. As remarked by geographer Samuel Berlin while recounting the developmental dreams still influencing Chinese workers nowadays:

> [c]apitalist aspirations are not 'natural' phenomena inherent to the human experience, but emerge within semiological and material contexts that induce neoliberal forms of subjectivity through the ubiquity of social facts like those of 'the entrepreneur, individual success, competition, social Darwinism, and so on'[460].

In this research, Berlin has employed Stiegler's concept of proletarianization to give an account of the "colonialization" of Chinese self-entrepreneurs' imaginary by "technologies […] assessing futures still to come"[461]. He shows that the adoption of these rationalities occurs to the detriment of other ways of living. Similarly, the anthropologist Yang Jie, while researching the discursive articulations of patients with schizophrenia in today's China, has observed how the asymmetry between the omnipresent developmental discourse of the "China Dream" and the strained realities of

[455] China's Gini Index (an indicator measuring income inequality from 0, perfect equality, to 100, maximal inequality) has increased from 32 in 1990 to almost 44 in 2010. See Schrag, 'How Well-off Is China's Middle Class?'.
[456] Yan, 'The Politics of Moral Crisis in Contemporary China', p. 17.
[457] Lindtner, *Prototype Nation*, p. 19.
[458] Sam Berlin provides a concise yet flawless explanation of this type of proletarianization: "the removal of the ability to live well from subjects into external objects, creating dependencies on these objects". Berlin, 'Cultures of Labour', p. 4.
[459] Sigurðsson, 'Frugalists, Anti-Consumers, and Prosumers', p. 129.
[460] Berlin, 'Cultures of Labour', p. 4.
[461] *ivi*, 3.

economically vulnerable people is a factor of psychological distress reflected in their hallucinations[462]. In 2021, these more or less imposed aspirational imaginaries, also relating to logics of massive production and consumption, but also to frenzied work dynamics spurred by social mobility aspirations, have been evocatively and powerfully visually recorded in the documentary *Ascension*[463].

It is interesting to remark that the need to top-down boost domestic consumption has also been recurrently linked to a partial increase of workers' leisure time through policies enacted by the Chinese government and directed to selected portions of the population. For instance, Tomba has remarked that during the 90s the urban employees' working time was reduced and festivities extended to increase leisure time to boost consumption. In this sense, free time becomes purchase time declined in a variety of activities, including the launch of tourism[464]. Recently, a similar strategy has been enforced by the government to address what has been popularly defined as a process of "involution" (*neijuan* 内卷). This buzzword has become famous in recent years to indicate the stressful and burning out competitive work environment and society that young and well-educated people must navigate without, however, being able to realize upward mobility. Originally, "involution" was an academic term describing a stagnating agricultural economy[465]. Nowadays, the two characters, 内卷, indicating a movement spiraling inward, evocate the "endless cycle of self-flagellation"[466] that Chinese urban middle class replicate in a slowing down economy to upward the social ladder without success[467]. This word has become popular among university students and the young and well-educated citizens partaking in the "996" work culture. "996" refers to the workstyle of urban people employed in good paying jobs by big tech firms or in the financial sector working at least from 9 am to 9 pm six days per week. *Neijuan* comes to indicate, thus, the ills of an urban middle class stuck in a sort of "existential and psychological suspension"[468] with regards to the alienation of its way of life: borrowing Stiegler's concepts, life for them has become subsistence without existence[469]. However, the simple idea of abandoning the socially constructed motives pushing them toward success is unthinkable as "by stepping down the social ladder, you're essentially committing moral betrayal"[470],

[462] Jie Yang, 'Hallucinations of the "China Dream": Forbidden Voice, Articulation, and Schizophrenia in China', *Medical Anthropology* 42, no. 3 (2023): 250–63.
[463] *Ascension*, Documentary, directed by Jessica Kingdon (Mouth Numbing Spicy Crab, XTR, 2021), 1h37m.
[464] Tomba, 'Creating an Urban Middle Class', p. 9.
[465] Qianni Wang and Shifan Ge, 'How One Obscure Word Captures Urban China's Unhappiness', *SixthTone*, November 2020, https://www.sixthtone.com/news/1006391; Linda Qian and Barclay Bram, 'The Inescapability of Neijuan (Involution)', in *Self-Development Ethics and Politics in China Today* (Amsterdam University Press, 2024), p. 261.
[466] Wang and Ge, 'How One Obscure Word Captures Urban China's Unhappiness'.
[467] When Hu Jintao was top leader, China's economic growth rate reached 10%, while during Xi's second term this rate has slowed down to 5-6%, see Qian and Bram, 'The Inescapability of Neijuan (Involution)', p. 260.
[468] Qian and Bram, 'The Inescapability of Neijuan (Involution)', p. 274.
[469] Stiegler, *The Decadence of Industrial Democracies*, p. 12.
[470] Xiang Biao quoted in Wang and Ge, 'How One Obscure Word Captures Urban China's Unhappiness'.

indicating how the blend of market and morality has generated pressuring and distressing social imperatives.

In the spring of 2025, the Chinese government has taken measures against the *neijuan* phenomenon announcing an action plan aimed at relaxing workstyle while boosting domestic consumption[471]. Chinese decision makers are inciting big-techs firms to impede employees to work overtime. This plan is aimed at resizing workstyles and increasing the leisure time of some population strata to boost consumption in some economic sectors such as those of advanced technologies (e.g., artificial intelligence-powered products) and tourism. On the one hand, the Chinese government's direction to impose healthy workstyles must be welcomed positively, even though it only applies to selected segments of the population, while the majority still has to submit to exploitative labor dynamics; on the other, the overlap that decision makers see in leisure time and purchase time is concerning, particularly when considering the further exploitation of desires and attentional forms induced by permanent innovation.

As remarked by Stiegler, the evolution of the sociotechnical system with the spreading of digital technologies constitutes a further step of the proletarianization processes. Digital technology has modified and skyrocketed consumerist practices. In the PRC, the thriving industry of smartphones and the introduction of Internet in the country have come to establish the world's largest e-commerce[472]. Online shopping platform giants such as Taobao (Alibaba Group) and Jingdong (Tencent Holdings) have been boosted by digital and mobile payments[473]. AliPay and TenPay were respectively devised and incorporated by the two big tech corporations in their platform services providing the two companies with "a degree of behavioral insight that is breathtaking in its breadth and clarity"[474]. The Chinese consumer culture has jumped from a cash economy to mobile finance almost skipping credit card usage. This leap epitomizes how fast technological concretization proceeds in a country where ""platformization" has profoundly reshaped Chinese society by permeating and commodifying nearly every profitable aspect of social life"[475]. Over the past two decades, a Chinese-style "platform capitalism"[476] has been thriving in the PRC, to the point that the

[471] Qitong He, 'China Unveils Plan on Special Initiatives to Boost Consumption', *SixthTone*, 17 March 2025, https://english.www.gov.cn/policies/latestreleases/202503/16/content_WS67d6b21bc6d0868f4e8f0da0.html.
[472] In 2020, it was three times larger than the European one. See Schrag, 'How Well-off Is China's Middle Class?'.
[473] Yipeng Xi and Aaron and Ng, 'Disappearing Bargain and Technical Sharing: The Sociocultural Influence of Mobile Payment in China', *Chinese Journal of Communication* 14, no. 1 (2020): 40–57.
[474] Chin and Lin, *Surveillance State*, p. 119.
[475] Jingyan Elaine Yuan and Lin Zhang, 'From Platform Capitalism to Digital China: The Path, Governance, and Geopolitics', *Social Media + Society* 11, no. 1 (2025): 1–9, p. 4.
[476] For an insight of the concept of "platform capitalism" see Nick Srnicek, *Platform Capitalism* (Polity, 2017). For a critique of the mechanisms of data-driven capitalism see Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, First edition (PublicAffairs, 2019).

Chinese government has decided to partially regulate the way in which companies harvest data after years of *laissez-faire* (this issue is discussed in the last part of this chapter).

In terms of proletarianization of *savoir-vivre*, consumerism in hyper-industrial societies leads to the destruction of desire, which is gradually reduced to drives and compulsions induced by new forms of hypomnesic/tertiary retentions (data and big data) anticipating and even molding citizens' desires via "tertiary protentions" (see Chapter 3). Even though the Chinese digital sociotechnical system has distinctive features compared with the Western one – for instance, the Chinese Internet is a partially "close" ecosystem filtered by the so-called "Great Firewall"[477] – it can be advanced that it works according to the same dynamics of exploitation of attentional and libidinal forms detected by Stiegler regarding Western societies (a claim further explored in Chapter 4). Moreover, the permanent innovation supported by governments globally – without exception of the Chinese one, which aspires instead at leading the international industrial competition – prevents the elaboration of transgenerational and psychosocial forms of adoption of technologies.

Party-State authorities have been continuously attempting to manage the social challenges originated by the changes in the mode of production and at the same time to make the mode of consumption more efficient. As already remarked, the CCP's legitimacy also relies on the performance of economic growth. Consumption is, thus, treated ambiguously: on one side, it is a "virtuous" behavior forwarding individual and collective development. For instance, the Chinese government has looked at the emergence of the Chinese middle class as increasing the stability of the country[478]. On the other, apparently, the market-oriented economy and the technological innovations continuously necessitate a patronizing dimension of control to maintain stability and renew authority (see for example internet addiction as a "moral panic" in the PRC[479]): produce, consume *and* be virtuous, produce, consume and become a "high-quality citizen" able to contribute to the incessant development of China. In this sense, the introduction of market economy in the country constitutes a peculiar "scientific and moral project" that affect citizens' minds, aspirations, and ways of living. Concurrently, in these times of moral disorientation or crisis of authority, the Party recurrently enacts initiatives of moral revitalization, also culturally driven, while assuming the role of a pivotal moral guide. If we want to follow Stiegler's discourse, the Party at once revitalizes a cultural normative (and automatic, as we are going to see in Chapter 3) super-ego of the nation and plays the central role of being its interpreter.

[477] Griffiths, *The Great Firewall of China*.
[478] See Tomba, 'Creating an Urban Middle Class'.
[479] Marcella Szablewicz, 'The Ill Effects of "Opium for the Spirit": A Critical Cultural Analysis of China's Internet Addiction Moral Panic', *Chinese Journal of Communication* 3, no. 4 (2010): 453–70.

So far, the role of technology emerges as a forgotten but constitutive element at the service of hyper-markets. The last part of this chapter specifically addresses how technology as a theme and as a tool has been central in the top-down making of post-socialist Chinese citizens.

2.3 FROM CYBERNETICS TO DIGITAL GOVERNANCE

[A]ll aspects of the universe are knowable through the methods of science.
Qian Xuesen[480]

This section explores the appropriation by Party-State authorities of a specific interpretation of science and technology in post-Mao China. The aim is to examine how technology and science, more and more fused into a *technoscience*, have been presented as neutral values and core elements of modernization, economic growth and governance. Through recounting the incorporation of cybernetics into population management, this section explores the consolidation of such a technoscientific rationality. Later, it describes the engineering approach adopted to construct citizens through an analysis of the discursive tool of *suzhi*. The last part addresses the growing attention that the Chinese government directs at boosting technological innovation and at upgrading its infrastructure for digital governance.

The Neutralization of Technoscience

As anticipated, in the market reform era, the re-emergence of tradition was accompanied by a renewed belief in science, which consolidated into a "technoscientific reasoning"[481] and, in some cases, even turned into to scientism. Under Mao (1949-1976), the official relation with science was ambivalent: on the one hand, during the 50s and the 60s, the PRC reached some technological landmarks, such as the construction of the atomic bomb and of a national missile defense system, also thanks to the initial scientific cooperation with the USSR, interrupted in the late 50s, and to the coming back of some Chinese scientists from the US[482]. On the other hand, some ideological national economic and developmental plans led to enormous social and environmental disasters[483] (such as the "Great Leap Forward") as the understanding of science during this period was deemed to be subordinate to Marxist ideology. As already remarked by Yuk Hui (see 1.2), since 1949, philosophy of science and philosophy of technology in the PRC were almost entirely based on Friedrich Engels'

[480] Bakken, *The Exemplary Society*, p. 52.
[481] Gary Sigley, 'Suzhi, the Body, and the Fortunes of Technoscientific Reasoning in Contemporary China', *Positions: Asia Critique* 17, no. 3 (2009): 537–66.
[482] See Feigenbaum, *China's Techno-Warriors*, chapter 2; and Simone Pieranni, *Tecnocina: Storia della tecnologia cinese dal 1949 a oggi* (ADD Editore, 2023), chapter 1.
[483] Judith Shapiro, *Mao's War against Nature: Politics and the Environment in Revolutionary China* (Cambridge University Press, 2001).

unfinished "Dialectics of Nature" (first published in 1925 in the USSR)[484]. Guo Yuanlin highlights that this book is mainly an essay on philosophy of nature expounding a dialectical materialist interpretation of natural phenomena[485]. With this text as the pivotal philosophical reference, the understanding of science in the socialist years was deeply affected by Mao's interpretation of Marxist ideology in the sense that "society and thought must be analyzed and explained from the view of class" [486]. Because of this interpretation, some Western scientific theories, such as the theory of relativity, genetics, and quantum mechanics, were rejected *qua* products of a science of the bourgeoisie.

At the end of the 70s, Deng Xiaoping, the pragmatist "architect of modern China"[487], operated a radical ideological shift with regards to the state's vision of science and technology: he supported the idea that "the productive forces, including scientific inquiry and technological progress, were what drove society", sustaining that " […] scientific progress could be liberated from the constraints of ideology" and endorsing, thus, "the idea that science and technology were philosophical systems independent of political theory"[488]. Deng's ideological reset, among other things, paved the way to private investments in the technological field; for instance, Lenovo and Huawei, two Chinese high-tech giants, have been founded during the 80s.

Bakken describes the renewed scientific approach top-down disseminated in the post-Mao PRC as "[a] view of "science" as a value-neutral instrument capable of reconciling the values of "tradition" and the demands of the modern world"[489], with an important need of balancing these two aspects. Guo, too, underlines this perspective, highlighting that: "the productive forces [became] value-free. The proletariat and the bourgeoisie [had] the same productive forces. Therefore, science and technology [did] not belong to one class, but to all human beings. They [were] value-free, and universal around the world"[490]. Deng's statement can be read as the culmination of the process of cosmotechnical "oblivion" affecting the Chinese philosophical thought during modernization, with the consequent embracement of the Western capitalist/Promethean one (even though, of course, this process was already initiated under Mao, with the impact of Marxist thought, and even before, at the end of the Qing dynasty, with the rupture of the relation between *Dao* and *Qi* described by Hui). During the reforms era, this renewed understanding of science and technology – two disciplines that

[484] See, also, Guo, 'The Philosophy of Science and Technology in China'.
[485] Guo, 'The Philosophy of Science and Technology in China', p. 1836.
[486] *ivi*, p. 1837.
[487] For an account of Deng Xiaoping's era see Ezra F. Vogel, *Deng Xiaoping and the Transformation of China*, Reprint edition (Belknap Pr, 2013).
[488] Dylan Levi King, 'A Brief History of Chinese Cybernetics', in *Cybernetics for the 21st Century Vol.1 Epistemological Reconstruction*, ed. Yuk Hui (Hanart Press, 2024), p. 182. See also Guo, 'The Philosophy of Science and Technology in China', p. 1838.
[489] Bakken, *The Exemplary Society*, p. 52.
[490] Guo, 'The Philosophy of Science and Technology in China', p. 1838.

since then started not to be distinguished in China, as remarked by both Hui and Gao – results in a change of university curricula, which begin to focus on how technology and science might impact management, policies and society, to the detriment of philosophical speculation[491].

Since the reform and opening up, thus, Chinese decision makers have been determined to spread a renewed faith into a neutral technoscience. This goal also discloses as part of the discourse on "spiritual civilization". On the street billboards advertising this campaign, for instance, Chinese people could read: "[The civilized citizen] praises science, respects educators, improves him/herself without sparing his/her efforts and raises his/her quality""[492]. This slogan reflects an endorsement of scientific thought and of commitment to education, which, at the same time, starts to be linked to ideas of human improvement. The following sections analyze how Party-State authorities would top-down construct a new model of citizenship advancing a peculiar technoscientific rationality and, even, faith.

The Cybernetic Fever

One interesting product of the twofold re-elaboration of traditional culture and technoscientific belief, is Jin Guantao's theory of "ultrastability" (*chao wending* 超稳定), which addressed the equilibrium between stability and change in Chinese imperial society from the perspective of cybernetics and control systems theory[493]. According to Jin's thesis, Chinese millenarian feudalism could be understood as working according to cybernetic dynamics: an ultrastable social complex in which Chinese cultural elements were recurrent and worked as a resilient feedback system[494]:

> Far from being a static and motionless society, Chinese feudal society was repeatedly shaken by social upheavals; violent and apparently successful rebellions repeatedly made old dynasties collapse and new ones appear. […] A remarkable stability based on internal resilience and the capacity for continuous readjustment characterized this society. Mechanisms of internal adjustment restored stability in times of upheaval[495].

Even though this theory was officially rejected by authorities[496], it epitomizes, within the lively intellectual debate emerging in post-Mao China[497], a widespread interest toward cybernetics.

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[491] *ivi*, p. 1841. For an academic example of application of systems theory to socio-economic phenomena in the PRC see Huijiong Wang and Yan Hong, 'China: Technology Development and Management in the Context of Economic Reform and Opening', *Journal of Technology Management in China* 4, no. 1 (2009): 4–25.
[492] Boutonnet, 'From Local Control to Globalised Citizenship: The Civilising Concept of Wenming in Official Chinese Rhetoric', p. 89.
[493] Jin Guantao has been an influential scholar of the "New Enlightenment movement" spreading in China in the 80s, see Wang, *High Culture Fever*, pp. 58-59.
[494] Bakken, *The Exemplary Society*, p. 37.
[495] *ivi*, p. 37.
[496] Because it was considered as a form of "typical historical idealism", see Bakken, *The Exemplary Society*, p. 39.
[497] For an analysis of the flourishing cultural and intellectual debates of post-Mao China see Wang, *High Culture Fever*.

Norbert Wiener, the father of modern cybernetics, looked at this discipline as the study of the ways in which both mechanical and biological complex systems exert control through information[498]. Qian Xuesen (1911-2009), a Chinese scientist who returned to the PRC after having worked in the US during WWII due to McCarthyism partly contributed to spread cybernetics in China. Considered the "Chinese Norbert Wiener", he played a fundamental role in the development of the PRC's defense and space programs in the 60s[499]. Along with cybernetics, during Deng's rule, theories such as Taylorism and "scientific management" were imported into China and deemed fundamental for the development of the market economy. Party-State authorities forwarded the application of these different theories to many socio-economic fields, revealing an increasing technocratic approach among the élite[500]. Regarding the vision of Chinese policy makers during this period, Julian Gewirtz speaks about an "actionable futurism", namely an idea of the future which demanded active actions from the state in terms of shaping the economy and establishing policies to develop science and technology[501]. This vision rests at the origin of landmark research and development plans that contributed to the PRC's technological advancement, such as the "863 Program", which was aimed at reducing China's technological gap and at developing information technology, the energy sector, biotechnology, space technology, lasers and other fields[502].

Different projects forwarded by Chinese scientists and embraced by the government were directed at managing social and economic issues via cybernetics, control systems theory and systems engineering, such as, for example, the gradual relaxation of the state control on prices during the reform era[503]. Among these, the most infamous experiment remains the "one-child policy" initiated in 1980 and ideated, among others, by Song Jian (1931), another scientist working in the defense sector[504]. This policy foresaw a limit of births at one per couple to reduce the birth rate in the country. After being gradually relaxed since 2013, the "one-child policy" was officially abolished in 2015. Even though the population's growth diminished, the effectiveness of this program – which caused

[498] Norbert Wiener, *Cybernetics: Or Control and Communication in the Animal and the Machine*, Reissue of the 1961 second edition, ed. Doug Hill and Sanjoy K. Mitter (The MIT Press, 2019). For a reflection on the impact of cybernetics on philosophy see Yuk Hui, ed., *Cybernetics for the 21st Century Vol.1 Epistemological Reconstruction*, Hanart Press (Hong Kong, 2024), introduction.
[499] Iris Chang, *Thread of the Silkworm* (Basic Books, 1995).
[500] Cheng Li and Lynn T. White, 'China's Technocratic Movement and the World Economic Herald', *Modern China* 17 (July 1991).
[501] Julian Gewirtz, 'The Futurists of Beijing: Alvin Toffler, Zhao Ziyang, and China's "New Technological Revolution," 1979–1991', *The Journal of Asian Studies* 78, no. 1 (2019): 115–40, p. 117.
[502] Regarding the "863 Program" see also Feigenbaum, *China's Techno-Warriors*, pp. 248-258.
[503] King, 'A Brief History of Chinese Cybernetics', p. 186.
[504] Song's view was influenced by the Club of Rome, an anti-natalist think tank, see Susan Greenhalgh, *Cultivating Global Citizens: Population in the Rise of China* (Harvard University Press, 2010), p. 31. However, discussions on limiting births were already present within the Maoist élite, see Sigley, 'Suzhi, the Body, and the Fortunes of Technoscientific Reasoning in Contemporary China', p. 546.

enormous human sufferings[505] – remains difficult to assess[506], also because, in line with the trend of other East Asian states, the growth of the Chinese population was already slowing down before its enforcement[507]. Under the newly embraced technoscientific rationality, the "one-child policy" aimed at finding ""the feedback mechanism of [the] population system," its parameters, and how to achieve optimal control"[508]. Song Jian and his collaborators resumed in this way the overall scientific rationality behind the project:

> Mankind has entered a new stage of civilization. We believe that the progress of science and technology enables us not only to tame nature, but also to adjust our own numbers by means of birth control, so that a delicate homeostasis between *Homo sapiens* and the ecosystem can be achieved. Population system control theory provides an alternative to the timid family planning philosophy and the traditional concept of population transition, which seem too weak to meet the great challenge[509].

Dylan Lévy King notices that "[i]t seems clear from the way that Song Jian writes about population growth that he was scientifically convinced, but also viscerally disgusted by surplus humanity"[510]. As a matter of fact, however, eugenics approaches have been widespread in China before the reform era and, also, Maoism[511]. Nevertheless, the "one-child policy" unveils a social Darwinist rationality in which population's quantity is linked to population's quality (*suzhi*)[512]. For instance, this demographic program was, in fact, internally criticized by some as it brought to the reduction of fertility rate in urbanities, namely where "high quality" people resided, with a minor impact on rural areas, where people were deemed having a "low *suzhi*"[513]. Susan Greenhalgh has highlighted that the "one-child policy" targeted the population as an object as well as a subject: in parallel with coercion, also the self-government of individuals, "construed" through the molding of aspirations, mentalities and desires, was effective[514]. The concept of *suzhi* condensates these dynamics shaping the citizens in post-socialist China.

Suzhi, or Raising Citizens' Quality

Some facets of the discourse on *suzhi*, a concept linked with the "one-child policy", but which also emerged as a core element of the "spiritual civilization", disclose the rationalities behind the state's

[505] For a literary account of the impact of this policy, see Mo Yan, *Frog*, trans. Howard Goldblatt (Viking, 2015).
[506] Greenhalgh, *Cultivating Global Citizens*, p. 112.
[507] King, 'A Brief History of Chinese Cybernetics', p. 185. Greenhalgh highlights that the "scientific framework was inappropriate for an arena of social policy. The cybernetics of population took no account of social, cultural, and political factors, producing a policy that was out of touch with the realities of rural Chinese society, its intended target, and thus not implementable without massive social and political trauma". Greenhalgh, *Cultivating Global Citizens*, p. 96.
[508] King, 'A Brief History of Chinese Cybernetics', p. 184.
[509] Yu Jing-Yuon et al., *Population Control in China: Theory and Applications* (Praeger, 1985), preface viii.
[510] King, 'A Brief History of Chinese Cybernetics', p. 184.
[511] Bakken, *The Exemplary Society*, p. 68; Greenhalgh, *Cultivating Global Citizens*, p. 26. See also Ong, *Flexible Citizenship*, p. 59.
[512] Greenhalgh, *Cultivating Global Citizens*, p. 20.
[513] Bakken, *The Exemplary Society*, p. 68
[514] Greenhalgh, *Cultivating Global Citizens*, p. 37.

need for new citizens in post-socialist China. During the reform era, an assemblage of top-down discourses and initiatives has delineated *suzhi* as an umbrella term, a "floating signifier"[515] resisting a clear definition and, for this reason, serving multiple purposes while disclosing the pervasive power of "sacred" official language[516]. The term is composed by *su* 素, which can be translated as pure or plain, and *zhi* 质, indicating intrinsic qualities[517] that are to be transformed[518], a *potential* within the individual. Lin Delia claims that this word evocates Confucian concepts, particularly the belief in the transformational capacity of individuals, and claims that it represents a distinctive element of Chinese "transformational citizenship"[519].

However, when *suzhi* has been introduced within the official utterances of post-Mao China, the boundaries within which the citizens' potentials could be disclosed were delimitated by the state goal of "improving the Chinese population" (*tigao renkou suzhi* 提高人口素质)[520]. Sigley remarks that a biopolitical discourse on *suzhi* focusing on governing the body of the population had already started during late Qing dynasty and evolving throughout Maoism. However, in post-1978 China, and particularly in the 90s, this concept has started to be adapted to market rationalities[521] by linking human improvement to the advancement of the productive forces[522].

For instance, *suzhi* has been used to quantify the educational level of citizens along with their "behavioral, ideological and moral quality"[523]. More broadly, under this concept, development was understood as something that people needed to address in the first person or within the family, by raising their quality as citizens as a moral imperative. In concrete, on the one hand, it strictly served market and consumption logics and functioned as a biopolitical narrative to raise the Chinese middle class, originating a form of "consumer citizenship"[524]. Through the discursive tool of *suzhi*, in fact, the middle class was incited to "responsibilization"[525] within the market. The goal was "the making of new subjects who [were] autonomous enough to choose what to consume (and therefore stimulate economic growth and China's integration in the global market)"[526]. On the other hand, as expounded by Yan Hairong[527], citizens with "low *suzhi*" were looked at as not having the right mentality to

[515] Ann Anagnost, 'The Corporeal Politics of Quality (*Suzhi*)', *Public Culture* 16, no. 2 (2004): 189–208, p. 197.
[516] Kipnis, 'Neoliberalism Reified'.
[517] Lin, *Civilising Citizens in Post-Mao China*, introduction.
[518] Sigley, 'Suzhi, the Body, and the Fortunes of Technoscientific Reasoning in Contemporary China', p. 539
[519] Lin, *Civilising Citizens in Post-Mao China*, chapter 2.
[520] Quoted in Beatrice Gallelli, *La Cina di oggi in otto parole* (Bologna: Il mulino, 2021), 109.
[521] Sigley, 'Suzhi, the Body, and the Fortunes of Technoscientific Reasoning in Contemporary China'.
[522] Bakken, *The Exemplary Society*, p. 57.
[523] *ibid*.
[524] Anagnost, 'The Corporeal Politics of Quality (*Suzhi*)'.
[525] Tomba, 'Of Quality, Harmony, and Community', p. 592.
[526] *ibid*.
[527] Hairong Yan, 'Neoliberal Governmentality and Neohumanism: Organizing Suzhi/Value Flow through Labor Recruitment Networks', *Cultural Anthropology* 18, no. 4 (2003): 493–523.

contribute to the development of the market economy and needed, thus, to be educated. On this basis, *suzhi* also comprehended values such as risk-taking, innovation and competition[528] and, in this sense, recipients of *suzhi* campaigns were peasants, minorities and internal migrants.

The discourse on *suzhi* shifted political issues from the domain of the collective to that of the individual (with a parallel transition from the former Maoist concept of class, *jieji* 阶级, to the depoliticized post-socialist focus on "social strata", *jieceng* 阶层[529]). To better delineate the approach to citizenship of Chinese authorities in this period, Murphy and Fong sustain that "by focusing on personal transformation as the key to citizenship rights, state leaders could blame their inability to guarantee social rights such as education and satisfactory living conditions on individual failings and dispositional inadequacies"[530]. In this context, the discourse on *suzhi* contributed to create autonomous citizens-consumers who would restrain themselves in matter of social order while, at the same time, inspiring "the creation of models for individual self-improvement"[531].

It is interesting to highlight the rationality behind this concept, i.e. the fact that it was used to *categorize* and *quantify* the quality of the population according to market

needs. For instance, the framing of a "population quality index"[532] was attempted to carry out a systematic measuring of citizens' *suzhi* according to different criteria, such as physical health, educational/cultural level, work attitude and moral/social qualities. This concept reveals that in post-1978 China the market starts to dictate new moral categories and values[533] and that, in the PRC, this process takes place not because of a retreat of the state[534] but, on the contrary, through its intermediation, which was also assisted by the academic discourse and national media[535]. To sum up this rationality, Chinese authorities were concerned about constructing a "high-quality population" able to produce *and* consume within an ordered collective dimension.

[528] Bakken, *The Exemplary Society*, p. 62.
[529] Ann Anagnost, 'From "Class" to 'Social Strata': Grasping the Social Totality in Reform-Era China', *Third World Quarterly* 29, no. 3 (2008): 497–519.
[530] Rachel Murphy and Vanessa L. Fong, 'Introduction: Chinese Experiences of Citizenship at the Margins', in *Chinese Citizenship: Views from the Margins*, 1. publ, ed. Vanessa L. Fong, Routledge Studies on the Chinese Economy 18 (Routledge, 2006), p. 7.
[531] Tomba, 'Of Quality, Harmony, and Community', p. 593.
[532] Bakken, *The Exemplary Society*, p. 70.
[533] Fourcade and Healy, 'Moral Views of Market Society'.
[534] For instance, Kipnis claims that reducing *suzhi* to Western-like neoliberal logics is reductive as this vision overshadows the authoritarian context in which this discourse has unfolded as well as the cultural tradition that this term evokes, see Kipnis, 'Neoliberalism Reified'.
[535] Lin, *Civilising Citizens in Post-Mao China*, chapter 4.

Social Engineering

What is significant to remark is that "the moral and behavioral aspects of the scientific management in practice go further in China than in perhaps any other country"[536], originating proper initiatives of "moral construction" (*jianshe daode* 建设道德), of population's molding and measurement, of cybernetics hypotheses applied to society. Here, it is interesting to linger on Qian Xuesen's own formulation and understanding of "spiritual civilization". He lamented that "spiritual wealth" needed to be undertaken as "an industry" (here, it must be reminded again that with spiritual he refers broadly to the ideological dimension, which, however, includes the moral sphere). His concern was to optimize social engineering and control with the idea of perfectioning society, in a way that "[h]uman improvement [was] thus linked with the development of the productive forces in general, and theories of 'human perfection' are added to the Marxist argument"[537]. The state approach during the reform era, thus, progressively discloses an engineering attitude with regards to the perfectioning of its citizens.

The Chinese experience of constructing individuals at the turn of the 21st century is peculiar because of the technoscientific rationality adopted in orienting this process. The Party-State strategy to govern the social disorientation driven by economic transformations is based on a peculiar blending of revival of tradition and technology. This process impacts citizenship individuation relying on cultural memories that are revitalized in a radically transfigured sociotechnical environment. Chinese authorities seem to acknowledge that modernization is a process leading to the misadjustment of the economic system and the social one. However, the globalization of technological thinking, a constitutive element of this process, is neglected, while its employment as a political and economic theme and as a governance tool is pervasive. The result is an assemblage of social engineering projects directed at citizenship construction. In fact, since 1978, various forms of rationalization, of population control, of calculation and measurement are adopted to manage social issues: both *suzhi* (quality) and *wenming* (civilization), for instance, reveal a ranking and rating logic unfolded in a variety of measurement systems and hierarchical criteria[538].

Bakken contends that the social engineering processes of the reform era led to the "freezing of morality" through the constitution of exemplary conducts, of recurrent models adapted from tradition, disseminated via technoscientific approaches: "the 'exemplary' is in such a moral-political climate not only 'exemplary', but also 'objectively correct'. […] modernity itself imposes constraints of a traditional kind based on a new quasi-religious modern icon of science"[539]. This persisting aspect

[536] Bakken, *The Exemplary Society*, p. 57.
[537] *ibid*.
[538] Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', pp. 97-98.
[539] Bakken, *The Exemplary Society*, p. 53.

with regards to morality will be more thoroughly explored in Chapter 3, here it is essential to remark that the official understanding and use of technology plays a central role in this process, while the technoscientific rationality invades all social aspects. Qian Xuesen's words condensate this interiorized (cosmo)technoscientific vision applied to social issues: "[a]ll aspects of the universe are knowable through the methods of science"[540]. Civilization becomes, according to this perspective "a planned system of spiritual and cultural control"[541] and society, like nature, can be interpreted based on objective laws.

Party-State authorities embark on a mission to manage "human improvement" blending tradition and science. On one side the revival of tradition is extremely "modern" and rational, because it involves a rationality of calculation with predictive ambitions: it might be defined a cybernetic use of tradition, where selected cultural patterns are understood as tools for social control, for governing future behaviors[542] (ironically, the cultural revival plays a function similar to that which Jin Guantao identified in his theory of ultrastability before mentioned). On the other side, the scientific and technological approach, foreseeing the resurgence of culturalist elements, reveals a comprehensive understanding of science and technology which is actually global-ized, that is, not philosophically, not even ideologically, indigenous to China but actively internalized to suit the rationalities imposed by the global market. This scientific approach, all the more a "technoscience", shares epistemological foundations with the West, and its culturalist facets must be addressed acknowledging that traditional elements serve governance purposes[543]. The words of Bakken resume these overall concepts:

> Human behavior, values, and norms are incorporated into a system of cultural and social engineering that is meant to fit the development of and linked to the fortunes of the modern state and Chinese modernization. Tradition, culture, and human life itself are subsumed under a system of social control and turned into objects for the techniques of social discipline and social engineering linked to the alleged eradication of 'social decay'. It is a technology of modern mass manipulation, and the logic of this system is strictly technocratic.

The governmental initiatives denote a gradual integration of technoscience, politics and population, a growing interest in "rationally" managing citizens and in exploring new ways of population control mediated by continuously evolving technologies. This synergic joint is concretely operated by the flourishment of institutions, organizations and centers to produce knowledge and to administer the

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[540] *ivi*, p. 52.
[541] *ivi*, p. 58. Dynon also adds that the "material civilization" rationality revives assertive and aggressive notions "fueled by globalization" and "imbued with Western scientism and reminiscent of the German *Zivilisation*". Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology', p. 88.
[542] Bakken, *The Exemplary Society*, p. 19. To this regards he also contends, while commenting on a statement of a Chinese scholar, that only selected parts of traditional culture are picked: "One central characteristic of modern societies is their reflexivity, differentiating them from the backwards-looking societies of the past. […] It now becomes increasingly possible to choose parts of tradition to use for specific purposes: 'In the past tradition was a whole (*zhengti*), today we pick out moral parts of it that we want to develop further and insert organically into the new social whole'." (2000, 27)
[543] Bakken also remarks that the utopia where scientists rule is of Western derivation Bakken, *The Exemplary Society*, p. 74.

population, reinforcing the biopolitical reach of the state[544]. In this context, population must be understood in terms of "an object of scientific and governmental attention"[545]. Since the reform era, thus, there is a governmental shift taking place in the PRC[546]. Governmentality, a concept developed by Michel Foucault and often simplified as "the conduct of conducts"[547], can be understood as the processes of *producing* individuals enacted by power. Under this lens, technologies of power hold a productive nature. Regarding the Chinese transitional context, Jeffrey and Sigley advance that "[…] to describe Chinese government as either 'socialist' or 'neoliberal' is misleading. […] government in contemporary China is a unique and innovative mix of technologies and rationalities, old and new, sometimes united to achieve common ends and at other moments in apparent states of contradiction and antagonism"[548]. It is here recognized that a distinctive governmental approach takes place in China, concretizing within a peculiar political system. However, the mediation played by technology is not, according to the philosophical perspective delineated so far, indigenous to its tradition of thought or epistemologically alternative. If anything, the global processes of technological concretization are extremely accelerated in transitional China, where the rationality of governmentality even assumes a technological or engineering approach addressed to all aspects of society and, even, nature[549].

To clarify, technological concretization plays a twofold role in the process of citizens' individuation in the post-1978: (1) first, the technoscientific rationality is embraced by the state as a supposed neutral value forwarding modernization and even making China a "successful" experiment of modernity, when measured in terms of economic growth. This vision of technology and science is instilled to and interiorized by citizens, embodying a sociotechnical imaginary[550] that supports the development of the nation through the making of entrepreneurial citizens. This understanding of technology, however, is not neutral at all, instead it purports a Promethean and capitalist cosmotechnics, spreading social misery and, using Stiegler's perspective, psychosocial *dis*individuation. This leads to the (2) second function of technology within this process. The employment of this type of governance fostering technoscientific or engineering projects to construct high-quality citizens, actually, proletarianizes them. If we follow Stiegler's interpretation, technics

[544] Greenhalgh, *Cultivating Global Citizens*, p. 83.
[545] *ivi*, p. 10.
[546] For an application of Michel Foucault's concept of "governmentality" to the Chinese context see Jeffreys and Sigley, 'Governmentality, Governance and China'.
[547] Michel Foucault, 'Governmentality', in *The Foucault Effect: Studies in Governmentality*, ed. Colin Gordon et al., trans. Rosi Braidotti (University of Chicago Press, 2009).
[548] Jeffreys and Sigley, 'Governmentality, Governance and China', p. 24.
[549] See, for instance, Ivan Franceschini et al., eds, *Prometheus in China. Techno-Optimism and Its Discontents*, Made in China Journal, Volume 7, Issue 2 (2022).
[550] Sheila Jasanoff and Sang-Hyun Kim, eds, *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (University of Chicago Press, 2015).

always makes humans and is made by them, in a co-productive process. However, under this type of governance, a vision and application of technology is top-down imposed on citizens, implying processes of state-led citizens' proletarianization, in terms of manual and practical knowledge, life aspirations and ways of life, ideals and desires. The Chinese state leads these top-down strategies and contains their effects efficiently; however, the impossibility of enacting shared psychosocial practices to adopt technological concretization might reveal toxic in the long-term. In the last section of this chapter, new approaches of governance forwarded by Chinese decision makers in the era of digital technologies are introduced to advance that today the PRC pioneers prototypes of digital governance, with aspirations of being an international foregoer in this field.

Digital Governance

Under Xi Jinping (2013-), the Party-State is hanging on the technocratic approach incorporating digital technologies into a China-style architecture of digital governance, making more concrete through technology the practices of social management. Digital governance broadly refers to the modernization of the administrative infrastructure with the incorporation of digital technologies to provide services to citizens. In today China, digital governance's aspirations are ambitious and aimed at fostering a "Chinese-style modernization".

Chinese digital governance encompasses various policies, projects and pilots taking place in the country. The spectrum of technological advancement and implementation of these initiatives is actually wide [551], suggesting that the national ambition does not always reflect the concrete achievements realized at the local level. As pointed out by Genia Kostka, "[o]ne important goal is to set up unified national databases that collect data relating to population demographics, corporations, environmental resources, and geographic information"[552]. More broadly, the state encourages digital- and AI-driven policymaking with the idea of economic and political returns[553]. An important feature of the Chinese digital governance strategy is the cooperation of local governments with private tech enterprises to create digital infrastructures or implement policies. These types of collaboration make up for the lack of local governments' technological capacity[554].

In 2023, the Chinese government has launched the "Plan for the Overall Layout of Building a Digital China"[555] (hereinafter "Digital China"). It is an ambitious program with short-term and long-

[551] Genia Kostka, 'Digital Governance in China', SSRN Scholarly Paper no. 4047764 (Social Science Research Network, 2 March 2022), p. 2.
[552] *ivi*, p. 2.
[553] *ivi*, p. 1.
[554] *ivi,* p. 13.
[555] For an English translation of this document see Graham Webster et al., 'Translation: "Plan for the Overall Layout of Building a Digital China"', *DigiChina*, 3 March 2023, https://digichina.stanford.edu/work/translation-plan-for-the-overall-layout-of-building-a-digital-china/..

term goals directed at constructing a national modern digital infrastructure and at building a "digital society" and a "digital government"[556]. This plan has been looked at as a "pivotal part of China's effort to dominate the Fourth Industrial Revolution"[557]. Among the main goals of "Digital China", there are the interconnection of the digital infrastructures of the country and the growth of the digital economy. This plan looks both at the domestic environment, in terms of digital security and incorporation of new digital technologies within governmental and public services, and at the international level, fostering international cooperation through the Digital Silk Road (DSR) initiative (see 4.2). With this last project, China aims at ranking by 2035 among the world's leading nations in terms of digital development.

The vision forwarded by the program "Digital China" consolidates a sociotechnical imaginary bonding and launching the nation and its citizens into a technological future. One of the major aspects of this plan is the interest toward forms of data-driven governance for public services, economic growth and surveillance purposes. Regarding this project, Liu Ziyu has remarked that it is not simply another industrial development plan, but that it discloses the government's vision for governance[558]. Under its ideological framework, Party-State authorities recognize the pivotal role of big data for governance purposes. According to their vision, big data have come to constitute a strategic asset and resource "like electricity and water"[559], a "'free resource' for industrialized societies"[560].

The flourishing of various planning documents that can be related to "Digital China" denotes the central interest the Chinese government calls on the digital industry. For instance, the "Made in China 2025" program (2015) establishes the goal of making the country a leader in digital manufacturing to substitute foreign technologies with national products, the "Internet Plus Strategy" (2015) foresees the incorporation of innovative Internet technologies for industrial purposes, the "Action Outline for Promoting the Development of Big Data" (2015), the "Development Plan on the New Generation of Artificial Intelligence" (2017), and the "14th Five-Year Plan for Digital Economic Development (2021-2025)" (2021) are directed at boosting respectively big data, AI and the digital economy[561].

