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How Digital Platforms Organize Immaturity: A Socio-Symbolic Framework of Platform Power

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The power of the digital platforms and the increasing scope of their control over individuals and institutions have begun to generate societal concern. However, the ways in which digital platforms exercise power and organize immaturity—defined as the erosion of the individual’s capacity for public use of reason—have not yet been theorized sufficiently. Drawing on Bourdieu’s concepts of field, capitals, and habitus, we take a socio-symbolic perspective on platforms’ power dynamics, characterizing the digital habitus and identifying specific forms of platform power and counter-power accumulation. We make two main contributions. First, we expand the concept of organized immaturity by adopting a sociological perspective, from which we develop a novel socio-symbolic view of platforms’ power dynamics. Our framework explains fundamental aspects of immaturity, such as self-infliction and emergence. Second, we contribute to the platform literature by developing a three-phase model of platform power dynamics over time.

Key Words: organized immaturity, autonomy erosion, digital platforms, power, surveillance

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Organized immaturity, defined as the erosion of the individual's capacity for the public use of reason (Scherer and Neesham 2020), differs from other forms of control in that it is a self-inflicted and emergent (as opposed to orchestrated) collective phenomenon, in which autonomy-eroding mechanisms mutually reinforce each other (Scherer and Neesham 2020: 9).

The phenomenon of autonomy erosion and increasing user control has been discussed in the context of the dark side of digitalization (Flyverbom, Deibert, and Matten 2019; Trittin-Ulbrich et al. 2021). Scholars have looked at how the automation of interactions through algorithms can lead to an emergent manipulation of choice and autonomy erosion (Alaimo and Kallinikos 2017; Beer 2017; Just and Latzer 2017; Orlikowski and Scott 2015), but there is still little exploration of the organizing role of platforms in this process.

Digital platforms have been described as organizational forms that orchestrate activities between independent users through the use of digital interfaces (Gawer 2014, 2021; Constantinides et al. 2018; Cusumano, et al. 2019; McIntyre et al. 2021). Increasingly, scholars denounce the negative effects of power accumulation by digital platforms and platform owners. For example, studies of the structural constitution of markets criticize gatekeeping positions that impose discriminatory clauses or limit content access and creation, with consequences for users' choices (Crémer et al. 2019; Jacobides 2021; Khan 2018). Other researchers such as Kelkar (2018), Stark and Pais (2020), and Flyverbom et al. (2019) discuss socio-material perspectives on platforms and show how platform owners design the interfaces, prescribing what is accessible to users and what choices they may enjoy in the digital platform; this, again, restricts choice and creates negative psychological effects on users (Seymour 2019; Wu et al. 2019). Lanier (2018) and Zuboff (2019) present systems of surveillance promoted

by the power of digital platforms that explain how the datafication of human experience leads to increasing forms of domination.

These studies provide valuable explanations of how the increasing power of platforms hinders freedom of choice and individual autonomy. However, their explanations are partial, focusing either on the market mechanisms that limit consumer choice, or the specific role of digital objects, such as algorithms, that constrain the platform users' autonomy. The fundamental aspects of the organizing of immaturity, such as the tension between organizing and emergence, and the relationship between self-infliction and the power accumulation strategies of key agents such as platform owners, remain unexplored though. These tensions are essential to explaining how organized immaturity is created and reproduced. We claim there is a need to explain the power accumulation of the different agents of the platforms and its relation to the mechanisms that lead to the delegation of autonomous decision-making. Therefore, in this article we ask: *How do digital platforms organize immaturity?*

To tackle this issue, we build a socio-symbolic perspective of power accumulation in digital platforms inspired by Bourdieu's writings (Bourdieu and Wacquant 2007; Bourdieu 1984; 1989; 1977; 1979; 1987; 1990; 1991; 2005; 2011; 2020). A socio-symbolic perspective supports building a dynamic conceptualization of power accumulation based on agents' practices, positions, and strategies. The concepts of field evolution and habitus allow further explanation of the emergence of immaturity and the mechanisms of self-infliction. By situating the concepts of fields, capitals, and habitus in the context of digital platforms, we describe digital platforms as organizations mediated by a digital infrastructure and a digital habitus in which agents accumulate capitals by operating in a field. We explain the role of the digital habitus in organizing immaturity, complementing prior literature on materiality and affordances. We propose a framework of power accumulation in which the dynamics of platform-owner power accumulation and counter-power accumulation co-exist. The platform

owner accumulates power in five forms: constitutional, juridical, discursive, distinction, and crowd. There are two forms of counter-power: crowd and hacking. We also explain the evolution over time of the power dynamics and propose a three-phase model in which the forms of power operate. These phases are platform formation, platform domination within the original field, and platform cross-field expansion.

This framework makes two significant contributions. First, we build a theoretical apparatus that explains the organizing dynamics of immaturity by explaining the relations between the structure, the digital objects, and the platform owner's power accumulation strategies. From these, we can explain the tension of emergence and self-infliction. With this framework, we draw on sociological perspectives to expand the understanding of organized immaturity in digital spaces by focusing on describing the practices that constitute the webs of relations that configure the digital habitus and the processes of power accumulation. Second, we contribute to the platform literature by developing a three-phase model of platform power dynamics over time. This model expands current views on platform power, providing a more holistic scheme in which power is both accumulated and contested, and highlighting how agents other than the platform owner play a role in the production and exercise of forms of power. This article concludes by providing policy recommendations on how to understand and tackle organized immaturity and highlight potential avenues for further research.

ORGANIZED IMMATURITY

Organized immaturity has been defined as a collective, albeit not necessarily orchestrated, phenomenon where independent reasoning is delegated to another's guidance (Scherer and Neesham 2020). It is inspired by the Kantian principle that humans should have intellectual maturity involving autonomy of judgment, choice, and decision-making without the guidance of an external authority. It also relates to the ability to use experience to reason and reflect critically and ethically on complex or problematic situations, and challenge norms and

institutions (Scherer and Neesham 2020). The concept of organized immaturity differs from other forms of control in two ways. First, it is a “self-inflicted” (Kant 1784 in Scherer and Neesham 2020: 8) process, referring to harm done by humans to themselves, often in a non-conscious manner. From this perspective, “immaturity” is therefore a condition of the human being that arises when an individual defers or delegates their own autonomous reasoning to external authorities (Dewey 1939). The second way in which organized immaturity differs from other forms of control is that it is an emergent (as opposed to orchestrated) collective phenomenon, in which autonomy-eroding mechanisms mutually reinforce each other (Scherer and Neesham 2020: 9).

According to Scherer and Neesham (2020), the study of immaturity relates also to its organizing elements. The perpetuation of modern forms of immaturity has been associated to organizations and institutions that create the conditions for the self-inflicted immaturity. Organized forms of immaturity have been addressed in the critical analysis of bureaucratic organizations, where the individual is subject to various forms of domination and control (Clegg 1989; Hilferding 2005).

The Fourth Industrial Revolution (Schwab 2017; Philbeck and Davis 2018) has ushered in a consolidation of the globalized information and communication technologies that are driving the organization of economic life. However, the infrastructures and mechanisms behind these socio-technological systems curb individual liberties and impact people’s autonomy (O’Connor and Weatherall 2019; McCoy, Rahman, and Somer 2018).