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[556] State Council's utterances quoted in Kevin Ziyu Liu, 'Localizing the Digital: Implementation Frictions and Digital Governance in Inland China', *Journal of Information Technology & Politics* 0, no. 0 (2024): 1–15, p. 5. The plan is structured around the so called "2522" framework: it is based on "two foundations" (digital infrastructures and data resource systems), it aims at integrating digital technologies into "five spheres" (economic, political, cultural, social and ecological), it fosters "two capabilities" (digital technology and digital security) and it is directed at "two environments" (domestic and international).

[557] David Dorman, 'China's Plan for Digital Dominance', War on the Rocks, 28 March 2022, https://warontherocks.com/2022/03/chinas-plan-for-digital-dominance/.

[558] Liu, 'Localizing the Digital', p. 5.

[559] State Council (2016) quoted in Liu, 'Localizing the Digital', p. 5.

[560] This is a quotation from a Xi Jinping's speech reported in Chin and Lin, *Surveillance State*, p. 104.

[561] Kostka, 'Digital Governance in China'.

In parallel to planning documents, Chinese authorities have also updated the domestic legal framework on matter of digital technology. This was partly done as a response to raising concerns regarding citizens' privacy[562] and to address the excessive power of big tech corporations with regards to the harvesting and usage of citizens' data. The Chinese government has issued two laws to regulate the handling of data within the country: the Data Security Law (2021), which enforces data security protection, and the Personal Information Protection Law (PIPL, 2021), which regulates legal issues regarding citizens' privacy protection. The PIPL, in particular, foresees limitations for facial recognition technologies, cross-border data sharing, and automated decision-making; it also defines the limits within which IT enterprises can collect citizens' data: for instance, it requires companies to request users for explicit consent regarding their data collection. For this reason, the PIPL has received international and academic interest, as it contributes to constituting an emerging and perhaps influential legal regime regulating digital technologies and data use. To this regard, it has been compared to the European Union "General Data Protection Regulation" (GDPR), issued in 2016 and considered the most advanced legal framework on this matter[563].

These legal updates must be observed together with the tightening that Party-State authorities have enforced on IT corporations, targeting a variety of malpractices emerging in the latest years and including data breaches. Within the peculiar context of the Chinese "platform economy", this set of regulatory actions directed at big tech corporations has been differently interpreted: while it can represent an attempt of the state to regulate the huge growth and power of private digital platforms in the country, it can also be seen as a strategy to extend state power through them[564]. What must be remarked is that the state reserves the capacity of accessing citizens' data collected by big tech enterprises for national security reasons, an utterance which can refer to a wide spectrum of issues spanning from terrorist threats to social media posts dissenting with the government. In this sense, large attention has been dedicated by both scholarship and media to the practices of state surveillance unlocked by digital technologies in the PRC, including the harvesting of data for surveillance purposes[565] and a set of national security programs[566].

To shed light on the peculiar forms of digital governance concretizing in China, it is helpful to linger on a concrete example of its local implementation realized in partnership with an IT corporation,

[562] Privacy, as understood in Western societies, is a concept that began to spread in China only post-1978. Traditionally, in fact, this concept had a negative connotation, as it related to *yinsi* (阴私), which can be translated as "shameful secrets". Regarding the emergence of the debate on privacy in the country see Yao-Huai Lü, 'Privacy and Data Privacy Issues in Contemporary China', *Ethics and Information Technology* 7, no. 1 (2005): 7–15.
[563] Igor Calzada, 'Citizens' Data Privacy in China: The State of the Art of the Personal Information Protection Law (PIPL)', *Smart Cities* 5, no. 3 (2022): 1129–50.
[564] Yuan and Zhang, 'From Platform Capitalism to Digital China', p. 2.
[565] This dimension is thoroughly described in Chin and Lin, *Surveillance State*.
[566] Such as the two projects "Skynet" and "Sharp Eyes", both foreseeing the installation of security cameras nationwide.

while keeping in mind that local projects are extremely diversified in the country. The example is provided for by Chin and Lin[567] and it involves a series of initiatives launched in Hangzhou, the capital city of the industrial coastal region of Zhejiang. Hangzhou is considered the Chinese smart city *par excellence*, also due to the fact that it hosts the headquarters of the hi-tech giant Alibaba. One of the renown innovative projects hosted in Hangzhou under a public-private partnership is "City Eye", a program of public security management that incorporates the use of AI and data-driven technologies within the Chinese grid management system. Grid management is a form of "spatializing local governance"[568] launched in the PRC in 2004 and nationally implemented since 2013[569]. It consists into the subdivision of territories (both urban and rural) into "administrative units of governance within neighborhood communities"[570]. About 1.4 million[571] "grid workers" are nationally employed by the government to manage the grids. Their tasks include solving disputes, detecting unlawful behaviors and enforcing security. The aim of grid governance is that of "intelligence gathering"[572], that is, to construct a spatialized knowledge for local administration to be able to respond to different issues. *Guan* (管), a verb whose meaning lies between "care" and "manage", is a central term of grid governance, denoting an approach which is at once paternalist and rational[573]. At the same time, grid management makes the technoscientific approach to social governance more concrete and less abstract, particularly when it is enhanced through technological concretization. For instance, the project "City Eye" developed in Hangzhou consists into incorporating AI technologies into the grid management system of the city. Grid management, which already foresaw the use of high-definition security cameras for real-time monitoring, was thus supplemented with "autonomic error correction"[574] which relied on the predictive capacity of AI technologies[575].

The COVID-19 pandemic has expanded the proliferation of the (mass) surveillance industry in China, even though afterwards some technologies employed to manage the crisis were recognized as not truly reliable, such as for instance "fever detecting" cameras[576]. To this regard, it must be remarked

[567] Chin and Lin, *Surveillance State*, pp. 127-137.
[568] Yu Gao and Carolyn Cartier, 'The Grid Process: Spatializing Local Governance in China', *Eurasian Geography and Economics* 65, no. 4 (2024): 516–41. See also Jean Christopher Mittelstaedt, 'The Grid Management System in Contemporary China: Grass-Roots Governance in Social Surveillance and Service Provision', *China Information* 36, no. 1 (2022): 3–22; Zhu Wei, 'Grid Managers, the Moral Logic of Guan, and State–Society Dynamics in China', *Made in China Journal*, 20 June 2023, https://madeinchinajournal.com/2023/06/20/grid-managers-the-moral-logic-of-guan-and-state-society-dynamics-in-china/.
[569] Wei, 'Grid Managers, the Moral Logic of Guan, and State–Society Dynamics in China'.
[570] Jianhua Xu and Siying He, 'Can Grid Governance Fix the Party-State's Broken Windows? A Study of Stability Maintenance in Grassroots China', *The China Quarterly* 251 (September 2022): 1-23, p. 2.
[571] Wei, 'Grid Managers, the Moral Logic of Guan, and State–Society Dynamics in China'.
[572] Xu and He, 'Can Grid Governance Fix the Party-State's Broken Windows?', p. 2.
[573] Wei, 'Grid Managers, the Moral Logic of Guan, and State–Society Dynamics in China'.
[574] Samantha Hoffman, 'Programming China: The Communist Party's Autonomic Approach to Managing State Security', Merics China Monitor, 12 December 2017.
[575] Chin and Lin, *Surveillance State*, p. 124.
[576] *ivi*, p. 241.

is that the Chinese surveillance industry – even though the surveillance market was invented in the West[577] – is being exported in terms of both tools and expertise outside the country, to the Global South, but also to EU city governments[578]. The result is a sort of global "democratization" of state surveillance encouraged by the PRC[579] and supported throughout its international cooperation projects, such as the DSR initiative, which will be examined in Chapter 4.

To analyze how the expansion of the Chinese digital governance apparatus impacts the individuation of citizenship in China, Chapter 3 will focus on a peculiar experiment of digital governance taking place in the country: the Social Credit System. This initiative has emerged as a largely discussed experiment of authoritarian digital governance taking place in contemporary China. It has received huge attention for its ambition in scope and implementation, as well as for its surveillance and repressive potential. The following chapter will thus concentrate on this technological infrastructure affecting citizenship individuation in the PRC to provide further insight into this project from the philosophical perspective explored so far.

Chapter 2 aimed at reconstructing the top-down market-oriented rationalities that have been molding citizenship individuation in post-Mao China. A series of government initiatives and discourses have contributed to the shaping of new citizens in order to respond to the developmental aspirations of the country. At the same time, the opening to market economy, which took place without a retreat of the Party-State, has impacted Chinese citizenship individuation in a way comparable to that of Western countries. Following Stiegler's analysis of the devaluation of spirit in hyper-industrial democracies, it can be advanced that the proletarianization of the Chinese citizens has been taking place at the encounter with an astonishingly rapid diffusion of consumerist rationalities and developmental imaginaries. This process has boosted proletarianization processes deteriorating the *savoir-vivre* of Chinese citizens, affecting their behaviors, desires and life aspirations. In parallel, the Chinese hyper-market constitutes a thought-provoking example of swift concretization of analog and digital technologies put at the service of the consumption industries and creating "consumer citizens".

These processes have been administered and contained by the Party-State through the configuration of a strong moral discourse to assure order and maintain legitimacy. This strategy has involved a revival of cultural elements and a peculiar interpretation of law. Against the *dis*individuation processes driven by Chinese modernization, the Party imposes its central role in interpreting and making exist the super-ego of the nation. The hypothesis this chapter has tried to

[577] Chin and Lin, *Surveillance State*, p. 134.
[578] *ivi*, p. 10.
[579] *ivi*, p. 134.

demonstrate is that Party-State authorities have been molding the Chinese spirit since the reform era focusing on economic growth without, however, taking into consideration an economy of desire or of *consistences*.

In parallel, another process has been disclosed, in which technology emerges as a core theme and means in the hands of the Party-State. Since the reform era, an alleged neutral interpretation of science and technology has guided the strategy to govern the population. Regarding this, it can be advanced that proletarianization, mediated by a peculiar interpretation of technology, has affected Chinese citizens with the active involvement of the state in this process. The fostering of a technoscientific mindset "with Chinese characteristics" marks instead the oblivion of the Chinese distinctive cosmotechnics and steers the reproduction of an internalized capitalist cosmotechnics. Moreover, the mediation of technology results in a series of distinctive experiments to "technologize" citizens and in which virtuous behaviors, social morals, or the "Chinese spirit" – influenced by a moralization of the market or, better, by a marketization of morality – are "automated" through technology.

From late Qing dynasty to the post-1978 and until the "China Dream", the Chinese modernization has become an endless process, in which the acceleration of innovation imposed by global market rationalities does not allow for processes of technological adoption. Stiegler has denounced that "the organization of consumption presupposes […] that the becoming of *social systems* must structurally submit to the becoming of the *economic system*, something enabled by granting the latter full control over technological becoming, that is, over the *technical system*"[580]. This hierarchical submission takes place also in the PRC, albeit supervised by the government. The Chinese model seems efficient – and it is more and more internationally looked at as such – but it is doubtful whether it is sustainable when considering an economy of desire. While from the perspective of governance it can be considered alternative and, even, innovative, when it comes to technological adoption, it embraces and brings forth a cosmotechnical thought that is planetarized.

[580] Stiegler, *For a New Critique of Political Economy*, pp. 81-82.

CHAPTER 3: THE LIBIDINAL ECONOMY OF THE CHINESE SOCIAL CREDIT SYSTEM

OVERVIEW OF THE CHAPTER: Chapter 3 concentrates on examining a concrete example of digital governance that is being implemented in present days' China: the Social Credit System. The analysis is guided by the following questions: Is the PRC a foregoer of digital governance prototypes? Does it constitute an exception within the global scenario? The purpose is to place the contemporary Chinese "dataist" state and the consequential citizenship reconfiguration in the country into a continuum of global tendencies shaped by the planetary technological concretization.

In the first section, three paradigms are introduced and analyzed to briefly expose global tendencies steered by technical evolution: (1) the global dataist state, (2) ordinal citizenship, and (3) algorithmic governmentality. The second section proposes the Chinese Social Credit System as a peculiar experimentation of digital governance in the PRC by situating it within the exposed paradigms. It does so to dismantle the techno-orientalist discourse internationally emerged around it, while, at the same time, also advancing that it might constitute a fashionable example of efficacious digital governance at the international level. The final section discusses how the Chinese Social Credit System's infrastructure shapes a model of citizenship that disrupts the "libidinal economy" and the processes of individuation at the core of citizenship constitution.

3.1 THE DATAIST STATE, ORDINAL CITIZENSHIP, AND ALGORITHMIC GOVERNMENTALITY

Ratings […] not just describe but also shape reality.
Akos Rona-Tas[581]

Technology does not need a purpose. It is its own purpose.
Max Weber quoted by Fourcade and Healy[582]

Fourcade and Gordon assert that a "reorientation of the state to serve the market" is taking place worldwide as a global trend[583]. This process is coherent with the planetarization of the capitalist cosmotechnics, namely of a planetary technological system led by financial rationales, a process that has been introduced in the first chapter (1.2). The second chapter, from the philosophical perspective proposed by Bernard Stiegler, has shown how this process has also affected the post-1978 Chinese citizen, even though in a peculiar manner, that is, as a process oriented and guided by Party-State

[581] Akos Rona-Tas, 'The Off-Label Use of Consumer Credit Ratings', *Historical Social Research* 42 (2017): 52–76, p. 57.
[582] Marion Fourcade and Kieran Healy, 'Seeing like a Market', *Socio-Economic Review* 15, no. 1 (2017): 9–29, p. 13.
[583] Marion Fourcade and Jeffrey Gordon, 'Learning Like a State: Statecraft in the Digital Age', *Journal of Law and Political Economy* 1, no. 1 (2020): 78–108, p. 78

authorities in the market reform era. The issue now is to understand the impact of the digital realm on this commingle of market and state and how it contributes to shape citizenship worldwide, taking the Chinese case as a hypothetic influencer or foregoer of global trends.

In this scenario, it is first important to assess the role of technological development and its integration into, as well as absorption of, the social fabric, originating a process shaping citizenship worldwide in the digital era. The technical objects or, more precisely, the digital unities steering these global transformations are data. This section explores how they influence the states' approach to govern, to "see"[584] citizens and, likewise, how they shape citizenship itself. It does so by analyzing three intertwined paradigms shaping the current political realm and focusing on three different but co-constitutive levels: the dataist state, ordinal citizenship, and algorithmic governmentality.

The Global Dataist State[585]

The role of information has always been pivotal in the bureaucratic state. Information is a source of power from the perspective of both the state and the market[586]. As remarked by Fourcade and Gordon, however, what a state knows depends on the arrangement and capability of its vast sociotechnical machinery[587], whose ability to "see" citizens has undoubtedly changed when not improved with the transition to digital technologies. Nowadays, we witness a shift in the rationalities guiding the state: while the neoliberal state relied on statistics, "the emergent political rationality […] is philosophically dataist and progresses through the deployment of new computational tools. The most prominent of these is a class of computing algorithms known as "machine learning"."[588]. The theme of algorithmic governmentality will be addressed later, here it is interesting to linger on the functioning of the "dataist state".

There are two main traits of the dataist state. First, it is behavioral, in that the objective of its action is "to obtain the desired behavior, whether or not it is animated by rational intentions"[589]. Relying on Deleuze's terminology[590], Fourcade and Gordon sustain that the "dividual" is the focus of the state's insight. Second, it is experimental, because its context of operation is the near future, the short-term, excluding a wider temporal perspective or a more ambitious theoretical and political vision. In this last sense, it is "possibilist", that is, the logics guiding its actions reveals an experimentalist attitude,

[584] The term is first used by James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale Univ Pr, 2020), and retrieved by Fourcade and Gordon, 'Learning Like a State'.
[585] The expression "dataist state" is employed in Fourcade and Gordon, 'Learning Like a State'. Cheung and Chen refer to the PRC as a "Data State" as exposed more thoroughly later. See Anne S. Y. Cheung and Yongxi Chen, 'From Datafication to Data State: Making Sense of China's Social Credit System and Its Implications', *Law & Social Inquiry* 47, no. 4 (2022): 1137–71.
[586] Fourcade and Gordon, 'Learning Like a State', p. 78
[587] *ibid*.
[588] *ivi*, p. 80.
[589] *ivi*, p. 86.
[590] Gilles Deleuze, 'Postscript on the Societies of Control', *October* 59 (1992): 3–7.

particularly steered by the possibilities opened by technological development. These possibilities are then assessed at the borders, in prototype zones, or through pilot projects in defined areas, which are later extended to the whole state. This, in particular, is an attitude of the Chinese state, which often experiments at the "borders" or in some pilot cities, and later implements at the national level the projects which are deemed successful[591].

The digital technical objects enabling this new state model are represented by data. Data, thus, are increasingly a priority for states, especially to increase their power[592]. For instance, as anticipated in 2.3, the Chinese government is openly considering data as a fundamental asset of its governance approach, a sort of new strategic raw material. If data are considered a crucial economic and political source of government, it is interesting to linger on the differences elapsing between money minting and data collecting when considering the relationship between the state and citizens. According to Fourcade and Gordon, "[t]he state cannot unilaterally print data in the same manner it prints money. But the state is in a unique position to induce the production of all sorts of data that would not be recorded in its absence"[593]. In other words, the state can prompt or even coerce citizens to provide their personal data. This might happen in different ways, through census, through interactions with borders, through the introduction of different forms of verified digital identity (e.g., in the PRC, with the "real-name registration policy", each citizen's online activity can be tracked because it is linked to authentic personal data), and also through the cooperation with private institutions, or by coercing their cooperation. Under this configuration of the state/citizens relationship mediated by data, "meta data appear to have become a regular currency for "citizens to pay for their communication services and security—a trade-off that has nestled into the comfort zone of most people"[594]. As a consequence, good citizenship might start to be considered in terms of one's willingness to provide data about oneself[595].

Following this analysis, Fourcade and Gordon sustain that the Panopticon, the architectural structure representing the pervasiveness of the look of power described by Foucault[596], does not suit anymore how power grasps individuals under the current digital technical system. They suggest, thus, that the metaphor of the "rhizome", as described by Deleuze and Guattari[597], better represents a reality in which different knots of power emerge quite randomly[598]. In such a rhizomatic configuration of

[591] See, for instance, Lindtner, *Prototype Nation*.
[592] Cheung and Chen, 'From Datafication to Data State', p. 1138.
[593] Fourcade and Gordon, 'Learning Like a State', p. 90.
[594] Van Dijck, 'Datafication, Dataism and Dataveillance', p. 198.
[595] Fourcade and Gordon, 'Learning Like a State', p. 90.
[596] Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (Vintage Books, 1995).
[597] Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Univ of Minnesota Pr, 1987).
[598] Fourcade and Gordon, 'Learning Like a State', p. 93.

control distribution, power relies in the ability of trespassing the information knots: the key is, thus, data sharing and, especially, data sharing agreements. To this regard, it must be remarked that "Corporations […] frequently act as "proxy sovereigns", or constitute "knots of statelike power""[599]. Fourcade and Gordon presents the "dataism" of this emergent configuration of the state as a "philosophy of governing", "an ideology that finds the purpose of government in what can be measured rather than in the will of the people"[600]. More broadly, Van Dijck looks at "datafication", namely the quantification of social actions through the online harvesting of data to formulate predictive analyses, as an increasingly normalized "paradigm in science and society"[601].

Fourcade and Gordon sustain that the use of data for governing purposes does not forcibly produce an inescapable "dataist" approach, suggesting that another data/governance relationship is possible[602]. However, configured in the current way, this governmental approach *de facto* produces a different type of knowledge about its subjects, a new epistemics through which reality is represented and acted upon, which must be analyzed in philosophical terms. For now, it is sufficient to ask: how do digital technologies employed by the state and, importantly, also by the market, make the world *legible*? As in the lesson taught by Foucault, the question is that different technologies produce a different kind of dominant knowledge and, consequently, of power[603]. Seeing always involves a classificatory aspect: a "new" way of seeing leads to new classifying mechanisms. When we *see* in a different way, we *classify* in a different way. And the way in which we see and, thus, classify is more and more influenced by a commingle of finance and technology. When a state sees this way, citizens, too, are classified in novel ways.

Ordinal Citizenship[604]

An informing paradigm to describe the evolution of citizenship in the digital age is provided for by Fourcade, who defines the contemporary transformations occurring in the domain of citizenship, understood mostly in its institutional dimension but also influencing its broader dimension, as "ordinal citizenship" [605]. With this term she describes a double intrusion into citizenship's configuration: that of the (1) financial domain and that of (2) several practices of sorting, listing, ranking and ordering enacted through digital technologies. These two processes are inevitably commingled together, as the former inspires and nourishes the other, but also vice versa, as the

[599] *ivi*, p. 94.
[600] *ivi*, p. 81
[601] Van Dijck, 'Datafication, Dataism and Dataveillance', p. 198.
[602] Fourcade and Gordon, 'Learning Like a State', pp. 95-99.
[603] Michel Foucault, *Biopolitica e liberalismo. Detti e scritti su potere ed etica 1975-1984*, trans. O. Marzocca (Medusa Edizioni, 2001).
[604] The term is derived from Fourcade, 'Ordinal Citizenship'.
[605] Fourcade, 'Ordinal Citizenship'.

supposed "efficiency" and objectivity of measurements and calculations is enabled by digital technologies. Moreover, the two processes present themselves as somehow inescapable, in the sense that an ordinary citizen could hardly avoid partaking into the processes originated by them. The following paragraphs provide a brief summary of these two transformations shaping contemporary global citizenship.

The "financial intrusion" within the dimension of citizenship refers to a global tendency represented by the expansion of the financial rationales, especially the logics of *credit*, into almost every domain of life. As Fourcade puts it, "credit utilization has become essential not simply to the realization of people's social identity as consumers but also to their status as full members of society"[606]. One cannot live in contemporary society without a credit history. It is a process of more or less forced financialization also presented as "democratic" in a sense that it also contributes to include people within the citizenry – which comes with rights that are, however, more and more influenced by credit itself, as expounded later.

With regards to this process of an almost colonial expansion of finance into people's daily life, Rona-Tas has highlighted an important aspect: the "off-label use of consumer credit ratings"[607]. An "off-label" use happens when credit ratings – namely, those rated classifications based on the credit history of an individual or a company, and even of states and establishing the risk of a prospective debtor – are employed outside of the lending domain. For instance, this use can be observed when car insurance companies refer to the client's credit history to calculate their premiums or when landlords require potential tenants to provide their credit history. Rona-Tas detects two negative consequences when there is an off-label use of credit, beyond the manifest privacy issues: (1) error propagation, which refers to the fact that the on-label use often produces calculation's errors whose results also disseminate and influence the calculations and classifications in the off-label contexts, and (2) enhanced performativity, namely the effect through which an off-label use might create vicious or virtuous loops, in which, for instance, a "bad rating is not just a consequence of poor creditworthiness but it can be its cause as well"[608]. Based on this, the multiplication of ratings produced by off-label use has a "productive" effect, as rankings become at once "descriptive and performative"[609], that is, they collect a history *and* contribute to "create" the reality. What emerges from Rona-Tas's analysis is that the off-label use of credit ratings have predictive effectiveness in the

[606] *ivi*, p. 156,
[607] Rona-Tas, 'The Off-Label Use of Consumer Credit Ratings'.
[608] *ivi*, p. 56.
[609] *ivi*, p. 57.

short term; however, in the long term, it might contribute to actively influence reality by reinforcing discriminations and inequalities[610].

Importantly for the issues addressed in this work, the financialization tendency is enabled and reinforced by the changes of the global technical system. Fourcade and Healy have described the mechanisms through which today the market "sees" individuals, namely the ways in which it is able to collect data and elaborate inferences about them, operating classificatory activities[611]. These last appears more and more as "moralized social classifications"[612]. Even though classificatory contentions and the systems they produce have always been at the core of society's organization and functioning, capitalism has contributed to spread a scientific and management rationality that integrates the social, the moral and the technical plane under its specific logics[613]. Moreover, with the possibilities opened by the shift from analog to digital technologies, we witness that the "technological and specifically actuarial dimension of these [classificatory] struggles"[614] is taking a step further. The irruption of financial rationales in almost every aspect of life generates moral categories producing a new "economy of *moral* judgment"[615] according to which the position one occupies in a given ranking or list appears as somehow *deserved*, especially the more the measurements appear as extremely objective because machine-led. This process was already introduced while investigating the relation between morals and the market (see 2.1). The entanglement of morals, finance and technics in the digital age will be the object of philosophical speculation in the last section of this chapter (3.3). Here, the interest is to shed light on how the rapid diffusion of digital technologies have contributed to an acceleration and a concretization of this process. For instance, as pointed out by Fourcade and Healy, the continuous digital interactions everyone makes in her daily life, via social networks and (public or private) digital platforms, has come to constitute a sort of "übercapital" – namely, a "capital arising from one's digital records"[616] – according to which the classificatory insight of the market (and not only) distributes rewards and punishments, for instance in the form of prices' differentiation, and produces rankings in which the final occupied position appears morally entitled[617]. Consequently, the market gets to know the

[610] *ivi*, p. 71.
[611] Fourcade and Healy, 'Seeing like a Market'.
[612] *ivi*, p. 10.
[613] Daithí Mac Síthigh and Mathias Siems, 'The Chinese Social Credit System: A Model for Other Countries?', *The Modern Law Review* 82, no. 6 (2019): 1034–71, pp. 4-5. This also resonates with Yuk Hui's analysis of the capitalist cosmotechnics, see Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*.
[614] Fourcade and Healy, 'Seeing like a Market', p. 14.
[615] *ivi*, p. 24.
[616] *ivi*, p. 10.
[617] *ivi*, p. 24.

individual's "statistical double"[618] very well (which does not forcibly mean that it knows the individual herself *per se*, as discussed more thoroughly later). Against this background, we witness the functioning of a "reputation economy"[619] in which (a measured and calculated) "reputation […] is an asset"[620], a way to measure consumers', users', and ultimately citizens' trustworthiness through the traces they leave online. The "reputation economy" is amplified by the practices of the "sharing" and "gig" economy, in which ratings providing information on the reputation of a user or provider have contributed to the changing of the labor market[621].

Lastly, it is not only the market that gets a deep insight on people's behavior, as the state as well can now "grasp" a lot of information about its citizens, too. On one side this is possible because, today, people as ordinary *citizens* are (top-down) included within the above-described process of financialization, for instance in projects of financial inclusion, particularly in the Global South[622]. In this sense, "[f]ar from protecting people from the vagaries of the market, status as an *ordinary citizen* actively enrolls them into it"[623]. To this regard, it has been even advanced that the Chinese case seems to carry on a model for a "reputation State"[624] that is thoroughly analyzed in a few paragraphs. On the other, as formulated by Fourcade and Healy, the state is learning to "see" like a market. In other words, to make its functioning more efficient, the state is assimilating from the market the capacity to classify, rank and sort. The logics of this efficiency are unsurprisingly dictated by the market, in terms of "how to save money, and how to better extract income"[625], to the point that "[i]n an age of constrained budgets and fear of debt, [the states], too, may end up seeing like a market"[626].

The repeatedly mentioned classificatory aspect leads us to delve into the second dimension of "ordinal citizenship" highlighted by Fourcade, that of "digitality". As already remarked, the two components – that of financialization and that comprehending the variety of classificatory possibilities enabled by the digital realm – are intertwined. This partially corroborates the thesis according to which nowadays the technical system is subordinated to the interests of the economic

[618] The wording is employed in Antoinette Rouvroy and Thomas Berns, 'Algorithmic Governmentality and Prospects of Emancipation Disparateness as a Precondition for Individuation through Relationships?', trans. Elizabeth Libbrecht, *Réseaux* 177, no. 1 (2013): 163–96, p. 176.
[619] Michael Fertik, *The Reputation Economy: How to Optimize Your Digital Footprint in a World Where Your Reputation Is Your Most Valuable Asset*, with David C. Thompson (Crown/Archetype, 2015) referred to in Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 6.
[620] Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 6.
[621] *ivi*, p. 7.
[622] With regards to the Chinese case, see Nicholas Loubère, *Development on Loan: Microcredit and Marginalisation in Rural China*, Transforming Asia (Amsterdam University Press, 2019).
[623] Fourcade, 'Ordinal Citizenship', p. 157.
[624] Xin Dai, 'Toward a Reputation State: The Social Credit System Project of China', *SSRN Electronic Journal*, ahead of print, 2018.
[625] Fourcade and Healy, 'Seeing like a Market', p. 25.
[626] *ibid*.

system, to the detriment of the social configuration, as criticized by Stiegler[627]. Coherently, thus, as remarked by Fourcade: "the 'datafication of everything' is [arguably] an extension of the much broader phenomenon of the financialization of everyday life"[628]. At the same time, however, this process is also stirred by technical concretization itself, which is always in advance, insofar as a lot of the initiatives seem led by the simple fact that "technology has its own purpose"[629]. The push operated by technological concretization is explained by Fourcade and Healy in this way:

> The injunction coming from professions is normative and moral: we do these things because we must. That coming from programs is mimetic, taking the whole environment into account: we do these things because everyone else does. But the institutional command coming from technology is the most potent of all: we do these things because we can[630].

The first and most evident aspect concerning the pervasiveness of the digital dimension in citizens' life consists in that today it is challenging when not impossible to live a (social) life outside the established digital environment, namely without, for instance, having an account on some of the most popular social networks or platforms, such as Google, the Meta group's social networks (Facebook and Instagram), LinkedIn, or PayPal, to name a few with regards to the Euro-America, and WeChat, AliPay, BaiDu within the Chinese digital ecosystem (which insofar as it is partially "closed" differs from the Euro-American one but works according to comparable dynamics, see 4.2). In parallel, nowadays, it would be inconceivable not to possess those technical instruments supporting this digital dimension of life, namely, to live without a smartphone or a laptop. At the same time, for citizens *as such* it is becoming increasingly common and even encouraged, when not compulsory, to interact with public or private digital platforms in order to receive services from the state, national agencies or private firms (e.g., the "digital identity"). In this context, the state is undergoing a reorganization as a digital platform[631] with the aim of becoming more efficient (an aspect that has been already partially addressed when describing the initiatives of digital governance within the PRC in 2.3). With regards to the relation between citizenship and digitalization, it must be remarked that this latter brings with it a luring promise of "democratization", because it is supposed to facilitate the inclusion of every citizen in the state's fabric. This is an aspect from which the tech industry also draws its legitimacy, as underlined by Fourcade: "[n]early every Internet-based service promises to realize two fundamental dimensions of citizenship - equal status and the freedom to be whoever we want—at once"[632]. Today, this democratization promise seems, however, more and more a mirage.

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[627] See Stiegler, *For a New Critique of Political Economy*, pp. 81-82.
[628] Fourcade, 2021, p. 158.
[629] Max Weber quoted in Fourcade and Healy, 'Seeing like a Market', p. 13.
[630] Fourcade and Healy, 'Seeing like a Market', p. 13.
[631] Fourcade, 'Ordinal Citizenship', p. 158.
[632] *ibid*.

To resume, "ordinal citizenship" is "actuarial and quantitative"[633], indicating that the state, and the market as well, are able to measure citizens with deep insight. These more refined measurements produce more nuanced differences, deemed to prompt a more "just" meritocracy. The commingle of the public and private to this regard is often shadowy. Citizens are "known" better, even though the level of grasp may vary (for instance, based on the amount of information shared between states and private firms). Another feature of this type of citizenship is that it is "transactional"[634], as welfare is increasingly entangled with private debt and its services might depend on the position held within the ranking, the "ordinalization" dimension[635]. This is why Fourcade defines this new citizenship "ordinal", because it "dwells in ordinality"[636], an ordinality inspired by financial rationales and by the possibilities of measuring, sorting and classifying opened by computers (*ordinateurs* in French). These possibilities are further enhanced by computers' "ability" to correct and adjust themselves through cybernetic feedback loops enabled by algorithms. To the point that some scholars have introduced the paradigm of "cybernetic citizenship"[637] to describe the configuration of this new type of citizenship.

In short, Fourcade resumes three major problems concerning the individualization of measurement pursued by ordinal citizenship: (1) it displays an a-sociological dimension under the pretense that the information provided by the measurements directly quantifies behaviors, which, however, are classified upon those social categories ordinalization pretends to ignore; (2) it displays a moralizing nature whose rationales are dictated by the market; (3) it assumes to reveal the objective and "real" merit of someone, while individuals do not necessarily correspond to the actuarial rationalities employed to rate and rank them.

When analyzing these transformations under the lens of individuation, it is crucial to linger on the technical component influencing the *I/We* relation enshrined into this type of citizenship. What is the *what* of "ordinal citizenship"? Which function maintains the technical component of digital citizenship? What are those digital objects[638] – data and algorithms – co-producing this citizenship, and what do they "see" or know about citizens?

Algorithmic Governmentality

The discussion on the impact of the digital realm on citizenship ends up recurrently evocating the paradigm of algorithmic governmentality. For instance, Fourcade considers that one of the major

[633] *ivi*, p. 156.
[634] *ibid*.
[635] *ivi*, p. 162.
[636] *ibid*.
[637] Wessel Reijers et al., 'The Rise of Cybernetic Citizenship', *Citizenship Studies*, 20 May 2022, 1–20.
[638] Hui, *On the Existence of Digital Objects*.

issues concerning "ordinal citizenship" is that big data and algorithms define our identities in ways we would not define it: "[i]dentities are no longer just claimed or granted, they are inferred from behavior and theorized by data engines"[639]. She, thus, concludes by saying that ordinal citizenship promotes a "digitally mediated, dividually managed and technologically assisted self"[640]. However, it is important here to remind that the philosophical perspective through which we are considering technology is more complex than a simple opposition between human vs machine. The starting point for this dissertation has been Stiegler's reflection on the entanglement of the *who/what* ("technics is the invention *of* man" – this "of" indicating at once that man is the inventor and the invented), which led us to consider citizenship as the point of an incessantly negotiated triple crystallization of the individual, the collective and technics in the political arena. According to Stiegler's interpretation, thus, we are always "technically assisted", in the sense that technics is an original prosthesis[641]. The process of grammatization introduced in 2.1 (the spatialization of the temporal fluxes of consciousness into external tools) is, thus, to a certain extent, unavoidable and it distinguishes humanity as such. This does not mean, however, that grammatization should be a deterministic process: the entropy[642] caused by the advancement of technical concretization should require an effort to reorganize the social system to positively adopt and re-interiorize the advancements of technics. For instance, Stiegler sustained that the digital realm opened to a reorganization of society (first requiring a reorganization of the economy) that could lead to positive externalities for societies, particularly with regards to the possibilities opened concerning the reorganization of labor and free time[643]. Following his philosophical speculation, it is interesting to investigate in which ways, instead, algorithmic governmentality deteriorates, *proletarianizes*, citizenship.

Rouvroy and Berns define algorithmic governmentality as "a certain type of (a)normative or (a)political rationality founded on the automated collection, aggregation and analysis of big data so as to model, anticipate and pre-emptively affect possible behaviors" [644]. This section also relies upon their critical analysis, which has delineated the main steps of algorithmic governmentality as follows. First, a vast collection of data from various sources takes place; this collection occurs for disparate purposes (marketing, surveillance, research, etc.). The collected data seem innocuous because, alone, they bear no meaning, they are "traces left and not data shared, though they do not seem to be "stolen",

[639] Fourcade, 'Ordinal Citizenship', p. 164.
[640] *ivi*, p. 165.
[641] Expounding this nexus is the thesis in Stiegler, *Technics and Time 1*.
[642] Stiegler recurrently employs this term to refer to the disorders originated by technical concretization, with which societies must cope through negentropic actions. For a clarification of these concepts see Bernard Stiegler, *The Neganthropocene*, ed. Daniel Ross, CCC2 Irreversibility (Open Humanities Press, 2018).
[643] Stiegler, *For a New Critique of Political Economy*.
[644] Rouvroy and Berns, 'Algorithmic Governmentality and Prospects of Emancipation Disparateness as a Precondition for Individuation through Relationships?', p. 10.

and they also appear as absolutely ordinary and scattered"[645]. Second, there is the so-called "datamining", namely the processing of the collected data and the automated production of knowledge through algorithms. Last, this type of "probabilistic statistical knowledge"[646] allows for conducting actions on people's behaviors. This takes place through an association of behaviors with profiles. Based on the assigned profile, for instance, one may or may not obtain a loan; at the same time, it is also possible to "intervene on"[647] or "anticipate" behaviors based on the knowledge produced, for example, for marketing purposes.

Rouvroy and Berns thoroughly expound the critical issues of this type of governmentality, particularly relying on the thoughts of Foucault, Simondon, Deleuze and Guattari. Here it is suggested a proposal to organize the issues delineated by them under three main critical dimensions. They have been organized as such for clarity purposes, however the way algorithmic governmentality works prevents to separate these three dimensions in practice.

(1) The first and perhaps most known critical dimension concerns the surveillance threat[648], which can be defined more specifically as "dataveillance"[649]. Algorithmic governmentality allows "power" to grasp subjects in a different way compared to previous forms of power. It is a digital grasp that holds individuals based on the traces they leave online and based on the profiles automatically assigned to them. The aim and the (alleged) efficacy of this kind of governmentality is "to avoid the unpredictable" and to establish a "systematized serendipity"[650]. This type of governmentality is able to do so because the efficacy of this type of surveillance allows for "personalizing" information, services, product offers, and control. The two authors highlight that "[t]he field of action of this type of "power" is not situated in the present, but in the future"[651], with the tendency of replacing prevention with pre-emption[652]. Even though, as shown by Stiegler, the future is always the object of an anticipation through technics, algorithmics governmentality works through exacerbated logics of calculation (see 3.3).

(2) This leads us to the second critical dimension, which concerns the production of a new and different type of knowledge about "reality" (and individuals). Algorithmic governmentality, in fact,

[645] *ivi*, p. 6.
[646] *ivi*, p. 8.
[647] Fourcade and Healy, 'Seeing like a Market', p. 13.
[648] See, for instance, Zuboff, *The Age of Surveillance Capitalism*.
[649] Van Dijck, 'Datafication, Dataism and Dataveillance', p. 205. Concerning the difference between surveillance and dataveillance, Van Dijck adds "whereas surveillance presumes monitoring for specific purposes, dataveillance entails the continuous tracking of (meta)data for unstated preset purposes". Van Dijck, 'Datafication, Dataism and Dataveillance', p. 205.
[650] Rouvroy and Berns, 'Algorithmic Governmentality and Prospects of Emancipation Disparateness as a Precondition for Individuation through Relationships?', p. 19.
[651] *ivi*, p. 18.
[652] *ivi*, p. 19.

moves away from the traditional statistical perspectives of the "average man" and pretends to capture the social reality as such. In doing so, it produces an "a-normative objectivity" and, even, a "tele-objectivity"[653]. This type of knowledge, however, relies on the lack of a hypothesis. For instance, data are generally collected without a specific scope and, later, inferences are made about them. This is also why it is also deemed to be a hyper-objective kind of knowledge[654], because it is devoid of human or subjective interference or interpretation. Consequently, "[n]orms seem to emerge directly from reality itself. However, this "knowledge" merely emerges from correlations"[655]. What Rouvroy and Berns denounce to this regard is that we give up the ambition to signify events or to produce a theory. Stiegler, for his part, describes the functioning of this knowledge as an intellect that works without the involvement of reason, using these terms according to Kant's interpretation[656], and denounces this exteriorization of the faculty of thinking as part of a proletarianization process of loss of *savoir-théoriser*[657] and, even, of *savoir-penser*[658].

(3) The third critical dimension concerns *individuation* and this last one is deemed to be the most meaningful for the current investigation. Berns and Rouvroy point out that both the two opposite angles from which digital life and its impact on individuals have been looked at, that of a hyper-individualization and that of desubjectification of individuals, are wrongfully evocated. They claim that this type of governmentality is, instead, "indifferent" to individuals[659], as the statistical doubles produced by the knowledge originated by aggregated data are too detached from people: individuals/citizens are led to believe that they are someone they actually are not. In this sense, algorithmic governmentality ""creates" a reality as much as it records it" and, at the same time, it makes more difficult for people to *individuate* themselves:

> Algorithmic governmentality produces no subjectification, it circumvents and avoids reflexive human subjects, feeding on infra-individual data which are meaningless on their own, to build supra-individual models of behaviors or profiles without ever involving the individual, and without ever asking them to themselves describe what they are or what they could become[660].

Why does this happen? Because relations, and not subjects, have become the targets of this type of governmentality. Even though, according to the philosophical interpretation of Simondon (see 1.4), the individual should be understood from the perspective of the processes of individuation and, thus,

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[653] *ivi*, p. 3.
[654] This is also remarked in Fourcade and Healy, 'Seeing like a Market', p. 25.
[655] Rouvroy and Berns, 'Algorithmic Governmentality and Prospects of Emancipation Disparateness as a Precondition for Individuation through Relationships?', p. 7.
[656] Antoinette Rouvroy and Bernard Stiegler, 'Il Regime Di Verità Digitale. Dalla Governamentalità Algoritmica a Un Nuovo Stato Di Diritto', trans. Sara Baranzoni, *La Deleuziana* 3 (2016): 6–29, p. 20.
[657] Stiegler, *For a New Critique of Political Economy*, p. 30.
[658] Stiegler, *Nanjing Lectures (2016-2019)*, p. 187.
[659] Rouvroy and Berns, 'Algorithmic Governmentality and Prospects of Emancipation Disparateness as a Precondition for Individuation through Relationships?', p. 16.
[660] *ivi*, p. 10.

she is always the combination of polarizations of relations, within algorithmic governmentality, relations are treated as objects and, thus, are "substantified": they become states or statuses. Consequently, algorithmic governmentality does not act upon individuals, but upon their environment[661]. It constitutes an "extraction from the becoming"[662], which hinders individuation by somehow *freezing* the metastable equilibrium of transindividuation[663]. As also remarked by Hui, while advancing the necessity of a new perspective from which analyzing digital objects and their action on consciousness, "[r]elationality is the point where algorithms act, and at which data are related to each other"[664], with deep impacts on society.

To add some nuanced perspectives from the reflections of both Stiegler and Hui, it is interesting to look at the digital realm in term of tertiary retentions[665] and, especially in this case, of tertiary protentions[666]. Tertiary retentions are what technics, as an external memory, preserves as a transindividuation fund. Technical evolution, however, impacts the configuration of tertiary retentions. For instance, digital tertiary retentions are not the same as analog tertiary retentions. Digital tertiary retentions (e.g., data organized through algorithms) are able to produce tertiary protentions, that is, automated anticipations of the future influencing people's desire by reducing it to drives[667]. Drives, in this sense, "prompt individuals to act without forming or formulating a desire"[668]. It is not only a disruption of the social fabric, but a scattering of the functioning of time itself:

> The organization of digital objects through the standardization of data structures and the invention of algorithms is not simply what has fashionably been called the "organization of knowledge" but is also the organization of time. The making-present has its primordial mode of bodying forth to the world, is redirected to the abstractness of the pseudo "We" and "I." The imagination based on the programming of intersubjectivity through interobjective relations is an attempt to enact this, and it is no surprise to find that social norms are increasingly easily formed because of this programmability. That is to say, technological normativity is the source of social normativity[669].

At the same time, algorithms must be understood as a further step in the process of concretization of machines, as a form of technology become, in Hui's words, an "*organizing inorganic*"[670] that works through recursive processes. Hui exposes that technologies, through which humans have always tried

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[661] *ivi*, p. 9.
[662] *ivi*, p. 5.
[663] *ivi*, p. 25.
[664] Yuk Hui, 'What Is a Digital Object?', *Metaphilosophy* 43, no. 4 (2012): 380–95, p. 394.
[665] As already anticipated, tertiary retention is a concept that Siegler takes from Husserl's reflection on primary and secondary retentions and which he interprets through his personal understanding of technics as exteriorized memory. See Stiegler, *Technics and Time 1* and *2*.
[666] For a more specific understanding of the concept of protentions, see also Hui, *On the Existence of Digital Objects*, chapter 6.
[667] To this regard, see also Bernard Stiegler, *The Future of Work*, trans. Daniel Ross, Automatic Society / Bernard Stiegler, Volume 1 (Polity, 2016), chapter 1.
[668] Rouvroy and Berns, 'Algorithmic Governmentality and Prospects of Emancipation Disparateness as a Precondition for Individuation through Relationships?', p. 13.
[669] Hui, *On the Existence of Digital Objects*, p. 247
[670] Yuk Hui, 'Philosophy After Automation?', *Philosophy Today* 65, no. 2 (2022): 217–33, p. 226

to anticipate and care for the future, have, at the same time, always been creating new types of catastrophes, different from natural ones, because technics produces a different kind of "contingency"[671]. This constitutive aspect reveals the double, *pharmacological*, nature of technics: at once poison and remedy. The peculiarity of the new catastrophes originated by digital technologies should be understood in temporal terms, because they show the increasing inability of human time to catch up with the acceleration produced by algorithmic machines. One example is provided for by financial crises originated by automated transactions, during which the human hand arrives late in the case of a malfunctioning (which might happen frequently, as "design for failure" is an intrinsic logic at the basis of digital innovation that incorporates the very likely possibility of malfunctioning into technological design[672]). This new type of contingency originating new types of catastrophes originating within a globalized technical system throws humanity into the planetary condition.

In conclusion, algorithmic governmentality urges us to realize that individuation is a triple process where the role of the technical system emerges as pivotal and which is affected by its unbridled market-led concretization. To further clarify the exposed features of the dataist state, of ordinal citizenship, and of algorithmic governmentality, it is interesting to assess how they operate in concrete and, more specifically, in the Chinese context, which is often the object of digital orientalist discourses on these matters. The Chinese Social Credit System has been presented as the epitome of this type of governance, as its most advanced or concerning concretization: a form of "cybernetic citizenship"[673] in which feedback loops would regulate the access to rights and even control the behaviors of Chinese citizens.

3.2 REVISITING THE CHINESE SOCIAL CREDIT SYSTEM

> *[T]oday, machines cease to be* organized inorganic*, and are instead becoming a gigantic system, for example Google, or the Social Credit System, which we might want to call* organizing inorganic.
> Yuk Hui[674]

The Chinese Social Credit System (*shehui xinyong tixi* 社会信用体系), insofar CSCS, has been for some years the catalyst of techno- and digital Orientalism's anxieties and even obsessions directed toward the PRC[675]. It is a remarkable and ambitious digital project developed by Chinese decision

[671] Yuk Hui, *Pensare la contingenza: la rinascita della filosofia dopo la cibernetica*, ed. B. Antomarini (Castelvecchi, 2022), pp. 35-58.
[672] Hui, *Pensare la contingenza*, p. 46.
[673] Reijers et al., 'The Rise of Cybernetic Citizenship'.
[674] Hui, 'Philosophy After Automation?', p. 226.
[675] Adam Knight, 'Basket Case: Reform and China's Social Credit Law', *China Law and Society Review* 6, no. 2 (2023): 181–210, p. 182.

makers which, in recent years, has also received widespread scrutiny by the scholarship, also proved by the flourishing of classificatory proposals to address it. It has been labeled as a "digital socio-technical credit system"[676] shaping society and citizens in contemporary PRC, but also looked at as a "versatile instrument" serving different governmental and administrative goals[677]. Using Foucauldian terminology, it has been analyzed as an innovative "assemblage" to govern the Chinese subjects[678]. Furthermore, it has been labeled "less a system than a comprehensive strategy"[679] or an "ecosystem of various initiatives"[680] driven by various governance and administrative purposes. Some even conceptualized it as the flagship of the Chinese "surveillance state capitalism"[681] – a further "technology-assisted variant"[682] in the variegated taxonomy of state capitalism – or, even, as a project launching the rise of the Chinese "reputation state"[683]. More in concrete, it has been researched as an ambitious "infrastructure mechanism for data collection and aggregation, data assessment and analysis"[684].

For instance, in the wake of the construction of this digital myth, Samantha Hoffman presents the CSCS as one of the four pillars of China's "Autonomic Nervous System" (ANS)[685], a framework she employs to describe the overall social management strategy developed by the Chinese government and steered by a precise technological belief. The CSCS would constitute the "self-optimizing" component of this system, under which citizens are responsible in participating in their own management. The structure of the Chinese ANS would constitute a concretization of Party-State authorities' social management vision enabled by digital technologies. It would inherit the approach to society understood through the lens of complex systems engineering[686], also delineated in 2.3.

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[676] Severin Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System: Diversity, Flexibility, and Comprehensiveness', *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*, ACM, 21 July 2021, 78–88, p. 78.
[677] Cheung and Chen, 'From Datafication to Data State', p. 1139.
[678] Chenchen Zhang, 'Governing (through) Trustworthiness: Technologies of Power and Subjectification in China's Social Credit System', *Critical Asian Studies* 52, no. 4 (2020): 565–88, p. 3.
[679] Nicholas Loubere, 'The Global Age of Algorithm: Social Credit and the Financialisation of Governance in China', *Made in China Journal*, 17 May 2018, https://madeinchinajournal.com/2018/05/17/the-global-age-of-algorithm-social-credit-and-the-financialisation-of-governance-in-china/.
[680] Gianluca Centraco and Giovanna Maria Dora Dore, 'Il Sistema di Credito Sociale cinese: tecnologia come strumento di sorveglianza e persuasione', *OrizzonteCina* 15, no. 1 (2024): 61-78, p. 66 (my translation).
[681] Lauren Yu-Hsin Lin and Curtis J. Milhaupt, 'China's Corporate Social Credit System: The Dawn of Surveillance State Capitalism?', SSRN Scholarly Paper no. 3933134 (Social Science Research Network, 30 September 2021), p. 1.
[682] *ibid*.
[683] Dai, 'Toward a Reputation State'.
[684] Liav Orgad and Wessel Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', *Vanderbilt Journal of Transnational Law* 54, no. 5 (2021): 1087–121, p. 1091.
[685] The three others are: "self-configuring" (the centralized security apparatus), "self-healing" (the grid policing, see 2.3), "self-protecting" (the national defense system) see Hoffman, 'Programming China: The Communist Party's Autonomic Approach to Managing State Security'.
[686] Hoffman, 'Programming China: The Communist Party's Autonomic Approach to Managing State Security'; Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 79; Vincent Brussee, *Social Credit: The Warring States of China's Emerging Data Empire*, 1st ed (Palgrave Macmillan, 2023), p. 40.

According to Hoffman, the ANS model is based on a holistic approach, a dialectical understanding of societal forces, and dynamic equilibrium. In her words, the overall ANS framework would constitute an "authoritarianism […] augmented through technology"[687]. Her analysis is deemed thought-provoking because she leverages on the technological "reflexive" potential of the CSCS, a project which can be analyzed – and has been analyzed as such – as one of the most infamous examples of ordinal citizenship and, even, of algorithmic governmentality operated by the Chinese "dataist" state.

In this sense, according to Knight and Creemers, the CSCS must be looked at as "part of a wider program of 'informatization' (*xinxihua*) that seeks to enhance all aspects of governance through digital technology"[688]. A trend that, however, is taking place on a global level affecting citizens' individuation, as already discussed. The following paragraphs aim at describing this project by exposing its unique features and, parallelly, by situating it in a continuum of global trends.

Origins: The Market/Technology Nexus

Before delving more deeply into the current configuration of the CSCS, it is helpful to delineate its origins, in order to understand the motives and fragmented history beneath this state-led conglomeration of data-driven governance projects.

Even though in its comprehensive form it has been officially announced in 2014[689], there is a pre-2014 history, or perhaps histories, of this project. The origins of CSCS date back to 1999, and even before[690]. At this initial stage of configuration, it was considered a necessary regulatory mechanism for maintaining financial accountability within the Chinese rapidly growing economy that, according to Brussee, "could succumb under its disorderly expansion"[691] in the 90s and 00s. The previous chapter has already addressed how the opening to a market economy at the turn of the 21st century in the PRC was accompanied by top-down moralizing discourses to tame the social issues caused by economic growth. According to Brussee, three main issues were afflicting the Chinese embryonic market economy base on the Party-State authorities' perspective: (1) the financial need to assess the borrowing capacities of companies and citizens; (2) the necessity to improve the enforcement of law and regulations; (3) the dispersal of guiding moral values[692]. The CSCS has somehow crystallized as

[687] Hoffman, 'Programming China: The Communist Party's Autonomic Approach to Managing State Security'.
[688] Adam Knight and Rogier Creemers, 'Going Viral: The Social Credit System and COVID-19', SSRN Scholarly Paper no. 3770208 (Social Science Research Network, 20 January 2021), p. 2.
[689] The "Planning Outline for the Construction of a Social Credit System" (2014-2020). For a translation of this document consult see Rogier Creemers, 'Planning Outline for the Construction of a Social Credit System (2014-2020)', *DigiChina*, 14 June 2014, https://digichina.stanford.edu/work/planning-outline-for-the-construction-of-a-social-credit-system-2014-2020/.
[690] According to Brussee, "social credit" shows in policy documents as early as 1991, see Brussee, *Social Credit*, p. 20. The formal announcement, instead, dates back to 2002, see Brussee, *Social Credit*, p. 71.
[691] Brussee, *Social Credit*, p. 21.
[692] *ivi*, p. 23.

a versatile answer to all these problems, and it was configurated under a specific understanding of technology and governance.

The quasi-mythical origins of the CSCS dates back to 1999, when a Chinese toys factory owner wrote a petition to the then Premier Zhu Rongji (Jiang administration). In the petition, she complained that other companies copied her toys, violating her IP rights. According to this version of the story, the Premier rapidly exhorted the People's Bank of China (PBOC) to frame a credit system to assess the reliability of market actors. The PBOC worked in cooperation with the Institute of Economics of the Chinese Academy of Social Sciences, whose main figure with regards to this project was Lin Junye, a sociologist who had studied in the US and who was familiar with the functioning of credit systems in that country[693]. Apparently, only a bunch of months after the petition, the Chinese government had already presented a set of proposals to assess the trustworthiness of actors in different domains: finance, law/regulation and morality[694]. Actually, some proposals to regulate the lending domain had already been advanced since 1991[695]. In fact, solving the issue of financial reliability was deemed of pivotal importance to sustain the accelerated economic growth of those years. In particular, individuals and enterprises, especially in rural areas, lacked a documented credit history and a lot of citizens still took out loans through informal channels[696]. This has been a pressing issue for the Chinese government until recent times, as in 2021 about 20% of the total Chinese population lacked a banking history[697]. In parallel, another question affecting the socio-economic environment was the lack of legal and administrative enforcement capacity. The limits concerning law and regulation enforcement were also reinforced by the administrative fragmentation of a country where, for instance, it was difficult to enforce court orders across different regions[698].

Different scholars have highlighted that the CSCS project emerges from indigenous historical and cultural roots. According to these interpretations, the examination ranking systems to select public officials during imperial times or the archival instruments employed by the Maoist social management (the *dang'an* mechanism) would represent the cultural memory of its current rationalities[699]. For his part, Knight sustains that the CSCS does not emerge from a void and that it is the result of three more recent ideological and strategic trends steered by the Party-State vision of governance: (1) the

[693] The facts are narrated in Brussee, *Social Credit*, p. 18. See also Knight and Creemers, 'Going Viral', p. 4.
[694] Brussee, *Social Credit*, p. 19.
[695] *ivi*, p. 20.
[696] Yu-Jie Chen et al., '"Rule of Trust": The Power and Perils of China's Social Credit Megaproject', *Columbia Journal of Asian Law* 32, no. 1 (2018): 1-36, p. 9.
[697] Brussee, *Social Credit*, p. 21.
[698] *ivi*, p. 22.
[699] Fan Liang et al., 'Constructing a Data-Driven Society: China's Social Credit System as a State Surveillance Infrastructure: China's Social Credit System as State Surveillance', *Policy & Internet* 10, no. 4 (2018): 415–53, p. 6; Adam Knight, 'Technologies of Risk and Discipline in China's Social Credit System', in *Law and the Party in China: Ideology and Organization*, ed. Rogier Creemers and Susan Trevaskes (Cambridge University Press, 2020), p. 247.

ambitious informatization projects; (2) the construction of a "Morality in the New Era", in continuity with the "spiritual civilization" rhetoric; and (3) the framing of the Socialist Rule of Law (to this regard, see 2.2)[700]. In this sense, the project inherits the 80s' scientist aspirations of automating governance by also accomplishing "the fusion of socialist creed with marketized technologies"[701].

At the same time, it is important to notice that part of the CSCS's rationales have global roots. For instance, many scholars point out that the FICO system in the US – a financial credit assessment system for loans – is one of the main sources of inspiration of this project[702]. In particular, it was the "narrowly defined SCS", which was developed by the PBOC between 2002 and 2013, that was molded after financial credit systems in Western countries[703]. According to Drinhausen and Brussee, the shift from a tool for regulating financial activities to an instrument for a variety of socio-political uses took place since 2011[704], and particularly in 2014 with the issuing of the "Planning Outline for the Construction of a Social Credit System" (2014-2020), part of the 12th Five-Year Plan (2011-2015). This official watershed foresaw the first step of the construction of a "social credit system", establishing it as "an important component of the Socialist market economy system and the social governance system"[705] which was also looked at as a further development of the "spiritual civilization" policy[706].

The last part of this chapter will concentrate on the influence of global processes led by the concretization of technical tendencies (particularly those steering ordinal citizenship and the dataist governmental approaches) and the globalization of the financial world's rationalities as well, to point out the continuities of this unique experimental project with global trends. For now, it is sufficient to remark that at the international level, different credit experimentations are being implemented as well, such as the already mentioned FICO system in the USA, municipal experimentations of credit systems in European cities[707], or the government-led Aadhaar system in India, which has been often compared to the CSCS[708]. What distinguishes the CSCS as an undoubtedly peculiar experiment is the extension

[700] Knight, 'Basket Case', p. 186.
[701] *ibid*.
[702] Brussee, *Social Credit*, p. 47. Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1102.
[703] Brussee, *Social Credit*, p. 47.
[704] Katja Drinhausen and Vincent Brussee, 'China's Social Credit System in 2021 From Fragmentation towards Integration', *Merics China Monitor*, 3 March 2021, https://merics.org/en/report/chinas-social-credit-system-2021-fragmentation-towards-integration, p. 3. The "four general areas" of implementation of social credit (government, commerce, judiciary and society) have been delineated since 2011. See Knight, 2020, pp. 239-240.
[705] For a translation of this document see 'Planning Outline for the Construction of a Social Credit System (2014-2020)', *China Copyright and Media*, 14 June 2014, https://chinacopyrightandmedia.wordpress.com/2014/06/14/planning-outline-for-the-construction-of-a-social-credit-system-2014-2020/..
[706] Knight, 'Technologies of Risk and Discipline in China's Social Credit System', p. 239.
[707] Such as the city of Cascais in Portugal, see the website: 'City Points Cascais | Câmara Municipal de Cascais', accessed 26 October 2025, https://www.cascais.pt/citypoints.
[708] Centraco and Dore, 'Il Sistema di Credito Sociale cinese', p. 62

of its current scope, the authority forwarding it, and the characteristics of the regime type where it is implemented[709].

Resizing the CSCS's Myth

In order to introduce the CSCS is helpful to clarify the official terminology employed to refer to this project. As suggested by Brussee, the word translated as "social" (*shehui* 社会) in CSCS can be also rendered as "societal" in opposition to "governmental", to refer to the idea that this system involves the participation of societal actors, and not only of governmental ones, to be established[710]. The semantic and conceptual unit of the project is "credit", a word that in Chinese has different translations according to its application: *zhengxin* (征信) is used in the economic world for financial accountability, *chengxin* (诚信) means "honest and trustworthy" or "integrity" and represents one of the CSVs promoted under Xi Jinping[711], *xinyong* (信用), the word actually used in the CSCS's framework and frequently criticized for its opaque meaning[712], combines the former two meanings into an expanded form of financial, commercial, legal, and moral/social accountability. Concurrently, *xinyong* recalls Chinese cultural memory as it evocates "lofty moral virtues such as trustworthiness, promise-keeping, norm abiding, integrity and general courtesy"[713]. The virtue of *xin* (信) has in fact an important role in Confucian philosophy (as expounded more thoroughly in 3.3). Last, the term "system" (*tixi* 体系) is sometimes translated using the English plural version of the word to render the multiple composition of this project, a "system of systems"[714].

According to Brussee, who has provided one of the most recent and comprehensive analyses of this governance initiative, "[t]he real SCS may actually be quite boring. It is a broad policy umbrella – not an integrated system – to help enforce legally effective obligations such as laws, regulations, and contracts in China's market economy"[715]. The three main functions of the CSCS are the assessment of financial credit, the regulation of the market and social domains, and the fostering of top-down disseminated moral values[716]. Because of the expansion of credit application domains, the CSCS has been presented as a thought-provoking case of extensive "off-label" use of consumer credit

[709] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1091.
[710] Chen et al., '"Rule of Trust"', p. 10.
[711] Zhang, 'Governing (through) Trustworthiness', p. 167. See also the footnote 416.
[712] Brussee, *Social Credit*, p. 39.
[713] Xiaodong Ding and Dale Yuhao Zhong, 'Rethinking China's Social Credit System: A Long Road to Establishing Trust in Chinese Society', *Journal of Contemporary China* 30, no. 130 (2021): 630–44, p. 2. See also Chen et al., '"Rule of Trust"', p. 10.
[714] Drinhausen and Brussee, 'China's Social Credit System in 2021 From Fragmentation towards Integration', p. 4.
[715] Brussee, *Social Credit*, p. 4.
[716] Cheung and Chen, 'From Datafication to Data State', p. 1143.

assessment[717]. At the same time, because its implementation is extended to all Chinese citizens, it has been looked at as a peculiar and enhanced form of "ordinal citizenship" and, even, as anticipated, labeled as a prototype of "cybernetic citizenship".

The CSCS is a variegated and intricated ecosystem of initiatives or, better, a multiple governance infrastructure to collect data concerning different domains with regards to individuals, companies, governmental and social institutions' conducts. There are three main components distinguishing the system at both the national and local level: state-led databases for sharing information between state institutions, the reward and punishment system, and the interfaces, mostly websites, allowing for the consultation of the partially publicly accessible credit records[718]. To supervise it, the Inter-Ministerial SCS Joint Conference has been created. The Conference is supervised by the PBOC and the National Development and Reform Commission (NDRC). The Conference comprehends over thirty government agencies and CCP organizations (including the Central Office for the Construction of a Spiritual Civilization)[719]. Local governments and institutions also cooperate at a subnational level. Big private tech companies were also involved in developing some experimental credit projects, even though in a more recent time their involvement has been resized. The official interface of the CSCS is "Credit China"[720], a website where the Conference shares public credit information. Some information can also be consulted in corporate-own databases[721].

The CSCS foresees two main implementation mechanisms: (1) a system of combined punishments, mainly in the market and regulatory domains, and one of incentives, to promote moral model behaviors, carried out by the state; and (2) a uniformed and standardized infrastructure for the collection and elaboration of data operated by the state. The data collection and sharing have been facilitated by the introduction of a personal "social credit code" (*shehui xinyong daima* 社会信用代码) for identifying businesses (the actual main target of this project[722]), governmental organizations, and citizens (in the case of citizens, the code is made of the same digits of their ID card number)[723]. It is important to notice that some of the information collected about individuals cannot be freely inquired online. At the same time, through this code, actors are not automatically "scored".

Apart from this backbone infrastructure, three main different categories of credit systems, whose scope and functioning have been sometimes confused and overlapped, can be distinguished. (1) The

[717] Rona-Tas, 'The Off-Label Use of Consumer Credit Ratings'.
[718] Knight and Creemers, 'Going Viral', p. 4.
[719] Chen et al., '"Rule of Trust"', p. 14.
[720] '信用中国', accessed 26 October 2025, https://www.creditchina.gov.cn/.
[721] Brussee, *Social Credit*, p. 45.
[722] Around 70% of the targeted actors are companies, according to Drinhausen and Brussee, 'China's Social Credit System in 2021 From Fragmentation towards Integration', p. 8.
[723] Cheung and Chen, 'From Datafication to Data State', p. 1151; Brussee, *Social Credit*, p. 45.

first category, national in extension and scope, but of local implementation, consists in the creation of blacklists (*heimingdan* 黑名单) and redlists (*hongmingdan* 红名单) addressing individuals, enterprises, governmental institutions, and NGOs[724] for trust breaking or trust enhancing behaviors. The composition and report to the public of these lists is delegated to government departments (operating at a national level) and government agencies (operating at different local levels, such as provincial or municipal), which communicate information about them via "Credit China" but also via dedicated websites, which differ for structure and appearance but are of quite simple accessibility[725]. The punishments that follow the presence in each blacklist are regulated by Memoranda of Understandings between government agencies[726]. The position in such lists is not ranked or scored: the sole fact of being present in a given list determines the "joint punishments", carried out by forms of public-private partnership[727].

The governmental rationality of the blacklists follows the principle advancing that "dishonesty in one place leads to restrictions everywhere" (*yichu shixin, chuchu shouxian* 一处失信、处处受限)[728]. The most implemented and, thus, renown blacklist is the "Judgment Defaulters Blacklist" supervised by the Supreme People's Court (SPC). It targets people who are believed to have the capacity to fulfill a court order but refuse to do so; for instance, it may target an individual who has contracted a debt and who does not repay it, even though she is believed to be able to do so. Actors in such list are prevented from taking high-speed trains or flights and accessing luxury accommodation, goods or services, such as private education for their offspring. The moralizing intent is quite clear. Other more sectoral blacklists (for instance, those about tax or environmental regulation) do not foresee this kind of punishment, but, instead, they involve restrictions on matter of administrative bureaucracy, such as the revocation of permits[729]. There has also been experimentation with blacklists regulating online behaviors but, within the Chinese online ecosystem, there are already efficient means employed by the state to punish online crimes or misbehaviors, included dissent with regards to the government, such as the already mentioned "real-name registration policy". The percentage of individuals and companies targeted by blacklists is quite low (0,17% of individuals and 1,8% of companies targeted annually between 2018 and 2019[730]).

[724] Knight, 'Technologies of Risk and Discipline in China's Social Credit System', p. 242.
[725] Engelmann et al. have provided a partial study of CSCS local websites and platform. Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System'.
[726] Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 79.
[727] Marianne von Blomberg, 'The Social Credit System and China's Rule of Law', SSRN Scholarly Paper no. 3877623 (Social Science Research Network, 30 December 2018), p. 90.
[728] Brussee, *Social Credit*., p. 111.
[729] *ibid*.
[730] Data provided for in Brussee, *Social Credit*, p. 120.

On the other hand, redlists work according to a reward logic. The redlists praise trustworthy commercial behaviors, companies that produce high-quality products or that foster good conditions of employment[731]. The "trust enhancers" can receive different kinds of rewards (such as an easier access to loans), but most of the times the reward takes the form of facilitated administrative procedures[732]. Engelmann et al. point out that the infrastructure of redlists is less developed[733], even though its reward logics is the one upon which the Chinese government is investing in recent times, to foster behavioral models and positive energy instead of punishments[734].

The variety of blacklists and redlists highlights the versatility of an instrument that can respond to different regulatory needs according to the locality and to the situation. This is why local governments can set up different lists based on their contingent regulatory necessities. As interpreted by Engelmann et al., blacklists foster conformism, while redlists use role models to foster state-led moral behaviors[735], under a logic of deterrence and inducement, which according to the project's aspirations is enhanced by technology. However, as pointed out by Brussee points, the blacklists and redlists infrastructure is still far from being high-tech[736]. Many lists are still analogically composed and, for instance, when the addition of an actor to a blacklist takes place through digital proofing, the law requires human review to confirm it[737].

One of the key features of the lists system is the practice of "naming and shaming", namely the fact that this project is linked to a reputation (social) economy: the presence in a given list is displayed on public portals and sometimes on the news broadcasts[738]. Some websites also foresee the possibility of sharing information via social networks[739]. The intent is that of shaming or praising individuals or companies via a moralization of mostly financial and commercial conducts. These logics imply a further step up in the financialization of the moral domain whose consequences are analyzed more thoroughly later. In the last years, the modalities to "repair" one's credit (*xinyong xiufu* 信用修复) have been clarified to reinforce the perception of the construction of a "trustworthy" society[740]. The

[731] Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 86.
[732] Brussee, *Social Credit*, p. 119.
[733] Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 83.
[734] Party-State organisms are interested in spreading "positive energy" within the country. See, for instance, Zifeng Chen and Clyde Yicheng Wang, 'The Discipline of Happiness: The Foucauldian Use of the "Positive Energy" Discourse in China's Ideological Works', *Journal of Current Chinese Affairs* 48, no. 2 (2019): 201–25.
[735] Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 82.
[736] Brussee, *Social Credit*, p. 115.
[737] *ibid*.
[738] *ivi*, p. 117.
[739] Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 82.
[740] Brussee, *Social Credit*, p. 122.

actors accessing these remedial paths need to demonstrate that they have rectified the committed violations, and they might be asked to attend "credit training"[741].

(2) The second category of CSCS is developed at a subnational level and comprehends more experimental and technology-driven programs enacted as pilot projects in different Chinese cities, municipalities, and districts. These projects are presented under the umbrella of "demonstration cities" (62 in 2021[742]). In the last decade, these experimentations did not forcibly lead or inspire national implementation[743] and, in some cases, have led to a resizing of some of these projects, such as in the renowned one of the city of Rongcheng[744], and even to their dismantling after media, experts and citizens' criticism[745]. Local decision makers can freely shape the configuration of these pilot projects. This results in a variety of modalities to frame and assess the targeted behaviors to improve urban management. For instance, some of these local experiments foresaw platforms scoring citizens based on a pre-established set of behaviors. A high score could translate into a major possibility of accessing loans, local housing, health and education services, but punishments and rewards vary locally, according to the configuration of each project. Importantly, these locally developed projects also score the compliance of companies. To this regard, a study has suggested that some companies with stronger links with the CCP might be favored within the system, expounding the potential of this infrastructure to tighten loyalty to the Party-State[746].

It was this specific category of social credit experimentations that, in some cases, employed new technologies, such as facial recognition, apps, and score points and that, in some cases, were established in partnership with private firms. For this reason, some of these local pilot projects probably raised international concern regarding the CSCS. However, to dismantle a recurrent myth concerning this category of CSCS, it must be remarked that, in more recent years, participation in local programs scoring citizens has been established mostly on a voluntary basis[747]. Moreover, Trauth-Goik has hypothesized that the ambitions of locally-implemented projects of CSCS have overlapped with other policies' goals, such as the "National Civilized Cities Award", a project linked with the discourse on "spiritual civilization", to influence citizens' behaviors, raise their *suzhi* and

[741] *ivi*, p. 123.
[742] *ivi*, pp. 80-81.
[743] Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 79.
[744] Jeremy Daum, 'Getting Rongcheng Right', *China Law Translate*, 29 March 2019, https://www.chinalawtranslate.com/getting-rongcheng-right/.
[745] See, for instance, the case of Suzhou's "Civility Code" described in Alexander Trauth-Goik, 'Civilized Cities or Social Credit? Overlap and Tension between Emergent Governance Infrastructures in China', *Global Media and China* 8, no. 3 (2023): 305–26, p. 310.
[746] Lin and Milhaupt have analyzed the functioning of the Chinese Corporate Social Credit System in the province of Zhejiang, see Lin and Milhaupt, 'China's Corporate Social Credit System'.
[747] Trauth-Goik, 'Civilized Cities or Social Credit?'.

propagate the CSVs, resulting in a sort of policies confusion and overlapping[748]. Concurrently, as interestingly found by Brussee, the periodical evaluation mechanisms that "demonstration cities" undergo produce a low evaluation when a too high number of actors is blacklisted[749], which might deter project designers to frame too strict credit mechanisms in the future.

Local social credit systems are developed mostly in urban areas, the so-called "smart cities" where some of its projects are implemented[750], in some cases in partnership with big tech companies[751]. They thus further reflect the gap of smartification between cities and rural areas in contemporary China. However, it must be remarked that forms of credit systems have been established in rural China as well. For instance, as foreseen by the 2014's "Planning Outline", rural and county areas have seen the creation of "Banks of Virtues" (*daode yinhang* 道德银行)[752]. These organizations store information about citizens' virtuous behaviors as they are reported by other residents and village authorities. By carrying out community service, citizens can accumulate virtue points, which may result in facilitated access to forms of financial credit and to other types of rewards, from discounts to reputational benefits[753]. This project enlightens the commingle of financial and moral logics by reimagining "the relation between financial credit and morality in the Chinese rural context"[754]. It does so by misappropriating rural residents of informal and relation-based forms of credit. Within the logics of the "rural revitalization" campaign, "banks of virtue" respond to the necessity of collecting credit records and to react to the allegedly perceived moral vacuum[755].

The infrastructures to collect information varies according to each implementation, but they are generally low tech. However, one experimentation, reported by Von Blomberg and Reijers, foresaw the usage of a "like machine", an interface instrument through which residents could report good behaviors of other fellow residents, which was also connected to an app[756]. On one side, Von Blomberg and Reijers examine this project as an initiative empowering citizens by reinforcing interpersonal relations, participation to the community life, and economic autonomy; however, they also point out that the machine's working mechanisms introduce logics of measuring and scoring into

[748] *ivi*, p. 310.
[749] Brussee, *Social Credit*, p. 83.
[750] Federico Caprotti et al., 'Variegated Platform Urbanism: Social Credit and the City', *Annals of the American Association of Geographers* 114, no. 10 (2024): 2222–39.
[751] Brussee refers to the example of the partnership between the city of Suzhou and Alibaba. Brussee, *Social Credit*, 87.
[752] Trauth-Goik, 'Civilized Cities or Social Credit?', p. 317.
[753] Marianne Von Blomberg and Wessel Reijers, 'Who Deserves Credit? Banks for the Virtuous in Rural China', *Journal of Contemporary China* 33, no. 150 (2023): 955–70, p. 2.
[754] *ibid*.
[755] *ivi*, pp. 7-8.
[756] *ivi*, p. 11.

the citizenry social relations[757], showing that "[l]ocal, interpersonal reciprocity is still central to creditworthiness, but is now mediated by objectifying metrics"[758].

(3) The last main category of CSCS comprehends commercial and private initiatives driven by Chinese tech companies (such as Tencent and AliBaba) that have constructed different voluntarily based systems of credit to score financial and commercial accountability. In 2015, the government announced a project involving eight famous high-tech oriented companies to experiment in the creation of commercial forms of credit. One of the best-known products of this initiative is the *Zhima* or Sesame Credit, the renowned system developed by a company owned by the AliBaba group. Sesame Credit works as a popular fidelity or loyalty program in which users are scored based on their commercial reliability (its expansion is facilitated by the fact that Alipay is one of the most widespread platforms to make online payments in the country, a sort of enhanced PayPal). Rewards might consist in facilitated access to loans or discounts, while users can share their scores according to a gamification but also peer-pressure approach[759]. It is unclear whether the government initially foresaw the inclusion of the programs developed under this project within the official CSCS configuration. Eventually, however, the eight companies did not receive further licenses to continue broadening these projects. The government, instead, opted for the creation in 2018 of a unified system, the "Baihang Credit"[760], supervised by the PBOC in partnership with the initial eight involved big tech companies. The purpose of this initiative is to sell commercial credit-related data to banks to assess loaners' accountability. The PBOC asked the involved tech companies to share the relevant data about their users, but they resisted this request, also due to business competition rationalities[761].

After this overall description of the different categories composing this ecosystem, it can be deduced that the CSCS is not a comprehensive system where each citizen is scored or evaluated in the same way in every part of China. For instance, its constitutive fragmentation is one of the main obstacles to its digital implementation, although consistent steps have been taken toward integration, such as the introduction of the unified code for all actors. Moreover, its complex and fragmented ecosystem makes it difficult to analyze the whole scope and functioning of this project[762]. At the same time, its ongoing and "possibilist" implementation lends itself to versatile experimentation according to the needs of the moment in a given locality, which makes it a protean infrastructure. For instance, a watershed moment showing the adaptability potential of the CSCS has been represented

[757] *ivi*, p. 15.
[758] *ivi*, p. 16.
[759] Centraco and Dore, 'Il Sistema di Credito Sociale cinese', p. 67.
[760] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1097.
[761] Brussee, *Social Credit*, pp. 55-56. See also Sun Yu, 'China's Central Bank Struggles to Force Tech Groups to Share User Data with State', Chinese Business & Finance, *Financial Times*, 4 November 2022, https://www.ft.com/content/75409a44-6cfb-43e9-be31-776eb814a919.
[762] As remarked by Cheung and Chen, 'From Datafication to Data State', p. 1140.

by the COVID-19 pandemics (2020-2023[763]). This period has undoubtedly boosted and facilitated the daily use of mandatory technologies worldwide. With regards to the Chinese case, for instance, the "health code" was among the main digital instruments foreseen by the government to manage the emergency[764]. During the pandemics, some behaviors concerning public health were targeted by dedicated blacklists under the CSCS framework[765]. At that same time, some financial obligations were relaxed through the CSCS, to help businesses facing the economic challenges that emerged during this period[766]. As a result, the COVID-19 crisis contributed to a growing use of CSCS technologies and platforms. Yet, during this phase, the CSCS also received some internal criticism for its extending "off-label" use, which has partially led to recent attempts of framing a clearer legislation about it, as expounded later.

The main concern with regards to the configuration of the CSCS is the degree of intervention of the state. For instance, Mac Síthigh and Siems have provided a conceptual framework to situate whichever credit system at the global level according to the "degree of interventionism" at the basis of each project within a framework evaluating from low to high interventionism[767]. The CSCS ecosystem distinguishes itself from other countries' experimentations as it is state-driven and enforced (vs private-driven and enforced forms), mandatory, uniform and general, because it encompasses various domains[768]. However, as remarked by the two researchers and expounded above, the degree of interventionism is not uniform within the CSCS infrastructure itself, as there are structural differences among the three main kinds of CSCS and a high degree of interventionism is not present in all applications of the three kinds of CSCS at once[769].

Another important concern regarding the CSCS has been raised in terms of "dataveillance"[770], as the initiative foresees an extraction of personal information from the citizenry in the form of data which is unsupervised by regulating bodies external to the government, as it is state-driven[771]. However, Brussee has shown that, at the current moment, the amount of data collected with regards to citizens provides a quite modest insight about them when compared to that of other countries' capacity concerning their own citizens[772]. This does not mean that the Chinese state does not have an

[763] According to the World Health Organization (WHO)'s timeline: WHO, 'Listings of WHO's Response to COVID-19'.
[764] Haili Li and Genia Kostka, 'Accepting but Not Engaging with It: Digital Participation in Local Government-run Social Credit Systems in China', *Policy & Internet* 14 (September 2022): 1–30; Reijers et al., 'The Rise of Cybernetic Citizenship'.
[765] See Brussee, *Social Credit*, p. 80.
[766] Reijers et al., 'The Rise of Cybernetic Citizenship', p. 1; see also Brussee, *Social Credit*, chapter 6.
[767] Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 12.
[768] *ibid*.
[769] *ivi*, p. 19.
[770] Ding and Zhong, 'Rethinking China's Social Credit System', p. 4.
[771] To this regard, Mac Síthigh and Siems allude to the fact that the algorithms and data assessment are "protected" and not "transparent". Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 12.
[772] Brussee, *Social Credit*, p. 88.

efficient digital insight or surveillance apparatus[773], but only that the main purpose of the CSCS is not strictly surveillance (although it has been shown that it might be used to enact subtle forms of targeted repression[774]).

Regarding the reception of the CSCS by Chinese citizens, some studies have underlined that it is not a hot topic of discussion in the Chinese media[775]. Brussee has even remarked that the Western anxiety toward this project has even provoked hilarity among the Chinese public[776]. However, it has been observed a lack of awareness among Chinese citizens concerning the configuration of the CSCS[777]. Nevertheless, the urban middle class seems to approve it[778]. To this rekard, Kostka and Antoine have hypothesized that "[o]ne potential explanation is that this group already sees itself as "trustworthy," and it might be easier for them to adjust their behavior to norms embedded in SCSs"[779]. At the same time, this same category of people is "associated with higher risk awareness and lower trust in others in China"[780], which might clarify the category's support to this project. Interestingly, however, Liu have found that people with a high "political capital", which is understood in terms of the higher one is close to the Party-State the higher the political capital, e.g. people who are part of the CCP, are less supportive of state-led CSCS, a finding that destabilizes the idea that people closer to authoritarian government blindly support all its initiatives[781]. Moreover, the kind of media one is exposed to seems to influence the degree of support for the CSCS (people who access foreign media are less supportive), along with the involvement in its use (people who have used it are less enthusiast toward it, perhaps because they are more aware of being a possible target)[782]. At the same time, some participants have lamented a sort of "technology fatigue"[783] when involved in some of the CSCS projects foreseeing an interaction with digital platforms; others, instead, have experienced a gamer approach when participating in CSCS projects including technologies based on score[784]. Nevertheless, it has been suggested that the mandatory or widespread use of other digital technologies in daily life might result in a higher level of acceptance of the CSCS digital initiatives[785]. Another study has also

[773] Chin and Lin, *Surveillance State*.
[774] Xu et al., 'Information Control and Public Support for Social Credit Systems in China', *The Journal of Politics* 84, no. 4 (2022): 2230–45, p. 2133.
[775] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1099.
[776] Brussee, *Social Credit*, p. 3.
[777] Genia Kostka and Lukas Antoine, 'Fostering Model Citizenship: Behavioral Responses to China's Emerging Social Credit Systems', *Policy & Internet* 12, no. 3 (2020): 256–89, p. 279.
[778] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1099. For a further study on the reception of the CSCS, see also Chuncheng Liu, 'Who Supports Expanding Surveillance? Exploring Public Opinion of Chinese Social Credit Systems', *International Sociology* 37, no. 3 (2022): 391–412.
[779] Kostka and Antoine, 'Fostering Model Citizenship', p. 276.
[780] Liu, 'Who Supports Expanding Surveillance?', p. 407.
[781] *ivi*, p. 404. The author links this finding also to the fact that the CSCS targets CCP members too.
[782] *ivi*, p. 407.
[783] Li and Kostka, 'Accepting but Not Engaging with It', p. 13.
[784] *ivi*, p. 9.
[785] *ivi*, p. 8.

assessed how citizens might judge blacklisted people, hypothesizing that the CSCS might enhance forms of "relational punishments"[786], namely punishment not directed along a vertical axis (state-citizens) but along a horizontal or peer-to-peer one (citizen-citizen). This critical aspect is examined more in detail in the following paragraph, which considers inconsistencies between the CSCS and the Chinese legal framework. To conclude this brief overview on the acceptance of this project in the country, it must be remarked that studies on the reception of the CSCS presents consistent limitations, also because it may be difficult to wholly assess the position of the Chinese citizens concerning it, given the fact that respondents might not feel safe to answer sincerely on such themes[787].

Legal Implications and Adjustments

One of the scopes of application of the CSCS is the judiciary domain. The above-mentioned national "Judgment Defaulters Blacklist", for instance, has been a powerful tool to reinforce the credibility of the judiciary sector on the matter of enforcing court cases[788]. This was a pressing issue in the PRC: as Ding and Zhong observed, according to an article of China Daily of 2017, the execution of court decisions in China only reached 20% in the few previous years[789]. With regards to court orders' enforcement, the CSCS represents an instrument in the hands of Party-State authorities to incentivize individuals and companies' compliance. Aho and Duffield even sustain that "much of SCS's power lies in its ability to bypass institutional weakness and coerce economic actors into self-regulation"[790]. However, as remarked by Von Blomberg while analyzing the relationship between the CSCS and China's rule of law, "if trustworthiness was to be defined as law obedience, the SCS was merely an innovative law enforcement system"[791]. Instead, the CSCS project has also developed in contrast with the Chinese legal framework. Legal scholars, in particular, have pointed out that the system originates legal loops and "unfairness"[792]. In parallel, contrarily to an idea of a motionless Chinese public opinion environment, some of the local projects and configurations linked to the CSCS have received internal criticism by the public opinion and media. For instance, regarding the already mentioned project of the city of Rongcheng, which foresaw a social credit score for all residents, the possibility of raising one's score donating blood ignited public disagreement[793].