The term organized immaturity is not explicitly used in most of the literature studying forms of control related to digitalization (with the exception of Scherer and Neesham 2020 and Scherer et al. 2020), but scholars are increasingly analyzing the “dark side of digitalization” (Flyverbom et al. 2019; Trittin-Ulbrich et al. 2021). In particular, attention has been directed to the use of big data and systems based on artificial intelligence, and to how the

automation of interactions through algorithms can lead to an emergent manipulation of choice. Even the basic algorithmic function of search and match creates power asymmetries, since the inspection or control of its guiding principles presents technical challenges for both users and regulators (Beer 2017; Just and Latzer 2017). Biases might be found in the criteria for how results are limited, displayed, and sorted (Faraj, Pachidi and Sayegh 2018), and may even amplify properties of the data used as input, as has been observed in the context of racial biases (Noble 2018). Researchers are increasingly pointing at the importance of unpacking the consequences of algorithms in conjunction with a socially structured analysis of the device (e.g., Beer 2017; Introna 2016; Orlikowski and Scott 2015). Through this, they show how the “black box of algorithmic culture” (Orlikowski and Scott 2015; Pasquale 2015; Striplhas 2010) creates a world of secrecy that eschews questioning and abrogates responsibility (Introna 2016), eroding autonomous decision making.

However, this emphasis on the artificial intelligence tools, algorithms, and coding processes that hinder autonomy in decision making must be complemented by research into the organizing structures of immaturity; that is, the key organizing agents. Studying digital platforms can improve understanding about how organized immaturity happens, as these platforms organize social interactions and transform the power relations of the different agents that participate in the digital exchanges.

PLATFORMS AND THE ACCUMULATION OF POWER

Platforms as Organizing Agents

In the platform literature, digital platforms have been described as new organizational forms that orchestrate activities between independent users through the use of digital interfaces (Gawer 2014; Kretschmer et al. 2020; McIntyre et al. 2021). Platforms can be considered a “particular kind of technology of organizing” (Gulati, Puranam, and Tushman 2012: 573) or “hybrid structures between organizations and markets” (Kretschmer et al. 2020: 4), as they

use a mixture of market and hierarchical incentives to coordinate autonomous agents. Platform organizations are distinct from hierarchies, markets, and networks (Gawer 2014) since, as argued by Kornberger et al. (2017: 81), “platform organizations question not only extant organization designs but also, quite fundamentally, the [Coasian] idea of the firm... and... of value creation processes”.

Two fundamental characteristics define the digital platform as an organizing agent: how its digital architecture is structured, and how it coordinates interactions. From an organizational perspective, platforms can be described by the common set of design rules that define their technological architecture. This system is characterized by a “core” or center component with low variety, and a complementary set of “peripheral” components with high variety (Tiwana, Konsynski, and Bush 2010). The rules governing interactions among the parts are the interfaces (Baldwin and Woodard 2009). Interfaces contribute to reduce a system’s complexity by greatly simplifying the scope of information required to develop each component (Gawer 2014). Together, the center, the periphery, and the interfaces define a platform’s architecture (Baldwin and Woodard 2009). The center-periphery structure therefore defines an asymmetric framework in which the participants collaborate and compete (Adner and Kapoor 2010), under conditions set by the platform owners on two elements: openness and governance rules (Gawer and Henderson 2007; Boudreau 2010).

Platforms coordinate transactions by creating “multi-sided markets”, in which their owners act as intermediaries to bring together (match) and facilitate exchanges between different groups of users by aligning market incentives (Rochet and Tirole 2003). Interactions occur in a networked structure, implying that the value derived from its usage increases exponentially with each additional user (Katz and Shapiro 1985). As the value for participants grows with the size of the platform, it is optimal for them to converge on the same platform, leading to

the prediction that platforms will tend to create concentrated markets organized by increasingly powerful owners (Caillaud and Jullien 2003; Evans 2003).

Platforms' Accumulation of Power and the Consequences on Individuals' Autonomy Erosion

The above-described characteristics of platforms have facilitated the accumulation of power by platform owners, leading to “new forms of domination and competition” (Fuchs 2007: 7) that are increasingly eroding people’s capacity to make independent decisions. The consequences of the platforms’ power accumulation for manipulation of choice and autonomy delegation have been analyzed from two perspectives. First, in relation to the structural constitution of markets and how this structure can lead to manipulation of users’ choices. Second, from a socio-material perspective that looks at the interaction of digital objects (e.g., algorithms) and the platform users.

From the perspective of the structural constitution of markets, the accumulation of power and manipulation of choice is associated to the growing centrality of large platforms in the economy. Consumers and business partners can have their choices manipulated due to the specific intermediary role that platforms play. Once the market has been tipped, this role provides the platform owner with a position from which they can charge supra-monopoly prices and define the rules of the market, including who can access it and how the transactions occur (Busch et al. 2021; Khan 2018; Jacobides 2021). In this way, platforms are increasingly operating as gatekeepers, imposing discriminatory clauses, or limiting content access and creation (Stigler report 2019; Furman 2019). Choice making can also be limited due to market concentration driven by platforms, in that a platform enhances its owner’s opportunities to leverage its assets (Khan 2018). Thus, the owner can entrench their (platform’s) position in a market and enter an adjacent one by creating economies of scale and scope (Khan 2018; Jacobides 2021). This brings the possibility of creating a dominant position in apparently unrelated markets through practices such as vertical integrations, killer buys, predatory pricing,

and self-preferencing (Crémer et al. 2019; Furman 2019). In addition, the capture and control of transactional data may be used to improve platform services, while also enabling the creation of entry barriers that fend off competition (Khan 2018).

Market-based analyses provide a view of power accumulation based on asset control and market position. However, they have been criticized for overlooking the impact of other non-economic dimensions and for portraying power as relatively unidirectional (Margetts et al. 2021; Lynskey 2017, 2019). Such critiques recognize that the deep social impact of platform power cannot be tackled from a market perspective alone (Margetts et al. 2021; Lianos and Carballa Smichowski 2022).

Socio-material perspectives place affordances and materiality of the digital objects at the center of the platform interactions (Fayard and Weeks 2014; Kornberger 2017; Curchod et al. 2019). In this perspective, digital objects such as code, interfaces, and algorithms are described as central objects that can hinder autonomy. For example, when platform owners design the interfaces, they define the category of user, prescribing what is accessible to users, and what choices they enjoy in the digital platform (Kelkar 2018). Encoding, which are the rules for how offline objects and actions are translated into a digital language (Alaimo and Kallinikos 2017) are also defined by platform owners. Once codified, actions must be performed in accordance with the rules established by the platform. Thus, the affordances of technology shape and mold the interactions of the users with the platforms (Alaimo and Kallinikos 2017). Furthermore, algorithms and codes have been denounced for their opacity (Ettler and Albu 2021). The inspection and control of a platform's guiding principles present technical challenges for both users and regulators (Beer 2017), which enables manipulation. For example, Seymour (2019) and Wu et al. (2019) describe how the manipulation design techniques employed by platform firms, such as Facebook or Twitter, are worrying not only

because they affect an individual's freedom of choice but also because they can cause users to experience harmful psychological effects, such as addiction.

Yet the studies of affordances and materiality mentioned above offer a limited understanding of how emergence and self-infliction of organized maturity are patterned by the strategic choices of platform owners and other agents. To further understand the organized immaturity of digital platforms, it is important to look at how practices are shaped and organized by the relations between the technological objects, the different users' strategies, and structural elements that conform the power accumulation of the platform.