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[786] The impact and limits of this form of "relational punishment" linked to the CSCS are analyzed in Alexander Trauth-Goik and Chuncheng Liu, 'Black or Fifty Shades of Grey? The Power and Limits of the Social Credit Blacklist System in China', *Journal of Contemporary China* 32 (September 2022): 1–17.
[787] Kostka and Antoine, 'Fostering Model Citizenship', p. 278.
[788] Brussee, *Social Credit*, p. 53.
[789] Ding and Zhong, 'Rethinking China's Social Credit System', p. 3.
[790] Brett Aho and Roberta Duffield, 'Beyond Surveillance Capitalism: Privacy, Regulation and Big Data in Europe and China', *Economy and Society* 49, no. 2 (2020): 187–212, p. 11.
[791] Von Blomberg, 'The Social Credit System and China's Rule of Law', p. 95.
[792] Different opinions from Chinese legal scholars are collected in Knight, 'Basket Case'.
[793] Knight and Creemers, 'Going Viral', p. 20.

To respond to the legislative vacuums at the basis of this project, Chinese authorities have finally issued a draft version of the "Social Credit Law" in 2022[794]. However, this version has been welcomed with deceit, as it hardly clarifies the scope and the boundaries of application of the CSCS. In other words, it adds little to nothing to the already existent regulation. Up to date, the final law has not been enacted yet. The legal remarks provided by Chinese scholars and the consequent regulatory attempts through which the government has tried to respond to the legal deficiencies of this project must be analyzed to understand how the CSCS, and the underlying interpretation of the "rule by law"[795] forwarded by the Chinese government, might shape global trends of technological application, also influencing citizenship individuation.

One of the most reported issues concerning the CSCS project is the lack of standardization, which also involves the legal framework[796]. The CSCS's local implementation has, in fact, led to different executions of punishments and rewards at the provincial and municipal level, causing citizens' disparate treatment[797]. After the creative use of blacklists and redlists during COVID-19, authorities had already urged local government to implement the system within its regulatory framework. To this regard, there has been an attempt to uniformize the disparity of punishments with the publication of the "National Basic List of Disciplinary Measures for Untrustworthiness" in 2021[798]. This is also connected to another often-criticized aspect, namely the opacity and vagueness of the semantic and applicatory use of credit within the project. According to some Chinese critics, credit has become a "basket" where everything can be thrown inside[799]. The ongoing lack of clarity with regards to the definition of its core legal and regulatory terminology, such as "credit" and "trustworthiness", worries Chinese legal scholars. A part of them suggests limiting the scope and use of credit, to render its original financial and regulatory function more efficient[800]. The reason is that those deemed "uncivil" behaviors targeted by some of its applications are uninformative when it comes to assess the financial capacity of an actor: one can be "immoral" according to the CSCS's standards, but she can be financially able and also eager to return a loan.

At the same time, it has been remarked how the CSCS might generate disproportionate punishment, in particular on three matters: "reputational damage", disqualification from accessing public resources, and limitations on personal freedom[801]. Importantly, these dimensions of punishment

[794] See Knight, 'Basket Case'.
[795] The concept of "rule *by* law" forwarded by the party-state authorities as an indigenous interpretation of the "rule of law" principle has been introduced in subchapter 2.2.
[796] Knight, 'Basket Case'.
[797] *ibid*.
[798] *ivi*, p. 199.
[799] *ivi*, p. 191.
[800] Knight and Creemers, 'Going Viral', p. 19.
[801] Knight, 'Basket Case', p. 194.

originated by the CSCS are not linked to established legislation but only supported by administrative regulation and, for this reason, they are deemed problematic by Chinese legal scholars[802]. The issue of reputational damage is particularly revelatory when considering the CSCS because it expounds how the evolution of the technical system influences and amplifies social issues: within the digital technical environment of the CSCS, reputational circumstances are not limited to interpersonal relations but are broadened by the informative and communicative potentials of digital technologies. As remarked by Dai:

> In the pre-digital age, reputation-related information were collected and disseminated primarily through mechanisms of offline interpersonal networks, such as word-of-mouth, gossips, shared memories and community norms. With the aid of modern technologies, today such information can be generated with data that are collected with highly sophisticated surveillance and behavioral tracking methods and processed through computer algorithms[803].

As we have seen, reputational damage takes place because some mechanisms of the CSCS foresee the dissemination and even advertisement of information with regards to trust breaking' actors via official channels and traditional or social media. There are two issues concerning this problem. (1) First, reputational damage can induce forms of "double punishment", namely a behavior already regulated by the law can also be addressed by forms of relational punishment[804]. As remarked by Knight, there is the possibility of "double jeopardy", namely, "duplicated punishment for the same behavior"[805]. This overlapping calls for the integration of the CSCS within the legal framework. (2) Second, the extent of reputational damage cannot be clearly defined or assessed. In other words, the effects produced by relational punishment are unmanageable, they escape the regulatory mechanisms of the system. Based on the disclosed information, for instance, third parties might decide not to forward financial or commercial collaborations with the targeted actor[806]. According to Von Blomberg and Yu, however, reputational sanctions are an established trend within the PRC legal system, which in recent years has been shaped by a strict combination of law with top-down moral and ideological values[807], as already discussed in the second chapter. In continuity with this legal interpretation, the CSCS is presented as a pillar of the model of rule of (by) law forwarded by Xi Jinping[808]. Concurrently, however, in recent years effort has been dedicated to clarifying the mechanisms for "credit repair", which have been more institutionalized. Establishing clear procedures to repair a given actor's credit

[802] *ibid*.
[803] Dai, 'Toward a Reputation State', p. 6.
[804] Trauth-Goik and Liu, 'Black or Fifty Shades of Grey?'.
[805] Knight, 'Basket Case', p. 195.
[806] Marianne Von Blomberg and Haixu Yu, 'Shaming the Untrustworthy and Paths to Relief in China's Social Credit System', *Modern China* 49, no. 6 (2023): 744–81, p. 2.
[807] *ivi*, p. 4.
[808] Drinhausen and Brussee, 'China's Social Credit System in 2021 From Fragmentation towards Integration', p, 6; Knight, 'Basket Case', p. 186.

can be seen as a way to partially respond to the issues produced by reputational damage, although it does not entirely contain its consequences.

Further legal concern directed at the CSCS has been about privacy[809]. With regards to this often-mentioned issue, Ding and Zhong have raised the question whether the traditional concept of privacy, based on the public/private division, would not be outdated within the digital ecosystem of contemporary societies, sustaining the good regulatory and even social potential of the CSCS assuming it did not lack transparent regulation[810]. Privacy, as understood in the West, is a concept that began to spread quite late in China, after the beginning of the reforms and opening-up period. Traditionally, privacy had a negative connotation, as it related to *yinsi* (阴私), which can be translated as "shameful secrets"[811]. In the last years, instead, the debate concerning privacy and technology has gained attention in China, probably also influenced by the West[812], until the enactment of the already mentioned PIPL in 2021 (see 2.3), establishing rights for individuals and obligations for companies. Nevertheless, the role of the PIPL in relation to the CSCS is unclear, as the former may reinforce the latter[813]. Today, however, the regulatory framework concerning the CSCS foresees restrictions on the information that can be collected. In particular, some categories of information are excluded: "(1) state or business secrets; (2) personal petitions, and information on illegal dog breeding, blood donation, veterans' affairs, or religion; (3) information about arrears owed on property service payments, public transportation fare dodging, running red lights, or illegal construction, and (4) information about bribery"[814]. At the same time, other mechanisms concerning the project have been regulated, for instance, since 2019 individuals' scores can be used for rewarding systems, but not for punishments[815].

The clarificatory effort concerning the integration of the CSCS within the Chinese legal framework must be carefully considered. This institutional endeavor contributes to presenting the CSCS as a sort of neutral infrastructure to efficiently enhance societal trustworthiness through technology, forwarding a peculiar interpretation of the rule of law that, in the future, may become increasingly influential for other countries. Both these aspects should be carefully evaluated.

Neutralization and Possible Expansion

After the initial rise of international concern regarding this project, the scholarship has considerably resized the narrative and comprehension with regards to it. The techno-orientalist

[809] Ding and Zhong, 'Rethinking China's Social Credit System', pp. 4-7.
[810] *ivi*, p. 14.
[811] Lü, 'Privacy and Data Privacy Issues in Contemporary China', p. 8.
[812] *ibidem*.
[813] Calzada, 'Citizens' Data Privacy in China'.
[814] Knight, 'Basket Case', p. 199.
[815] *ivi*, p. 197.

concerns were generally linked to two major commingling issues: the (1) surveillance potential of the CSCS enabled by the opportunities opened by its (2) innovative digital infrastructure. This corroborates that, as expounded in 1.1, the PRC catalyzes international attention on matters of surveillance practices and technological advancements.

To comment on the surveillance concern, it must first be remarked that the CSCS has not been configured as a specific surveillance tool. Other technological projects and infrastructures have been already established by the Chinese government for surveillance purposes (see 2.3). In fact, as also remarked by Drinhausen and Brussee, "there is a clear division of labor between more public and transparent governance initiatives, including the SoCS [CSCS], and other more covert, repressive ones"[816]. The thesis that the CSCS is not a pivotal instrument for state surveillance is also sustained by Brussee, who writes: "while not unimportant, the SCS is far from regarded as system-critical as the surveillance tools that directly uphold CCP rule"[817].

In contrast to this resizing, however, other analyses have compared the CSCS ecosystem to a digital concretization of the eyesight of centralized power, a state-level Panopticon enhanced by data[818], to the point that, within its framework, the Panopticon can be understood as "a smallscale unit of cybernetic governance"[819]. This evocative image is proposed by Reijers et al. while suggesting the paradigm of "cybernetic citizenship" to describe the CSCS[820]. The cybernetic paradigm is evocative and useful, because it shifts the attention from surveillance to control, a concept understood in terms of feedbacks and adjustments able to anticipate behaviors and to conduct predictive actions to determine the future. Under this paradigm, the CSCS system modifies the space of citizenship itself "promoting both connectivity (horizontal) and systematization (vertical) [under the logics that] the more connectivity, the more room for central regulation"[821]. To partially contrast this analysis, however, it has been expounded how, at this level of implementation, the fragmentation of the CSCS still hinders a homogenized and thus efficient sharing of information between the multiple agencies involved. For this reason, the image of the rhizome, already introduced when discussing the paradigm of the dataist state, perhaps returns a more suitable description of an enhanced version of the current project, because the focus should be directed not at a single, central mechanism of control, but rather at the nodes where information is shared (currently in a not yet optimized manner).

[816] Drinhausen and Brussee, 'China's Social Credit System in 2021 From Fragmentation towards Integration', p. 17.
[817] Brussee, *Social Credit*, p. 94.
[818] Centraco and Dore, 2024, pp. 69-71.
[819] Reijers et al., 'The Rise of Cybernetic Citizenship', p. 6.
[820] *ibid*.
[821] *ibid*.

Nevertheless, the paradigm of "cybernetic citizenship" is useful to highlight that, together with space, also the interaction and time of citizenship are modified[822]. With the term "interaction", Reijers et al. refer to the mechanisms of calculation of relations between citizens and institutions and among citizens themselves. Relations are thus quantified through data, originating classifications, ranking and scoring[823]. As already expounded, however, the systematization operated by the CSCS is far from being "standardized" and "interoperative": the nightmarish image of a country where all citizens are scored for each behavior has been largely dismantled. At the same time, the paradigm of "cybernetic citizenship" puts the accent on how the time of citizenship is impacted. The "recursive feedbacks" enabled by the collection of data would allow for a "process of mutual adaptation" between citizens and institutions. This interpretation resonates with the self-optimizing function described by Hoffmann within the already mentioned ANS framework[824]. In this sense, the CSCS is presented as the epitome of algorithmic governmentality – understood as the quantification, anticipation and influence on citizens' behaviors mediated by data and algorithms. However, the CSCS infrastructure seems less advanced than feared, particularly in terms of automatization.

This leads us to the second dimension which needs to be resized when considering this project: the technical composition and organization of the CSCS infrastructure, which is geographically heterogeneous and, in some cases, not particularly high-tech. Apparently, the technological implementation is poorly digitized, in particular the system of national blacklists and redlists, and not automatized (which, however, does not mean it will not be in the future as the Chinese government maintains AI-driven aspirations on matter of governance). According to the research conducted by Brussee and based on the information disclosed by the agencies involved, at the moment the system presents a low quantity and quality of data collected[825]. Brussee even anticipates that "punitive mechanisms under the SCS umbrella will remain human driven [as] the fundamental design of the SCS limits the scope for automation [and] any penalties must be related to violations of laws and regulations"[826]. For instance, he has also remarked that "the plan [the "Planning Outline for the Construction of a Social Credit System"] also did not mention social credit scoring, big data, and AI anywhere"[827]. Apparently, the main obstacle to updating the CSCS's infrastructure is not technical implementation *per se*, but administrative interests and practices and, more broadly, a bureaucracy that "resists" technical concretization:

> building the technical architecture is not the main bottleneck. Designing technical and institutional frameworks to suit everyone's policy interests and getting all cadres to use them

[822] *ivi*, pp. 7-8.
[823] *ibid*.
[824] Hoffman, 'Programming China: The Communist Party's Autonomic Approach to Managing State Security'.
[825] Brussee, *Social Credit*, pp. 87-88.
[826] *ivi*, p. 191.
[827] *ivi*, p. 79.

> consistently is the more significant challenge. Scholars from China's eminent Tsinghua University echo that technical developments are progressing rapidly but that the institutional system and management practices have become the main constraints in China's system[828].

It is here underlined, thus, that the CSCS has already been the object of numerous analyses which have resized initial concerns with regard to its application. After an initial attention and sometimes misinterpretation, also led by digital orientalist perceptions of China, this ecosystem is ultimately presented in its fragmented application and partial implementation to different domains. The project is even presented as somehow neutral, even "boring"[829], and it is often justifiably compared with similar experimentations in other countries.

This, however, does not mean that it should not receive attentive consideration by scholarship for at least three reasons. (1) First, the Chinese government has not renounced digital governance ambitions with regards to this project. As remarked by Knight,

> In keeping with a broader pattern of recentralization in Xi Jinping's "New Era", the SCS will become increasingly institutionalized. This should not be mistaken as an attempt to scale back social credit; rather, it should be seen as an effort to standardize data collection and management as the principles of credit-based supervision and governance are applied in an even-wider variety of contexts[830].

At the same time, Brussee remarks that "there is immense potential in even simple forms of digitization"[831]. For instance, ambitions regarding the CSCS involve the inclusion of "predictive management" to "use big data to proactively discover and identify clues on violations of laws and regulations, effectively preventing harms to the societal public interest and the masses' security"[832]. In other words, the current configuration of the system might evolve in the future. (2) Second, the project forwards a rationality of governance which understands society as a complex system that can be engineered. For this reason, the CSCS must be looked at as an example of a techno-solutionist rationality that the Chinese government has adopted and forwarded over the years. In the near future, this governmental approach advanced by Party-State authorities may receive international praise for its efficiency in managing some financial, commercial and even social issues. (3) Consequently, at the international level, the CSCS may constitute an increasingly popular example for other countries' implementation of similar systems of digital governance[833].

In the previous chapters, it has already been expounded how the PRC is increasingly extending its international influence on the matter of technological innovation. Within China's borders, the CSCS already targets foreign firms established in the country (even though, apparently, foreign companies

[828] *ivi*, p. 93.
[829] The term is used in Brussee, *Social Credit*, p. 3.
[830] Knight, 'Basket Case', p. 201.
[831] Brussee, *Social Credit*, p. 89.
[832] *ivi*, p. 90.
[833] Yau Tsz Yan, 'Exporting China's Social Credit System to Central Asia', The Diplomat, accessed 2 August 2025, https://thediplomat.com/2020/01/exporting-chinas-social-credit-system-to-central-asia/.

are more benefiting from its application than being harmed)[834] and there is risk for an application to Chinese citizens' residing in other countries[835]. Liang et al. have also shown how Chinese big tech firms are even encouraging other countries to adopt similar credit projects[836]. For this reason, the authority that China is obtaining at the international level, not only on the financial and commercial realms, but with regards to technological application and even political and legal theory too, imposes that this project is analyzed with scrutiny[837]. To this regard, Engelmann et al. reports ex-US secretary of state Antony Blinken's words, which stated that "whether techno democracies or techno autocracies are the ones who get to define how tech is used […] will go a long way toward shaping the next decades"[838], to underline that there are international scrutiny and competition regarding which country will lead the new trends of digital governance. However, by backing this dualistic interpretation of technological implementation, the risk is that of forwarding an ontological binary and opposition between Wests and Easts, as respectively fixed actors of democracy and authoritarianism, in which nuances are lost, and dialogue is missed. In particular, it is important to recognize that the CSCS's logics emerges from a globalized technical system dominated by financial rationales: a "global age of the algorithm" [839]. As resumed by Brussee:

> Especially as supervisory practices evolve into predictive approaches, we must consider the risks and implications of unequal treatment and abuse. China's government, like many other European and Northern American governments, believes that socio-economic issues can be fixed by technical solutions like more data and better predictions, creating a system of governance by numbers. But data is never unbiased, and what to measure is inherently political. Algorithms typically measure metrics (like "risk" or "trustworthiness") via proxy, and no proxy or combination of proxies is completely unbiased or accurate[840].

With this spirit in mind, it is important to approach the CSCS to inform risks, opportunities and viewpoints from which imagining other ways to frame citizenship in the digital age, ways that empower citizens and not the institutions behind these projects. As suggested by Mac Síthigh and Siems,

> the Chinese models (not model) of new approaches to credit should be studied in the West, not as a template or even a counter-model, but as illustrations of the implications of today's emphasis upon quantification and reputation across a range of domains, personal and official. Such illustrations can also inform lawmaking efforts in the West[841].

That of lawmaking is a first important level of analysis, as the introduction of laws regulating new digital technologies is a major step to "positively" adopt technological advancements. However, there

[834] Brussee, *Social Credit*, pp. 121-122.
[835] Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 2.
[836] Liang et al., 'Constructing a Data-Driven Society', p. 21.
[837] The question is also raised in Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 24.
[838] From 2021's U.S. Secretary of State confirmation hearings, quoted in Engelmann et al., 'Blacklists and Redlists in the Chinese Social Credit System', p. 79.
[839] Loubère, 'The Global Age of Algorithm'.
[840] Brussee, *Social Credit*, p. 192
[841] Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 34.

is a second level of analysis proposed in this work, and it involves the necessity to comprehend how such system affects the individuation of citizenship at a more constitutive level. The last section of this chapter aims, thus, at considering how the CSCS might affect the individuation of Chinese citizens by analyzing which model of citizen it advances and the consequences on citizenship' "libidinal economy"[842].

3.3 MEASURING TRUSTWORTHINESS: TECHNOLOGY, VIRTUE, AND TRUST

Of virtue, we must say that it is first defined as the elevation or the nobility of a singularity that is, precisely, incomparable and, as such, never ex-sists.
Stiegler[843]

The last section of this chapter aims at exploring the impact of the CSCS's sociotechnical system on citizenship by investigating the model of citizen fostered by this project. In particular, it seeks to assess how the system shapes citizens' virtue and ethics by challenging established theoretical models of civic virtue. The discussion is oriented by the thought of Stiegler and aims at exploring the following questions: in which ways citizenship individuation is affected by the technical concretization of the CSCS? Are we facing a *proletarianization* of morality, understood as a *grammatization* (exteriorization) of citizens' prerogatives into the technical ecosystem of the CSCS without practices of reappropriation? Is morality becoming "drive-based" under the gamification inputs of the CSCS? Which is the relation elapsing between morality/ethics and technology? By introducing different models of civic virtue and their incompatibilities with the one fostered by the CSCS, and by reiterating the constitutive role of technology in configurating citizenship, this last section aims at exploring the impact of technological concretization on citizenship's libidinal economy.

Histories and Models of Citizens' Virtue

According to Orgad and Reijiers, the CSCS should be approached as a "social "virtue" system"[844] aimed at socially engineering the Chinese citizenry with the purpose of "making the perfect citizen"[845]. As remarked in the previous chapter, the Party-State approach to engineer moral models is nothing recent. Within this enduring technopolitical vision, a specific understanding of technology is employed as a tool to engineer the Chinese citizens. Caprotti et al. forwards this interpretation with regards to the specific case of the CSCS while adding that "the idea of technical systems' utility in

[842] A concept formulated by Stiegler and already introduced in 2.1.
[843] Stiegler, *The Decadence of Industrial Democracies*, p. 48.
[844] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1107.
[845] *ibidem*.

achieving societal moral standards can be found across various Chinese government initiatives and discourses; for example, in the link between building an "ecological civilization" and morality"[846].

To add further nuance to this perspective, it must be remarked that, according to the philosophical perspective delineated by Stiegler, technics always *makes* humans and their society. In other words, the technical system always plays a constitutive role in shaping social processes, in delineating norms, laws, morals, and aesthetics. On this basis, the technical system always shapes the citizenry. The core point is to determine the rationales behind a specific technological concretization and its impact on society. To this regard, Stiegler points out that there is a social economy of desire, a "libidinal economy", in which triple individuation processes must be carefully considered at the encounter with new digital applications, particularly in the hyper-industrial societies where the accelerated concretization of the technical system jeopardizes the functioning of such an economy of desire. The following paragraphs focus on how citizenship individuation is affected by the CSCS by reflecting on the co-constitutive relationship between the social and the technical system.

To address this question, it is helpful to first examine the CSCS through the lens of civic virtue, as proposed by Orgad and Reijers[847]. This approach departs from a strict legal understanding of citizenship, focusing on the socio-political prerogatives of the citizens along with the relational aspect of citizenship. They make four questions to delineate models of civic virtue and, in particular, the one fostered by the CSCS: (1) what is civic virtue? Is it an individual disposition or a form of social behavior? (2) Why are individuals and society, and even the state when considering the CSCS, interested in cultivating it? (3) How is civic virtue cultivated? (4) Which are the structures and technologies supporting the cultivation of civic virtue?[848] To these questions proposed by them, a last one is added here, which is going to be explored later: (5) which is the role of *desire* in cultivating civic virtue?

Orgad and Reijers's critical inquiry stems from the definition of models of civic virtue – namely the essence of the good citizen – derived from the Western political-philosophical tradition. They sum up three models: the neo-republican, the civic humanist and the existentialist republican one[849]. The neo-republican model, derived from the work of Philip Pettit[850], looks at civility as a form of general societal trust directed at the wellbeing of society. It can be considered a reputational model with some affinities with the CSCS, leaving aside its authoritarian and technological-assisted implementation. The civic humanist model derives from the Aristotelian approach that considers civic virtue from the

[846] Caprotti et al., 'Variegated Platform Urbanism', p. 2224.
[847] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System'.
[848] *ivi*, p. 1109.
[849] *ivi*, pp. 1112-117.
[850] Philip Pettit, 'The Cunning of Trust', *Philosophy & Public Affairs* 24, no. 3 (1995): 202–25, referred to in Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1112.

angles of effectiveness and excellence; this last, in particular, is seen as the capacity and motivation to participate in public life. The last model of civic virtue is the existentialist republican one. It is largely based on the reflection made by Arendt on civic virtue[851], which she considers "a disposition to act politically"[852]. In this sense, political action is individualized by its temporality, being an act of initiative.

To partially return a Chinese indigenous perspective on civic virtue, it is also interesting to linger on the Confucian perspective on this theme[853]. What is civic virtue according to Confucian thought[854]? To answer such a question, one must assume that the Chinese reflection on citizenship – and, more generally, on political philosophy – followed a different path from the Western one, with partial influence from the West starting from the colonial period. Even though in Chinese philosophy there is not a reflection on citizenship as delineated by Western political philosophy until the end of the XIX century, the Chinese traditional thought, and particularly Confucianism, has largely speculated on man in political terms. This viewpoint is shared among those scholars who aim to return the complexity of Confucianism and to deconstruct a narration (dating back to Weber) according to which "Confucian ethics played a hindering role to capitalist development in ancient China, and therefore failed to contribute to generating similar forms as Western citizenship"[855].

In view of this, it is possible to compare the long-lasting political reflection on the *junzi* (君子), the Confucian man of virtue, with the modern concept of citizenship[856]. Confucian ethics are indeed deeply relational: the *junzi* is engaged in the social milieu, the family as well as the social community considered as "reflecting" networks. In this interpretation, the Confucian ideal of *ren* (仁), must be pursued through developing relational virtues "based on reciprocity and solidarity"[857]. *Ren* is a fundamental pillar of the Confucian semantics and is often translated as "humanity/humaneness". The word is composed by "person" (*ren* 人) and "two" (*er* 二), indicating that the human nature realizes itself in relationships with others[858]. As family relations, based on the bond of filial piety, reflect

[851] Hannah Arendt, *The Human Condition*, 2nd ed (University of Chicago Press, 1998).
[852] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1115.
[853] This is also important to avoid misleading reappropriations within the contemporary Chinese context, which witnesses a revival of traditional thought with political purposes, as analyzed in 2.2. See also Ai, 'Two Sides of One Coin'.
[854] Confucianism has been selected as it has been constituting one of the pillars of the Chinese political-philosophical tradition. However, other schools of thought could have been considered as well, such as Legalism, as it has been done, for instance, in Chen, 'A Déjà Vu?'. For an essential bibliography on Confucianism see Confucius, *Understanding the Analects of Confucius: A New Translation of Lunyu with Annotations*, trans. Peimin Ni, SUNY Series in Chinese Philosophy and Culture (State University of New York Press, 2017); Tiziana Lippiello, *Il confucianesimo* (Il mulino, 2009); Canglong Wang, 'Confucianism and Citizenship Revisited', in *The Routledge Handbook of Chinese Citizenship*, 1st edn, ed. Zhonghua Guo (Routledge, 2021).
[855] Wang, 'Confucianism and Citizenship Revisited', paragraph 9.
[856] *ibidem*.
[857] Cheng, *Storia del pensiero cinese*, p. 56 (my translation).
[858] *ivi*, p. 52.

societal organization, the man of virtue must contribute to reach social harmony. However, Confucius clearly distinguished between contributing to social harmony from conformity or "sameness" (*tong* 同)[859]: "[The Master said,] "Exemplary persons harmonize but do not conform (同), whereas the petty-minded conform but do not harmonize"" (*Lunyu* 13:23). Thus, harmony and conformity are far from being synonyms within the Confucian semantics, as Wong and Wang further clarify it:

> At the heart of the difference is the idea of creative dynamics, which Confucians believe to be essential to human flourishing. Aiming only at complete agreement leads to mutual reinforcement, but it does not promote creative exchanges. In other words, it only maintains the status quo, and it does not contribute to advancement or growth. Harmony differs from a complete agreement because it is mutually beneficial to the involved parties, which is made possible by their creative dynamics. Hence, unlike sameness, which precludes difference and diversity, harmony presupposes them[860].

In this sense, the Confucian man of virtue cultivates a sense of justice not regulated by external norms, but by *xin* (信) and *yi* (义). *Xin* (信) is the character present in all the Chinese translations for credit. It is composed by "man" (*ren* 人) and "word" (*yan* 言) and symbolizes one person standing by her own word. According to Confucian teaching, *Xin* is the virtue conditioning the integration of the man within the social body[861]. Also known as one of the five principal Confucian virtues, *xin*'s meaning "includes keeping promises, being truthful in one's statements, and seeing one's actions through to the end. As an extension, "it can also be used to mean to trust someone or have confidence in some-one"". The French philosopher François Jullien, while reflecting on the translation of Chinese concepts for Western readers, affirms that *xin*/trustworthiness is not about the individual, but about the relation involved; such relation requires time to take root and it is not about transparency, but silence and continuity[862]. *Yi* can be translated as "appropriateness/rightness" and "actions of *yi* contribute to true prosperity or flourishing of human life"[863]. To further delineate *yi*, the sinologist Anne Cheng states that it "represents the personal investment of thought that everyone brings to his/her way of being in the world and within the human community, it constitutes the way in which everyone constantly reinterprets the collective tradition giving to it new meaning"[864]. According to this interpretation, Confucianism and, more generally, the Chinese thought, is based on pragmatic and situational ethics, on the idea that "harmony involves contextualized and holistic thinking […], continuous negotiation and adjustment", until the depiction of harmony as a process[865]. Therefore, according to Confucian ethics, the moral decision and action are always linked to the context, in a

[859] Pak Hang Wong and Tom Xiaowei Wang, eds, *Harmonious Technology: A Confucian Ethics of Technology* (Routledge, 2021), p. 33.
[860] *ibidem*.
[861] Cheng, *Storia del pensiero cinese*, p. 57,
[862] Jullien, *Essere o vivere*, chapter 4.
[863] Confucius, *Understanding the Analects of Confucius*, p. 49.
[864] Cheng, *Storia del pensiero cinese*, p. 61 (my translation).
[865] Wong and Wang, *Harmonious Technology*, p. 34.

continuous path toward *ren*. Contemporary Confucianism continues reflecting on the virtues of the Confucian citizen with different and opposite perspectives (in particular, there is divergence between democratic Confucianism and meritocratic Confucianism). According to Wang's understanding of "thick Confucian citizenship"[866], the figure of the *junzi* might be significant to enrich the discourse on civic virtue in different ways: first, it helps understanding rights and obligations not in terms of the individual but "of the relationship between the individual and his or her community"[867]; second, interpreting social bonds in terms of filial piety and fraternal responsibility may translate into less impersonal relationships between citizens; last, the Confucian virtues of the *junzi* contribute to shape "active, critical and self-assertive subjects"[868]. This brief digression aimed at offering a general perspective on civic virtue according to Confucianism, to widen the Western view on such themes and to dismantle philosophical prejudices.

Before analyzing in concrete how the CSCS might depart from these proposed models, it is interesting to explore how the philosophical perspective on technology adopted so far addresses the question of civic virtue.

Civic Virtue and the Technical System

Which is the relationship between technics, virtue and citizenship? The philosophical perspective on citizenship here delineated puts the accent on the importance of the technical system in constituting the processes at the origin of psychic and collective individuation, at the basis of citizenship itself (see 1.4). Following this interpretation, it can be advanced that the possibility of constitution of civic virtue is *originally* opened by the technical system[869], which gives a concrete shape to the pre-individual fund allowing for the sharing of norms and ideals of politics, justice and ethics.

According to Stiegler's reflection, (civic) virtue does not properly exist but, instead, *consists* as an idea, an ideal stimulating individuation and, particularly, that peculiar kind of individuation that is citizenship. For this reason, he advances that the core question is *desire for* virtue, the tension toward it, and not virtue *per se*. He sustains that the central task to face the crisis of individuation within hyper-industrial societies – a discussion that he carries on in the already mentioned series of books *Disbelief and Discredit*[870] – is re-stimulating a belief in politics, ethics, and aesthetics against processes of *dis*individuation triggered by the current organization of the technical system. As already discussed, in fact, desires or beliefs, which are of pivotal importance in the processes of individuation,

[866] Wang, 'Confucianism and Citizenship Revisited'.
[867] *ivi*, paragraph 20.
[868] *Ibidem*.
[869] He discusses this issue in *Technics and Time 1*, where he addresses how the constitution of the *polis* is enabled by technics. See Stiegler, *Technics and Time 1*, pp. 200-202.
[870] Stiegler, *The Decadence of Industrial Democracies*; Stiegler, *Uncontrollable Societies of Disaffected Individuals*.

can only be channeled, passed down, and reinterpreted through generations thanks to the technical system.

According to this perspective, the history of citizens' excellence or virtue retraces the history of the evolution of the technical system. Viewed in this way, for instance, the "techniques of the self", delineated by Foucault as those processes to take care of oneself, to be "virtuous", are enabled by technics (in particular by writing, which produces *hypomnemata* enabling the exteriorization of thought and memory)[871]. In a similar way, Stiegler expounds how it is once again writing, as a technique, that has opened the possibility to fix the law, originally in the *polis*, enabling its continuous interpretation by the citizens[872]. The core issue, he advances, is that the human/technics nexus is not simply a history of opposition juxtaposing the two parts involved, but that of a composition of tendencies. As already expounded in 1.4, citizenship is *enabled* by the technical system. This last, however, constantly evolves, producing grammatization processes, namely the continuous and progressive exteriorization of human faculties, a process that, when no stemmed, also proletarianizes citizens. Digitization is undoubtedly a (global-ized) technical tendency producing a "global mnemotechnical system"[873] – of which the CSCS is a peculiar concretization – in which behaviors, for instance, are exteriorized and preserved through data. This process, however, proletarianizes citizens worldwide, for instance by exteriorizing their hermeneutical capacity and by inducing drives and compulsions which jeopardize the citizens' spirit.

If we try to individuate an appanage of citizens' spirit, this last understood as a tension toward civic virtue according to Stiegler's analysis, we could locate it in the citizen's prerogative of interpreting, whether the law or the ethical situation, to act accordingly or to eventually provide a critique in the name of an ideal of justice which, as previously expounded, can never exist but, nevertheless, stimulates a desire for it[874]. According to such interpretation, ethics becomes a hermeneutic process which is continuously technologically assisted. To this regard, Stiegler sustains that there is a difference between morality and ethics. According to him, the main difference is that morality constitutes fixed norms while ethics always involves an interpretation and is, thus, situational:

> Ethics becomes morality when, as a law posing itself as an immutable principle, rather than as a process and object of individuation, that is, of desire, it rigidifies into a body of rules defined as norms of life, founded on guilt and thus denying the singularity of existences in their own

[871] Stiegler, *The Decadence of Industrial Democracies*, p. 76. To this regard, Stiegler sustains that *subjectivation* in Foucault's thought can be understood as *individuation*.
[872] *ivi*, p. 78.
[873] *ivi*, p. 8.
[874] "For the citizen is, then, the one qualified and authorized to judge, to decide, and as such the one in whom existence resides, not only by right but in the duty to critique the super-ego: to become the interpreter of, and if necessary to contest, the law". Stiegler, *Uncontrollable Societies of Disaffected Individuals*, p. 31. "[T]he constitution of citizenship - that is, of psychic individuation capable of (noetically) implementing political principles and translating them into social individuation through organizations that are also institutions". Stiegler, *Uncontrollable Societies of Disaffected Individuals*, p. 75.

> experiences of the irreducible difference between that which exists and that which consists - which is also to say, denying the singularity of the ethical interpretations that are concretized individuations[875].

His interpretation, which highlights the role of technics, is meaningful when considering the erosion of the mechanisms of citizens' participation at the global level. According to Stiegler, the citizen's spirit is continuously decomposed by a technical evolution subjected to financial rationales. In particular, he claims that there is a loss of individuation, affecting the role of the citizen, which mostly corresponds to a loss of *consistence*, this last being the dissolution, the loss or the failed transmission or reinterpretation of ideas, ideals, aspirations, and desires.

It is important to underline that Stiegler's critique and analysis is directed against "industrial democracies" and must be carefully interpreted with regards to the Chinese context, particularly when considering the indigenous history of citizenship and the political system of this country. However, the attention to the interpretative dimension at the origin of civic virtue is not incompatible, for instance, with the Confucian tradition on such theme. Moreover, as already anticipated in 1.4, the focus on individuation highlights the processes of citizens' individuation more than a culturalist dimension of citizenship and it has been proposed as a paradigm to analyze citizenship in different contexts in the global present, without forgetting the reflections made by Hui concerning the history of the Chinese technological thought (see 1.2).

Civic Virtue and the CSCS

After having exposed different models to approach civic virtue – those proposed by Orgad and Reijiers, the Confucian one, and Stiegler's interpretation of this concept – it is now possible to employ them to investigate how civic virtue is pursued through the CSCS, namely which model of citizen, and "model citizen", this project fosters.

Going back to the questions proposed by Orgad and Reijers to analyze civic virtue and reported at the beginning of this section, the CSCS forwards a model of civic virtue defined from the perspective of the Party-State and understood in terms of a societal virtuous behavior, instead of an individual disposition. The cultivation of civic virtue under such system takes place through a mechanism of pre-established punishments and rewards, and the CSCS's technological infrastructure is aimed at eliciting the desired behaviors, without an active participation of citizens. More in detail, stemming from the perspective of what a good citizen is, Reijers et al. remark that, within the CSCS, the "virtuous" citizen is selected a *priori*, with good and bad behaviors pre-established. Thus, the CSCS leaves little space to spontaneous agency and citizens' initiative is reduced to the domain of conformity. In this sense, the CSCS reverses the cause-effect relation to evaluate the virtue of the

[875] Stiegler, *Uncontrollable Societies of Disaffected Individuals*, p. 25.

citizen: "I am a good citizen because I have a good credit score"[876] and not vice versa, making "civic virtue past-oriented rather than future-oriented"[877]. Even though, as shown above, the insistence on scoring is far from being a dominant feature of this infrastructure, the CSCS, by relying on the registration of past behaviors, operates a change in the temporality from which considering civic virtue.

Another important observation made by Orgad and Reijiers is that, in such a system, excellence is taken over by effectiveness; in other words, the prerogatives of excellent citizens (whether we look at excellence from different perspectives on civic virtue, such as, for instance, that of the civic humanist model looking at excellence as citizens' participation in governing) are flattened in favor of efficacy, namely in favor of what is top-down established as the common good. As in a cybernetic system, to whom this project has been compared, the rationale behind the infrastructure is to induce ordered and controlled processes to avoid the unpredictable. In fact, within the CSCS, civic virtue is pre-defined, leaving no space for that personal initiative Arendt associated with the condition for political life[878]. Pre-established moral behaviors are also incoherent with Confucian taught against conformity; in fact, Confucian civic virtue, in the form of *yi* and *ren*, implies a continuous interpretation of the context to guide the situational ethics of the man of virtue. To this regard, there does not seem to be anything in the CSCS that induces processes of cultivation of the citizen, namely "techniques of the self" fostering, for instance, a cultivation of interpretation and of hermeneutics. By classifying good and bad behaviors little space is left to interpretation. In doing so, this project carries on an exteriorization of the knowledge of the citizens (and of information about them), while doing little to re-interiorize it. Moreover, through its infrastructure, the horizontal relations between citizens are massively mediated by the government, with the consequence that it originates a social ecosystem largely unbalanced along the vertical axis. One might ask, which is the problem if the system "functions", namely if in the end citizens become "virtuous"? As analyzed later and only anticipated here, efficacy comes at the expense of the libidinal economy and of citizens' individuation processes.

Another aspect often criticized concerning this project is that, within the CSCS, the moral quality of the citizen is quantified into data, raising the question whether qualitative facts could be measurable, translated into numbers and compared among different contexts[879]. Even though the scoring and ordering features of the project have undergone considerable resizing, it is true that with the CSCS (along with many other forms of other credit systems worldwide, different in implementation and scope), there is an increment and expansion of the rationale of "calculability".

[876] Reijers et al., 'The Rise of Cybernetic Citizenship', p. 16.
[877] *ibidem*.
[878] Arendt, *The Human Condition*, pp. 177; 189-190.
[879] The issue is also raised in Zhang, 'Governing (through) Trustworthiness', p. 16.

What is important to remark is that such process of behaviors' typification through measurement fails to return an accurate description of the individual – it produces a particular type of data-driven knowledge whom allegedly objective insight about individuals should be carefully examined (as briefly discussed in 3.1). This process echoes in some ways what was anticipated by Arendt:

> The moment we want to say *who* somebody is, our very vocabulary leads us astray into saying *what* he is; we get entangled in a description of qualities he necessarily shares with others like him; we begin to describe a type or a "character" in the old meaning of the word, with the result that his specific uniqueness escapes us[880].

The effects of these measuring rationales on citizens' individuation will be analyzed in the last section of the chapter. What is just anticipated here is that by standardizing sets of good behaviors, the configuration of the CSCS represents a shift from politics to governance, with a depoliticization effect[881]. Also important, it has been remarked how the CSCS introduces a further change in the temporality of citizenship[882]. As we have already seen, good and bad behaviors are *a priori* defined, but there is more influencing the temporality of citizenship. The massive collection of data made possible by such system might allow in the future to foresee citizens' actions, to caption them in advance[883]. In this sense, the permanence of a behavior registered by blacklists, the relations with people with a low score, any information collected by the CSCS might be used to shape and control future behaviors of its participants, to make pre-emptive decisions to contain them:

> Automated processes of recursive feedback rely on vast collections of historical data to deal with scale and complexity. They can use statistical methods to learn from the populations' behavior and use this data to predict and modulate individual behaviors. In this way, "cybernetic systems mediate the temporality of human activities" [884].

As a consequence, the CSCS reverses the peculiarity of the human action which Arendt described in this way: "The fact that man is capable of action means that the unexpected can be expected from him, that he is able to perform what is infinitely improbable"[885]. The collection and permanence of information to assess the trustworthiness of the citizens also contrast with the ideal of Confucian trustworthiness that Jullien attempted to translate for the West. In Chinese traditional thought, the relational bond based on trustworthiness is not dependent on causality but "falls within what happens by itself, by *propensity*, and flourishes without having been planned or agreed" [886], that is, trustworthiness cannot mature from a guided or controlled process, and its development cannot be *a priori* directed or established.

[880] Arendt, *The Human Condition*, p. 181.
[881] Zhang, 'Governing (through) Trustworthiness', p. 18.
[882] Reijers et al., 'The Rise of Cybernetic Citizenship'.
[883] Liang et al., 'Constructing a Data-Driven Society', p. 5.
[884] Reijers et al., 'The Rise of Cybernetic Citizenship', p. 7.
[885] Arendt, *The Human Condition*, p. 178.
[886] Jullien, *Essere o vivere*, chapter 4, paragraph 3 (my translation).

One of the main consequences of such evolution is that citizenship moves from being a status and a practice to a process[887]. In such a process, critics have observed that rights are constantly to be gained, as a high or low score, in some city-level experiments might define one's access to rights. Therefore, "citizens have less time to exercise their freedom since the labor to maintain rights is tied to a cyclical, never-ending process"[888], further contributing to alter, in this case eroding, the time of citizenship. This way, as anticipated while discussing ordinal citizenship and algorithmic governmentality, citizenship translates into the production of rankings and lists affecting access to rights. The main consequence, as already mentioned, is that civic virtue is emptied of its significance and scope, and citizens' initiative loses prominence within the political space.

It is important to notice that some of these critiques were formulated before the CSCS's myth had been resized. In the last section of this chapter, it is proposed a different angle from which considering the CSCS as it has been presented and analyzed more "neutrally" in recent years.

Credit vs Trust / Calculation vs Anticipation

The central concept of the CSCS is credit. As already expounded, the Chinese word for credit (信用 *xinyong*) is enriched with semantic and cultural moral connotations but the main concept is of financial derivation. The English word for "credit" derives from the Latin *credere*, "believe", and originally presented a religious connotation[889]. Afterwards, the term has been tied to the history and flourishing of capitalism. As delineated by Stiegler, relying on Weber's analysis,

> Capitalism is before anything else "an age of credit". Insofar as it is credit, capitalism presupposes a belief in the future – a belief in a future which may be anticipated, and therefore a future which can be calculated, but also a belief in a future which, because it can only be absolutely indeterminate and open (failing which there would be no future) always exceeds the calculations that capital can count on[890].

In this extract, Stiegler points out the subtle difference between anticipation and calculation, underlying that the evolution of capitalism has brought to the extreme the logics of credit. While analyzing the deterioration of the spirit of capitalism in the hyper-industrial epoch, Stiegler expounds that there is a delicate economy of desire at the bases of society's political, social and economic functioning. As already anticipated in 2.1, there exists an economy of consistency guaranteeing psychosocial individuation through the continuous evolution of the technical system. One of the tendencies of this phase of capitalism, however, is the definitive transformation of fidelity into calculation[891]. This shift affects the libidinal economy because the object of desire and of belief is

[887] Reijers et al., 'The Rise of Cybernetic Citizenship'.
[888] *ivi*, p. 15.
[889] Mac Síthigh and Siems, 'The Chinese Social Credit System', p. 29.
[890] Stiegler, *The Decadence of Industrial Democracies*, pp. 45-46.
[891] The central theme of Stiegler, *For a New Critique of Political Economy*.

always incommensurable, it *consists*, and for this reason cannot be calculated or measured. On the contrary, the rationales of measurement and calculation have colonized all life's domains, enhanced by digital technologies.

Stiegler has largely discussed how technics shapes our relationship with time, even advancing that technics is time itself[892]. Technical evolution, thus, contributes to changing our understanding and experience of time. Predictive calculation alters our relationship with time, as it fixes the future by trying to determine it. However, Stiegler shows that the future is the domain of the incalculable, of an anticipation through technics which should never become a determination. To this regard, Stiegler does not blindly criticizes calculation *per se*, for he had already expounded how the future is always the object of an anticipation, of a calculus that takes place through technics. However, he sustains that an excessive determination through calculation – which is today enabled by digital technologies, which work through recursive feedbacks and big data prediction – risks erasing the future itself. Stiegler affirms that this approach is detrimental because it harms processes of individuation: "the current stage of capitalism, which is hyper-industrial to the degree that it is hyper-computational, insofar as it is capable of transforming everything into numbers, is encountering its limit and entering into a zone of very great danger"[893].

With regards to the CSCS, this calculability shift takes place because interpersonal relationships, whether professional or personal, are mediated by a state-led digital infrastructure. Even though at the current stage the system is not able to make automatic predictions, future ambitions linked to this project raises concerns about pre-emptive actions to contain the Chinese citizenry. As analyzed by Stiegler:

> […] the *reduction* of trust (and of time, that is, of belief in a future) to pure calculation, which would be capable therefore of eliminating everything incalculable, is what *radically destroys all trust*, because it destroys all *possibility of believing*: all possibility of believing in the indetermination of the future, in the future as indeterminate and in this indetermination as a *chance*, an *opening* to the future as to its im-probability, that is, to the future as *irreducibly singular*[894].

For the French philosopher it is largely a matter of (formulating a new critique of) political economy, as the current concretization of the global technical system is submitted to financial rationales. In particular, according to Dai, the implementation of the CSCS is led by four simultaneous interests: developmental, authoritarian, bureaucratic, and private businesses' one[895]. This is why the financial scope of the CSCS seems like a more thought-provoking angle from which analyzing this project. In this sense, the CSCS can be looked at as an infrastructure further expanding the logics of the market

[892] The central thesis of Stiegler, *Technics and Time 1*.
[893] Stiegler, *The Decadence of Industrial Democracies*, p. 46.
[894] *ivi*, p. 45.
[895] Dai, 'Toward a Reputation State', p. 41.

to the realm of citizenship. It can be even considered a sort of system of "care" (in Chinese *guan* 管, which can be translated as "to care", but also as "to control/manage", as anticipated when discussing the grid system, see 2.3) for the economic and financial domestic environment established by the state. To this regard, more than its surveillance employment, it is interesting to analyze how the CSCS is used to enforce "market self-discipline"[896]. In this respect, one of the most important aspects of the project is that it carries forward the "financialization" of modern life, in which "nothing can no longer escape *negotium*"[897]. For instance, it sets forth the extension of the logics of capitalism to interpersonal relations[898], as remarked when analyzing experimental forms of credit in rural China[899]. Moreover, given that, in recent times, the accent is more directed on rewarding good behaviors than on punishing mechanisms, it is significant to remark that rewards consist in commercial or financial benefits or incentives, promoting consumerist practices recompensing civic virtuous behaviors. In this sense, "the libidinal economy is being ruined by making desire the subject of destructive calculation"[900].

Regarding this "financialization" expanded to new frontiers, it can be advanced that the Chinese dataist state is increasingly "seeing like a market" (see 3.1). It does so by assuming the role and the task of optimizing market's functioning and rationales. Understood in this way, the CSCS seems so constitute a further tool in the hands of the Chinese government to perfect and bridle the financial domestic context by taking up a central role in regulating and supervising it. For instance, according to Loubère, the CSCS works as a "financial(ized) forced inclusion" in which

> the invention of social credit establishes an explicit and tangible link between social behavior and economic benefits. In this context the State is able to assume a new role not dissimilar to that of a corporate shareholder. Social credit […] transplants the rationale of profit maximization into the realm of interpersonal relationships[901].

Lin and Milhaupt, too, sustain that the CSCS works as a technology regulating the economy, a sort of "enhanced version of existing credit rating systems and nascent regtech initiatives found throughout market economies"[902]; they even advance that "the CSCS begins to look like a means of fusing Chinese state capitalism whit the surveillance state"[903].

The Chinese state is, thus, taking up a central role as a (financial) regulator and mediator. In contrast with other political-economic contexts, the Party-State assumes responsibility for "a long-

[896] Brussee, *Social Credit*, p. 56.
[897] Stiegler, *The Decadence of Industrial Democracies*, p. 67.
[898] Loubère, 'The Global Age of Algorithm'.
[899] Von Blomberg and Reijers, 'Who Deserves Credit?'.
[900] Stiegler, *Uncontrollable Societies of Disaffected Individuals*, p. 70.
[901] Loubère, 'The Global Age of Algorithm'.
[902] Lin and Milhaupt, 'China's Corporate Social Credit System', p. 4.
[903] *ibid*.

term organization of technological and industrial becoming"[904], guiding and leading its concretization but, parallelly, also submitting it to financial rationales. To this regard, contrarily to the tendency in Western countries, it must be remarked that the Chinese state is assuming a central role in leading technical implementation in the country, an approach that might be regarded as more and more fashionable, because efficient in the short-term, in the sense that the state steers unbridled capitalist practices. However, it remains questionable whether a similar investment is parallelly directed to the evolution of the social system. To this regard, Zhang sustains that the CSCS epitomizes "a "technological fix" for socioeconomic problems [with] the aim of maximizing the entrepreneurial potential of society"[905]. Through the CSCS, thus, the Chinese state engineers a new spirit of the capitalist cosmotechnics, to the detriment of Chinese citizens' spirit. As also remarked by Loubère:

> [t]he state, as a shareholder in 'the people', enjoys the dividends of good behavior and loyalty, which is rewarded through economic privileges. In this all-encompassing financialized system, social action becomes increasingly entrenched within the economic realm, and individual behavior is more and more shaped by financial motives. In a nutshell, social credit represents the ultimate marketization of political control because it provides incentives for maximizing citizen value through politically and commercially aligned social behavior[906].

In the long-term, however, this approach might inevitably lead to the destruction of the libidinal economy, by further proletarianizing citizens. As advanced by Rona-Tas while describing the off-label use of credit, whose logics the CSCS brings to the extreme,

> [r]atings are designed to bring stability to credit markets. Their spread to off-label uses while in the short-run can enhance their predictive powers, in the long run, because ratings also propagate errors and reinforce and magnify economic inequalities, contribute not only to a society that is less just but also to one that is ultimately less stable[907].

To this regard, it has already been anticipated that also Chinese legislators and experts have lamented the breadth of application of the CSCS, and it will be interesting to examine how this system will evolve in the future.

More generally, Stiegler has analyzed how a political economy organized according to these dynamics leads to the destruction of desire, this last being reduced to drives. As already advanced, the depreciation of desire to mere drives proletarianizes citizens' *savoir-vivre*. For instance, the CSCS can be looked at as a tool proletarianizing the Chinese citizens' ethics by exteriorizing their hermeneutic capacity with regards to interpreting and applying social norms, laws, and situational ethics. The CSCS does so by exteriorizing information about societal actors and by pre-defining social/moral behaviors. In this sense, it can be looked at as an innovation that shows how "new forms of grammatization […] constitute new forms of proletarianization"[908], according to Stiegler's

[904] Stiegler, *For a New Critique of Political Economy*, p. 100.
[905] Zhang, 'Governing (through) Trustworthiness', p. 13.
[906] Loubère, 'The Global Age of Algorithm'.
[907] Rona-Tas, 'The Off-Label Use of Consumer Credit Ratings', p. 21.
[908] Stiegler, *For a New Critique of Political Economy*, p. 11.

vocabulary. For instance, this takes place in concrete with the mechanisms rewarding exemplary behaviors with consumerist incentives. For this reason, at the moment, the rewarding side of this system should receive more attention than the punishing one. Centraco and Dore have also underlined how this concerning facet of the infrastructure should be analyzed through the "captology framework", which investigates how computer systems might be designed to influence users' behaviors, insisting on the issues raised by the extension of gamification processes to citizens' practices[909]. This relates to the broader issue of the harnessing of attention operated by the digital system to the detriment of the social one, a question that has been discussed several times by Stiegler as a core mechanism of *proletarianization* and of *dis*individuation[910].

In parallel, the proletarianization of citizenship also takes place with regards to the establishment of a technological infrastructure of which citizens do not know the functioning. Understood this way, the CSCS would product "absent citizens" who are "disempowered and excluded from processes informing the techno-economic frameworks within which they operate"[911]. Interestingly, the issue of the ignorance of the laborer toward machines was also posed by Simondon, who advanced that the more technics advances the less societies seem to know about it, or to be able to appreciate machines' functioning, to be *co-individuated* with and through technology[912]. This analysis remains valid when observing an increasing ignorance on the side of the social systems concerning the concrete functioning and mechanisms of the technical one and it should constitute a starting point for a reflection on how this tendency disempowers citizens worldwide.

Another critical angle is that the CSCS carries forward an understanding of society as a complex system that can be optimized using digital technologies. To this regard, the technical system seems to absorb the social one, by "grammatizing social relations themselves via *social engineering*"[913]. For sure, the CSCS can be considered as an infrastructure engulfing social relations, even though most of

[909] Centraco and Dore, 'Il Sistema di Credito Sociale cinese', p. 64. Regarding the captology framework see B. J. Fogg et al., 'Motivating, Influencing, and Persuading Users: An Introduction to Captology', in *Human-Computer Interaction Fundamentals*, ed. Andrew Sears and Julie A. Jacko (CRC Press, 2007).
[910] See, for instance, Stiegler, *For a New Critique of Political Economy*, p. 58.
[911] Caprotti et al., 'Variegated Platform Urbanism', p. 2234.
[912] The question is discussed in Simondon, *On the Mode of Existence of Technical Objects*. Stiegler's words clarify Simondon's perspective on such theme: "The proletarian, we read in Gilbert Simondon, is a *disindividuated* worker, a laborer whose knowledge has passed into the machine in such a way that it is no longer the worker who is individuated through bearing tools and putting them into practice. Rather, the laborer serves the machine-tool, and it is the latter that has become the technical individual – in the sense that it is within the machine-tool, and within the technical system to which it belongs, that an individuation is produced. This technical individuation is, according to Simondon, a process of concretisation through which the system of industrial objects becomes functionally integrated and thereby transformed – as does the sociotechnical milieu. The proletarianized laborer, however, is literally excluded from this transformation – *dissociated* from it, not *associated* with it. Such a laborer is not co-individuated. He does not ex-ist". Stiegler, *For a New Critique of Political Economy*, p. 37. A similar observation on the matter of the increasing human inability to keep up with technical concretisation is also made by Hui concerning the complexity of certain algorithms. See Hui, *Pensare la contingenza*, p. 47.
[913] Stiegler, *For a New Critique of Political Economy*, p. 114.

the regulated behaviors concerns financial, commercial and regulatory realms, with few exceptions. The guiding principle is, according to Brussee, that "[w]hat gets measured gets managed"[914]. The catalyst of global attention and, at the same time, the possible strength of this project, is that data and behaviors are mediated by the state. In this sense, responsibility between peers, citizens, usually developed along a horizontal axis, becomes responsibilities *vis à vis* the state, with a shift toward the vertical axis. As remarked by Cheung and Chen,

> Credit rating, as commonly understood, assesses the degree of trust between market players. The SCS, however, adopts a more elusive concept of trustworthiness, attempting to evaluate the trust that members of society should place in evaluated individuals. In reality, however, this concept of trustworthiness represents party-state authorities' trust in the citizenry. Furthermore, the theory of three-dimension credit has shifted the main criterion of trustworthiness from honoring one's promises in bilateral relations to complying with rules imposed or values endorsed by the state, with little respect for autonomy[915].

This shifts toward the vertical axis concurrently unveils, however, a displacement of the state towards data. As already discussed while introduced algorithmic governmentality, the CSCS forwards the production of a specific type of knowledge deprived of theory and of intellectual analysis. It forwards the idea that pure data represents a supreme and ultimate form of knowledge:

> Empowered by data technology, the SCS conveys an aura of objectivity and neutrality as it moves laws to the sidelines, reducing them "to the means by which the factors necessary for the production of scores, or rankings, can be determined" (Backer 2019b, 14). As bureaucracy increasingly wields its powers through the SCS, the laws upholding the principles of rationality and proportionality are gradually eroded and risk[916].

A last critical level emerging from the philosophical reflection delineated so far concerns individuation. At the individual/psychic level, if the CSCS's infrastructure will be able to collect more data and more efficiently, the amount of information on citizens will reveal a deep insight on their behavior, to the point that "ultimately […] the data self, carefully groomed by the State, [will] dominate the bio-self"[917]. This critical aspect was also anticipated while discussing algorithmic governmentality, which tailors a "data-self" that defines and fixes citizens' identities by eroding the continuous processes of psychosocial individuation. For now, as already anticipated, the CSCS seems not to be able to operate this level of insight yet. For this reason, some researchers even sustain that by resizing the CSCS's goals, the impact on citizens' conducts might even be positive. For instance, Ding and Zhong sustain that "not all manipulations of behaviors are inherently evil"[918]. Other scholars, while discussing the critical aspects of this project, have seemingly pointed out that the challenge for

[914] Brussee, *Social Credit*, p. 43
[915] Cheung and Chen, 'From Datafication to Data State', p. 1152.
[916] *ivi*, p. 1156.
[917] *ivi*, p. 1138.
[918] Ding and Zhong, 'Rethinking China's Social Credit System', p. 8.

other countries and for political actors and theorists worldwide is to construct a form of "social credit" or, more broadly, of digital citizenship, respective of citizens' autonomy and of democratic processes[919]. In this interpretation, digital innovations and implementations might constitute an opportunity to promote citizens' participation. The question raised by the philosophical perspective adopted hitherto is always to distinguish between desires and drives, between tendencies that allow for psychosocial individuation through technics (taking in mind that individuation always takes place thanks to technics) and tendencies which, instead, *dis*individuate societies and, consequently, to reorient technical concretization through political actions informed of and *caring for* these processes.

This chapter has intended to situate the Chinese Social Credit System at the intersection of tendencies that impact citizenship at the global level. As the planetary technical system embraces digitalization, which is also led by an intrusion of financial rationales into social processes, the states are increasingly lured to embrace a dataist approach on the matter of governance. Such an approach results in new ways of getting information about citizens to classify them. These classifications are increasingly shaped by credit rationales and by computers' functioning. Moreover, the aggregation of information in the form of data concerning the citizenry originates a new type of governance mediated by the allegedly objective inferences made by algorithms. Algorithmic governance allows for acting on citizens' environment to influence their behavior in ways not too dissimilar from those already established by the market.

Within this scenario, the Chinese Social Credit System, a composite infrastructure for digital governance launched by the Chinese Party-State, has received global attention as the epitome of a repressive digital governance enhanced through data. After an initial disproportionate concern, imbued with techno-orientalist views, the project's real scope has been resized. Nevertheless, even though in a more neutral guise, it still constitutes a thought-provoking example of the evolution affecting global citizenship at various levels. Throughout this chapter, the attention has been directed onto how this project contributes to proletarianize the figure of the citizen (1) by exteriorizing their hermeneutical capacity without cultivating new ways to re-internalize them; (2) by producing "absent citizens" increasingly unaware or ignorant concerning the technical system they are immersed in and co-individuated with, and (3) by originating governance processes optimizing the financial domain to the detriment of psychosocial individuation processes and, thus, of the social realm. Regarding this last point, the rewarding side of CSCS's mechanisms should receive more attention than the

[919] Orgad and Reijers, 'How to Make the Perfect Citizen? Lessons from China's Social Credit System', p. 1107. See also Fourcade and Gordon, 'Learning Like a State', pp. 95-99.

surveillance/punishing one, to assess the increasing intrusion of consumerist and gamification practices eroding the domain of citizenship.

In light of this, although far from being an absolute anomaly in the global arena, the CSCS constitutes an engaging case showing how the transformation of contemporary citizenship is stirred by the concretization of the technical system, particularly by the conditions originated by the rapid transition to the digital era. This process denotes the continuous advancement of technical concretization with regards to the social system, denoting a process of *adaptation* without *adoption*, as frequently reminded by Stiegler, which leads to citizens' *dis*individuation.

CHAPTER 4: IMAGINARIES FROM THE CHINESE TECHNO-NATIONALISM

OVERVIEW OF THE CHAPTER: This last chapter reconnects with some preliminary reflections made in Chapter 1 to expand the analysis on the original intertwining between ethnicity and technics, which constructs the symbolic unity shaping ethnical groups' desire and future imaginaries. The disappearance of this nexus under today's global technical system arises the opposing rationales between nation-states and the planetarization of technology. The aim of this chapter is situating the current Chinese techno-nationalism within broader global tendencies, without diluting its distinctive peculiarities, to also give a philosophical meaning to the contemporary global disorientation. It does so by analyzing national and nationalistic sociotechnical imaginaries from today's China and their impact on citizens' individuation and imagination as well as on the global future.

The first part of the chapter investigates the resurgence of nationalisms at the global level by expounding the original co-evolution of ethnicity and technics, an interplay that today needs to be updated and revisited in light of the processes of planetarization. The contrasting rationales of the globalized capitalist cosmotechnics on one side and of nation-states on the other originate a resurgence of global nationalist and reactionary trends, in which the role of technology must be clarified.

The second part analyses techno-nationalism as a strategy for promoting nations' technological self-reliance and stimulating technological development. It focuses on China's techno-nationalism to assess how techno-nationalist sociotechnical imaginaries in the country shape citizens' understanding of technology by indissolubly associating it with national progress. At the same time, it questions the image of China as a technological "isolated" country that is producing an alternative technical ecosystem. It does so by analyzing the role of its technological permeable "membranes" and by exploring the globalizing dimension of its technological infrastructure, which is exported to its international partners.

The third part explores how contemporary Chinese sociotechnical imaginaries concerning the future are largely saturated by technological discourses that indissolubly pair technology with the country's fate. It does so by expounding how technology function as a central element in both the top-down future-oriented strategy of the "ecological civilization" and in bottom-up speculations on China's technological destiny, as articulated through the Chinese science fiction literary genre.

4.1 TECHNICS AND (GLOBAL) NATIONALISM

The local cannot stand as an opposition to the global, otherwise it will risk defaulting to some kind of 'conservative revolution', or even facilitating metaphysical fascism.
Yuk Hui[920]

If Heimat *was the condition of world citizenship, what happened to the world citizen when we entered into an epoch of* Heimatlosigkeit*?*
Yuk Hui[921]

The first part of the chapter examines the interplay between technology and nationalism through the philosophical trajectory followed so far. It does so, first, by presenting the original co-productive relation between ethnicity and technics expounded by Leroi-Gourhan and resumed by both Stiegler and Hui; second, by assessing how global citizens' individuation may be affected by re-emerging (and even "recurrent"[922]) nationalist trends in which technology is treated as a disputed object and in which the concept of belonging is colonized by the past, bound to the territory and infused with nativist rhetorics. In doing so, this section departs from historical seminal perspectives on the theme of nationalism[923], important as they remain, to add a further nuance taken from the perspective of philosophy of technology to understand the global present.

In the global context of geopolitical rivalries and "trade wars", at the brink of escalating into international conflicts, China is once again often treated as the epitomic "Other"[924] through which the "West" defines itself and from which it must distance as well. As noted in 1.1, techno-Orientalism and Sinofuturism reproduce an othered vision of the PRC filtered through Western anxieties on the rapid technologization of this country. At the same time, discourses exalting the exceptionality of the Chinese technologization path are widespread within the PRC, in part also top-down disseminated. For instance, national technological imaginaries play a pivotal role in shaping the "China Dream", in forwarding the axiom of "ecological civilization", and in supporting national development plans such as "Made in China 2025" or the "AI Plus" plan.

Analyzing these mirroring nationalist trends is crucial for re-orienting citizenship studies globally, helping to reinvent citizenship *beyond* the mere question of identity and territoriality, particularly

[920] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 307.
[921] Hui, *Post-Europe*, p. 20.
[922] Yuk Hui, 'On the Recurrence of Neoreactionaries', *E-Flux Journal*, no. 151 (February 2025), https://www.e-flux.com/journal/151/652979/on-the-recurrence-of-neoreactionaries/.
[923] Benedict R. O'G Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Rev. and extended ed (Verso, 1991); E. J. Hobsbawm, *Nations and Nationalism since 1780: Programme, Myth, Reality*, 2nd ed (Cambridge University Press, 1992).
[924] See, for instance, the concerns raised by 2025 China's Victory Day parade: Amy Hawkins and Helen Davidson, 'China to Show off Military Might in Parade Attended by Anti-West Leaders', World News, *The Guardian*, 2 September 2025, https://www.theguardian.com/world/2025/sep/01/china-military-parade-anti-west-leaders.

after the planetarization[925] and the loss of *Heimat* ("home") which, as discussed by Hui, affects citizenship worldwide as consequence of processes of homogenization and synchronization driven by technology[926]. According to him, *Heimatlosigkeit* ("homelessness") has thus become "the condition of existence in the twenty-first century"[927].

To analyze these phenomena, technology cannot be understood merely as a locally developed or transnationally exchanged object or knowledge, as in the historical techno-nationalism vs techno-globalism debate[928] – even though that remains a central question of today's geopolitical rivalries and tensions. Rather, technology is addressed more broadly as a disorienting agent, the essential "actor" of that planetarization fueling a nationalist resurgence. In this sense, disputes for or against techno-nationalist policies (the impetus behind the so-called "trade wars") overshadow the constitutive dimension of technics in influencing politics, the global economy and citizens' imaginaries, orienting their fears or desires toward the future.

The Disappearance of Ethnicity

Both Stiegler and Hui look at contemporary disorientation as the consequence of the disruption of the ethnical/technical unity[929]. By relying on the work of the ethnologist Leroi-Gourhan, Stiegler has inquired about the role of the technical system in shaping ethnicity. Leroi-Gourhan has researched the relationship between technics – pushed by a universal tendency – and ethnicity – the contingent concretization produced by technical facts[930], to understand the mechanisms of technical evolution and exchange. To Stiegler, the work of the French ethnologist appears especially insightful because he makes a sort of *technogenesis*, more than an *anthropogenesis*, in order to investigate cultural differentiation between ethnic groups from the perspective of technics[931].

Leroi-Gourhan points out that there is a "technical determinism" pushing the conjoint technical/ethnical evolution, a tendency to evolve intrinsic to the *organized inorganic matter*. In other words, he describes how technical evolution has proceeded thanks to two types of causality: "that of cultural diffusion by borrowing – which is immediately evident – and that of the technical tendency, less directly discernible but more essential, constituting the very principle of the technical tendency

[925] With the term "planetarization", Hui refers to the current, late stage of globalization, produced by the continuous technology-driven processes of modernization, globalization and colonization.
[926] Hui, *Post-Europe*, pp. 7-29.
[927] *ivi*, p. 108.
[928] David E.H. Edgerton, 'The Contradictions of Techno-Nationalism and Techno-Globalism: A Historical Perspective', *New Global Studies* 1, no. 1 (2007).
[929] For Hui, this constitutes a metaphysical rupture leading to the disappearance of traditional cosmotechnics.
[930] Stiegler, *Technics and Time 1*, pp. 43-44. The difference between technical tendency and technical fact is important in such analysis. The technical tendency is intrinsic to technical evolution and explains why in different and distant ancient societies similar technical elements are present; the technical fact, instead, is produced by multiple coincidences produced "locally" and influenced by the environment and by human invention.
[931] Stiegler, *Technics and Time 1*, p. 45.

from the point of view of the history of life in general"[932]. The technical system's evolution, thus, is also driven by a sort of internal determinism.

Investigating the relationship between technics and ethnicity is important because it reveals the central role of the *what* – the material history and its concretization into objects and artifacts – in shaping communities. According to Leroi-Gourhan, human groups were conditioned at once by an external milieu and by an internal one, the former being constituted by the geological and climatic environment, the latter by the "social memory" of the group, which according to Stiegler's interpretation is represented by technics as an "exteriorized memory". To this regard, the interplay of each individual's relationship with tradition must be understood as continuously mediated and differed through this exteriorized memory, who precedes her and is at once altered by her: tradition is "repeated" but also "differed" through the *who*, and this process is enabled by the *what* (technics), allowing for "ethnic memory itself to progress"[933].

At this point, Stiegler highlights an important aspect, expounding how the principles orienting aesthetics have always been at once linked to territoriality and deterritorializing through technics itself. In other words, technics at once constitutes the symbolic unity of ethnicity while it also always deterritorializes it, through exchanges and contaminations. To clarify this point, he makes the example of style, which at once escapes a definition but also reveals itself somehow manifestly, delineating the complexity of the aesthetic and symbolic experience among ethnic groups. At the same time, style is at once produced by a locality while always trespassing its borders:

> Style is always the product of a place; it speaks the unity of a group or of a person, a work or a particular technical know-how. Like the technical tendency, it crosses frontiers, renders the tightest protections permeable. This is why the idiomatic's frontiers are quintessentially fluid: the singular idiom is never absolutely foreign to another idiom—which always appears to be at once a non-idiom, barbarous, insignificant—and also idiom par excellence—the idiot, singular and strange[934].

In this sense, as highlighted by Hui, the technical milieu has been working in the past as a sort of "membrane" defining the boundaries of cultures. This membrane, however, was permeable to cross-border contaminations[935].

At a certain point, the technical evolution has disrupted the continuing evolving equilibrium between the internal and the external milieu at the origins of ethnicity, marking the end of the "technic/ethnic maieutics"[936]. This happened with the advent of industrial technologies which gave shape to an "associated milieu". It is Simondon who analyses how the associated milieu[937] disrupts

[932] *ivi*, p. 48.
[933] Stiegler, *Technics and Time 2*, p. 76.
[934] *ivi*, p. 84.
[935] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.
[936] Stiegler, *Technics and Time 2*, p. 71.
[937] Simondon, *On the Mode of Existence of Technical Objects*.

the (already permeable) division between internal and external milieux. With the "associated milieu", "[t]he interior milieu is absent because it is diluted into the interior milieu when the technical object becomes industrial. By the same movement, the milieu in general no longer constitutes an exteriority"[938]. As a further result of technological acceleration, the internal and external milieux found themselves continuously mediated by the technical system to the detriment of ethnic groups[939], meanwhile reconfigured as nation-states, to the point that the technical group takes the ethnic one over[940]. This occurs because modern technology allows for a permanent communication and sharing between ethnic (by now national) groups, and because the external milieu, the physical geography, is colonized by human, namely, technical intervention, to the point that "one must at least envisage the hypothesis that the conditions of possibility of differentiations between groups have radically changed and notably, that the ethnic dimension of groups is waning"[941]. As remarked by Stiegler, today we witness the "advancement of technics over ethnicity. […] This anachronism, however, is originary—as *epimetheia*—and accelerates the dynamism of the organization of groups"[942]. He claims thus that this disorientation disrupting social groups and originated by technics is a constitutive phenomenon of the dual relation elapsing between ethnicity and technics, even though it has consistently accelerated since the industrial revolution, bringing about "a *loss of individuation* on the part of the *who* in favor of the *what*[943]. With the advent of industrial societies, accelerated by hyper-industrial technologies forwarding the expansion of consumerist and globalizing rationales, a planetary technical system has imposed itself on a planetary level. If we try to integrate Stiegler's thought with Hui's reflections, it could be advanced that a peculiar cosmotechnics, the Western one, has taken over globally, to the point that "the dynamic described by Leroi-Gourhan has to be largely updated"[944].

In light of this, Stiegler makes an observation concerning the constitutive role played by technics within global history, claiming that

> Technological superiority is the profound reality of the "superiority" of historical peoples. By this very fact, "civilization" is a technical state, a relation of technical forces, rather than cultural in the limited sense of moral, religious, artistic, scientific, or even political. The following question remains: what are the causes of the appearance of this type of "technical state" *qua* factor of "civilization"?[945]

"Superiority", of course in air quotes, to denote how technological power has resulted in political and economic power at the origins of processes of colonization and globalization. As a result, the

[938] Stiegler, *Technics and Time 1: The Fault of Epimetheus*, p. 59.
[939] *ivi*, p. 65.
[940] *ivi*, p. 62.
[941] *ivi*, p. 65.
[942] Stiegler, *Technics and Time 2*, p. 73.
[943] *ivi*, p. 75.
[944] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.
[945] Stiegler, *Technics and Time 1*, p. 56.

word "civilization" has been increasingly enriched with a particular technological connotation (as already emerged while discussing this term in the Chinese context in 2.2). The match between technology and power is also remarked by Hui, who claims that "[t]he differences in technological development define, to a substantial extent, the boundary of culture and power differences"[946]. The consequence, Hui would say, has been an acritical embracing of the Western technological rationale and the disappearance of cosmotechnical diversity, with the imposition of the capitalist/Promethean cosmotechnics.

These reflections enrich the discourse on nationalism with two important annotations. (1) First, against mythologies of the origins forwarded by nationalist claims, ethnicity is instead presented by Stiegler as a form of group relationship linked with (desire for) the future: "The unity of the ethnic group is governed by the relation to time, more precisely, the relation to a collective future sketching in its effects the reality of a common becoming […]: ethnic unity is conventional, without any other origin than a mythical one. […] there is no ethnic genius of technics"[947]. This relationship, however, is continuously, at once, maintained *and* altered through technical evolution, and is based on a common and always artificial interpretation of the past. (2) Second, both Stiegler and Hui expound the central role of technological acceleration regarding the resurgence of nationalist trends in the global present. The dynamic relationship between technics and ethnicity is at the origin of aesthetics production and sensory experience, to the point that the disappearance of style can originate disorientation, even panic, and the "mourning of territoriality", with the rise of nationalist tendencies. However, this reaction also takes place because of a misinterpretation of the relationship between technics and social groups; for instance, as already remarked, style is produced by a locality but also brings with it a permanent "deterritorializing" potential. To clarify this point, it is here reported a long but significant quotation by Stiegler on this matter:

> Style underlies sensory experience, and this is why the world panics when ethnicity is effaced: style has always been understood as the instantiation of ethnic territoriality, and this was while being constructed against such an ethnicity. Could industrialization, the making-permeable of the world through the universal technical tendency, the destroyer of ethnic diversity, be the end of style, of meaning, of the world? We would have to understand why style, as a tendency, creates permeability and is disseminated. In fact, what should be mourned is territoriality. Which does not mean locality, since it is possible to see place, style, outside of territory. It is rather a matter of accepting a new style of style. To have place is not to have paternity, roots, a place of birth certified in the soil and the blood, but rather to give place to the new. And the new is precisely the mourning of territoriality[948].

To this regard, Stiegler argues that "the question of aesthetics, the question of politics, and the question of industry together form one question"[949], elaborating that the sensory and symbolic

[946] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.
[947] Stiegler, *Technics and Time 1*, p. 55.
[948] Stiegler, *Technics and Time 2*, p. 85.
[949] Bernard Stiegler, *Symbolic Misery, Volume 1: The Hyperindustrial Epoch* (Polity, 2014), p. 6.

experience largely depends on the constitution of the technical system.

To resume, nation-states are the "inheritors" of an ethnical/technical bond which is originally and continuously de-stabilized by the technical tendency. Since the industrial era, however, the advancement of technological concretization disrupts social organizations. The acceleration of this phenomenon in the global present is at the origins of the "mourning of territoriality", of nationalist tendencies spreading worldwide and identifying, for instance, the threat behind the "loss of home" with migrant people. This is a trend that can be detected worldwide, even though, of course, each type of nationalism maintains its own history and peculiarities.

As remarked by Hui, it is impellent to make sense of the fact that the dynamic between ethnicity and technics individuated by Leroi-Gourhan must be updated[950]. To this regard, he diagnosticates the presence of two opposed tendencies: planetarization and homecoming. While the former is induced by the conjoint self-propagation of capital and technoscience, the latter tends to resist and reject what is not deemed specific of a given territory, i.e. what is foreign[951]. These diverging tides lie at the origins of the resurgence and even recurrence of nationalist and (neo)reactionary tendencies in the global present.

A Global-izing Nationalism?

Nation-states are the supposed inheritors of ethnicity in a world where the ethnical/technical bond has lost its original significance. It appears somehow paradoxical to witness the proliferation of nationalist claims when considering that globalization – as a process of synchronization, homogenization, and overall "inclusion" in the global market – is on its way of being fulfilled. Nevertheless, forms of nationalisms are re-arising from both Wests and Easts and even though they emerge from different socio-political contexts and histories, they share common causes.

There is ongoing discussion on the resurgence at the global level of forms of nationalism, defined at the occurrence as "populist nationalisms" [952], "postcolonial nationalisms" [953], "techno-nationalisms"[954], and which are even framed under a general trend of "global nationalism"[955]. The spreading of a variety of definitions denotes a difficulty to delimitate the wide boundaries of such term. Here it is adopted the broad perspective according to which nationalism represents a politics

[950] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.
[951] Hui, *Post-Europe*, p. 17.
[952] Cynthia Miller-Idriss, 'The Global Dimensions of Populist Nationalism', *The International Spectator* 54, no. 2 (2019): 17–34.
[953] Zhang, 'Post-colonial Nationalism and the Global Right'.
[954] Alex Capri, 'Techno-Nationalism: What Is It And How Will It Change Global Commerce?', Forbes, 20 December 2019, https://www.forbes.com/sites/alexcapri/2019/12/20/techno-nationalism-what-is-it-and-how-will-it-change-global-commerce/.
[955] Florian Bieber, 'Global Nationalism in Times of the COVID-19 Pandemic', *Nationalities Papers* 50, no. 1 (2022): 13–25

who prioritizes the "interior" at the expenses of the "exterior". According to Florian Bieber, "Nationalism is best understood as a malleable and narrow ideology, which values membership in a nation greater than other groups (i.e. based on gender, parties, or socio-economic group), seeks distinction from other nations, and strives to preserve the nation and give preference to political representation by the nation for the nation"[956]. More broadly, this term is today often articulated along with the analyses of other political tendencies such as the rise of the global far-right (parties and/or discourses)[957], of the (neo)reactionary movement[958], or of forms of ethnopopulisms[959], tendencies which in some cases even result in nativist rhetorics and policies. In the following paragraphs, it is proposed an interpretation of these intertwining global tendencies from the philosophical analysis made by Hui.

In the so-called "West", nationalist tendencies are backed by the advent of the neoreactionary movement to the most preeminent political offices (Donald Trump re-election in the US in the late 2024 is the epitome of this trend). According to Hui, the global rise of the neoreactionary movement is a consequence of the processes of planetarization. While analyzing the claims of this movement, linked with the originally niche subculture of the "alt-right"[960] now become mainstream, Hui sustains that it has emerged from the discontents about a process "reversing the unilateral universalization of Western modernity since the turn of the last century"[961], a sort of symptom of the "end of unilateral globalization"[962] originally enriching and empowering Western countries. Globalization, thus, was originally a unilateral universalization ideology and project (which, according to Hui, has culminated in 2001 with the entrance of the PRC in the WTO) that, apparently, has now turned against its supporters.

Following Hui's interpretation, the Western neoreactionary movement represents an "unhappy consciousness" turned against the universal ideals of Enlightenment. According to the Hegelian terminology, the "unhappy consciousness" is melancholic because perceives a deep interior contradiction between its finitude/imperfection and the infinite/perfection, thus yearning for the "whole"[963]. Hui borrows Hegel's term to refer to "a skepticism which cannot get out of itself"[964] or, better, to expound how "fundamentally, the neoreactionary movement and the "alt-right" are expressions of an anxiety over the fact that the West is incapable of overcoming the current phase of

[956] Florian Bieber, 'Is Nationalism on the Rise? Assessing Global Trends', *Ethnopolitics* 17, no. 5 (2018): 519–40, p. 520.
[957] See, for instance, Zhang, 'Post-colonial Nationalism and the Global Right'.
[958] Hui, 'On the Unhappy Consciousness of Neoreactionaries'; Zhang, 'Race, Gender, and Occidentalism in Global Reactionary Discourses'.
[959] Erin K. Jenne, 'Is Nationalism or Ethnopopulism on the Rise Today?', *Ethnopolitics* 17, no. 5 (2018): 546–52.
[960] Blair Taylor, 'Alt-Right', in *Encyclopedia of Critical Whiteness Studies in Education* (Brill, 2020).
[961] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.
[962] Hui, 'Cosmotechnics as Cosmopolitics', p. 1
[963] Georg Hegel, *The Phenomenology of Spirit* (Cambridge University Press, 2018).
[964] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 12, footnote 3.

globalization and maintaining the privilege it has enjoyed for the past few hundred years"[965]. In this sense, there is a paradox inherent to globalization, as once it has been accomplished, its original supporters have transformed into its main detractors, so that this late stage of globalization "is indicated by the US desire to economically decouple from China, and by China's consequent defense of free-market globalization—a rhetoric unimaginable in the 1990s and early 2000s, when the US was the main promoter of globalization"[966]. To this regard, the PRC arises mixed feelings in the mind of Western neoreactionaries: on one side, its rising economic, geopolitical, industrial and military power catalyzes concerns from a variety of global actors whose leading role is challenged; on the other, it arouses admiration for having been able to "out-west the West", while being presented as the savior of modernity, a modernity (or, perhaps, of modernization) represented by the techno-industrial and economic growth of megalopolis such as Shenzhen[967]. As already anticipated in 1.1, some of the intellectuals and entrepreneurs providing theoretical ground and political-economic support for the composite neoreactionary movement (such as the British philosopher Nick Land and PayPal and Palantir's CEO Peter Thiel) have also contributed to depict a "Sinofuturist" image of the "East", in particular of China, where an alleged depoliticized techno-commercial utopia leading a new wave of capitalism is presented as an aspirational paradigm.

In this context, Western neoreactionaries are going back to the nation as a solution to prevent the loss of their privileges. Of course, nationalism is not the only characteristic ideology forwarded by, for instance, the first and second Trump administration or by other Western far-right governments (see, for instance, those EU states currently ruled by the far-right such as Italy or Hungary). The theorists and CEOs backing this movement, for example, also forward accelerationist and techno-solutionist rhetorics. However, as an overall phenomenon, nationalism catches how contemporary *disorientation* is interpreted and instrumentalized by political élites and far-right intellectuals at the global level, who converge on themes such as racial nativism, anti-gender ideology, and the need for a masculinist resurgence. Importantly, these perspectives often pair with an exaltation of the techno-military and industrial power[968], which gets along with the current global militarization race.