Some scholars have begun to offer holistic models that explain the accumulation of power by platform firms and its consequences for the authority erosion of different agents. Lanier (2018) and Zuboff (2019) describe the digital platforms' datafication of human experience, which leads to increasing forms of domination in what they term "surveillance capitalism". Surveillance is enabled by the asymmetric positions of platform owners and users, defined by the technological architecture, and executed through the monetization strategies based on user data. Zuboff (2019) argues that despite the explicit narrative of platforms as both positive and objectively inevitable, their strategies and business models—based on voluntary data sharing—are fundamentally connected to the extraction of economic rents. Surveillance reduces human experience to free raw material for translation into behavioral data and prediction products (Zuboff 2019), eroding individual autonomy and disrupting intellectual privacy (Richards 2012). Surveillance has become a naturalized practice that we all—willingly or not—perform (Lyon 2018). Surveillance theories therefore contribute to this debate by offering an understanding of the instrumental connection between the business model and technological objects that constitute the platform, and the self-infliction aspects of immaturity processes.

Yet, we argue that further work is needed to understand not only the expansion of immaturity through a system of economic surveillance, but also how the everyday practices of leading and participating in the platform relate to immaturity emergence. Moreover, we argue that these views should be enriched with a theory of how agency is constituted and transformed by platform power dynamics, how these dynamics have an organizing role in producing and reproducing the delegation of autonomous decision-making, and how the emergence of immaturity and the strategic power accumulation by platform owners are connected.

A SOCIO-SYMBOLIC PERSPECTIVE ON DIGITAL PLATFORMS

To further explain how platforms organize immaturity, we draw on Bourdieu's socio-symbolic theory and the concepts of field, capitals, and habitus. A socio-symbolic perspective situates the agents in a field and explores the power accumulation dynamics of each agent. It takes materiality into consideration but, through the concept of habitus, it is able to explain how interactions are also mediated by previous history and the networks of relations in a way that complements the notion of affordances and its connotations for the perception of physical artifacts and technology (Fayard and Weeks 2014). Further, a socio-symbolic approach allows us to build an integrative conceptualization of power accumulation and its dynamics based on agents' practices, positions, and strategies. It shows how multiple types of powers can coexist, and accounts for how the relative positions of agents shape their motivations and actions, explaining the practices of immaturity and its relation to self-infliction. We explain this further. First, by providing an overview of how a socio-symbolic perspective generally explains power and its dynamics through the concepts of field, capital, and habitus; we thus show how digital platforms can be understood through these lenses. Second, we describe the dynamics that lead to specific forms of power accumulation and explain how they can evolve over time.

Fields, Capitals and Habitus in Digital Platforms

Bourdieu's socio-symbolic theory was developed to explain social stratification and dynamics in (offline) societies by focusing on how agents (people, groups, or institutions) produce, reproduce, and transform social structures through practice (i.e., what they do in everyday life). Through practice, agents produce particular social spaces with specific boundaries demarcated by shared interests and power relations; these social spaces are termed fields of practice (Bourdieu and Wacquant 2007).

Fields. A field (*champ*) is a key spatial metaphor in Bourdieu's work. It represents "a network, or a configuration, of objective relations between positions" (Bourdieu and Wacquant 2007: 97). These positions are objectively defined "...—to field occupants, agents or institutions— ... by their present and potential position (*situs*) in the structure of the distribution of species of power (or capital)" (Bourdieu and Wacquant 2007: 97). Individuals, groups, or organizations can be agents in a given field and one individual may have different agencies (or "roles") depending their situation on the field.

The concept of field can be related to digital platforms in the sense that the organization and production of practices situates the platform in relation to an existing field. This may be the field of cultural production (e.g., Facebook) or the field of goods exchange (e.g., Amazon). The fields have specific logics and structures that define them. Different agents can have multiple roles; for example, an Instagram user may be both a contributor and consumer of content. The relational aspects of the fields are also very compatible with network-based perspectives (Portes 1998) since the field in which the platform is embedded functions on the basis of relations created during the practice of exchanges that constitute the field. The technological infrastructure creates a center-periphery structure, which provides the foundation upon which the practices occur, both enabling and regulating them. This approach to platforms simultaneously highlights the practice of the agent and its position, but also shows how

the platform's constitutive elements are deeply interconnected. Taking Twitter as an example, the extent to which a specific content generated by a user is reproduced depends on the user's social position in the network but also on the priorities defined by the platform's algorithms, which create the structure in which the content is shared.

Multiple nested and overlapping fields can be found on any platform, just as they are in any (offline) social context. For example, YouTube constitutes a huge field of people broadly interested in sharing and viewing online video content. However, YouTube also hosts a variety of other more focused subfields, for instance, a field centered on cryptocurrency videos. At the same time, platforms do not necessarily constitute a field in its entirety, for while some online fields exist mostly in a single platform, like the field of video content sharing in YouTube, competing platforms have entered some subfields, such as gaming videos in Twitch. At the same time, other online fields are embedded in larger fields of practice. For example, job seekers would look at job opportunities in LinkedIn while engaging offline with the job-offering companies.

Yet the creation of a digital platform can also be conceptualized as an attempt to "enclose" part of a field: an agent (the platform creator) designs a value creation model for users (the specific practices to be performed by them within the field) and develops the digital infrastructure that makes interactions possible. Digital platforms enclose the field because they attempt to create "exclusive control rights" (Boyle 2003) over dimensions of practices that were previously in the public domain. Consider Google's Street View, launched in 2007, which permits users to view the front of buildings from a pedestrian's viewpoint. The service utilizes photographs taken by Google of objects that are not covered by intellectual property rights, albeit that the photographs were taken without the authorization or agreement of the communities, and their use is monetized (Zuboff 2019). In this case, Google Street View

becomes not only a new service for the users but also a new way of exploiting value through dispossession of public goods and private data (Zuboff 2019).

A field enclosure by a platform also includes encoding social interactions defined by more or less variable practices (e.g., hailing a taxi on the street) into a precisely defined process in a controlled space (using a ride hailing app). This appropriation is produced through the codification of social interactions, control over the digital space, and the data generated by these interactions. Moreover, by enclosing a field, digital platforms modify both the practices and the agents' relative positions. For example, drivers and passengers are inscribed into a database owned by the platform owner and are organized into groups from which they are picked and matched.

Furthermore, the creation of the platform can also transform the scope of the field. Digitalized practices often involve connecting with deeply intimate aspects of users' lives (Lupton 2016), such as private data exemplified in photos, comments, or information about consumption habits. While typically regarded as private, the encoding of these portions of experience puts them into the potential reach of a field and exposes them to its specific field logic. Furthermore, because of the new ways of performing certain practices, platforms collide with the established scopes of the field, changing the agents and institutions involved in it. This is the so-called "disruptive" nature (Stigler report 2019) of the platform. Examples can be found in conflicts around regulatory frameworks triggered by the introduction of platforms to some industries, like Uber's entry to the field of transportation and Airbnb's to hospitality.

Capitals. Fields are dynamic spaces defined by the relations of power between players that constitute the structure of the field (Bourdieu and Wacquant 2007). These relations result from "the possession and activation of resources that are both materially and symbolically produced and perceived" (Bourdieu 1989: 16). These resources are the capitals.