To provide a more exhaustive panorama of this global tendency, it must be remarked that the wave of nationalist sentiment is not circumscribed to Western countries. As analyzed by Zhang Chenchen, the Global Easts and Souths are not unfamiliar to the phenomena just described[969]. For instance, she analyses how anticolonial rhetoric is increasingly being appropriated by far-right and nationalist

[965] *ivi*, p. 7.
[966] Hui, 'On the Recurrence of Neoreactionaries'.
[967] Lindtner, *Prototype Nation*, chapter 3.
[968] Zhang, 'Race, Gender, and Occidentalism in Global Reactionary Discourses'.
[969] *ibid*.; see also Chenchen Zhang, 'Right-Wing Populism with Chinese Characteristics? Identity, Otherness and Global Imaginaries in Debating World Politics Online', *European Journal of International Relations* 26, no. 1 (2020): 88–115.

discourses in countries such as India and China[970]. Historically and culturally, the peculiarities of the Chinese nationalism – linked to its semi-colonial status and to its revolutionary past – have been already thoroughly analyzed. Here, it is interesting to linger on the convergences of a trend of nationalism spreading worldwide after globalization and not spearing the Global Easts. As a rhetoric and discourse, nationalism is emerging in these countries in the shape of a "postcolonial nationalism", namely a sort of mirroring and defensive form of nationalism directed against an allegedly decadent West. Zhang defines postcolonial nationalism as a "prevalent political strategy through which authoritarian and conservative actors in peripheral and semi-peripheral settings mobilize subaltern identity in a Western/US dominated world to legitimate reactionary politics"[971]. She also remarks that, while declaring to insurge against the hegemonic world order, postcolonial nationalism replicates instead its rationales.

In parallel, the rhetoric of emerging forms of right-wing populism and far-right rhetorics have been analyzed in the Chinese online discursive context as well. Global far-right narratives have received less attention from the scholarship, with has instead largely focused on the Euro-American contexts[972]. Zhang, instead, has searched how these rhetorics are also spreading in non-liberal contexts, such as the PRC, thriving in the online sphere and targeting gender claims[973], racial minorities, and migrant communities. In this respect, these discursive practices mirror "Western-style" narratives. At the same time, these nationalist narratives also contribute to "discursively construct China's ethno-racial and political identities"[974] while also enriching them with a renewed confidence toward the economic, industrial and military power of the PRC. For instance, the target of the Chinese online right-wing nationalist and reactionary rhetoric has also been the so-called *baizuo* (白左), a Chinese neologism to refer to the Western "white left", deemed of being victim of "wokeness" and "political correctness"[975]. The anti-*baizuo* rhetoric also proposes revised West-East binaries, where China is now presented as masculine(-ist) and the Euro-America as feminine, overturning the orientalist narrative. These discursive practices, popularized by the access to the online sphere, contribute to the formulation of bottom-up geopolitical identities which, in the Chinese case, are not contrasted by Party-State authorities. Interestingly, Zhang analyses that this type of rhetoric is also backed by

[970] Zhang, 'Race, Gender, and Occidentalism in Global Reactionary Discourses'.
[971] Zhang, 'Post-colonial Nationalism and the Global Right', p. 1.
[972] Pietro Castelli Gattinara, 'The Study of the Far Right and Its Three E's: Why Scholarship Must Go beyond Eurocentrism, Electoralism and Externalism', *French Politics* 18, no. 3 (2020): 314–33.
[973] To this regard, see also Altman Yuzhu Peng, 'Digital Nationalism versus Gender Politics in Post-Reform China: Gender-Issue Debates on Zhihu', *Global Media and Communication* 18, no. 3 (2022): 281–99; and Clyde Yicheng Wang and Zifeng Chen, 'From "Motherland" to "Daddy State": A Genealogical Analysis of the Gender Undertone in China's Nationalist Discourses', *Nations and Nationalism* 29, no. 2 (2023): 751–67.
[974] Zhang, 'Right-Wing Populism with Chinese Characteristics?', p. 89.
[975] Zhang, 'Race, Gender, and Occidentalism in Global Reactionary Discourses'.

techno-nationalist connotations exalting the recent techno-economic trajectory of the Chinese nation (an analysis of China's techno-nationalism will be the object of the following section, 4.2).

In light of this, the Global Easts are not immune from that "unhappy consciousness" affecting the Western counterpart, namely these countries also take part in the reproduction, but also reinvention, of far-right and reactionary ideologies by misinterpreting globalization's impact. However, as remarked by Hui, "The East is trapped in an unhappy consciousness of a different kind. It is based on the East's need to assimilate to the Western modernization project, which leads to the dissolution of its own traditions, values, and family-based social structure"[976]. China is, thus, "trapped" between a renewed and even nationalist pride in its technological capacity and power, while at the same time, it seems to be willing to substitute the US, more broadly the Euro-America, as the main globalizing geopolitical actor and even theorizer. However, these processes also originate forms of discontent produced by the rapid technological evolution and by the oblivion of its indigenous cosmotechnics and "ways of life". As remarked by Hui:

> Paradoxically, in order to surpass the West, the East will have to accelerate faster in all domains, which will only deepen its melancholia. To cope with this unhappy consciousness, the East will have to reinvent the concept of modernization by giving it a nationality, to create an illusion of moving in the direction of history. Can we really say that the East and the West are developing two different projects or agendas?[977]

Both Wests and Easts look at technology as a means to gain or maintain economic and political power. Technology has become a contested and polarizing object of geopolitical rivalries, to the point that it constitutes the central theme around which organizing *techno*-nationalist discourses and imaginaries that, contrarily to what they aim to obtain, only accelerate the disrupting processes of planetarization.

4.2 CHINA'S TECHNO-NATIONALISM

> *The 'modern', which was accidental to Chinese culture, is thus not only being amplified within the country itself, but also propagated within the countries of its Third World partners — and in this sense* it is extending European modernity through modern technology.
> Yuk Hui[978]

> *If faith has a color, it must be China red.*
> Huawei's CFO Meng Wanzhou[979]

[976] Hui, 'On the Recurrence of Neoreactionaries'.
[977] *ibid*.
[978] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 298.
[979] Quoted in Yuqi Na and Ngai Pun, 'Techno-Nationalism as the Cultural Logic of Global Infrastructural Capitalism: Media Spectacles and Cyber-Situations in Huawei Meng Wanzhou's Extradition Case', *Chinese Journal of Communication* 16, no. 4 (2023): 426–43, p. 426.

This section discusses the distinctive peculiarities of China's techno-nationalism, here specifically understood as the ongoing top-down construction of sociotechnical imaginaries leading the country and its citizens into an aspirational global future shaped by technological development. The first section clarifies what is here referred to as techno-nationalism and, later, gives a brief description of how sociotechnical imaginaries have been partially associated and even equated with the technological infrastructure of the Chinese country and its future development. The second section explores the idea that two digital "membranes" – the Great Firewall and the ecosystem of national digital platforms, which contribute to shape China's techno-nationalist imaginaries inside and outside the country – are "permeable" to global technological flows and configurations. The aim of such investigation is dismantling the narrative according to which China's technical system is constitutively different or alternative to the global one, by underlying that behind its apparent uniqueness, it is configured according to a single and globalized cosmotechnics. To add further nuance to this thesis, the last section focuses on reviewing how the techno-nationalist imaginary coexists with techno-globalist aspirations and strategies enacted by the PRC to expand locally developed technologies outside of its borders.

This section does not address the historical, cultural and political origins and dimensions of China's (techno-)nationalism[980], which has been discussed, even though only partially, while analyzing the impact of the modernization process in late-Imperial China and afterwords (see 1.2). It mostly focuses, instead, on today's China.

Techno-Nationalist Sociotechnical Imaginaries

The term "techno-nationalism" has been firstly coined in 1987 by Robert B. Reich[981] in an article published on *The Atlantic*. The American politician and professor used this word to refer to the US government concerned reaction against the Japanese acquisition of a firm selling products to American defense contractors. Techno-nationalism came to indicate a variety of policies and strategies to keep technological breakthroughs within national borders, whether by employing only national citizens in research institutes, by preventing the selling of locally developed products to foreign firms, or by increasing the national spending to facilitate the development of new technologies at home. Reich remarked that this approach was a novelty for the US strategy concerning technology, which had been mainly techno-globalist until then (with the exception of the measures undertaken against the Soviet Union). To this regard and interestingly for the thesis sustained in this work, he

[980] To this regard, see, for instance, Suisheng Zhao, *A Nation-State by Construction: Dynamics of Modern Chinese Nationalism* (Stanford University Press, 2004); Bill Hayton, *The Invention of China* (Yale University Press, 2020); and the already mentioned Feigenbaum, *China's Techno-Warriors*.

[981] Robert B. Reich, 'The Rise of Techno-Nationalism', *The Atlantic*, 1 May 1987, 62-69, https://www.theatlantic.com/magazine/archive/1987/05/the-rise-of-techno-nationalism/665772/.

added: “The notion of “American” technology has thus become a meaningless concept. Across a broad expanse of the globe (excluding little but the Soviet Union and its allies) national boundaries have in this respect become less and less relevant”[982].

According to this consolidated interpretation, thus, techno-nationalism comes to describe the ensemble of national strategies, policies and even rhetorics according to which technological development and breakthroughs should be kept inside national borders and “defended” against foreign appropriation, mostly for military, strategic, and economic reasons. Yilmaz provides an encompassing definition of what techno-nationalism has come to define:

> Techno-nationalism focuses not only on military or dual-use applications but also on broader strategies to “maximize national power”. It blurs the distinctions between economic advantage, military capability, and scientific and technological capacity, framing all as national security concerns. As a specific subset of nationalism, techno-nationalism aligns with the shared goal of prioritizing national interests but uniquely emphasizes the role of technology[983].

However, from a historical perspective, Edgerton has resumed how technological advancements and their exchange escape from narrow techno-nationalist and techno-globalist views, remarking how a multiplicity of actors, such as states, firms, the global market, institutions such as universities and research centers, is constitutive of technological development, which cannot be thus entirely reduced to either of these two interpretations[984]. The analysis of Stiegler following the thesis of Leroi-Gourhan adds a further nuance to this historical perspective, showing that there is an intrinsic tendency to technical evolution which originally and continuously disrupts the boundaries it creates.

As in a play of forces, in the last decades, there seems to have been an interplay of techno-globalization processes and techno-nationalist reactions, as epitomized by the US government’s course change toward globalization processes, already introduced in the previous section while discussing the resurgence of nationalisms. Na and Pun, in fact, remark that “techno-nationalism is a prevalent way of thinking that is present in nearly all countries when they encounter global challenges”[985]. What must be remarked is that to the evolving geopolitical forces in action corresponds a continuous change of foreign target of techno-nationalist rhetoric, depending on the point of view. In the 80s the “foreign hands” which the US needed to keep “its” technology from were Japanese, even before they had been Soviet, today they have become Chinese.

The epitome of this shift has been represented by the “Huawei case”. In 2018, Meng Wanzhou, the daughter of the Chinese tech firm Huawei’s CEO, as well as second in charge of the company, was detained in Canada upon request of extradition from the US government. Huawei, a Chinese giant of

[982] *ivi*, p. 64.
[983] Özgür Yılmaz, ‘Technology and State Relations: China Case’, *Journal of Chinese Research* 1 (February 2025): 26–44, p. 37.
[984] Edgerton, ‘The Contradictions of Techno-Nationalism and Techno-Globalism’.
[985] Na and Pun, ‘Techno-Nationalism as the Cultural Logic of Global Infrastructural Capitalism’, p. 427.

technology, was the object of international concern for its role in leading the establishment of the 5G infrastructure within and outside the PRC, which earned the company the label of "China's national hero" representing China's presence in the international techno-economic business world[986]. The US government accused Meng of bank fraud and of planning to bypass US sanction against Iran. As a result of this incident, Huawei's 5G aspirations needed to be resized in most of the Euro-American market[987]. Meng could go back to China only in 2021 with a "spectacular return performance, marked by nationalist sentiments" and "livestreamed as a special program on China Central Television (CCTV) for over five hours", during which she claimed that "If faith has a color, it must be China red"[988]. Na and Pun have employed French philosopher Guy Debord's lens, exposed in the essay *Society of Spectacle*[989], to claim that this event has epitomized "the contemporary integrated Spectacle of techno-nationalism exert[ing] its ideological power through media spectacles to facilitate China's transition to infrastructural capitalism"[990].

Not even a year before the Huawei case, the US-China "trade war" had started. It was initiated by the first Trump presidency (2017-2021), delineating a more general turn in the US foreign relationship toward China and still pursuing with recurrent escalations and de-escalations. At the core of this commercial dispute there is technology as an object of rivalry in terms of strategic development: innovative technologies, such as semiconductors (and rare metals to produce them) or AI, are deemed of crucial importance for both the US and the PRC government. While the US accuses the PRC of illicit commercial conducts, the PRC, for its part, denounces that the US is interfering with the global market and even trying to hinder China's development.

Can we consider China's techno-nationalism as a mere reaction to these international dynamics? Since Maoism, the Party-State has insisted on reaching technological independence and military power[991], also under the ideological assumption of historical materialism, which underlines the role of material progress in the historical social development. The Maoist era is thus considered as a techno-nationalist phase of the PRC, which, however, transitioned to a techno-globalist one since the reform and opening-up, when the country was in search of technological transfer to update its manufacturing sector[992]. More recently, however, the Party-State focus has been directed to reach independence from other countries' technological supply chain, for security and strategic reasons,

[986] Xiaoguang Wang, 'The "Techno-Turn" of China's Official Discourse on Nationalism', *Communist and Post-Communist Studies* 53, no. 4 (2020): 220–39, p. 222.
[987] Na and Pun, 'Techno-Nationalism as the Cultural Logic of Global Infrastructural Capitalism', p. 427.
[988] *ivi*, p. 426.
[989] Guy Debord, *Society of the Spectacle* (Black & Red, 2010).
[990] Na and Pun, 'Techno-Nationalism as the Cultural Logic of Global Infrastructural Capitalism', p. 429.
[991] Feigenbaum, *China's Techno-Warriors*.
[992] Shigeru Nakayama, 'Techno-Nationalism versus Techno-Globalism', *East Asian Science, Technology and Society: An International Journal* 6, no. 1 (2012): 9–15, pp. 12-13.

which are also linked to the promise of economic growth behind technological development. To this regard, China's techno-nationalism can be simply understood as an ensemble of policies and strategies to increase the country's technological capacity. In this respect, the Chinese case is no exception within the larger geopolitical panorama, which has seen in the last decades several attempts by other developing countries to ensure technological self-efficiency. As remarked by Zhang Jun, "Indeed, many Asian governments have adopted a development agenda in which technoscientific development is yoked with national security and socio-economic progress, especially as part of efforts to reduce dependence on advanced imports, pursue export oriented production and capitalize on increasingly global value chains"[993]. To this regard, Wang Xiaoguang speaks of a real "techno-turn" of China's most recent nationalist discourse, established as a top-down narrative built around economic, political and ideological interests and directed at promoting the three main focuses of China's technological development: the construction of infrastructural megaprojects, China's growing international presence as a techno-economic actor, and the development of cutting-edge technological areas[994].

However, there is something more about China's techno-nationalism. The Party-State insistence on the necessity of technological advancement and autonomy partially derives from the memories of the "Century of Humiliation" (*bainian guochi* 百年国耻), namely the period initiated with the First Opium War (1839-1842) and resulted into China's semi-colonization by Western countries and, later, into the Japanese invasion. As already discussed in 1.2, this historical period is understood also in terms of a disadvantage of China compared to Western and Japanese powers caused by its technological backwardness. As underlined by Wu Xiaotong, this national imaginary is still evocative and powerful in today's China:

> The concept of 'The Century of Humiliation' is portrayed as a prolonged struggle for national survival and independence from Western and Japanese imperialism. This framework provides officials, intellectuals, media, and other individuals with numerous opportunities to draw broad historical principles that may be applicable to the current context. Chinese nationalism is closely linked to national security concerns on the perceived threat presented by external entities[995].

In this sense, techno-nationalism in the PRC functions as a national rhetoric providing a powerful imaginary strictly linking the national flourishing and citizens' lifestyle to a technological progress led by the Party-State but also by Chinese companies. To this regard, the Huawei case offers a thought-provoking example of the impact and leverage of techno-nationalist discourses in the country. This episode, in fact, triggered a considerable reaction on the side of Chinese ordinary citizens –

[993] Zhang, 'Hardening National Boundaries in a Globally-Connected World', p. 15.
[994] Wang, 'The "Techno-Turn" of China's Official Discourse on Nationalism'.
[995] Xiaotong Wu, 'Techno-Nationalism: Examining the Impact of Chinese State Social Media Framing on Public', Atlantis Press, 1 December 2024, 215–21, p. 217.

whose attitudes and processes of individuation are of major interest for this work than simple top-down narratives – who responded by showing support to Huawei by boycotting US tech products. As remarked by Zhang Jun, this case underlines the role of sociotechnical imaginaries in shaping citizens' minds and opinions, as it triggered a techno-nationalist reaction to defend China's developmental "interests" against its detractors[996]. In concrete, the Chinese citizens responded by supporting Huawei through techno-nationalist consumer(ist) practices.

When exploring the peculiarities of China's techno-nationalism[997], it is important to bring out the massive role of the state as the mediator or major interpreter of the crucial role of technology in the national development. As remarked again by Zhang Jun, "in China, the state provides much of the language for ordinary citizens to make sense of technology, labor, the economy and national development"[998]. In her ethnographic research, she analyses how Chinese middle-class educated professionals reacted to the Huawei case and, more broadly, discussed the issue of national technological development. Her research highlights three meaningful findings to discern the influence of today's techno-nationalism on Chinese citizens: (1) even though the discourse on technology is largely mediated by the Party-State, technoscience is presented as a neutral element or value of development, as "a general law about society and modernity, a law that applies to all societies, not just China"[999]. This process of neutralization of technoscience has been already discussed in 2.3 and repeatedly addressed by Hui as producing the oblivion of the distinctive Chinese technical thought. (2) Techno-nationalist discourses in the country forward the commingle of national development with technological advancement, a commingle which is always filtered by the lens of political economy. As underlined by Zhang,

> the internalization of the techno-science narrative among the educated professionals also comes with the fact that the narrative provides the possible language for them to think about and make sense of the economic and technological practices in their daily lives, which in turn reinforces their perception that national development is inevitably connected with technological progress[1000].

In this sense, technological development is uncritically presented as a crucial but neutral instrument to pursue economic flourishing, resulting in the production of the idea of a "techno-economy"[1001] in which technology is perceived "through the lens of political economy instead of technical

[996] Zhang, 'Hardening National Boundaries in a Globally-Connected World'.
[997] Here techno-nationalism must be distinguished from flourishing analyses on forms of digital nationalism (also known as cyber-nationalism or online nationalism). This latter identifies the circulation and spreading of nationalist discourses and rhetoric in the online sphere, a trend well researched in the Chinese digital ecosystem, see, for instance, Florian Schneider, 'China's Digital Nationalism', in *The Routledge Handbook of Nationalism in East and Southeast Asia* (Routledge, 2023); Xiaoyu Zhang et al., 'Mapping Chinese Digital Nationalism: A Literature Review', *International Journal of Communication* 18 (February 2024): 1891–912. Understood this way, digital nationalism is one of the vehicles or of the practices disseminating techno-nationalist sociotechnical imaginaries within the country.
[998] Zhang, 'Hardening National Boundaries in a Globally-Connected World', p. 12.
[999] *ivi*, p. 15.
[1000] *ibid*.
[1001] Yılmaz, 'Technology and State Relations', p. 32.

specificities"[1002] and the development of science and technology presented as an "economic panacea"[1003]. (3) Last, Zhang's research puts the accent on the symbolic value of technological objects and infrastructures as material vehicles of progress. In this sense, the accelerated diffusion of smartphones and of the essential services provided for by digital platforms symbolizes that China is "catching up" and is even at the vanguard of technological development, even though this interpretation, in substance, equates catching up or being in advance with the diffused adoption of global consumerist practices and lifestyles. In this respect, "the current [techno-nationalist] discourse clearly appeals to a consumer or economic nationalism that is not necessarily in contradiction with global economic integration"[1004]. Moreover, the limits and boundaries of development are increasingly figured out in terms of techno-solutionism[1005].

Before proceeding with a broader analysis of China's techno-nationalist sociotechnical imaginaries, a clarification of what is meant with sociotechnical imaginary is first required. According to Jasanoff and Kim, sociotechnical imaginaries are "collectively imagined forms of social life and social order reflected in the design and fulfillment of nation-specific scientific and/or technological projects"[1006]. Understanding how the role of technology is treated as a theme of national relevance is helpful to assess the top-down political and, thus, prescriptive dimension of these types of imaginaries that link technoscience with future social organization: "imaginaries, in this sense, at once describe attainable futures and prescribe futures that states believe ought to be attained"[1007]. It is interesting to add a further nuance to such STSs perspective, taken from the philosophical perspective followed so far. According to Stiegler's interpretation, one must comprehend that imaginary and, more generally, imagination, is always a faculty enabled by the technical system (but not delegated to it), whose circulation always takes place at the social level, in the *I/We* relation. Stiegler has remarked that with industrial technologies, the faculties of imagination too are more and more "exteriorized" and subjected to calculation, mostly for economic reasons. In the Chinese context, apparently, the national symbols referring to technology are kept together via a nationalist narrative that, however, proposes a neutral view of technoscience, uncapable of catching the ways in which "scientific imagination"[1008] jeopardizes citizens' imagination itself. In this sense, Özgür Yılmaz sustains that "technology in China is not merely a means of control but a mechanism to keep individuals ideologically aligned

[1002] Zhang, 'Hardening National Boundaries in a Globally-Connected World', p. 17.
[1003] Wang, 'The "Techno-Turn" of China's Official Discourse on Nationalism', p. 224.
[1004] Na and Pun, 'Techno-Nationalism as the Cultural Logic of Global Infrastructural Capitalism', p. 428.
[1005] Zhang, 'Hardening National Boundaries in a Globally-Connected World', p. 19.
[1006] Sheila Jasanoff and Sang-Hyun Kim, 'Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea', *Minerva* 47, no. 2 (2009): 119–46, p. 120.
[1007] *ibid*.
[1008] With this term, Bakken refers to "a view of "science" as a value-neutral instrument capable of reconciling the values of "tradition" and the demands of the modern world". Such viewpoints represent the beliefs or imagination of a technocracy or a "technical intelligentsia"". Bakken, *The Exemplary Society*, p. 52.

with national values and narratives"[1009]. At the same time, however, techno-nationalist strategies seem to be unaware of the impact of technological acceleration on collectively shared symbols and values. As remarked by Stiegler, the processes of industrial exteriorization of memory and imagination engender a loss of individuation and of symbolic sharing[1010] : it is properly this disruptive tendency that the techno-nationalist sentiment seems to be unable to grasp.

In the PRC a multiplicity of sociotechnical imaginaries is colonizing citizens' understanding of technology by tying this last to the country's national future. Zhang's research has considered technology mostly in terms of ICTs, which in practice could be broadly identified with the concrete use of computers and smartphones and their connected applications, such as social media. However, China's techno-nationalism is built across a variety of sociotechnical imaginaries. For instance, not only ICT, but also its international standards and standards-settings are the object of techno-nationalist mobilizations. In the Chinese case, the standardization race concerning 5G represents a strategy to maintain a competitive edge in technological innovation [1011] . Moreover, China's infrastructural power has been represented and internally exalted through the capillary construction of the high-speed railway in the country colonizing citizenry's imaginary[1012]. At the same time, the Chinese government is investing enormous resources in renewable energies and in developing related technical products such as solar panels and Electric Vehicles (EVs) to achieve the goal of reaching carbon neutrality by 2060. These technological products are the concrete means to forward the discourse on the "ecological civilization", which according to Chen Sibo is also linked to a techno-nationalist imaginary[1013]. In doing so, the Party-State is also interested in forwarding an image of China as leading the global ecological development, as well as in associating the imaginary of its citizens to this ambitious, but also nationalist rhetoric, which has been even defined as a sort of "green nationalism"[1014] (see 4.3). These global aspirations are, however, encountering the opposition and backlash of the Euro-America. Many countries of the Global North are in fact establishing tariffs on Chinese "green" products such as EVs[1015]. In addition, the international technological race or rivalry is also pursued regarding cutting-edge innovative technologies which are more and more colonizing

[1009] Yılmaz, 'Technology and State Relations', p. 37.
[1010] Bernard Stiegler, *Symbolic Misery, Volume 2: The Catastrophe of the Sensible* (Polity, 2015), p. 37.
[1011] Mi-jin Kim et al., 'The Changing Patterns of China's International Standardization in ICT under Techno-Nationalism: A Reflection through 5G Standardization', *International Journal of Information Management* 54, no. C (2020): 1–8.
[1012] Pun and Chen, 'Confronting Global Infrastructural Capitalism'.
[1013] Sibo Chen, 'Techno-Nationalism and China's Transition toward Carbon Neutrality', *Frontiers in Communication* 9 (September 2024): 1–3.
[1014] Virginie Arantes, 'Towards a Green Nationalism with Chinese Characteristics?', *Journal of Contemporary China* 33, no. 145 (2023): 65–82.
[1015] 'EU, China Will Look into Setting Minimum Prices on Electric Vehicles, EU Says', Autos & Transportation, *Reuters*, 10 April 2025, https://www.reuters.com/business/autos-transportation/eu-china-start-talks-lifting-eu-tariffs-chinese-electric-vehicles-handelsblatt-2025-04-10/.

the imaginary of global citizens, in particular AI technologies[1016]. With regards to this tech race, McInerney has coined the wording "AI nationalism" to describe how the US approach to China's AI development is spreading a narrative of a sort of "new yellow techno-peril" which shapes the AI race as a "civilizational race"[1017]. It is worthy to notice that technological development is presented in civilizational terms, not only by the US but also by the PRC (see 4.3). To this regard, it is undoubted that China is forwarding successful techno-nationalist strategies and policies allowing the country to successfully compete on the global field of AI. The case of the successful release of the AI Large Language Model (LLM) "DeepSeek" has been in fact internationally analyzed as the AI "Sputnik Moment"[1018]. Last, the Chinese government is further boosting techno-nationalism by exalting the activities and results of China's space program, as well as the development of high-tech armaments and vehicles to increase the strategic force of the People's Liberation Army (PLA), China's national army[1019].

The next section analyses how China's sociotechnical imaginaries are also produced by technical "membranes" partially isolating its sociotechnical system. These membranes are however permeable and do not prevent the Chinese government to expand its technological vision and infrastructure outside of its borders. In light of this, one might ask: is the PRC's current approach solely techno-nationalist, or is this country also an advocate of techno-globalism? It is this double role maintained by the PRC that the following two sections aim to explore.

Techno-Membranes of China

As already anticipated, Hui sustains that nation-states present themselves as the inheritors of the ethnical/technical interaction. However, the Hongkonger philosopher advances that after the planetarization of a single technical system, this dynamic has become obsolete:

> In the process of modernization, the dynamic described by Leroi-Gourhan has to be largely updated, because such a milieu virtually doesn't exist, since all non-Western countries have been forced to adapt themselves to constant technological development and innovation. Take China as an example: the defeat of China during the two Opium Wars led to a rampant modernization in which such a technical membrane became virtually unsustainable due to fundamental differences in technological thought and development (the most significant existing membrane is probably the Great Firewall of China, but its construction is only possible thanks to Silicon Valley)[1020].

[1016] Cecilia Rikap and Bengt-Åke Lundvall, 'AI Policies and Politics in China and the US Between Techno-Globalism and Techno-Nationalism', in *The Digital Innovation Race: Conceptualizing the Emerging New World Order*, ed. Cecilia Rikap and Bengt-Åke Lundvall (Springer International Publishing, 2021).
[1017] Kerry McInerney, 'Yellow Techno-Peril: The "Clash of Civilizations" and Anti-Chinese Racial Rhetoric in the US–China AI Arms Race', *Big Data & Society* 11, no. 2 (2024): 1–13.
[1018] Amy Hawkins, 'Who Is behind DeepSeek and How Did It Achieve Its AI "Sputnik Moment"?', Technology, *The Guardian*, 28 January 2025, https://www.theguardian.com/technology/2025/jan/28/who-is-behind-deepseek-and-how-did-it-achieve-its-ai-sputnik-moment; John Cassidy, 'Is DeepSeek China's Sputnik Moment?', The Financial Page, *The New Yorker*, 3 February 2025, https://www.newyorker.com/news/the-financial-page/is-deepseek-chinas-sputnik-moment.
[1019] Wang, 'The "Techno-Turn" of China's Official Discourse on Nationalism', p. 223.
[1020] Hui, 'On the Unhappy Consciousness of Neoreactionaries', p. 7.

This section aims to explore this thesis to support the idea that the separation and the distinctive peculiarities of China's technical system are today more presumed than real, at least from the cosmotechnical perspective delineated by Hui. The aim is to explore the following question: is the PRC truly recreating an alternative technical system of its own, as in a sort of "metaphysical" coincidence of a technical system/ethnicity of the Chinese nation? The following analysis aspires to investigate this issue by (1) dismantling the idea that the partially closed Chinese internet ecosystem, enclosed by the "Great Firewall", constitutes an alternative space compared to other online ecosystems, and by (2) comparing the configuration of the Chinese social media platforms' ecosystem with the Western counterpart, to propose that the cosmotechnical rationales according to which it functions is not substantially dissimilar from the globalized one. The scholarship has directed great attention to these two aspects of the Chinese internet ecosystem, namely the study of the functioning and impact of the "Great Firewall" on the Chinese internet, and the configuration of China's social media platforms' ecosystem[1021]. Here the aim is, on one side, to explore how political strategies, narratives, and representations about them contribute to shape Chinese citizens' individuation in terms of how they interiorize the Chinese sociotechnical environment and, on the other, to assess whether the configuration and functioning of such sociotechnical system distance themselves from those of the Euro-American one.

The establishment of the internet in the PRC is linked with its long-lasting techno-nationalist approach to technological development. It emerged as it is configured nowadays as the compromise of two opposed tendencies: the opening-up of China to global market and flows in the post-Maoism and the Party-State interest in maintaining control over information flows. With regards to the peculiarities of the Chinese digital ecosystem, it must be remarked that it is circumscribed by virtual national borders "recreated" through the "Great Firewall". Officially first set up in 1996 as a sub-system of the broader "Golden Shield Project"[1022], the "Great Firewall" has been interpreted as a pre-emptive informatic response to both internal disorders occurring in the first decades of 2000 in the Xinjiang autonomous region and to the international movement of the "Arab Spring", in which Internet played a strategic connective role. In substance, the "Great Firewall" is an ensemble of Internet blocking projects to enforce information security and censorship in the country, a "wall"

[1021] For a literature review of Chinese Internet studies see David Kurt Herold and Gabriele de Seta, 'Through the Looking Glass: Twenty Years of Chinese Internet Research', *Information Society* 31, no. 1 (2015): 68–82. For a general analysis of China's social media platforms ecosystem see Guobin Yang and Wei Wang, eds, *Engaging Social Media in China: Platforms, Publics, and Production* (Michigan State University Press, 2021).

[1022] The "Golden Shield Project" is also known with the official name of "'National Public Security Work Informational Project". It also included, among other projects, the management of criminal information system and of traffic information system. For a timeline of the major steps of the "Great Firewall"'s establishment see Sonali Chandel et al., 'The Golden Shield Project of China: A Decade Later—An in-Depth Study of the Great Firewall', *2019 International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery (CyberC)*, October 2019, 111–19, p. 112.

working as "both a technological apparatus and a structure metaphor"[1023]. The expression "Great Firewall" evocatively combine the impressive image of the "Great Wall", conceived to keep "barbarians" outside the Chinese empire, with the firewall, an informatic device that can selectively filter traffic from one's own network. The establishment of the "Great Firewall" has originated a partially enclosed Internet environment where Western social media platforms, such as those of the Meta Group, X (Twitter), Amazon, and Google+, and a variety of websites, both Western and Chinese, are blocked or censored[1024]. In fact, even though the main target appears to be "foreign content of a political nature"[1025], it is important to notice that the system can block Chinese websites and webpages as well.

Relying on Hui's words and observations quoted at the beginning of this section, it is thought-provoking to think of the "Great Firewall" in terms of a "membrane". As the metaphor of the membrane suggests, this infrastructure works as a relatively permeable barrier given that, for instance, it can be bypassed using proxy servers or VPNs. These last are informatic tools connotated by Chinese netizens as "ladders" (*tizi* 梯子) to climb and cross the "wall" [1026]. It is not easy to assess the number of VPN users in the PRC, considering that the selling of these products without official permission is illegal in the country[1027], that cross-border business activities via VPNs are prohibited[1028], and that VPNs are recurrently cracked down. One research has estimated that in 2014 the VPNs users in the country accounted roughly as the 20% of the total Internet user population[1029].

According to Lokman Tsui, the "Great Firewall" has constituted a misperceived "myth", especially in the Euro-America, forwarding "the belief that China's efforts to censor the Internet must ultimately fail, and that the Internet will eventually lead to the country's democratization"[1030]. In this sense, solely focusing on the undoubtedly massive liberticidal censorship function of this project (a potential not "absent" from the Western Internet) overshadows other aspects of the Chinese Internet ecosystem. For instance, as hinted by Tsui himself, thinking of the Internet as a "space" where one can only find news or information that might be censored, leave out many other figurative spaces and concrete actions enacted on the Internet, such as e-commerce or online shopping and entertainment or leisure

[1023] Jinying Li, 'China: The Techno-Politics of the Wall', in *Geoblocking and Global Video Culture*, ed. Ramon Lobato and James Meese (Institute of Network Cultures, 2016), p. 110.
[1024] The project GreatFire.org monitors the blocked websites and webpages. See 'GreatFire.Org - We Use AI to Monitor Censorship and Expand Free Speech', GreatFire.Org, accessed 27 October 2025, https://en.greatfire.org/.
[1025] Li, 'China: The Techno-Politics of the Wall', p. 112.
[1026] *ivi*, p. 113.
[1027] Chandel et al., 'The Golden Shield Project of China', p. 113.
[1028] *ivi* p. 117.
[1029] The research was conducted by Globalwebindex and referred to in Li, 'China: The Techno-Politics of the Wall', p. 114. For an insight on the population demography and reasons behind the use of VPNs in the PRC see also Chandel et al., 'The Golden Shield Project of China', p. 116.
[1030] Lokman Tsui, 'An Inadequate Metaphor: The Great Firewall and Chinese Internet Censorship', *Global Dialogue* 9, no. 1/2 (2007): 1–6.

activities, and their impact on daily lives of global citizens[1031]. For this reason, already in 2007, Tsui urged "to think "beyond the Great Firewall (in considering how China is) joining the world""[1032], namely, to assess the different ways in which the Internet is a global-ising experience endured by Chinese citizens. This perspective helps to underline that from a cosmotechnical perspective, the Chinese Internet works according to globalized dynamics impacting Chinese citizens in similar ways to those from other countries, although under a political system that attempts to negotiate them for its own interests by establishing a sort of digital national film.

It is also important to analyze how this "membrane" is perceived by Chinese citizens themselves. Li Jinying has remarked that the encounter or "collision" with the "Great Firewall" prompts Chinese netizens to realize and confront concealed dynamics of control in a space which, in theory, should provide limitless information. She thus claims that "as a structure and a metaphor, […] the wall makes what is invisible visible"[1033]. At the same time, undoubtedly, the "protectionism" of the "Great Firewall" generates a more robust cultural proximity market facilitating the consumption of domestic websites; however, to this regard, Taneja and Wu suggest that Chinese netizens might prefer in any case online contents in the Chinese language, which would promote anyway the consumption of domestic webpages[1034]. Nevertheless, it must be remarked that the tendency of producing "culturally defined market" analyzed by them in different contexts is being disrupted worldwide. For instance, in the same way that the Chinese diaspora tends to use Chinese social media platform such as WeChat when living abroad[1035], Chinese netizens can consume contents produced by Western users and influencers producing contents in the Chinese digital space as well[1036], and in this case, global users are those who have to adapt to the Chinese online ecosystem's rules.

It remains unquestionable that the establishment of the informatic membrane of the "Great Firewall" have produced three considerable consequences characterizing the Chinese Internet and influencing citizenship individuation in the country: (1) first and most evidently, it has enabled a series of strategies to censor, filter and control online contents and behaviors; (2) second, it has facilitated national sovereignty on data control (labeled as data sovereignty or cyber-sovereignty) in

[1031] *ivi*, p. 5.
[1032] *ivi*, p. 6.
[1033] Li, 'China: The Techno-Politics of the Wall', p. 118.
[1034] Harsh Taneja and Angela Xiao Wu, 'Does the Great Firewall Really Isolate the Chinese? Integrating Access Blockage with Cultural Factors to Explain Web User Behavior', *The Information Society* 30, no. 5 (2014): 297–309.
[1035] Luwei Rose Luqiu and Yi Kang, 'Loyalty to WeChat beyond National Borders: A Perspective of Media System Dependency Theory on Techno-Nationalism', *Chinese Journal of Communication* 14, no. 4 (2021): 451–68.
[1036] See, for instance, the online "migration" of Western content creators to the Chinese social media Xiaohongshu (Rednote) after the announcement about Tik Tok being shut down in the US (the so-called "TikTok refugees"). See Haipeng Zhao et al., 'TikTok Users Migration to Xiaohongshu (Rednote): Emotional Dynamics, Platform Governance, and an NCA-SEM Analysis in Cross-Cultural Adaptation', *International Journal of Human–Computer Interaction*, Taylor & Francis, 1–26.

contrast with other models privileging a market friendly data governance (US) or the protection of individual rights (EU)[1037]; (3) last, it has boosted the development of national tech giants and digital platforms as a consequence of the ban on Western social media platforms. Notably, it contributed to the expansion of the so-called BAT, acronym for Baidu, Alibaba, and Tencent, China's tech giant companies, and of other national tech firms. In this sense, the flourishing of Chinese indigenous social media platforms is also a consequence of the absence of foreign competitors.

The last point, in particular, allows to focus on the second dimension of the Chinese technical "membrane" here explored, that is the constitution of a Chinese indigenous social media platforms environment. To this regard, the proposed way through which assessing the construction of techno-nationalist sociotechnical imaginaries in the PRC is to understand whether local digital platforms are configured or function according to different rationales compared to their Western counterpart. This is done to assess whether through their daily use they might produce alternative processes of citizenship individuation.

Plantin and De Seta[1038] have proposed to analyze the peculiarities of the Chinese techno-nationalist digital ecosystem through the perspectives of infrastructuralization and of platformization. These two theoretical approaches derive respectively from the broader fields of STSs and of media studies, but they both focus on exploring the constitution and functioning of sociotechnical systems[1039]. While infrastructure studies give a more historic account of how sociotechnical systems have been evolving from systems to networks and, ultimately, webs, platform studies have instead delivered a more critical perspective on the interplay of social, economic and technical factors in shaping social media platforms' structure and use[1040]. These two theoretical approaches are also helpful because they underline the distinct roles of state and private actors in shaping digital ecosystems. For instance, infrastructures are understood in terms of government funded projects which are administratively regulated according to public interest to provide essential services on a large to very large scale. Platforms, instead, are usually developed by private firms in a competitive market and they are privately funded or funded through advertisements for a private profit, presenting a small to large scale, which is, however, becoming more and more ubiquitous[1041].

[1037] See Heylyung Yun, 'China's Data Sovereignty and Security: Implications for Global Digital Borders and Governance', *Chinese Political Science Review* 10, no. 2 (2025): 178–203.
[1038] Jean-Christophe Plantin and Gabriele De Seta, 'WeChat as Infrastructure: The Techno-Nationalist Shaping of Chinese Digital Platforms', *Chinese Journal of Communication* 12, no. 3 (2019): 257–73.
[1039] For a clarification of these two lines of research, see Jean-Christophe Plantin et al., 'Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook', *New Media & Society* 20, no. 1 (2018): 293–310.
[1040] Plantin et al., 'Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook'.
[1041] For a more thorough analysis of the constitutive differences between infrastructures and platforms see Plantin et al., 'Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook', pp. 9-10, table 1.

The employment of the combined approach of infrastructuralization and platformization has been able to show, at least in the Western digital ecosystem, that in the latest years digital infrastructures are more and more "platformized" while social media platforms are making their own the logics of infrastructures. To assess to what extent these processes could be applied to the Chinese context too, Plantin and De Seta have analyzed the features of WeChat, a ubiquitous app in today's China developed by Tencent (one of the BAT) which has become essential to carry out a number of social functions and daily actions. Its establishment as an essential digital instrument is further confirmed by the fact that, in 2025, it reached more than 1.4 billion active users[1042]. The two scholars have found that a process of infrastructuralization similar to that analyzed in the Western context is occurring with regards to the WeChat platform too, which has flourished in the Chinese Internet environment context thanks to techno-nationalist policies such as the above-mentioned "Great Firewall", but also on the tail of the expansion of platform capitalism. They sustain that:

> First, WeChat is a paradigmatic example of a digital media service that owes its success first to its platformization and then to the infrastructuralization of its platform model. Second, the development of WeChat, which is situated in the specific context of China's ICT industry, reveals how the platform model functions as a meeting ground for both the business ambitions of Internet companies and the infrastructural ambitions of the Chinese authorities[1043].