The accumulation of capitals give access to “the specific profits that are at stake in the field, as well as by their objective relation to other positions (domination, subordination, homology, etc.)” (Bourdieu and Wacquant 2007: 97). In each of the specific fields, the spaces of objective relations are the sites of a logic specific to those who regulate the fields. This logic does not need to follow purely economic rationalities to be described (Sandberg and Alvesson 2011). For example, TikTok’s users who copy their nearest higher-status digital neighbors in a particular contest or “dance” might not be guided by economic rationality, but they do follow the logic of the platform.

Capitals are therefore the resources—scarce and socially valued stocks of internalized abilities and externalized resources—that each agent has. Bourdieu defines three fundamental forms of capital through which power is accumulated: economic capital (money and other assets), cultural capital (knowledge and familiarity with accepted norms), and social capital (reflected in the actor’s creation of connections and social networks) (Bourdieu 2011). To these, Bourdieu adds symbolic capital, “which is the form that one or another of these species takes when it is grasped through categories of perception that recognize its specific logic, ... [that] misrecognize the arbitrariness of its possession and accumulation” (Bourdieu and Wacquant 2007: 118). That is, the reflection in the relations of the field of “accumulated prestige, consecration, or honor” (Bourdieu 1993: 7). For Bourdieu, power struggles are mainly symbolic and agents who are willing to increase their power will ultimately exercise the symbolic capital that will help them to be “perceived and recognized as legitimate” (Bourdieu 1989: 17) in what Bourdieu also calls “distinction” (Bourdieu 1984).

Social dynamics in fields are centered on the generation of distinction(s) by agents, who “constantly work to differentiate themselves from their closest rivals” (Bourdieu and Wacquant 2007: 100), although the actors’ participations in these games are typically no more than “unconscious or semi-conscious strategies” (Bourdieu 1969: 118). Distinction

operates through the accumulation of capital that matters to the field. Thus, fields are spaces of conflict and competition in which the hierarchy is continually contested. However, agents can attempt to convert one form of capital into another or transfer it to a different space, depending on the specific logic of the field (Levina and Arriaga 2014).

The concept of distinction can be assimilated to the concept of “status” as it is used to explain the means of interaction in digital platforms (Levina and Arriaga 2014). For example, in digital platforms such as YouTube, a user’s social network position as well as their cultural skills (e.g., their offline knowledge about a particular topic) combine with their taste and the time and money they invest into the field. Together, these shape which content gets noticed and which is ignored (Levina and Arriaga 2014), and therefore which agents become “influencers” or agents with high status in the network.

Habitus. Besides the description of how agents, through their collective actions, shape emergent field structures and the understanding of which capital matters and how, Bourdieu also looks at how structure shapes agency. Bourdieu uses the notion of habitus to describe the socially learned schemata of perception and inclinations to action (Bourdieu and Wacquant 2007). Habitus is the internalization of the logic of the field. It is a set of historical relations incorporated within individual bodies in the form of mental and corporeal schemata (Ignatow and Robinson 2017). These relations or the “...system of schemes of perception and appreciation of practices, cognitive and evaluative structures” (Bourdieu 1989: 19) are “acquired through the lasting experience of a social position” (Bourdieu 1989: 19); that is, they are acquired through interaction with other social agents. The habitus includes related comportment (posture and gait), aesthetic likes and dislikes, habitual linguistic practices, and ways of evaluating oneself and others via categories. It forges not only actions, but also desires and aspirations (Ignatow and Robinson 2017). While cognitively embedded, it is also embodied in

gestures, postures, movements, and accents (Ignatow and Robinson 2017). Its reproduction mainly depends on institutions such as family and school. Mastery of the habitus tends to guarantee distinction and constancy of practice over time (Bourdieu 1990).

Crucially, the constitution of the habitus is recursive: while agents can reshape social distance and the ways it may be perceived, their own perception is likewise framed by their own position in the social structure. This recursive cycle is the process of constitution of the socio-symbolic space, where changes in position can be understood as the outcome of symbolic struggle. Habitus is therefore a way of conceptualizing how social structures influence practice without reifying those structures (Costa 2006).

In his studies of class, taste, and lifestyles, Bourdieu (1984) illustrates how habitus shapes taste in ways that make a virtue out of necessity. For example, working-class people develop a taste for sensible, plain food, furnishings, and clothes, and they shun fancy extravagances (Bourdieu 1984). Hence, habitus leads to “the choice of the necessary” and, in so doing, it tends to generate practices that ultimately reproduce the original objective conditions, through which it functions as structure (Costa 2006). Thus, given a set of conditions, “habitus affords an actor some thoughts and behaviors and not others, making those thoughts and behaviors seem more appropriate, attractive, and authentic than others” (Fayard and Weeks 2014: 245). Ultimately, however, it is the actor who decides what to do. Often the decision occupies no conscious thought but, as Bourdieu (1990: 53) argues, it is “never ruled out that the responses of the habitus may be accompanied by strategic calculation tending to perform in a conscious mode.”

The concept of *digital habitus* has been used in the analysis of digital spaces (e.g., Levina and Arriaga 2014; Julien 2015; Ignatow and Robinson 2017; Romele and Rodighiero 2020) to explain the ways of acting; namely, the social and technologically ingrained habits, skills, and dispositions that define the practices in the digital field. Ignatow and Robinson (2017)

argue that digital machines are not only the crystallized parts of habitus but are also habitus producers and reproducers. This is because practices performed in digital platforms have technological and symbolic mediations: they are digitized—coded—and they are performed through a constant interaction with algorithms and the data that feeds the learning of the algorithms. For algorithms to constitute the habitus, they need the platform to be able to extract increasingly large amounts of data and transform it into capital. In this context, the data works as the culture that informs the knowledge about the social space. The norms of the platform are constantly shaped by the interaction between the data, the algorithm, and the agents. The capital created by this interaction can be appropriated by certain agents who know how to use these results to their advantage.

The mechanism of the digital habitus has two consequences. As socialization is increasingly done through digital platforms, the algorithmic logic becomes a norm that everyone needs to learn to play by or with (Beer 2017), and thus it becomes part of the habitus. It becomes the representation of the current taste of a social class or group so that their decisions resemble each other. However, unlike the offline habitus, it derives from code as well as from action; thus, it is somehow defined behind closed doors by the platform owners. Second, as argued by Ignatow and Robinson (2017), the digital habitus becomes a (re)generator of the social group because it is mediated by the property of the algorithmic practice that relates to aggregation for prediction. The singularities of social agents are reduced to aggregates of decision, actions, desires, and tastes. This phenomenon has been called “personalization without personality” (Ignatow and Robinson 2017: 100), personality being the principle that gives unique style to each human process of individualization.

Having set the theoretical apparatus to explain how digital platforms can be understood from a socio-symbolic perspective, we turn now to defining how digital platforms accumulate power and how the accumulation of power increases the problem of organized immaturity.

A Socio-Symbolic Perspective of Power Accumulation and its Consequences for Organized Immaturity

Building on Bourdieu's later writings on the State and its forms of power (Bourdieu 1989; Bourdieu 2020) and in light of the latest developments of digital platforms and their accumulation of power, we direct our analytic attention to the platform owner and its relations with the other platform agents and socio-digital objects. Thus, we go beyond the extant analysis of distinction in digital platforms done by scholars of digital sociology (e.g., Julien 2015; Ignatow and Robinson 2017) which focuses on users, to capture the mechanisms of field transformation led by platform owners in their relationship with the other platform agents. We follow Bourdieu (2020) in terming these mechanisms "forms of power" and showing how these contribute to explaining organized immaturity.

Drawing on Bourdieu's writings (Bourdieu, 1984, 1989; 1991), we define the forms of power, distinguishing between two general dynamics. We first define five forms of power (constitutional, juridical, discursive, distinction, and crowd) that drive the accumulation of power within the platform. Second, inspired by recent literature of platforms (Ziccardi 2012; Eaton et al. 2015; Krona 2015; Bucher et al. 2021) we show how counter-power can also be performed by end users and other peripheral agents through crowd and hacking power.

Crowd and hacking power are not concepts derived directly by Bourdieu's theory but provide a more comprehensive view of power accumulation dynamics.

We then articulate the platform power dynamics through three phases of platform evolution, which are derived from an interpretation of platform's innovation research (Cutolo and Kenney 2020; Kolagar, Parida, and Sjödin 2022; Rodon, Modol and Eaton 2021; Teece 2017). They are: formation, where the platform is launched and starts to be used by agents; domination, where the platform has been widely adopted and operates under a relatively stable design within the original field; and cross-field expansion, where the platform expands to

other fields, leveraging their accumulation of power. Although we describe for each stage the dominant forms of power and counter-power accumulation that enable the transformation of the field, we acknowledge that several forms of power co-exist in these phases, that the evolution of platforms is often non-linear, and that not all platforms will become dominant.

Forms of Platform Power

Constitutional power. Constitutional power is the ability to “transform the objective principles of union and separation, (...) the power to conserve or to transform current classifications” (Bourdieu 1989: 23). Within the platform, this power comprises both the architectural design (platform layers and modularity, design of user interfaces and experiences) and the capacity to define the rules, norms, categories, and languages that make up the digital interactions. Constitutional power shapes the digital medium for interactions and defines what may and may not be accessed by each type of agent within the platform.

Constitutional power is mainly exercised by the platform owner. As the provider of the digital infrastructure upon which other agents collaborate, the owner defines the symbolic space through code. Code symbolically creates the objects that constitute the relations, being a neat, unified, and unambiguous language with no openings for interpretation (Lessig 2009). In the digital realm, the actor that manages the code can increase its symbolic imposition, and therefore its legitimization. As the legitimization process is unified, creation and transformation are delegated. This legitimization is “world-making” (Bourdieu 1989) as it explicitly prescribes the possible realities and actions. The platform owner is therefore able to hold a monopoly over legitimate symbolic violence (Bourdieu 1989), having a differential capacity to influence and settle symbolic struggle. The possibility of obtaining and activating this symbolic capital is associated with complex technological competences, which are scarce and highly concentrated (Srnicsek 2016; Zuboff 2019).

The coherent body of code adopted by the symbolic space through constitutional power is not a neutral technical medium (Beer 2017; Gillespie 2010) and it can trigger autonomy eroding. Code is created and transformed in accordance with the objectives of the platform owner, and correspondingly managed toward these goals. For example, Kitchens et al. (2020) show how the differences in platform design for Facebook, Twitter, and Reddit create a differentiated impact on the diversity of news and the type of content consumed by their users. Calo and Rosenblat (2017) and Walker et al. (2021) find that the algorithmic design in Uber reduces drivers' insight about their working conditions and the competition they face, hindering their autonomy. Even without assuming strategic manipulation, the limited symbolic and repetitive action of users implies a delegation of users' own independent reasoning and the emergent coordination of their actions by the platform.

Juridical power. Along with the architecture definition, a second feature that is critical to the thriving of the platform is its governance. While constitutional power has to do with the design of governance, juridical power is the capacity to sanction via the created rules, and the authority to arbitrate in disputes (Bourdieu 2005, 1987). Typically, it can take a variety of forms such as sanctioning rule infringement, reporting abuses, or managing access to the platform (Adner and Kapoor 2010).

Digital technologies can enable increased participation and distribution of roles among agents, which is why studies of governance in these contexts have favored the idea that digitalization processes are highly democratizing (von Hippel 2006; Zittrain 2009). However, the hierarchical structure of digital platforms facilitates the creation of governance layers, meaning that the importance of those decisions can be easily packaged, resulting in a limited distribution of power in the field. For example, transaction-oriented platforms such as Amazon, eBay, or Uber rely on user-based rating systems to assure good quality and sanction

inadequate behavior; however, the platform owner designs the rankings and retains control of other actions such as account activation and suspension (Gawer and Srnicek 2021).

This role division effectively creates and redistributes power and therefore restricts the capacity of some agents to interact without the intervention of the digital platform owner.

Hence, the definition and distribution of roles will interact with (and eventually transform) the authority structure and the conflict management mechanisms that pre-exist in the field, including regulation. For example, Valdez (2022) explores how Uber uses what she calls “infrastructural” power to deploy a strategy of “contentious compliance”, both adapting to and challenging existing regulation. This strategy allows the company to exploit differences in regulation and regulatory scrutiny to reduce users’ access to information and acquired rights.

Discursive power. A third distinctive form of power that characterizes agents’ strategic interplay is discursive power. Discursive power is the power exercised in linguistic exchanges, which are embodied and learned but are also generative of the habitus (Bourdieu 1991). The way agents talk about platforms, the words they use to explain them—these discourses configure the collective narratives of what is possible and valuable in a platform.

Platforms are narrated as part of a broader already-institutionalized rational-technological narrative in which customer-centrism, effectiveness, and rationality of the exchanges are dominant values (Gillespie 2010; Garud et al. 2022). Technological determinism discourses promoted by the platform owners reinforce the idea that platforms’ algorithms are inscrutable and of an unfathomable complexity to the public or the regulator (Martin 2022; Pasquale 2015). These discourses have led to a broader narrative of a “Manifest Destiny” (Maddox and Malson 2020) of digital platforms, where the user is explicitly asked to delegate their own reasoning to the platform. This, alongside user dispersion, is a fundamental element that enables prescribing actions. Critical to maintaining user dispersion is the narrative that users are

directly connected through the platform, which is presented as an agora of exchanges. In actuality, platforms mediate that interaction, formatting it, regulating it, or even suspending it.

Distinction power. Distinction power is the creation of categories and the mechanisms of categorization that drive choice in the platform. It builds on the concept of distinction proposed by Bourdieu (1984). It defines the rules and practices that inhabit the habitus and designates which of them are legitimated and considered by society to be natural. The purpose of this type of power is to produce a behavioral response that serves some agents' specific accumulation of capital. The platform owner can influence user behavior by modifying the interfaces, the encoding, and the algorithms, thereby manipulating the user's decision making. At the same time, users can access and activate this power through their digital habitus, allowing them to influence and drive other users' choices.