Their main conclusions underline that China's digital ecosystem is largely distinguished by the pivotal regulating role played by the government. To this regard, however, Kloey et al. have suggested that it is more helpful watching at platforms from the perspective of governance rather than from that of surveillance, to assess the interplay between all the involved actors: "Governance refers to the wide variety of ways in which platforms govern users, the state governs platforms, and users have particular expectations of platforms"[1044]. In this sense, similarly to the Euro-American context where the US-based GAFAM (acronym for Google, Apple, Facebook/Meta, Amazon, Microsoft) tech giants dominate, we can look at the BAT digital ecosystem as producing a "local and coeval platformization of Chinese society"[1045]. Moreover, both BAT and GAFAM platforms are conceptualized and configured according to general social media industries features that are resumed by Pieter Verdegem as (1) dependence on user-generated content; (2) presence of multi-sided markets (while traditional media only refer to audience and advertisers, social media industries match multiple involved interests: different user groups, advertisers, app developers, other businesses' ones); (3) reliance on network effects (the more users one social media manages to engage, the more content is thus shared,

[1042] 'WeChat: Active Users Worldwide 2025', Statista, accessed 27 October 2025, https://www.statista.com/statistics/255778/number-of-active-wechat-messenger-accounts/.
[1043] Plantin and De Seta, 'WeChat as Infrastructure', p. 3.
[1044] Jeroen de Kloet et al., 'The Platformization of Chinese Society: Infrastructure, Governance, and Practice', *Chinese Journal of Communication* 12, no. 3 (2019): 249–56, p. 252.
[1045] *ivi*, p. 251. For a more general study of the platformization processes see Srnicek, *Platform Capitalism*.

leading to more data that are produced, and, thus, to a greater value of the given social media)[1046]. This last element also relates with another characteristic of social media platforms analyzed in both digital ecosystems, that is, the increasing provision of multiple services provoking users' "stickiness", namely augmenting the platform's potential to keep users engaged or returning frequently[1047]. More in detail, social media platforms are organized according to three main rationales: datafication, commodification, and selection (this last refers to the offering of personalized services to increase their value), all features that can be analyzed in the Chinese digital ecosystem, too[1048]. Lastly, even though in diverse timing, both the two big tech blocks, BAT and GAFAM, benefited from two crucial events: the mobile revolution and the social network revolution[1049]. To this regard, it must be remarked that one of the distinctiveness of the Chinese context is that of the rapidity of the processes of platformization, as also remarked by Kloet et al.: "As the boundaries between platforms and public infrastructures have become increasingly porous, platforms are more and more a part of our everyday lives. […] Although we can trace similar developments in the US and Europe, this process has developed at greater speed and intensity in China"[1050]. The major distinctiveness characterizing platforms use in the Chinese context, instead, is the presence of the real-name registration policy, based on which each profile on an online platform is connected to a legal name and to an ID.

This brief analysis was aimed to show that the sociotechnical casing of BAT and other local digital platforms "wrapping" the Chinese citizenry shares genealogical and structural similarities with the Western counterpart, although it remains undisputed that in the PRC the State maintains a crucial role in regulating and influencing the digital environment of the country. The public/private collaboration is also an element of resemblance. For instance, Chinese tech entrepreneurs have parallelly supported China's techno-nationalist narrative by showing nationalist sentiments, as crystallized by Huawei's Meng Wanzhou's quotation reported at the beginning of this section. The synergy between public and private actors in China is also highlighted by Na and Pun, who underline that "both economic and political actors have echoed and mined the same nationalist ideology in arguing for, or rhetorically asserting, a unitary China. Jack Ma, CEO of Alibaba, even identify the future of Alibaba to the future of China, and this identification legitimates Alibaba's dominant position in the market"[1051]. Remarkably, a similar dynamic seems to be disentangling in the US as well, particularly since the

[1046] Pieter Verdegem, 'Social Media Industries and the Rise of the Platform', in *The Routledge Companion to Media Industries* (Routledge, 2021), p. 302.
[1047] Yujie Chen et al., *Super-Sticky Wechat and Chinese Society*, Emerald Points (Emerald Publishing Limited, 2018).
[1048] Verdegem, 'Social Media Industries and the Rise of the Platform', p. 304.
[1049] *ivi*, p. 307.
[1050] de Kloet et al., 'The Platformization of Chinese Society', p. 251.
[1051] Yuqi Na and Ngai Pun, 'Internet as an Ideology: Nationalistic Discourses, and Multiple Subject Positions of Chinese Internet Workers', *Inter-Asia Cultural Studies* 24, no. 3 (2023): 367–81, p. 370.

second Trump administration which is receiving the praise and endorsement of several big tech CEOs[1052].

As remarked by Hui, the structural translation of digital platforms into the Chinese environment – see for instance the creation of Youku in the PRC after the ban on YouTube – cannot be regarded as the production of a diverse sociotechnical ecosystem based on a distinguishable relation with technology, namely of an alternative cosmotechnics, but it is limited to an expansion of the originally European modernization project[1053]. The following section aims to give further nuance to this thesis by analyzing in which ways the technological expansion is conducted outside of China's national borders, reinforcing the techno-nationalist imaginary of a (paradoxically) globalizing PRC.

Expanding the Promethean Cosmotechnics

As already mentioned, the PRC is in a singular position oscillating between techno-nationalist and techno-globalist tendencies. In practice, these two approaches are not forcibly in contrast, but might instead reinforce one another when selectively applied. To this regard, Yılmaz remarks that "unlike purely protectionist policies, China's techno-nationalism blends self-reliance with targeted international collaboration. For instance, while promoting indigenous innovation under policies such as "Made in China 2025", China continues to pursue global technology acquisitions and partnerships to bridge gaps in its technological capabilities"[1054]. A similar alternate approach has been also observed by Kim et al. concerning China's strategy toward 5G standardization race[1055]. In this sense, what must be remarked is that the techno-nationalist tendency of the PRC does not prevent the Party-State and its entrepreneurial allies to pursue international business while also increasing national (soft) power. Instead, it contributes to reinforcing this dual strategy. To this regard, Wang has advanced that the "techno-turn" of China's nationalism has enabled a transition "from inward- to outward-looking" strategies[1056]. This section examines a concrete example of the PRC's international technological expansion: the digital initiatives enacted by the Chinese state and its tech giants along the commercial routes of the Belt and Road Initiative.

The "Belt and Road Initiative" (BRI) – the official English name, while in Chinese it is *yidai yilu* 一带一路, literally "One Belt, One Road"[1057] – is a national development initiative officially

[1052] Brian Barrett, 'All the President's Tech CEOs', Tags, *Wired*, 5 September 2025, https://www.wired.com/story/tech-ceos-donald-trump-white-house/. Helena Vieira, 'Seven CEOs in Trump's AI Dinner Shape America's Tech Destiny - LSE Business Review', *LSE Business Review - Social Sciences for Business, Markets, and Enterprises*, 14 September 2025, https://blogs.lse.ac.uk/businessreview/2025/09/15/seven-ceos-in-trumps-ai-dinner-shape-americas-tech-destiny/.
[1053] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 297.
[1054] Yılmaz, 'Technology and State Relations', p. 38.
[1055] Kim et al., 'The Changing Patterns of China's International Standardization in ICT under Techno-Nationalism'.
[1056] Wang, 'The "Techno-Turn" of China's Official Discourse on Nationalism', p. 13.
[1057] For an interpretation of the origins of the name of this project see Yuan Li, 'Belt and Road: A Logic Behind the Myth', in *China's Belt and Road: A Game Changer?*, ed. Alessia Amighini and Paolo Magri, with Istituto per gli studi di politica internazionale (Edizioni Epoké, 2017).

launched by China's paramount leader Xi Jinping in 2013 and aimed at expanding China's diplomacy, trade, and investments into the Eurasia. To do so it aspires at constructing or improving infrastructures and networks of communication, transportation, energy, finance and business across Central, Western and Southern Asia, with aspirations of also reaching out the MENA region (Middle East and North Africa) and even the EU. The grandiose rhetoric around this nationally celebrated initiative takes inspiration from the Silk Road(s) imaginary, namely that ensemble of trading land and sea routes dating back to the Han Dynasty (206 BC-220 AD) and connecting the Chinese empire with the West. This megaproject has caught huge global attention by academic scholarship[1058], political and economic think-tanks, and international journalism as well, mainly because it epitomizes the concrete convergence of China's efforts and aspirations of integrating and leading the global economy and international relations. As underlined by Panibratov et al., "The BRI will link territories that account for about 60% of the world population and around 30% of the world trade (PWC 2017). The combined size of China and BRI countries is equal or even larger than some of the trade blocs existing nowadays"[1059]. Importantly, the BRI is also aimed at increasing China's soft power[1060] through sharing national culture and improving the international image of the country[1061]. The BRI is also a mean through which expanding China's technological governance, such as its technological standards.

The Digital Silk Road (DSR) is a parallel sub-project aimed at integrating China's Internet strategies with the BRI[1062]. Hussain et al. suggest comparing the DSR to a "software for the BRI's hardware infrastructure"[1063]. The purpose of the DSR, in this sense, is to expand China's high-quality digital infrastructures, products and software in the countries involved in the BRI project. For instance, the PRC is largely contributing to the construction of the physical infrastructure of connectivity along these routes, namely the transcontinental land and undersea cables and satellite system[1064]. Moreover, as already anticipated in Chapter 2 (2.3), the Chinese government is selling surveillance technologies and know-how in the countries involved in this project[1065]. At the same time, an important aspect of the BRI and DSR strategy is its dual level, involving both the state and private actors[1066]. In fact,

[1058] For a literature review of this widely researched project see Andrei Panibratov et al., 'The Belt and Road Initiative: A Systematic Literature Review and Future Research Agenda', *Eurasian Geography and Economics* 63, no. 1 (2022): 82–115.
[1059] Panibratov et al., 'The Belt and Road Initiative', p. 2.
[1060] Maria Repnikova, *Chinese Soft Power*, Elements in Global China (Cambridge University Press, 2022).
[1061] Jan P. Voon and Xinpeng Xu, 'Impact of the Belt and Road Initiative on China's Soft Power: Preliminary Evidence', *Asia-Pacific Journal of Accounting & Economics* 27, no. 1 (2020): 120–31.
[1062] Erie and Streinz, 'The Beijing Effect'.
[1063] Fakhar Hussain et al., 'The Digital Rise and Its Economic Implications for China through the Digital Silk Road under the Belt and Road Initiative', *Asian Journal of Comparative Politics* 9, no. 2 (2024): 238–53, p. 241.
[1064] Hong Shen, 'Building a Digital Silk Road? Situating the Internet in China's Belt and Road Initiative', *International Journal of Communication* 12 (June 2018): 2683–701, p. 2684.
[1065] See Chin and Lin, *Surveillance State*, part 3.
[1066] Chunmeizi Su and Terry Flew, 'The Rise of Baidu, Alibaba and Tencent (BAT) and Their Role in China's Belt and Road Initiative (BRI)', *Global Media and Communication* 17, no. 1 (2021): 1-20, p. 2.

China's big tech firms, such as the BAT and others, are more or less officially involved in the projects and strategies unfolding under the umbrella of the DSR. However, the public-private partnership is complicated, as remarked by Su and Flew who underline that "Even though the BAT is contributing to the Digital Silk Road, the Chinese government still has mixed feelings about the rise of these private companies. The synergy and tension between capital and state power is more intricate than ever"[1067].

The technological expansion of the BAT along the DSR routes depends on each company's interest in selling its core technological applications. The BAT areas of expertise are in fact quite differentiated: Chinese big tech corporations have mostly specialized in different segments of digital innovation, with the exception that both Alibaba and Tencent share commercial rivalry in the field of online payments. In this sense, these tech corporations develop their international expansion across different technological sectors. For instance, Baidu is a leader in online search technologies (it can be compared to Google, as it is the most widespread search engine in the PRC) and in AI technologies as well; thus, with regards to the business along the DSR, this company is developing and trading AI translation engines aimed at overcoming language barriers. Alibaba, for its part, is an expert in e-commerce and e-payments services, which it is expanding across the DSR routes exporting its AliPay system and e-commerce, along with the construction and establishment of data centers in countries such as India, Indonesia, and Malaysia[1068]. Tencent is a frontrunner in the sector of social media (WeChat), its interests in the DSR project have been interpreted more in terms of deepening ties with the Chinese government, contributing to the project by digitizing cultural heritage and by producing a BRI documentary with the aim of promoting and revitalizing the Chinese culture[1069]. Finally, Huawei, already mentioned as a leader in the sector of the 5G infrastructure, is expanding such infrastructure in the countries involved in the DSR.

To conceptualize China's giant tech global expansion – revealing itself not only in the DSR, but also in a multiplicity of projects undertaken, for instance, in the African continent[1070] – Yılmaz has employed the concept of "platform sub-imperialism"[1071], which "highlights the role of digital platforms not just as economic tools but also as instruments for extending geopolitical influence"[1072]. Platform sub-imperialism, in this case, refers to the extractive and exploiting power exercised by the PRC through its firms' digital platforms toward the countries of the Global South in its growing area

[1067] *ibid*.
[1068] Shen, 'Building a Digital Silk Road?', p. 2689.
[1069] Su and Flew, 'The Rise of Baidu, Alibaba and Tencent (BAT) and Their Role in China's Belt and Road Initiative (BRI)', pp. 11-14.
[1070] Alessandra Colarizi, *Africa rossa: Il modello cinese e il continente del futuro* (L'Asino d'oro, 2022).
[1071] Yılmaz, 'Technology and State Relations', p. 28.
[1072] *ivi*, p. 40.

of influence. Once again, it must be remarked that this globalizing approach is not in contrast with the techno-nationalist strategy, as it unfolds "in the context of how states leverage digital technologies to assert global influence"[1073], expounding how techno-nationalism "serves as a political-economic force and creates imperialist rivalry"[1074]. This way, technologies developed in the PRC contribute not only to the transformation of the nation, but also to that of the global order. China's "ideological Internet-enabled "inclusive globalization"" [1075] is promoted along the DSR through material infrastructures connecting an increasing number of countries with the Chinese state and Chinese firms through a hardware and software network made of cables, data centers, and digital platforms' services.

An interesting bottom-up digital project mapping China's infrastructural projects outside the national borders is "The People's Map of Global China" aimed at returning the size and scale of an increasingly expanding Global China[1076]. Lee Ching Kwan, editor of the first volume of the journal issued as a correlated project to the "The People's Map of Global China", *Pulse*, affirms that the paradigm of "Global China" must be understood according to three commingled dimensions: (1) the first one takes the perspective of the China's state-led *policies* to comprehend how the Chinese government aspires at increasing its geopolitical, diplomatic, and economic presence at the global level; its technological "expansion" constitutes a core and efficacious strategy in this sense. Lee remarks that this set of policies constitutes "an indomitable force that is predatory and imperialistic to some, but developmental and beneficial to others" [1077]. (2) Second, Global China must be understood in terms of a *power project* in order to assess the mechanisms enacted by Chinese public and private actors to pursue geopolitical, economic and symbolic power. Analyzing dynamics of power also encourages to avoid essentializing China as this angle helps assessing how such power mechanisms are enacted by other international actors as well[1078]. Moreover, this perspective also considers the resistances originating against these power mechanisms. (3) Last, assuming the perspective of Global China as a *method* enables to position the PRC's internal dynamics as well as external actions within the trajectories and tensions of a globalized world, in order to overcome long-lasting monolithic and isolating depictions of the Chinese nation[1079]. To this regard, Lee refers to

[1073] *ibid*.
[1074] Na and Pun, 'Techno-Nationalism as the Cultural Logic of Global Infrastructural Capitalism', p. 429.
[1075] Shen, 'Building a Digital Silk Road?', p. 2693.
[1076] 'The People's Map of Global China', The People's Map of Global China, accessed 27 October 2025, https://thepeoplesmap.net/. .
[1077] Ching Kwan Lee, 'What Is Global China?', *Global China Pulse* 1, no. 1 (2022): 25–31, p. 25.
[1078] For instance, Fung et al. have suggested a comparison between the BRI initiative and the post-WWII US Marshall Plan, see K. C. Fung et al., 'Digital Silk Road, Silicon Valley and Connectivity', *Journal of Chinese Economic and Business Studies* 16, no. 3 (2018): 313–36, pp. 1-2.
[1079] Lee, 'What Is Global China?'.

Franceschini and Loubère, whose work has already been mentioned in the introduction of this dissertation as a programmatic perspective to analyze the PRC according to global dynamics[1080].

This section and, more broadly the reflection on China's techno-nationalism, aimed at adding a further nuance to the methodological approach of Global China, to assess the synchronizing power of contemporary technology notwithstanding the global rise of nationalisms. It is not simply a matter of technological transfer – although Fung et al. have hypothesized that China's technological dissemination through the DSR might in part be the result of a process of "dual diffusion", from the Silicon Valley to China and from China to the BRI's countries[1081] – instead, the global technological dispute overshadows the fact that technological innovation itself, subjected to specific economic rationales, as a forgotten object of philosophical speculation and of political action is the factor shaping the current techno-nationalist tendency in China as elsewhere. Connotating today's technology in nationalist terms by parallelly advancing sovereigntist and even accelerationist ideals connecting the "destiny" of the nation to technology is a misleading attitude reinforcing reactionary tendencies, but also a consequence of this misinterpretation. It is, thus, somehow paradoxical that technology has become an object of national and even culturalist vindication, even a sort of national "ideology" in China, while it constitutes, instead, a means through which this country "*is extending European modernity through modern technology*"[1082], as stated by Hui and quoted at the beginning of this section.

4.3 CHINA'S VISIONS FOR THE GLOBAL FUTURE

> *'Disorientation' does not mean simply that one has lost one's way and doesn't know which direction to choose; it also means the incompatibility of temporalities, of metaphysics: it is rather a 'dis*-orient-*ation'.*
> Yuk Hui[1083]

> *One wonders how far the popular imagination has already become detached from the form of life and moral cosmologies that where central to the Chinese tradition.*
> Yuk Hui[1084]

What does techno-nationalism have to do with citizenship individuation? The discussion so far has tried to expound how technology as an ideology and an instrument is increasingly linked to national development and security in the PRC. Technology permeates national discourses on matter of economy, geopolitics, defense, progress, lifestyle, and even civilization. Paradoxically, however, the

[1080] Franceschini and Loubère, *Global China as Method*.
[1081] Fung et al., 'Digital Silk Road, Silicon Valley and Connectivity', p. 3.
[1082] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 298.
[1083] *ivi*, p. 296.
[1084] *ivi*, p. 298.

omnipresence of technology impedes dedicating scrutiny to its impact on societies and on individuation processes. Looking at technology as a neutral and universal means toward progress and growth translates into a philosophical misinterpretation and political carelessness with regards to the constitutive and *pharmacological* role of technics in social life[1085]. The toxic processes produced by global industrial technologies, according to both Stiegler and Hui, lie at the origin of contemporary disorientation. Relying on Stiegler's interpretation, it can be advanced that the top-down sociotechnical imaginaries just described are proletarianizing citizens in China (and worldwide) by "colonizing" their imagination, while their capacities are rapidly and continuously exteriorized into and even disrupted by new hyper-industrial technologies, without the possibility of re-interiorization.

The last two sections of this chapter aim to explore how the Chinese sociotechnical system and cultural environment might influence Chinese citizens' imagination and desire toward the future, this latter being the object of grandiose speculations in today's China, particularly in terms of how technology might contribute to shape it. To insist on this point, I would like to share an aesthetic experience I had in spring 2025, when I spent my research semester in Beijing. I was visiting an exhibition at the National Art Museum of China (NAMOC), titled "Beauty in Life" (*meng zaishenghuo* 梦在生活)[1086], which made me think about the pervasiveness of technology within visions shaping the present and the future of the PRC.

Two sizable paintings caught my attention. The first, titled *Fly the Dream* (*fangfei mengxiang* 放飞梦想), by Zhang Lin and Yang Ke, depicted a crowd of joyful people, representing different statuses and professions (engineers, doctors and nurses, white-collar and blue-collar workers, graduate students, old people and children) and a flock of doves. All these figures were standing on the red background with yellow stars of the PRC's flag. The almost 2mx4m triptych condensed a rather positive image of the Chinese nation. In addition to the people and the doves, only another element was ubiquitous: technology. In the painting, children were joyfully using virtual reality visors or watching drones flying over the skyline of a futurist city and carrying pending Chinese traditional red paper scrolls, usually pasted on front doors during Chinese New Year, reciting "dream" (*mengxiang* 梦想). Other technological components, such as a robot, a satellite, an airplane, and the sketch of a high-speed train on the red flag background, emerged as elements interacting harmoniously with the crowd. Apart from the red, which visually dominated, nuances of gray also stood out evocating metallic elements.

[1085] Stiegler, *What Makes Life Worth Living*.
[1086] For the introduction to this exhibition provided in Chinese by the official website of the NAMOC visit '美在生活——我们在幸福中美术作品展开展_中国美术馆', 中国美术馆 National Art Museum of China, January 2025, https://www.namoc.cn/namoc/zhanlan/202501/30140a7928304824835e41cee7984469.shtml..

Figure 1: *Fly the Dream* (*fangfei mengxiang* 放飞梦想), by Zhang Lin and Yang Ke (2019), 180x390cm (NAMOC collection). Image retrieved from the official website of NAMOC.

The other painting, located in the same exhibition room, was titled *Internet Plus Entrepreneurial Era* (*hulianwang+chuangye shidai* 互联网+创业时代), by Luo Xiaoshan. Even bigger (230x450cm), it portrayed different crowds of joyful Chinese citizens plus two smiling robots interacting with digital devices such as computers, cameras, and engineer tools. Some of them, including a bunch of astronauts, were waving at the spectator, others were intent to show prizes. In the right angle, a god-like figure coming from the cosmos was interacting with astronauts flying the sky in space suits. In the background, high-speed trains, airplanes, futuristic cities and infrastructures, and a globe enveloped in the Internet web popped up among the bunches of seemingly happy and successful people. The colors were bright, and the triptych returned a sensation of movement (some people were even dancing) enhanced by geometric arrows and the prospective depiction of the train and the airplane.

Figure 2: *Internet Plus Entrepreneurial Era* (*hulianwang+chuangye shidai* 互联网+创业时代), by Luo Xiaoshan (2019), 230x450cm (NAMOC collection). Photo of the painting taken by the author.

National museums in the PRC are largely influenced by top-down ideological constraints[1087], consequently a similar exaltation of national development and technological flourishing is not astonishing and its impact on citizens' imaginary might be carefully considered. Nevertheless, it was interesting to remark how technology, which was not the central element of the exhibition – centered instead on the vague utterance "beauty in life", reminiscing one of the key phrases of Xi Jinping, "Beautiful China", which comprehends "the beauty of the environment, the beauty of the times, the beauty of life, the beauty of society and the beauty of the common people"[1088] – recurrently emerged as a core element, also in other art works presented at the exhibition.

What I realized in the first person was that, in today's China, there is the production of an imaginary of the future, a collective and national "dream" that, even though top-down diffused and even imposed, as already discussed in the first chapter (1.1), stimulates narratives and imaginaries, aspirations and desires, by strictly associating them with technology. As a consequence of the pervasiveness of this narrative, citizens' imaginary and imagination become increasingly occupied and even colonized by the idea of technological innovation as a solution and an ultimate resource, which is the strategy of

[1087] Vivienne Chow, 'Chinese President Xi Jinping Has Told a State Art Museum to Uphold "a Politically Correct Direction" Amid Pressures on China's Cultural Sector', Politics, *Artnet News*, 31 May 2023, https://news.artnet.com/art-world-archives/xi-jinping-national-art-museum-of-china-political-correctness-2312067; Fenghua Zhang and Pascal Courty, 'The China Museum Boom: Soft Power and Cultural Nationalism', *International Journal of Cultural Policy* 27, no. 1 (2021): 30–49.

[1088] Maurizio Marinelli, 'How to Build a "Beautiful China" in the Anthropocene. The Political Discourse and the Intellectual Debate on Ecological Civilization', *Journal of Chinese Political Science* 23, no. 3 (2018): 365–86, p. 379.

"techno-solutionism". This observation is not made to advance that the PRC maintains a peculiar or even privileged relationship with future (as in the Sinofuturist trope discussed in 1.1), but to expound how in today's China the insistence on the technological dimension imaginatively produces a national discourse about the future, with a nationalistic astray.

As numerous times remembered by Stiegler, technics plays a pivotal role in shaping our relationship with time (being time itself) and, especially, with future. Through technics, humanity attempts to anticipate the future, to deal with it[1089]. A reflection on our present time is also a reflection on how the construction of time and the relationship with the future depend on technological evolution, being at the same time affected by this latter. In light of this, in our contemporaneity, it is also a matter of technological acceleration that deserves political and intellectual reflection to re-orient the global future. It is important to remind that for both Stiegler and Hui the response to the current disrupting crisis must pass through a rethinking of technology and of its positive adoption in our societies, and not through a mere reject of it. This reframing operation should be the object of a work of imagination to project desire into the future.

According to Stiegler, imagination, like memory, is a human faculty supplemented and, thus, enabled by technics. Technics as exteriorized memory filters the way in which humans *schematize* imagination (a terminology Stiegler derives from Kant[1090]). Antonio Oraldi underlines how in Stiegler's reflection memory and imagination are co-dependent[1091]. While imagination enables the exteriorization of memory through technics, the process of exteriorization is in turn influenced and oriented by collective imaginaries on technics so that human consciousness is shaped by the "co-evolution of its dreams and its technics"[1092]. At the same time, the exteriorized memories selected and sedimented through technologies, such as books, movies and social media contents too, influence, as a material and pre-existing fund, individual imagination.

Given the predominant role of imagination in anticipating and projecting the future, Stiegler urges for a politics of imagination recognizing that this faculty is always technologically assisted and, thus, largely influenced in its potential by the evolution of the technical system. As remarked by Oraldi, "the saturation of the contemporary technical milieu with reproducible content […] calls the critical theorist to the task of questioning how the regime of production and distribution of fictions shapes

[1089] Although, as expounded in 1.2, before modernization, traditional cosmotechnics originated different understandings of the technics/time relation, the object of analysis in Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*.
[1090] See Bernard Stiegler, *Technics and Time 3: Cinematic Time and the Question of Malaise*, Meridian (Stanford University Press, 2011).
[1091] Antonio Oraldi, 'Phantasy, Technology, Critique: On Bernard Stiegler's Pharmacology of the Imagination', *I Castelli Di Yale Online. Annali Di Filosofia* XII, no. 2 (2024): 109–22.
[1092] Bernard Stiegler, 'Organology of Dreams and Archi-Cinema', *Nordic Journal of Aesthetics* 24, no. 47 (2015): 7–37, p. 33 quoted in Oraldi, 'Phantasy, Technology, Critique', p. 114.

the collective imagination and its potential to imagine future possibilities"[1093]. Oraldi thus identifies two main issues affecting imagination at the encounter with hyper-industrial technologies according to Stiegler's analysis: standardization and exclusion. The former relates with the fact that contemporary technologies shaping imagination, such as movies, are more and more globally consumed, to the point that there is a convergence of the *I*'s imagination towards a single and depersonalized *one*. This tendency limits the possibility of differentiation with detrimental effects for individuation processes, which instead thrives through gaps and discrepancies. Exclusion, instead, relates with the fact that, following the trajectory of grammatization, imagination, too, is a faculty increasingly exteriorized without the introduction of practices to re-interiorize it. This process originates a sort of "automatization" of imagination that, concomitantly with the harnessing of attention, further accelerates the proletarianization of citizens worldwide[1094].

As remarked by Oraldi, "if technical objects and media function as supports for memory and imagination, then the imagination is not merely an internal, unconstrained, and individual faculty, but it is decisively formed in the interplay between subject and milieu with its associated power relations"[1095]. In light of this, it can be deduced that citizens' imagination is not immune to top-down and often nationalist imaginaries advancing a specific role of technology in the collective future. Stiegler's analysis, in fact, demonstrates that the impact of current sociotechnical imaginaries not only influences citizens' imagination and desires but also contributes to actively shaping (and even deteriorating) the faculty of imagination, with consequences for the collective future, as long as the evolution of the technical system also depends on imagination itself.

To explore the technology/imagination nexus in today's China, two distinctive sets of imaginaries projecting China into the global future are critically analyzed in the last part of this chapter: the top-down narrative and policy of the "ecological civilization", and the more popular production of sci-fi literature in the country, reaching today international recognition.

Ecological Civilization: Geo-engineering and Cultural Nationalism[1096]

The Anthropocene[1097], namely the conceptualization of a new geological era massively upset by human activities, has revealed the disruptive impact of technologization on the environment and on global ecosystems. As remarked by Hui, "The recognition of the Anthropocene is the culmination of

[1093] Oraldi, 'Phantasy, Technology, Critique', p. 118.
[1094] *ivi*, pp. 118-19.
[1095] *ivi*, p. 117.
[1096] Part of the contents included in this section are taken from an article I have published for an Italian online journal: Sara Corsaro, 'La Cosmotecnica Cancella i Confini, Il Tecno-Nazionalismo Cinese Li Riscrive', *Sinosfere* 21 Confini (March 2025), https://sinosfere.com/2025/03/29/sara-corsaro-la-cosmotecnica-cancella-i-confini-il-tecno-nazionalismo-cinese-li-riscrive/.
[1097] Simon L. Lewis and Mark A. Maslin, 'Defining the Anthropocene', *Nature* 519, no. 7542 (2015): 171–80.

a technological consciousness in which the human being starts to realize, not only in the intellectual milieu but also in the broader public, the decisive role of technology in the destruction of the biosphere and in the future of humanity"[1098]. For Stiegler, it is an epoch of increasing entropy, an "Entropocene", a term he employs to philosophically analyze the increasing disruption affecting both the ecosystems and the social systems and generated by the increasing "toxicity" of the technical milieu[1099]. Hui insists on how the existential shift originated by this era impacts humanity's life on earth as well as its relationship with time by affirming that "in this conceptualization of our epoch, geological time and human time are no longer two separate systems"[1100].

Academicians and scientists have urged governments to respond to this structural and systemic environmental global crisis. UN Climate Change Conferences have been organized each year since the 90s [1101] to think about how to multilaterally react to this planetary challenge. Nevertheless, the results of these negotiations and the strategies adopted by global leaders remain far from being reassuring, with countries such as the US even withdrawing from previous commitments. The PRC, instead, has been distinguishing as a country committed to reduce greenhouse emissions[1102] and to reach carbon neutrality by 2060, after a "carbon peak" in 2030. Moreover, the Chinese government has been promoting sustainable development practices and "green industrialization", with results exalted by the Party-State but resized by international analysts[1103].

The political strategy around which the Party-State has organized its national discourse and international soft power concerning the environmental challenge is the "ecological civilization". The "ecological civilization" (*shengtai wenming* 生态文明) has been official introduced as an official core political concept in the PRC in 2012[1104]. It is an axiom forwarding a further *teleological* step in the Chinese civilizational progress presented as the successive phase to "industrial civilization". The choice of the recurrent expression "civilization" in pair with a qualifier also reproduces a well-

[1098] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 293
[1099] Bernard Stiegler, 'The Ordeal of Truth: Causes and Quasi-Causes in the Entropocene', *Foundations of Science* 27, no. 1 (2022): 271–80; see also Stiegler, *The Neganthropocene*.
[1100] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 293.
[1101] 'UN Climate Change Conferences', United Nations, accessed 27 October 2025, https://www.un.org/en/climatechange/un-climate-conferences.
[1102] Xiaoying You, 'China Pledges to Cut Emissions by 2035: What Does That Mean for the Climate?', *Nature* 646, no. 8084 (2025): 266–67.
[1103] Fiona Harvey, 'China's Plans to Cut Emissions Too Weak to Stave off Global Catastrophe, Say Experts', Environment, *The Guardian*, 24 September 2025, https://www.theguardian.com/environment/2025/sep/24/chinas-plans-to-cut-emission-too-weak-to-stave-off-global-catastrophe-say-experts.
[1104] The concept has been embraced within the 17th National Congress of the CCP and established again in the 19th National Congress of the CCP (in the report: "Building an ecological civilization is vital to sustain the Chinese nation's development"); since 2018, the concept has also been enshrined in the PRC Constitution. For a conceptual genealogy of the "ecological civilization" see Pablo I Ampuero-Ruiz, 'New Energy Vehicles and the Political Geoecology of China's Ecological Civilization', *Environment and Planning C: Politics and Space* 0, no. 0 (2024): 1–15.

established continuum of ideological utterances: it follows the "spiritual civilization", the "material civilization", and the "political civilization" [1105] already introduced and discussed in Chapter 2.

The "ecological civilization" epitomizes the idea of an alternative path of development and technologization within the PRC, capable of producing a harmonious progress with the environment. It is an ambitious project, a "state-initiated imaginary of our global future"[1106], that claims to take inspiration from Chinese philosophical tradition, combined with socialism, to shape an alternative, "eco-friendly", sustainable development. The initiative is also seen as a strategy to boost the country's economy, for instance, in the sector of renewable energies and EVs[1107]. Top-down discursive and ideological strategies are implemented to "educate" Chinese citizens to sustainable practices. At the same time, there seems to be also bottom-up citizens' responses, represented, for instance, by the (international) success of Chinese influencers promoting rural revitalization and sustainable lifestyles romanticizing Chinese traditional rural life [1108]. According to Virginie Arantes, the "ecological civilization" initiative must also be read as an ideological alternative produced by the Chinese government in the shape of a "green nationalism" to foster the country's position in the global arena. At the same time, this strategy might improve the performance legitimacy of the PRC, also internally, by claiming that authoritarian governments are more able to respond to the environmental crisis[1109].

The "ecological civilization" axiom forwards a strong imaginary of China's national and global future. Within the wide-ranging discourse of the "China Dream"[1110], the "ecological civilization" contributes to build a self-confident national imaginary, also in terms of "cultural self-confidence" (*wenhua zixin* 文化自信)[1111] and even of "cultural nationalism"[1112]. Moreover, this strategy puts into action a self-positioning of China as the leader toward the global future. However, it appears as a deterministic, and even "imposed" future coming from the past: a dream "nurtured over more than 5000 years"[1113], in which "China is presented as a unified, ontogenetic civilization that developed accordingly to a linear, rational and almost mechanically instantiated teleology"[1114]. To this regard,

[1105] Coraline Goron, 'Ecological Civilization and the Political Limits of a Chinese Concept of Sustainability', *China Perspectives* 2018, no. 4 (2018): 39–52, p. 41; See also Dynon, '"Four Civilizations" and the Evolution of Post-Mao Chinese Socialist Ideology'.
[1106] Mette Halskov Hansen, Hongtao Li, and Rune Svarverud, "Ecological Civilization: Interpreting the Chinese Past, Projecting the Global Future," *Global Environmental Change* 53 (November 2018): 195–203, p. 2.
[1107] Ampuero-Ruiz, 'New Energy Vehicles and the Political Geoecology of China's Ecological Civilization'.
[1108] Arantes, 'Towards a Green Nationalism with Chinese Characteristics?'.
[1109] *ibid*.
[1110] Wang, 'The Chinese Dream'; Peters, 'The Chinese Dream'.
[1111] Beatrice Gallelli, 'Doing Things with Metaphors in Contemporary China Analyzing the Use of Creative Metaphors in the Discourse on the Chinese Dream', *Annali Di Ca' Foscari. Serie Orientale* 54 (2018): 595–617, p. 603.
[1112] Jason Cong Lin, 'The Rising China Is Not a "Sick Man" Anymore: Cultural Nationalism in the Xi Jinping Era', *Journal of Contemporary China* 33, no. 145 (2024): 83–100.
[1113] Jiahua Pan, *China's Global Vision for Ecological Civilization: Theoretical Construction and Practical Research on Building Ecological Civilization*, trans. Dan Wu (Springer, 2021), p. 12.
[1114] Marinelli, 'How to Build a "Beautiful China" in the Anthropocene. The Political Discourse and the Intellectual Debate on Ecological Civilization', p. 368.

Maurizio Marinelli sustains that, through the "ecological civilization", the CCP guards the promise to solve the present crisis in a moment located in a "future perfect tense", with the consequence that the future becomes thus "perfectible", but also pre-determined, a sort of "self-fulfilling prophecy", while the present crisis is ultimately avoided[1115]. As further clarified by Marinelli, the future perfect tense "combines the projection into the future with the assumption of a perfect aspect that views an event as completed *a priori* and therefore indicative of progress"[1116].

From this perspective, it might be advanced that the Chinese nation is presented as pre-destined to fulfill this leading task. The "ecological civilization", in fact, relies on the idea that the Chinese traditional vision of cosmos did not outstrip humans from nature. To assess this point, a preeminent theorist of the "ecological civilization", Pan Jiahua, quotes the *Daodejing*: "Man takes his law from the Earth; the Earth takes its law from Heaven; Heaven takes its law from the Tao. The law of the Tao is its being what it is"[1117]. Other times it is the Confucian principle of *tianrenheyi* 天人合一 ("the oneness of heaven and man") to be summoned to demonstrate that Chinese traditional philosophy originated a harmonious understanding of the relation between humankind and nature. Some criticisms were raised against such an interpretation of Chinese thought, which is, contrarily, considered substantially "anthropocentric" (particularly the Confucian tradition)[1118]. Moreover, the scholarship has underscored that, during Imperial China, more often than not, the infrastructural projects damaged or even destroyed the natural environment[1119]. Concerning this culturalist revival, Goron advances that patterns from traditional culture are selected carefully to respond to opportunistic political needs[1120]. At the same time, it has also been pointed out that the term "ecological culture" has originated in the USSR[1121], as Marxist theorization, and Pan Jiahua, too, has endorsed the deeply eco-Marxist character of the concept[1122]. However, from the perspective of philosophy of technology delineated by Hui, it can be acknowledged that the understanding of the cosmological order in pre-modern Cina diverged from the Western one, originating a peculiar relation with technics before Western modernization and colonization. Should we thus consider the "ecological civilization" as a project able to challenge the contemporary dominant cosmotechnics? But, also, how should we interpret the use of the past, of this revival of culturalist confidence, as a way toward the future,

[1115] *ivi*, p. 383.
[1116] *ivi*, 2018, p. 368.
[1117] Jiahua Pan, *China's Environmental Governing and Ecological Civilization*, China Insights (Springer ; China Social Sciences Press, 2016), p. 35. The *Daodejing*, or *Laozi*, is a Chinese classic text and the foundational work of the Daoist philosophical tradition.
[1118] Hansen et al., 'Ecological Civilization', p. 7.
[1119] Mark Elvin, *The Retreat of the Elephants: An Environmental History of China* (Yale University Press, 2006).
[1120] Goron, 'Ecological Civilization and the Political Limits of a Chinese Concept of Sustainability', p. 42.
[1121] Arran Gare, 'Ecological Civilization: What Is It and Why It Should Be the Goal of Humanity', *Culture of Sustainability* 27, no. 1 (2021): 8–23.
[1122] Pan, *China's Global Vision for Ecological Civilization*, chapter 1.

particularly after the considerations on ethnicity and technics developed at the beginning of this chapter?

The scholarly attention as already been directed to assess the limits of the practices forwarded by the "ecological civilization" in terms of environmental impact, economic (de)growth, sustainable development practices and "green" technologization. A part of literature has critically addressed the discourse on "ecological civilization", as it fails to contest or reject the idea of development or economic growth but, on the contrary, in some nuances it is also meant to boost growth and technologization, for example through a "green economy", while establishing practices of "authoritarian environmentalism"[1123]. Here, the intent is rather to analyze whether and to what extent the theory of "ecological civilization" addresses technologization and which is its positioning within the contemporary globalized cosmotechnics. In this sense, the "ecological civilization" axis is even more than a powerful sociotechnical imaginary reinforced with cultural confidence[1124]: if we understand the entanglement of human and technology in terms of a continuously redefined relation between technical individuation and collective individuation (producing time and history), in which the selection of memories (through technology) influences the projection toward the future, the impact of the shaping of a (top-down) imaginary, interpretation and comprehension of the role of technology must be addressed carefully.

The "ecological civilization" imaginary can be discursively analyzed through the metaphor "clear waters and lush mountains are gold and silver" (*lüshui qingshan jiushi jinshan yingshan* 绿水青山就是金山银山), officially traced back to a discourse pronounced by Xi Jinping in 2005[1125], and later developed as a pervasive slogan of the "ecological civilization" discourse. It must be remarked that mountains and rivers represent evocative "ethnonational symbols" of the Chinese traditional thought, culture and aesthetics, whose symbolic cultural value have lasted, with reinterpretations, until nowadays[1126]. The sentence refers to the idea that nature must be understood in terms of a fundamental asset, with the idea that ecological advantages represent economic advantages. The evocation of precious metals referring to the value of the environment resonates with Heidegger's description of the open pit mine in its famous critique of modern technology, which he interpreted as a force

[1123] Anna L. Ahlers and Yongdong Shen, 'Breathe Easy? Local Nuances of Authoritarian Environmentalism in China's Battle against Air Pollution', *The China Quarterly* 234 (June 2018): 299–319; Yifei Li and Judith Shapiro, *China Goes Green: Coercive Environmentalism for a Troubled Planet* (Polity, 2020), p. 26.
[1124] Hansen et al., 'Ecological Civilization', p. 3.
[1125] On the "cumulative genealogy" of this utterance see 'Green Waters and Green Mountains', *China Media Project*, 16 April 2021, https://chinamediaproject.org/the_ccp_dictionary/green-waters-and-green-mountains/.
[1126] John Qiong Wang, 'The Ethnonational Symbols of "Mountain-River" in Contemporary Chinese Discourse', *Cogent Arts & Humanities* 11, no. 1 (2024): 1–27. For a philosophical comparison between the value of landscape in Chinese and Western thought see also Jullien, *Vivre de Paysage, Ou, L'impensé de La Raison*.

unveiling nature in a world become "standing-reserve"[1127]. As Pan Jiahua clarifies while expounding the "Two mountains Theory" (*liangshanlun* 两山论), which has crystallized around the interpretations of this official utterance, the "ecological civilization" must prioritize the protection of environment over profit: "We want to have not only mountains of gold, but also mountains of green. If we must choose between the two, we would rather have the green than the gold. And in any case, green mountains are themselves gold mountains"[1128]. However, against the romantic awe toward nature the project is supposed to make people rediscover, a few paragraphs later the role of the environment is established in these terms:

> For example, we will insist on the economical and intensive use of resources, rely on the advantages of ecological environment to develop green industries, and make full use of good ecological environment to attract high-tech talents and modern industries with high-tech as the core. As such, the beautiful ecological environment will become an important "natural capital", and bring more development opportunities[1129].