In platforms, distinction power is often exercised through what Kornberger, Pflueger, and Mouritsen (2017) call evaluative infrastructures. Evaluative infrastructures are the different interactive devices, such as rankings, ratings, or reviews that establish an order of worth among the users of the platform, driving the "attention" (Goldhaber 1997) of other users. They relate agents and their contribution with each other, but they are also instruments of power. They define not only how agents are perceived and ranked in the community, but also how the hierarchy is monetized by the platform's owners (Kornberger et al. 2017). Status markers are examples of how distinction power is exercised. As they define how user activity and loyalty to the platform are rewarded, they become a fundamental element in guiding agents' accumulation strategies. For example, YouTube and Wikipedia changed their strategy for recognizing content so as to stimulate newcomers (Kornberger et al. 2017). Ignatow and Robinson (2017) refer to this process as the "übercapital". Übercapital emphasizes the position and trajectory of users according to the scoring, gradings, and rankings and is mobilized

as an index of superiority that can have strong reactive or performative effects on behavior (Ignatow and Robinson 2017).

A key feature of distinction power is that it is exercised heterogeneously over different users through differences created by constitutional and juridical power. Different types of users are granted different forms of agency, not only by the platform designers but also by their own intervention on the platform (Levina and Arriaga 2014). For instance, passive users may be granted agency through technological features. For example, YouTube gives agency to passive users by displaying the number of views. Merely by viewing a piece of content, individuals cast a vote on its value, which has significant consequences for the content producers. Other users become judges or “raters” and producers of information at the same time. For example, re-tweeting on Twitter is both a contribution to the platform and an act of evaluation. As well as users who are raters, there are often users who also act as “expert evaluators” (users that have accumulated significant cultural capital). One such example is the “super donors” in crowdfunding platforms such as Kickstarter, whose expert evaluations influence which projects are funded. Expert evaluators tend to form a tight-knit group within a field (Vaast, Davidson, and Mattson 2013; Aral and Walker 2012). Other users might have what Bourdieu called “institutionalized consecration” (Levina and Arriaga 2014), which is the formal authority to evaluate content given by the platform designers. These are typically site moderators and community managers who have more power than others to judge contributions (Levina and Arriaga 2014). In sum, these different types of agencies are designed by the platform owners to orient users’ actions and to promote and demote content (Ghosh and Hummel 2014). They are typically linked to how revenue models are designed by the platform owner (Zuboff, 2019).

The forms of power presented so far tend to reinforce the power position of the platform owner, but there are other forms of power that create the opposite tensions, that is counter-power accumulation. These are crowd and hacking power.

Crowd power. In the accumulation process, users are in a unique position in that they are the agents that produce the platform's activity. Crowd power results from the influence that users can exert in the platform by the sheer mass of their actions, which may or may not be coordinated (Bennett, Segerberg and Walker 2014; Culpepper and Thelen 2020). These practices are, in essence, the exercise of the digital habitus. The exercise of the habitus can have a long-lasting effect on the platform's structure. Practices can both inspire new functionalities and generate unexpected transformations to the value proposition, which can be re-captured by the platform owner through re-designing the code. For example, this has been observed in the sharing and creator economies where, since the provider side of the platform is the main value creator—e.g., graphic designers, programmers—the platform owner periodically changes the design to facilitate the delivery of that value (Bucher et al. 2018; Bhargava 2022).

As argued by Bourdieu (1990) the agents ultimately decide what they do, and the digital habitus may be accompanied by strategic calculation, even if most of the practices are bound by parameters defined by the platform owners and managed automatically by algorithms. This creates the opportunity for practices not aligned with the value proposition to go viral, eventually posing challenges to the balance envisioned in the platform design. For example, Krona (2015) uses the notion of “sousveillance”—an inverted surveillance “from the bottom” or “from many to a few”—to describe the novel use of an audiovisual sharing platform by social movements during the Arab Spring uprising. This emergent use emphasizes the emancipatory potential of users for creating collective capabilities and decision making (Ziccardi 2012), which we designate as *Crowd Platform-Power-Challenging* forms of power.

Yet, platform owners can attempt to use crowd power in their favor, in what we call the *Crowd Platform-Power-Enhancing* forms of power, through constitutional power (architecture design, limiting the possibility of contact between users), juridical power (policing and sanctioning users), and distinction power (by shaping the evaluative infrastructure). For example, Thelen (2018) shows how Uber “weaponized” the volume of its users in a regulatory dispute by introducing a button in its interface that would send a templated complaint email to local government on behalf of the user.

Hacking power. Hacking power is the ability to identify the features and categories of digital spaces, such as overlooked programming errors and ungoverned areas, that may be used for a different purpose than the one originally intended (Jordan 2009; Hunsinger and Schrock 2016). There are numerous examples in the literature of expressions of this type of power in digital platforms. Eaton et al. (2015) have described the continuous cycles of resistance and accommodation performed by groups of hackers and Apple that surround the *jailbreaking* of each new release of the iOS. Bucher et al. (2021) and Calo and Rosenblat (2017) have shown how workers learn to anticipate patterns in algorithms that control their work processes and use this knowledge to defend themselves from abuses.

Hacking power is the antithesis of individual immaturity, as it requires not only the exercise of independent reasoning but also a degree of understanding of the specific system in which the power is exercised. It is deliberate and purposeful, unlike crowd power which is independent of users’ understanding since it stems from the combined volume of their actions. At the same time, hacking power necessarily operates in the margins or interstices of the platform. Further, hacking power can be thought of as opposed to the constitutional and juridical powers; as such, it will be dispersed, under the radar, and is often considered illegal (Castells 2011). This creates difficulties for creating and accumulating this power in the field,

and consequently for using it to challenge other forms of power. Table 1 summarizes the different forms of power and provides further examples.

INSERT TABLE 1 ABOUT HERE

Platform Power Dynamics

By discussing platforms in the context of fields, we have shown how the relations between the different key agents can be understood through dynamics of power accumulation. On the one hand, users activate their capitals through the production of the practices that configure the digital habitus, which enhances their understanding of the ways of participating in the platform. However, it is mainly the platform owner who captures most of the value-creation process through constitutional, juridical, discursive, and distinction power. This uneven distribution facilitates the creation of a levelled field, upon which the relative positions can be consolidated while, at the same time, enlarging the distance and therefore the capacity of agents to decide in an autonomous way.

We articulate these power dynamics through the phases of platform evolution to explain how platforms transform the agents' relative positions over time and its impact on organizing immaturity. Figure 1 depicts the evolution in three phases.

INSERT FIGURE 1 ABOUT HERE

Figure 1: Platform Power Dynamics over Time

Phase 1: Platform Formation and Field Enclosure

In platform formation the primary objective for the platform owner is to get users to adopt the platform and regularly perform their practices on it. Constitutional, juridical, and discursive power are three of the forms of power through which the platform owners attempt to enclose

the field organizing the emergence of immaturity. For example, by designing a value creation model to create “exclusive control rights” (Boyle 2003) over dimensions of practices that were previously in the public domain. At the same time, these forms of power organize immaturity. First, constitutional power (in the forms of the rules, norms, categories, and languages) define how interactions are performed, under which conditions, and how the different agents can express their preferences. Through juridical power, platform owners have the capacity to define the sanctions that will promote or restrict an agent’s capacity to operate in the platform, that is for example, who can exercise their voice in the platform and who cannot, and what sanctions are going to be applied to misbehavior. Finally, discursive power creates a common narrative about the value of the platforms, restricting the capacity of agents to think beyond discourses that are presented as truths.

Phase 2: Platform Domination within Original Field

Platform adoption and sustained use creates the conditions for it to increasingly occupy the field. The increasing participation of agents in the platform can change the predominant accumulation logics of the different agents in the field, shaping the digital habitus. The process of capital accumulation of different agents leveraged by distinction power defines further how immaturity is organized by promoting the processes of self-infliction of immaturity. Capital accumulation in platforms is expressed as more data, the levying of fees, and the influx of users are repurposed as capital to develop the platform. In turn, users invest different combinations of capitals (data about their practices, social networks, money, and other assets) with logics of both consumption (purchasing, sharing digital content) and profit and accumulation (influencer, merchant, driver). To thrive in the accumulation dynamics, agents must increasingly invest themselves in the platform, adapting their strategies so they align with those that are relevant to the platform and embedded in the digital habitus. Users adapt their practices to learn the specific logics. This brings user practices closer to their archetypical category and

since they are better rewarded, it further legitimizes the practices of the digital habitus. When users grasp the critical elements of the digital habitus that correspond to their type, their practices experience and enjoy a viral thrust that characterizes the platform logic (for example, they may become social media super users or influencers). This success in increasing the capital leveraged by the mechanism of distinction power, such as rating in the platform, calls for higher investment, increasing the dependence of users of the platform and thus contributing to the self-inflictive process of immaturity.

At the same time, the processes that reinforce the platform power accumulation coexist with other processes that create tensions that call for change and adjustment. The existence of misalignments between users' practices and their expected behavior can quickly accumulate, destabilizing platform's operations or posing challenges for its governance. In addition, platforms with massive user bases and innumerable interactions can become problematic for the platform owner to police, creating the space for agents to exercise their hacking power. These counter-power accumulation forces can therefore create an emergent enlightenment - as opposed to immaturity- for the agents.

Phase 3: Platform Cross-Field Expansion

In a third phase, the platform domination over the field leads to the possibility of integrating new fields, further contributing to the accumulation of power and the organizing of immaturity. Once a platform has become the dominant agent, a position in which the structure itself acts on the owner's behalf, it can expand the scope of the field to new geographies and users, and even enter and integrate previously separated fields. For example, Uber's launch of Uber Eats was deployed using the platform's extant base of users (drivers and passengers, viewed now as commensals).

From the domination position, the owner can operate in the various fields with great freedom changing the exchange rate of the capitals at play and accumulating power. Highly

dominant expressions of constitutional power include interoperability lock-ins, the use of dark patterns and biased information that impede sovereignty of choice, and digital workplace design and control. Juridical power can be commanded from a position of gatekeeping, permitting arbitrary suspension of users' accounts, biased arbitration in a dispute, the imposition of discriminatory clauses, restricting access to the platform, or limiting freedom of speech. Abuses of power are typically supported by the discursive power that enacts the discourse of manifest destiny and uses opaque arguments to justify the increased accumulation of power and the need to enforce the juridical power measures of the platform owner. Also in this phase, a full deployment of distinction power relates to the platform owner's ability to monopolize the capture and processing of data through control of the technological architecture. This can be used to drive user choice in multiple ways, such as information asymmetries about the activities of a market or participant, and political influencing in social media platforms.

The activation of powers in the cross-field expansion phase depicts the dynamics within a field in a given moment, but it does not mean that the dominion of the platform owner is absolute, nor that the platform becomes a "total institution" (Bourdieu and Wacquant 2007). What we highlight is how the field's structural homology with the platform eases a fast concentration of powers and creates remarkable obstacles to modifying this situation, whether from within (due to users' habituation) or outside of the platform (because of network and lock-in effects, barriers to entry, and technical complexity). In addition to this, the form of dominion that the platform's specific logic enables is very effective, because by creating multi-sided businesses it invisibilizes the specific accumulation and struggle dynamics with respect to the core practices performed by users. For example, Amazon is "a place to buy and sell online", and the fact that the company accumulates capital from the capture of user data and the use of its sellers' capitals is not evident to the platform's users. Thus, the platform's

“rules of the game” may appear to be somewhat objective and relatively neutral, but they are in fact part of the organization of immaturity.

DISCUSSION

In this article, we present a socio-symbolic approach to power dynamics in digital platforms and how they relate to the organizing of immaturity. A socio-symbolic approach explains the structural and agentic dynamics of power accumulation leading to organized immaturity. We contrast the power asymmetries between the platform owner, as the central coordinating agent, and the rest of the agents directly participating in the platform to present five main forms of power enacted by the platform owner: constitutional, juridical, discursive, distinction, and crowd. We also present two forms of power that explain how users counteract the platform owner’s power accumulation: crowd and hacking. We explain how these forms of power are fundamental for understanding the different ways in which immaturity is organized. We show that constitutional power limits the symbolic world of the users, and therefore their capacity to influence new rules and vocabularies that orchestrate participation. We explain how through juridical power, the platform owners have the capacity to define the sanctions that restrict the voice and participation of users. We show how through the digital habitus the logic of the field is constituted, explaining the emergence of immaturity and its self-infliction. However, we also argue that distinction power enacts the platform owner’s capability to shape behavior through the creation of evaluative infrastructures that mediate the emergence of immaturity. Furthermore, we argue that the construction of a narrative of omniscience, through discursive power, explicitly asks users to delegate their own reasoning to the platform. We also highlight the existence of forms of power (hacking and crowd) that help users to accumulate power and resist the central authority of the platform owners.

Finally, we describe power dynamics and its relation to organized immaturity through three phases: platform formation, where forms of power—mainly constitutional, juridical,

and discursive—operate to promote the field enclosure and set the basis for immaturity to occur. Second, platform domination in the field, where distinction power promotes the field reproduction and processes of self-infliction of immaturity, while hacking and crowd power create resistance to the central authority. Third, platform cross-field expansion, in which power accumulation dynamics lead to the integration of new fields and increasing dynamics of immaturity. In defining the power accumulation dynamics, we explain the emergent character of immaturity and its relation to agents' strategies.

By focusing on the digital platform and its power dynamics, we contribute in two ways to the current literature. First, we build a framework that explains the organizing dynamics of immaturity, based on the relations between the platform structure, the digital objects, and the agents' strategies. Through this, we expand the understanding of organized immaturity in the light of sociological perspectives. Our framework analyzes how immaturity is constituted in practice and explains and nuances the possibility of emergence and the self-infliction dimensions of immaturity. Second, we provide a dynamic framework of platform power accumulation contributing to the platform literature. Finally, we also provide policy recommendations on how to tackle immaturity and highlight potential avenues for further research.

Rethinking Organized Immaturity from a Socio-Symbolic Perspective

A socio-symbolic perspective on digital platforms and its power dynamics can push the boundaries of current concepts of organized immaturity toward a post-Kantian and more sociologically grounded view (Scherer and Neesham 2020). This contributes to the understanding of organized immaturity in three ways. First, by explaining the different components of the emergence of immaturity through power struggles. We show how struggles are the result of agents' different strategies, heterogeneously shaped by their position in the platform, their practices, but also their discourses and the history of experiences of each individual that shape the digital

habitus. By showing the dynamics in these struggles, we contribute to explain the process through which immaturity emerges as a non-orchestrated phenomenon.