The Party's interpretation of "ecological civilization" is, thus, that of a dialectical and productive relationship between ecological protection and economic development[1130]. At the same time, the environment, become a "natural capital", can boost technologization, while the vice versa is also possible. In fact, through technology, it is possible to augment the "natural capacity", for example, by extracting water from the clouds[1131]. It can be thus assumed that the "ecological civilization" seems not directed to eradicating the contemporary "cosmotechnics" (simplified as the rationales behind globalized capitalism), but to domesticate it – or to establish a culturalist and even nationalist discourse, a path, supposed to appropriate it. The simple idea of "building a beautiful China" (*jianshe meili zhongguo* 建设美丽中国) – previously mentioned as one of the key slogans pronounced by Xi Jinping – implies the centrality of human intervention within the project, which can be described also in terms of "geo-engineering"[1132].

Therefore, "techno-optimism" – fostered by techno-solutionism – seems to be the ordinary approach toward environmental issues in the PRC, as the dedicated issue of the *Made in China Journal* "Prometheus in China. Techno-Optimism and Its Discontents"[1133] describes. The one pursued seems to be an "engineered" harmony[1134], perpetuating a development that ingests or denature resources. Once again, it is important to stress that the techno-solutionist approach cannot be

[1127] Heidegger, 'The Question Concerning Technology', pp. 287-317.
[1128] Pan, *China's Global Vision for Ecological Civilization*, p. 25.
[1129] *ivi*, p. 34.
[1130] Ampuero-Ruiz, 'New Energy Vehicles and the Political Geoecology of China's Ecological Civilization', p. 4
[1131] Emily T. Yeh, 'Sky River: Promethean Dreams of Optimising the Atmosphere', in *Prometheus in China. Techno-Optimism and Its Discontents*, ed. Ivan Franceschini et al., Made in China Journal, Volume 7, Issue 2 (2022).
[1132] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 293
[1133] Franceschini et al., *Prometheus in China. Techno-Optimism and Its Discontents*.
[1134] *ivi*, p. 8.

considered a Chinese anomaly or deviance: for instance, while describing the "Sky River Project" (*tianhe gongcheng* 天河工程) as a "Promethean environmentalist" venture to change weather in China and increase rainfall, Emily T. Yeh points out that a similar project had been proposed (and later blocked) in the context of the US war against Vietnam[1135]. We can remark, however, that in China techno-optimism pairs with a renewed self-confidence about the position of the PRC within the world order and with an insisted use of the cultural tradition to forward such strategy.

However, the incommensurable distance separating the contemporary Chinese epistemics with its traditional metaphysics and understanding of nature and cosmos is underscored by Pan himself, who claims: "The ecological civilization in modern age is no longer the passive accommodation of nature over 2000 years ago but the harmony between human and nature based on modern science and technology and people's deep understanding about nature"[1136]. The "ecological civilization" does not simply fail "to acknowledge the contradiction between industrialization and the environment", as remarked by anthropologist Wang Mingming[1137], but it also promotes a culturalist and past-oriented inspiration which, as also underlined by Hui, appears irreconcilable with the contemporary globalized cosmotechnics, particularly after China's "oblivion" of its traditional cosmotechnics. At the same time, Hui remarks that it would be inconceivable for the Chinese people to refute modern science and technology as they both constitute a past China did not directly experience but inherited as well as a global-ized epistemic experience[1138]. This "metaphysical rupture" characterizing our epoch, and particularly hitting non-European cultures, is addressed by Hui in these terms:

> The earth and the cosmos have been transformed into a gigantic technological system, the culmination of the epistemological and methodological rupture which we call modernity. The loss of the cosmos is the end of metaphysics in the sense that we no longer perceive anything behind or beyond the perfection of science and technology[1139].

According to Hui, two different ways unfold to address the current global crisis represented by the Anthropocene: "one is geo-engineering, which believes that the earth can be repaired by employing modern technology (e.g. ecological modernism); the other is the appeal for cultural plurality and ontological pluralism"[1140]. The philosophical attempt undertaken by Hui is directed at exploring the second pathway beyond national histories and the return to locality. Traditional cultures and ontologies, in his analysis, should be programmatically re-discovered and considered as an inspiration, however they cannot constitute a "solution", because doing so would imply a return to a localized

[1135] Yeh, 'Sky River: Promethean Dreams of Optimising the Atmosphere'.
[1136] Pan, *China's Environmental Governing and Ecological Civilization*, p. 38.
[1137] Wang, 'To Learn from the Ancestors or to Borrow from the Foreigners', p. 401.
[1138] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, p. 290.
[1139] Hui, 'Cosmotechnics as Cosmopolitics', p. 2.
[1140] Hui, *The Question Concerning Technology in China an Essay in Cosmotechnics*, pp. 293-294.

cosmotechnical unity that does not exist anymore. Instead, a plurality of cosmotechnics should be reinvented to imagine new technological adoptions beyond locality:

> In contrast to the appeals to 'return to nature' or to 'reset modernity', what I have tried to propose here is a rediscovery of cosmotechnics as both metaphysical and epistemic project. The question that remains to be further formulated is that of the role to be played by modern technologies in this project. […] It is less about the role of China in the Anthropocene – although we know that China has contributed greatly to its acceleration – than about how China (for example) will reposition itself in relation to the gigantic force of the earth-human time-axis constituted by modern technologies. How is it possible to connect technological consciousness with the cosmotechnics that we have tried to illuminate here?[1141]

China, instead, as illustrated in this chapter with various examples, seems to be undertaking the first path, that of a techno-solutionist and techno-nationalist approach to the global ecological, economic and political crisis, instrumentally insisting on national boundaries and on nativist differences, while largely contributing to the processes of planetarization.

In parallel to the top-down imaginary of the "ecological civilization", bottom-up speculations on China's future and on technologization emerge from the Chinese science fiction literature, today a genre reaching the global readership.

Techno-Dystopias from Chinese Science Fiction[1142]

This last section aims to explore the impact of technologization and modernization on citizens' individuation by analyzing how the recurrent tropes of Chinese science fiction might shape the national and even international readers' imaginary concerning China, technology, and the future.

In post-reform China, and especially starting from the 90s, science fiction (*kexue xiaoshuo* 科学小说, literally "science novels") has thrived in the country and has established itself to the global public, also thanks to a flourishing of translations in recent years. The consecration of this international success has been epitomized by Liu Cixin's *Three-Body Problem* (*santi* 三体), the first volume of a Chinese sci-fi trilogy that has won many national and international awards (among which the Hugo Award, the most prestigious international prize in the field of science fiction and fantasy literature). The 2024 Netflix's adaptation of this book has further contributed to make a greater global audience discover Chinese sci-fi.

Even though some scholars trace back the genesis of the Chinese science fiction to the mythological and fantastic literary tradition of Chinese literature[1143], the history and origins of the modern sci-fi genre in China date back to the late-Imperial intellectual context. Among the cultural

[1141] *ivi*, pp. 296-297.
[1142] Part of the contents expounded in this section are taken from a presentation I held in March 2024 at the PhD Conference 'Cannibal Consumption: Culture, Capitalism, Critique' at the UCD Humanities in Dublin.
[1143] Wu Yan et al., 'A Very Brief History of Chinese Science Fiction', *Chinese Literature Today* 7, no. 1 (2018): 44–53, p. 45.

pioneers of Chinese sci-fi, which was imported from the colonial and technologically driven modernity of the West in late Qing China, Liang Qichao and Lu Xun stand out[1144]. Liang Qichao (1873-1929) is better known as an intellectual, politician and ideologist engaged with China's modernization and national dream of rejuvenation (his role in shaping Chinese citizenship has been discussed in 1.3). However, among his wide literary production, he also translated Western sci-fi novels and experimented with this genre. He wrote a novel, *The future of new China*, where he imagined the near political redemption of China in 1962, become a world power after the humiliation of semi-colonization. Lu Xun (1881-1936), the literary father of modern Sinophone literature, translated Western sci-fi works too[1145] and, as a medical student and an intellectual of that time, showed interest in evolutionary theory, scientism, social Darwinism, and modern technology.

Since the introduction of this literary genre in late-Imperial China through translations from Western works, a political and nationalist view of technology and science against traditional culture projected dreams of power and rejuvenation into this literary production. At the turn of the twentieth century, late Qing intellectuals believed that science fiction could be used to spread modern science and technology among the Chinese people, humiliated by Western powers deemed "superior" because of their technological advancement. The spirit of these intellectuals is described by Han Song, a Chinese renown contemporary sci-fi writer, in this way:

> Both Liang [Qichao] and Lu [Xun] believed that science fiction would help the spread of modern knowledge in China, emancipate people's minds and bring positive developments to a declining civilization that was being surpassed by the industrialized Western nations. For a short period in the early twentieth century, sf writing by native writers became popular as the genre instilled pride in readers who saw China defeat Western countries with imaginary high-tech weapons in the future[1146].

The strict relation between national "redemption" and technologization that lied at the origins of the sci-fi genre in China has remained a core trope until today, as discussed more thoroughly later.

Over the decades, Chinese science fiction has known moments of success and setbacks as well. During the Maoist period, the so-called "science novels" became widespread, but encountered harsh criticism during the Cultural Revolution (1966-1976), as products of Western deviation. A revival followed in post-reform China, again suffocated in 1983, when this genre was accused of "spreading pseudoscience"[1147]. In fact, as a general understanding since Maoism and even before, the Chinese science fiction genre had to educate the masses on scientific topics and to divulgate scientific and

[1144] *ivi*, p. 46.
[1145] Yonglin Huang, *Narrative of Chinese and Western Popular Fiction: Comparison and Interpretation*, 1st ed. (Springer, 2018), p. 172. Mingwei Song, *Fear of Seeing: A Poetics of Chinese Science Fiction*, Global Chinese Culture (Columbia University Press, 2023), chapter 3.
[1146] Han, 'Chinese Science Fiction', p. 15.
[1147] *ivi*, p. 16.

technologic truth[1148] (and, interestingly, many contemporary Chinese sci-fi writers are scientists or have a scientific background). After 1989, a revival of the genre in the PRC, along with accelerated technologization and the spread of Internet, made its affirmation to the global readership[1149], with renown authors translated worldwide such as Liu Cixin, Han Song, Chen Qiufan, and Hao Jingfang[1150].

A double tendency characterizes the evolution of this literary genre in the PRC. On one side, China's cultural and literary world have been under the scrutiny of Party-State's ideology since Maoism. At the same time, the Party-State has recurrently supported the development of Chinese literature and culture as part of its ideological strategy. This is also reflected by the alternate repressions and endorsements directed toward the sci-fi genre. In the last years, the trend seems that of supporting the proliferation of science fiction works. In fact, in 2016, a plan was announced to promote scientific literacy and science fiction in general. It stated to:

> Aggressively develop science fiction, comics, videos, games and creation of other works of popular science [*kepu*] etc. Promote the establishment of policy to support the production of science fiction, promote the development of popular science games, increase the dissemination of popular science games, strengthen popular science production's international flow and cooperation[1151].

The aim is not simply to disseminate scientific knowledge and teaching, but also to contribute to popularize an international image of China as a technological advanced country and even superpower. This initiative underlines the successful "going global" strategy of the PRC, which, after having established itself as a political and economic power, finally aspires to "cultural exportation"[1152].

At the same time, however, John Hartley looks at the international success of Chinese science fiction as a "'bottom-up' globalization of the Chinese culture"[1153]. In this sense, it would be limiting to simply look at its international success as the simple representation of top-down policies to foster a monolithic image of this country in terms technologization, modernization and development. Instead, Chinese sci-fi should also be seen as a locus where these processes are more or less directly

[1148] Lennon Zhang, 'The Politics of Truth in China: Ontological-Ethical Dimensions of Science and Science Fiction', *Journal of Science Fiction and Philosophy* 5 (2022): 1–26.
[1149] Mingwei Song, 'After 1989: The New Wave of Chinese Science Fiction', *China Perspectives* 2015, no. 1 (2015): 7–13.
[1150] Some of the works of these authors have also been translated into Italian: Cixin Liu, *Il problema dei tre corpi*, trans. Benedetta Tavani (Mondadori, 2021); Song Han, *Oceano rosso: il nostro presente/il nostro passato*, trans. Asia Cigarini and Maria Renata Prosperi (ADD Editore, 2023); Song Han, *Oceano rosso. Il passato del nostro passato/Il nostro futuro*, trans. Chiara Cigarini and Martina Renata Prosperi (ADD Editore, 2023); Qiufan Chen, *Marea tossica*, trans. Benedetta Tavani (Mondadori, 2020); Jingfang Hao, *Pechino pieghevole*, trans. Silvia Pozzi (ADD Editore, 2022).
[1151] Angie Chau, 'From Nobel to Hugo: Reading Chinese Science Fiction as World Literature', *Modern Chinese Literature and Culture* 30, no. 1 (2018): 110–35, p. 117.
[1152] *ivi*, p. 113.
[1153] John Hartley, '"Pathetic Earthlings! Who Can Save You Now?" Science Fiction, Planetary Crisis and the Globalisation of Chinese Culture', *Global Media and China* 7, no. 1 (2022): 3–23, p. 7.

questioned, also thanks to the production of "heterotopias"[1154], namely speculative representations of "other" China(s), which the genre lends itself to develop. These fictional representations emerge as different versions of a

> "Sinotopia" 中托邦, a virtual form of China, a fictive unreality that speaks acutely to the country's undefined, unclear transforming realities, where imagination rewrites what is real into a monstrous conglomerate, like a chimera, of dreams and nightmares, ideas and ruins, memories and regrets. SF [Science fiction] depicting the hideous, disastrous, apocalyptic side to the story of modernity casts shadows of uncertainty over many domains of contemporary China's national program for reform, enlightenment, revolution, and rejuvenation[1155].

To this regard, three of the recurrent Chinese sci-fi tropes resumed by Song Mingwei, an expert of this literary genre, finely represent the questioning and imaginative potential of these novels: (1) China's rise in the global political arena is a central idea that, as already discussed, has been occupying Chinese sci-fi speculations since its origins; (2) the myth of development recurrently appears in dystopian and nightmarish versions, mirroring present social inequalities; (3) the posthuman vision is often discussed, along with conjectures concerning the impact of accelerated technologization on the future of humankind[1156]. In parallel, other scholars have also analyzed how Chinese sci-fi authors also deal with the challenges posed by the Anthropocene[1157].

These recurrent tropes of Chinese science fiction often converge to speculate on the role of the PRC in the global future and, particularly, on how such future depends, for the better or the worse, on technology. This popular genre is also able to investigate, more or less openly, the complicated relationship between the Chinese nation, its history, its current geopolitical role, its socio-economic context, and its accelerated technological development. Han Song (1965), a renown Chinese sci-fi writer and a journalist at Xinhua news agency, whose books have been translated into different languages, has labeled Chinese sci-fi a "response to modernization"[1158]. This author has received scholarly attention for its capacity to create nightmarish heterotopias reflecting on China's past, present and future[1159]. His stories are "haunted […] by the modern ghosts of the age of technology rather than by the classical ghosts of traditional supernatural stories"[1160] and are often bloody, chthonic, and gloomy. More generally, Han Song's literary production aims to shed a different light regarding the myth of development and, also, of globalization. For instance, *Red Ocean*[1161], a

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[1154] See, for instance, Loïc Aloisio, 'Elsewhere like Here: Heterotopias in Han Song's Science Fiction', *Cultural Geographies*, 30 June 2023, 1–13.
[1155] Song, *Fear of Seeing*, p. 24.
[1156] Mingwei Song, 'Variations on Utopia in Contemporary Chinese Science Fiction', *Science Fiction Studies* 40, no. 1 (2013): 86–102.
[1157] Jessica Imbach, 'Chinese Science Fiction in the Anthropocene', *Ecozon@* 12, no. 1 (2021): 121–37.
[1158] Han, 'Chinese Science Fiction'.
[1159] Aloisio, 'Elsewhere like Here'.
[1160] Liyuan Jia, 'Gloomy China: China's Image in Han Song's Science Fiction', trans. Joel Martinsen, *Science Fiction Studies* 40, no. 1 (2013): 103–15, p. 103.
[1161] This novel has just been translated for the Italian readers, see footnote 1150.

posthuman dystopia set in a post-atomic war underworld, has also been defined a "Sinotopia coming from the depths"[1162]. This novel combines temporal plans, re-writing China's past, imagining the global future after a planetary war, and exploring the impact of hyper-technologization on society as well as the darkness affecting a post-humankind that has "forgotten" technology.

Among the five recurrent themes in Han Song's literary production regrouped by Loïc Aloisio, three emerge as helpful to clarify how his works contributes to rediscuss the historical path of China and its present technological condition, by depicting future dystopias: (1) the China-US rivalry; (2) the country's unbridled development; (3) humanity's darkness as "revealed" by its employment of technology[1163]. Once again, Chinese sci-fi comes to discuss and revisit the national question of technologization and to diagnose its impact on the Chinese society. The author himself has reflected outside of its literary works on the effects of accelerated technologization and how this phenomenon affects Chinese sci-fi writers in a very first and existential place. He has claimed, in fact, that "Chinese sf writers are in a rather contradictory situation. Science, technology, and modernization are not characteristic of Chinese culture. They are like alien entities. If we buy into them, we turn ourselves into monsters, and that is the only way we can get along with Western notions of progress"[1164]. These words interestingly evoke the underlying, "unsolved" and tormented relationship between China and technology, which, as sustained throughout this research, the thoughts of Stiegler and Hui help extricate and elucidate. It is not surprising, thus, that Han Song has claimed that

> while most mainstream literature today focuses on China's past, science fiction looks to the future. And in China the future is now. A writer in present-day China does not even have to make an effort to imagine the future, as any day-to-day record of urban China's dramatic transformations is futuristic in itself. The realities of the country's rapid modernization are the stuff of fiction and some sf writers are chronicling their most dynamic dimensions[1165].

Han Song's novels are only a peculiar example of how Chinese science fiction can be at once a diagnostic meditation on the processes of modernization, which brings out social and ethical implications concerning accelerated development, and "a mirror of past, present and future"[1166], reflecting on the course of time and on China's place in world history. In this sense, it seems that the Chinese science fiction genre has trouble disengaging from the techno-nationalist perspective, even though it calls it into question by evoking humanity's concerns regarding how technological concretization is defining our relationship with future. Song Mingwei resumes the contrasting and overlapping perspectives emerging from Chinese sci-fi speculations in this way:

[1162] Song, *Fear of Seeing*, chapter 5.
[1163] Loïc Aloisio, 'Han Song : Pour Un Retour Sur Terre de La Science-Fiction':, *Monde Chinois* 51–52, no. 3 (2018): 77–88.
[1164] Han, 'Chinese Science Fiction', p. 20.
[1165] *ivi*, p. 18.
[1166] Aloisio, 'Han Song', p. 84.

> Deeply entangled with the politics of a changing China, science fiction today both strengthens and complicates the utopian vision of a new and powerful China: it mingles nationalism with utopianism/dystopianism, mixes sharp social criticism with an acute awareness of China's potential for further reform, and wraps political consciousness in scientific discourses about the powers of technology and the technologies of power[1167].

It remains debatable whether, apart from exploring and exposing the perils and threats behind accelerated technologization, Chinese science fiction can also be seen as a place where imagination and desire could guide China's future technological adoption, where the future can truly be the object of imaginative speculations which reframe the relationship with technology, and not simply the crystallization of "industrial protentions" and concretization, of drives and even fears induced by the sociotechnical imaginary in which Chinese citizens (and global citizens) are immersed. For instance, the approach contained in the collection of short-stories by Kai-Fu Lee (a Taiwanese venture capitalist working in the high-tech industry) and Chen Qiufan (a Chinese sci-fi writer), *AI 2041: Ten Visions for Our Future*, through which they image and describe, with the accuracy and insight of industry experts, near futures where applications of AI technologies are integrated in citizens' daily lives worldwide[1168], appears limited. The perspective adopted in this work, in fact, fails to take into consideration the constitutive role of technology in shaping social systems, in producing or disrupting individuation processes, memory and desires. The toxicity of the hyper-industrial technical system should be the object of a critique and of political action in the present, while the attempt contained in Lee and Chen's work remains constrained by imagining a future overdetermined by the current technical concretization and national pasts.

The exploration on contemporary technology-led disorientation and the consequent resurgence of nationalist responses from the perspectives of China's sociotechnical imaginaries reveals that the pervasiveness of the technological element still overshadows the constitutive and always disrupting role of technics in our lives. This oblivion exacerbates geopolitical dynamics without instead addressing technological concretization and its impact on social systems as an impellent political theme. Regarding the global re-emergence of nationalism, Stiegler points out that it would be misleading to reiterate an overcome binary cardinality, an obsolescent system of references marking difference between Wests and Easts. His proposal, thus, is that of reconstructing a "new cardinality", beyond the West/East dichotomy and its heritage, in order to create "a new style of style", namely, a yet to be imagined relationship with technology[1169]. Both Hui and Stiegler sustain that the focus must be displaced from issues about spatiality/territoriality, to issues about temporality, particularly about rhythm. In this sense, Hui advocates for an opening to a plurality of ontologies and of thoughts, able

[1167] Han, 'Chinese Science Fiction', p. 87.
[1168] Kai-Fu Lee and Chen Qiufan, *AI 2041: Ten Visions for Our Future* (WH Allen, 2021).
[1169] Stiegler, *Technics and Time 2*, p. 85.

to "practice" forms of *différance*, against the neocolonial imposition of a sole technological cosmotechnics represented by global capitalism. Seemingly, Stiegler prompts for the "possibility of a non-traditional—that is, non-ethnic—history"[1170], able to open to new forms of knowledge and context through an alternative co-individuation with technology.

This chapter engaged with an analysis of the interplay between ethnicity and technics to signify the role of the technical system in shaping sensory and symbolic experience, as well as cultural boundaries. As suggested by Stiegler, this original and generative relation has been continuously at once enabled and disrupted by the evolution of technics. Today, nation-states have inherited the ethnical/technical nexus, which, however, after the planetarization of technology, is on its way of disappearing because of synchronizing and homogenizing global processes that have established a single planetary technical system. The disappearance of those boundaries signifying belonging and symbolic values is a factor of disorientation for citizens worldwide. As a consequence, a resurgence of nationalist tendencies is on the rise globally as a response to these often-misinterpreted global processes. The analysis provided by Hui sheds light on the "going back" to the nation occurring in both the Global Wests and Easts (including the PRC), expounding the motives behind these "unhappy consciousnesses" who misinterpret the role of technology in the global present.

This chapter has also analyzed techno-nationalism as a flourishing global trend through which nation-states seek technological self-reliance and development as a means of increasing economic and political power. China is no exceptions in this global scenario. In this country, sociotechnical imaginaries are increasingly equated to the idea that the flourishing of the nation depends on technological progress and acceleration. To give further nuance to the analysis of the global rise of techno-nationalisms, this chapter has also analyzed how, contrarily to the imaginary behind the techno-nationalist narrative, the Chinese sociotechnical system is not alternative to the globalized one. It did so by expounding how China's technical "membranes" do not originate a constitutively peculiar or alternative relation with the digital ecosystem. At the same time, the discussion has also presented the PRC's strategy of international expansion of its technological infrastructure as a tendency not in contrast with its techno-nationalism but reinforcing it. This is further consolidated by the fact that through its international technological expansion China contributes to further disseminating the global cosmotechnics.

Finally, this chapter has explored two imaginaries produced in China and targeting the global future. The aim was to underline how technology appears as a fundamental element of the country's future status and progress, in order to give meaning to the hypothesis that the omnipresence of

[1170] *ivi*, p. 77.

technology as a pervasive discursive and visual element in Chinese citizens' lives contributes to affect their imagination and visions of the national and even global future, by overshadowing the possibilities to even conceive, or imagine, different ways to relate to technology.

CONCLUSIONS

Restating of the Research Questions and Main Findings

This research has enabled a philosophically oriented analysis of the technological circumstances affecting citizenship individuation in contemporary China. The original perspective employed in this work allowed for considering technology not as a mere instrument, but rather as both a constitutive and disruptive element of citizenship configuration. It did so by combining Stiegler and Hui's thought concerning technological globalization, as well as by proposing a philosophical lens to analyze citizenship as a threefold individuation process: at once psychic, collective, and technical.

The study has looked into the first research question - How is citizenship individuation being transformed by technological concretization in contemporary China? – by expounding how technological innovation in the country has been accelerating the processes of citizens' *dis*individuation. Since 1978, top-down market-oriented rationalities have rapidly contributed to China's integration into global processes of citizens' proletarianization. Consumerist practices and aspirational futures linked to economic growth, reinforced by an increasingly homogenizing planetary technical system, have profoundly affected Chinese citizens' ways of life. Concomitantly, the Party-State has contributed to steer and perfect these processes in order to advance the nation's developmental aspirations, while also maintaining a pivotal role in containing them. This has been achieved by presenting technology and technological rationales as neutral values and instruments aimed at enhancing citizens' "quality". Furthermore, the discussion on the CSCS has demonstrated how new digital infrastructures mediating citizens' interrelations affect both citizens' ethics and virtue, as well as the libidinal economy of society, by expanding consumerist and gamification practices into the domain of citizenship. The disruption of (the desire for) virtue and its transformation into measurable forms of credit or, even, into mere drives serves the overarching objective of reinforcing the country's economic performance.

The delving into the second question – In which ways does technology constitute an agentic and discursive element molding citizenship in this country? – has illuminated the constitutive role of the technical system in shaping citizenship, whether through hyper-industrial consumerism, the internalization of technoscientific rationales, or the constitution of "statistical doubles" under algorithmic governmentality reducing desire to drives. At the same time, the study has explored how, in today's China, technology is increasingly discussed as a key component of national progress, and continuously instrumentalized as a crucial factor for national security and consolidation. Technology in China has become indissolubly linked with the nation's flourishing and progress, as well as with ideas of improvement of the lifestyle of its citizens. This association, however, overshadows the fact that technology cannot be reduced to a mere instrument for achieving progress; rather it is a

constitutive element shaping humans and their social systems. In light of this, it has been recurrently emphasized that new technologies continuously disrupt the paradigms of citizens' individuation. The challenge, therefore, lies in how to contain and redirect such processes into a positive adoption, an issue the Party-State appears to manage by appropriating the role of moral and economic guide, without, however, foreseeing the detrimental effects of this type of "managed" technological concretization in the long term. Moreover, by analyzing the growing prominence of technology within global nationalist discourses, and by showing how the planetarization of the technical system constitutes an essential factor of disorientation for citizens worldwide, this research provides a different lens to understand the global resurgence of neoreactionary and nationalist sentiments. It has also been shown that sociotechnical imaginaries increasingly colonize Chinese citizens' minds with visions of a future more and more overdetermined by technological concretization. This occurs at the expense of imagination and of an urgent political reflection on the role of technology in shaping the collective and global future.

The investigation guided by the last research question - Why might a study on this matter shed light on trends of citizenship transformation at the global level? – has shown that Chinas has established itself as a new agent of modernization and of globalization. The PRC is accelerating global-ising processes by expanding its technological infrastructures abroad. Its prototypes of citizenship individuation and its digital ecosystems may influence other countries in the near future, if they are not already doing so. However, the study has also shown that the PRC is not constituting a distinctive anomaly or an alternative to Euro-American modernization, rather it is concretely expanding it, having appropriated and internalized its rationalities.

Starting from the exposition of the integrated perspectives of Stiegler and Hui, this research has originally combined and applied their philosophical lens to develop a methodological approach for analyzing and identifying concrete phenomena related to technology-led citizenship transformation. The study demonstrates how the synchronization of the PRC with the global temporal axis produced by the planetarization of the technical system homogenizes and accelerates citizens' *dis*individuation, revealing patterns and tendencies already identified by Stiegler in hyper-industrial democracies within a different socio-political context. This has been achieved by showing how the planetarization of a distinctive technological thought has expanded market-oriented rationales inducing further steps of citizens' proletarianization in the PRC. At the same time, the analysis of the CSCS has illustrated how global tendencies emerging from the convergence of technical concretization are producing new models of digital governance. In steering these new prototypes, the PRC positions itself as a new global-ising agent, showing that globalization today is also being driven by non-Western countries. Ultimately, the study argues that China is emerging as a key site for observing how processes of

citizenship individuation may evolve in the near future. In parallel, however, it must also be acknowledged that this evolution is the product of global tendencies and trajectories catalyzed by a globalized cosmotechnics, that is by a relation to technology shaped by globalized capitalist rationales. Throughout the study, these global continuities have been highlighted without, however, flattening or erasing existing peculiarities of the Chinese context.

Among the findings, the analytical lens developed in this research has proven useful for situating the emergence of China's techno-nationalist imaginaries within broader global trends and for assessing the role of technological globalization in producing and accelerating disorientation. The study has contributed to demonstrate that nationalist and reactionary trends are products of technological globalization and of its misinterpretation, this last produced by a misreading of the question of technology in our present. This question, instead, must be re-opened to foster a dialogue on how to advance a plurality of technological adoptions beyond locality. China's trajectory of synchronization with the global present, while also presenting distinctive traits, has shown that the lens of citizenship individuation constitutes an analytical paradigm that can be applied, if appropriately adapted, to other socio-political contexts. As anticipated by Arif Dirlik[1171], the becoming-sameness can now be understood in political-philosophical terms not through the Sino-orientalist trope (China's future democratization), but rather and conversely as a tendency toward global authoritarianism driven by technological acceleration, an acceleration that incessantly amplifies planetary disorientation and processes of citizenship *dis*individuation.

Limitations and Future Orientations (and Individuations)

Even though the proposed philosophical lens of citizenship individuation is deemed original for analyzing citizenship in a globalized world, while also having been further tailored to the Chinese context, the methodological approach of this study presents some limitations. (1) First, no primary data were collected, for instance through interviews. While knowledge of the Chinese language, culture and philosophy was an indispensable resource for conducting the research, the level of fluency was not deemed sufficient to carry out interviews with Chinese native speakers. Moreover, the awareness that some political topics addressed in the dissertation might make potential interviewees uncomfortable further deterred from taking this path, which could have nevertheless produced insightful results. (2) Second, official documents, regulations, and programmatic plans on matter of technology issued by the Chinese government were consulted but not systematically analyzed. This was partly motivated by the fact that the research was not aimed at specifically assess the political-technocratic approach of Chinese Party-State authorities regarding technological and digital

[1171] Dirlik, *Complicities*.

governance. (3) Third, although numerous secondary sources by Chinese scholars based both inside and outside the PRC were consulted, after an initial search on the China National Knowledge Infrastructure (CNKI) database directed at collecting philosophical papers commenting on the works of Stiegler and Hui, which did not yield relevant results, the research was not extended to other Chinese databases. This choice partially limits the study as it could not fully analyze discussions taking place within the Chinese academic context.

Future research stemming from this study could be directed at assessing processes of citizenship individuation in other non-Western contexts. The philosophical framework adopted here lends itself to applications in different geographical and political settings, when appropriately adapted, to assess the impact of global tendencies driven by technological concretization. Such investigations should aim to assess further tendencies and dynamics of citizenship *dis*individuation worldwide, and to further dismantle the rise of nationalist, nativist, and neoreactionary narratives. Indeed, the emphasis on deconstructing West/East binaries, which has guided this study, must also encompass other countries from the Global Easts and Souths. In this regard, excessive attention to the Chinese context and experience may risk overshadowing other non-Western trajectories. Following this direction, the pathway of rediscovering traditional cosmotechnics, which Hui exhorts to follow, represents an important preliminary step toward reconstructing the plurality of technical thoughts that existed prior to modernization and toward assessing the impact of their disappearance. For instance, an endeavor to recover the South American technical thought before modernization has already been undertaken[1172].

At the same time, to further expand the analysis on citizenship individuation, it is interesting to explore through future research what Hui calls an *individuation of thinking*, that is, a philosophical dialogue between Wests and Easts aimed at going beyond this binary and opening the way to a "technodiversity" shaping the next future. By individuation of thinking, he refers to an imaginative work capable of speculating on new processes of individuation emerging at the encounter with technological advancement. Under this lens, "[t]he individuation of thinking means the invention of new concepts in view of the incompatibility between two resources viewed from the present"[1173]. Hui urges that this speculative work should be conducted through contaminations with different philosophical thoughts, moving beyond mere comparative philosophy[1174].

Following Hui's proposal and focusing on the question of citizenship, future studies could be directed toward imagining new, "positive" models of citizenship individuation, in which, for instance,

[1172] Fernando Wirtz, 'La Cosmotécnica Como Método: Más Allá de Las Geoculturas / Cosmotechnics as Method: Beyond Geocultures', *Technophany, A Journal for Philosophy and Technology* 1, no. 1 (2021): 1–21.
[1173] Hui, *Post-Europe*, p. 109.
[1174] *ivi*, p. 63.

citizens self-determine and imagine how to appropriate and adopt technologies within the framework of technodiversity. One limitation of the present study, in fact, is that it has maintained a critical and diagnostic approach to the current situation, without engaging a more therapeutic perspective. The question of technological *adoption* versus *adaptation* becomes a question of "sovereignty" in relation to technology, one that involves exploring practices of technological appropriation capable of amplifying individuation, instead of disrupting it. As remarked by Hui, "what is at stake is not having a European Google or Facebook, but rather a new kind of search engine and social network which could facilitate individuation"[1175]. This consideration can also be extended to the Chinese context, where a Chinese Google (Baidu) or Facebook + Whatsapp (WeChat) already exist without, however, challenging the dominant cosmotechnics. Future research should therefore aim to investigate how to bottom-up reverse citizens' proletarianization, which is currently catalyzed by the planetary technical concretization. This imaginative work constitutes a philosophical task that, however, lends itself well to cross-disciplinary contamination with disciplines such as political theory, arts and literature, as well as with experimental practices of digital and technological design and usage.

[1175] *ivi*, p. 60.

PHILOSOPHICAL GLOSSARY

TECHNICS/TECHNOLOGY: Technics is broadly referred to as a general category including all practices and products of making. Stiegler looks at technics as "the invention *of* man": humanity is both subject and object of a co-constitutive relationship with technics. He shows that the evolution of man co-depends on the evolution of technics: technics and humankind are both simultaneously a product and a producer in a "transindividuation process" co-generating both. Stiegler understands technics as an "exteriorized memory" impressed on the objects by humans, which enables humanity to break the tie between species and memory. Individual development, in his view, is made possible by three kinds of memory: genetic memory, individual/nervous memory, external/technological memory. He calls *epiphylogenesis* the sedimentation process through which different kinds of memory accumulate. Technics constitutes, thus, an original human *prosthesis* that presents a *pharmacological* dimension: it produces both toxic and curative potentials which must be continually negotiated.

As remarked by Hui, while *technics* refers to a more general category, *technology* denotes to the acceleration of technical evolution that has taken place since European modernity, an evolution tending toward increasing automation. The distinction, in this sense, highlights a temporal shift producing a qualitative change in the category.

INDIVIDUATION: *Individuation* is an original philosophical perspective introduced by Simondon, which proposes to look at the individual from the processes of *individuation* rather than the other way around, namely at *individuation* starting from the individual. This approach departs from substantivist or hylomorphic perspectives that insist on a first principle or cause. According to such perspective, the living should not be analyzed as the result of an *individuation*, but as a theater of the continuous processes of *individuation,* namely incessant processes of polarization continuously crystallizing the living being. The framework of *individuation* does not only address the human individual, but it can be transversal to different scientific domains. We can speak of the individuation of the crystal, of the technical object (which Simondon referred to as *concretization*), or of the animal, though each presents substantial differences. Human individuation is a living individuation further connotated by the ongoing metastable processes of *transindividuation* that occur between psychic (the *I*) and collective (the *we*) individuation. The individual, in this sense, exists only as a continuous dephasing of the processes of individuation operating between these two poles, and never crystallizes into an individual *per se*. The charges of potential within *individuation* processes come from a *pre-individual*

fund that must not be considered as a cause or a principle, but rather the bearers of potential that are never fully exhausted through *individuation*.

According to Stiegler, Simondon fails to recognize that it is the technical system that constitutes the substratum enabling the transindividual. The pre-individual, understood in this configuration, becomes the depository of exteriorized memories preserved by the technical system, particularly by mnemotechnical objects (such as books and databases). Stiegler thus characterizes human *individuation* as threefold: a transindividuation process that is at once technical, psychic and collective. Based on this interpretation, citizenship – the political transindividuation process *par excellence* – is both originally enabled and continuously influenced by the configuration of the technical system. Stiegler shows, thus, that at the origins of the possibility of citizenship lie psychic and collective *individuation* processes, which are, however, enabled and altered by a transindividual fund made possible through technics.

*Dis*individuation occurs at the encounter with processes deteriorating or hampering *individuation*, destabilizing the incessantly crystallizing equilibria of psychosocial *individuation*.

TERTIARY RETENTIONS and PROTENTIONS: Inspired by Husserl's primary and secondary retentions, Stiegler introduces the notion of *tertiary retentions*, which he understands as the depository of experiences and memories produced and preserved by mnemotechnical objects and preserved as a transindividuation fund. He analyses how consumerism and advertising generate *industrial tertiary retentions*, namely mnemotechnical objects produced by media that alter desire and transform it into drives. Technical evolution continually reshapes the configuration of *tertiary retentions*. For instance, *digital tertiary retentions* (e.g., data) are not the same as *analog tertiary retentions*. Stemming from this analysis, Hui advances that digital objects produce *tertiary protentions*, namely inferences based on collected data that produce automated anticipations altering and erasing the indefinability of the future.

TECHNICAL/TECHNOLOGICAL CONCRETIZATION: According to Simondon, the individuation of the industrial technical object is a process of *concretization* tending to the concrete and all-comprehensive integration of the machine's parts and functions. It is an almost biological dynamic in which the technical object tends toward its integration, unity, and coherence. This does not imply an ineluctable or deterministic process of *concretization*, but rather that there is an internal tendency of technology to evolve in a particular direction. Contemporary technological *concretization* appears in Stiegler's analysis as a process submitted to financial rationalities.

GRAMMATIZATION: Grammatization is a term employed by Stiegler to refer to the gradual exteriorization of human faculties through technics. It is a process by which flows and streams intertwining our existences are discretized (that is, made discrete and exteriorized) through technics. For instance, writing represents a process of *grammatization* discretizing oral speech. Grammatization, as an original phenomenon, elucidates the successive phases of the technical history of memory, which have been accelerating since the modern age, producing in some cases "proletarianizing" effects.

PROLETARIANIZATION: *Proletarianization* is a core concept of Stiegler's philosophy. It derives from the Marxist analysis of the proletariat but is further developed by the French philosopher through an analysis of technical evolution and its impact on societies. In his interpretation of the proletariat and its relationship with technics, Stiegler rejects the idea of a gradual dissolution of the proletarian class in present times and, instead, advances that the processes of *proletarianization* are advancing and spreading in parallel with, and because of, technical concretization. In this view, *proletarianization* refers to the systematic dispossession of various human faculties driven by the accelerated technological concretization of hyper-industrial societies. The introduction of machines in the factories has led to the dispossession of the *savoir-faire* of workers whose practical knowledge was transferred to the machine-tool. The advent of consumerism has produced a second type of proletarianization, that of *savoir-vivre*, namely a gradual dispossession of everyday habits and existential motives. The most recent digital innovations may bring about another form of dispossession, that of *savoir-théoriser* or *savoir-penser*, according to which the very capacity for thinking is gradually exteriorized into machines, networks and digital systems. The process of *proletarianization* negatively affects individuation processes by short-circuiting them.

COSMOTECHNICS: Hui argues that the somatic function of technical objects *qua* prosthesis individuated by Stiegler is universal, however he rejects the idea of a "cosmological universality" of the technical apparatuses. According to him, the Greek concept of *techne* did not emerge alike in all cultures. Instead, each cosmological tradition developed a different scientific and technical thinking originating a peculiar relation with technics that he calls *cosmotechnics*. He classifies the Chinese *cosmotechnics* as form of thinking relating the cosmos and human beings and in which this relationship, established on a moral cosmology, was mediated by technical beings. The globalization of a single *cosmotechnics*, that of global capitalism, has led to the disappearance of the plurality of *cosmotechnics* existing before globalization.

PLANETARIZATION: Hui uses this term to refer to the current, late stage of globalization, shaped by ongoing processes of modernization, globalization and colonization. With the expression "*planetarization* of technology", he refers to the imposition of a single cosmotechnics resulting from these processes. The *planetarization* of technology gives rise to global processes of synchronization and homogenization, which in turn produce citizens' disorientation at the global level.

LIST OF ABBREVIATIONS

5G: Fifth Generation (of wireless cellular technology)

AI: Artificial Intelligence

ANS: Autonomic Nervous System

BAT: Baidu, Alibaba, Tencent

BRI: Belt and Road Initiative

CCP: Chinese Communist Party

CEO: Chief Executive Officer

CFO: Chief Financial Officer

CNKI: China National Knowledge Infrastructure

COVID-19: Coronavirus Disease 2019

CSCS (or SCS): Chinese Social Credit System

CSVs: Core Socialist Values

DSR: Digital Silk Road

EU: European Union

EV: Electric Vehicle

GAFAM: Google, Apple, Facebook, Amazon, Microsoft

GDPR: General Data Protection Regulation

ICT: Information and Communication Technology

IP: Intellectual Property

IT: Information Technology

LLM: Large Language Model

MENA: Middle East and North Africa

NAMOC: National Art Museum of China

NDRC: National Development and Reform Commission

NGO: Non-Governmental Organization

PBOC: People's Bank of China

PIPL: Personal Information Protection Law

PRC: People's Republic of China

QR Code: Quick Response Code

Sci-fi: Science Fiction

SEZ: Special Economic Zone

SPC: Supreme People's Court

STSs: Science and Technology Studies

UN: United Nations

US (or USA): United States of America

USSR: Union of Soviet Socialist Republics

VPN: Virtual Private Network

WHO: World Health Organization

WTO: World Trade Organization

WWII: World War II

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