Second, we explain self-infliction by moving away from the more political understandings of autonomy erosion. Political perspectives of immaturity look at the individual and its “(in)capacity for public use of reason” (Scherer and Neesham 2020: 1) and consider the “delegation of decision making to impersonal authorities they cannot comprehend or control” (Scherer and Neesham 2020: 4) as a condition of the individual. We, however, adopt a sociological view that focuses on the generation of practices, and places the individual in a space of socio-symbolic power struggles. We complement previous literature exploring the symbolic aspects of technology and its impacts on society and, more concretely, on autonomy erosion (Zuboff 2019; Stark and Pais 2020; Fayard and Weeks 2014) by providing a set of forms of power that articulate how self-infliction is embedded in the digital habitus and thus how immaturity is organized. Our socio-symbolic perspective explains how the conditions of agency are shaped by the specific structure of the platform and its power dynamics.

Last, looking at fields through the power dynamics between the different agents can shed explanatory light on the formation process of organized immaturity. The relationship between habitus and field operates in two ways: while the field structures the habitus as the embodiment of the immanent necessity of a field, the habitus makes the field a meaningful space in which the agents may invest their capitals and themselves (Bourdieu and Wacquant 2007). By defining the stages through which this relationship unfolds, we contribute to show the emergent, dynamic and accumulative nature of organized immaturity.

Contribution to the Understanding of Platform Power Accumulation

We have approached organized immaturity by analyzing platforms as spaces of coordination and production of practices, shaped by relations engrained into a digital habitus and the logic of the field. By better understanding the forms of power and the role they play in field

transformation, we have identified more clearly the different forms of power accumulation through which digital platforms can become vehicles for organized immaturity and its dynamics. This contributes to the literature of platforms in the following ways: first, our description of the structural process of power accumulation in the platform expands market and network approaches (Jacobides 2021; Khan 2018; Eaton et al. 2015) by showing the importance of the social, cultural, and symbolic dimensions of capital. This lays the foundations for fundamentally reconceptualizing platform power and further explaining how power is exercised by the platform owner (Culoto et al. 2020; Kenney, Bearson, and Zysman 2019).

Second, we enrich structural approaches to platforms by presenting how fields can be transformed through dynamics of power accumulation that extend beyond the consequences of an asymmetric structure (Curchod et al. 2019; Hurni, Huber, and Dibbern 2022). Further, our framework shows how platforms can be reshaped by the interaction of agents' strategies and the re-configuration of the fields. By introducing a field view, we provide a more holistic scheme in which power is both accumulated and contested. We also highlight how agents other than the platform owner play a role in the production and exercise of forms of power. This nuances our understanding of field dynamics and agent interaction in the context of platform power dynamics.

Thirdly, our model complements socio-material studies on platform power (e.g., Beer 2017; Kornberger 2017; Stark and Pais 2020;) with the notion of the digital habitus and its relation to organized immaturity. Other authors have analyzed technological affordances as social designations of a space, and the social and cultural factors that signify a space and set a generative principle of governance (Jung and Lyytinen 2014). While these authors do not talk explicitly about habitus or social capital, they reflect on the generative reproduction of norms by individuals in contact with their social spaces; this is very similar to the Bourdieu definition of habitus in social spaces. We complement the socio-material view of platforms by

showing how the digital habitus works and by emphasizing the role of the platform as an organizing agent with a privileged capacity of capital accumulation. We present the platform as a space of symbolically mediated power relationships in which the digital objects and structural elements interplay to conform the logic of the field. We provide an understanding of the multifaceted nature of power as a process resulting from agents' practices and strategies, the habitus, and capital accumulation in a field. We argue that this conceptualization defines power in platforms not only as an "instrument" (Zuboff 2019) at the service of the platform owners, but as a web of relations utilized by agents who can better exploit the different forms of capital. We also contribute to the debate about the coordinating role of platforms and how they create generative forms of distributed control while power remains centralized, in an interplay between hierarchical and heterarchical power relations (Kornberger et al. 2017).

Bourdieu's (1977, 1990) concepts of capitals, habitus and distinction have been used before in the study of the social consequences of digitalization and platforms' increase of power (e.g., Levina and Arriaga 2014; Fayard and Weeks 2014; Romele and Rodighiero 2020). We complement that research with a view of platforms' accumulation of power and its role in the organizing of immaturity. We go beyond the explanation of distinction power to define constitutional, juridical, discourse, crowd and hacking forms of power, thereby offering a more complete view of how platforms accumulate power and organize immaturity.

Contributions to Practice and Avenues for Future Research

Our article provides a conceptual framework to practitioners that can enable platform owners, users, and policy makers to fundamentally rethink how they might address the platforms' negative consequences for society. First, it highlights immaturity as a relevant concept to address social issues in platforms. Our detailed understanding of the mechanisms leading to immaturity and the manipulation of individuals' decisions can help policy makers to identify and set limits on these types of powers, especially in the light of platform domination. By

explaining the organizing dynamics of immaturity, we direct attention to the more holistic assessments of the social consequences of platforms. Concretely, we emphasize how these are not *just* concerned with the concentration in specific industries (such as retailing or advertising) but also involve constraints on human rights (such as freedom of speech). Furthermore, we show how the consequences of organizing our practices through platforms are embedded in social structures and expressed in the transformation of fields. We believe this line of thought is fundamental if we are to collectively rethink the social role of platforms.

Our article has also limitations which open up avenues for further research. We have identified not only forms of platform power accumulation, but also forms of platform counter-power accumulation. As our focus in this article has been on how platforms organize immaturity, we have devoted more attention to the forms of power accumulation. However, future work is needed to deepen our understanding of how platforms lose power. For example, in recent years, we have witnessed an increasing backlash against big tech platforms, fueled by reputational scandals and vigorous societal complaints (Joyce and Stuart, 2021; Gawer and Srnicek, 2021). We have also observed a new wave of regulatory initiatives that intend to curb platforms' power by forcing interoperability and limiting self-preferencing and acquisitions (Cusumano et al, 2021; Jacobides, Bruncko, and Langen 2020), even when the effectiveness of these policies is being debated (Rikap and Lundvall 2021). For example, in Europe, the new legislation of the Digital Markets Act (European Commission 2022a) and the Digital Services Act (European Commission 2022b) are respectively intended to create more contestability in digital platform markets. In the US, there has been intense debate around the possible revocation of Section 230, which has so far provided a shield for platforms' activities in social networks (Stigler report 2019) leading to abuses of power and increasing immaturity. In parallel to regulatory or external counter-power mechanisms, research into power dynamics could also analyze the flows of affects and affective intensification (Just 2019) that

happen with the abuse of the digital habitus. Incipient research (e.g., Just 2019; Castelló and Lopez-Berzosa 2021) has shown how these flows of affects not only shape collective meanings but can also lead to increasing forms of hate speech and the renaissance of populist politics. More should be researched about what forms of counter-power may emerge in society to reduce populism and hate speech. We believe our framework sets grounds for studying the more concrete practices of immaturity in platforms but also new forms of resistance.

CONCLUSION

Building on the concepts of fields, capitals, and habitus, we propose a socio-symbolic framework to explain organized immaturity in digital platforms. We articulate six forms of power that characterize the different ways in which platforms organize immaturity. It is our suggestion that a more precise understanding of the digital platforms' role in driving organized immaturity can become the basis for fundamentally rethinking the role of the digital platform in society. Can the processes that lead to organized immaturity be reoriented toward organized enlightenment? We argue that a first step in this direction is to better understand how power is performed in digital platforms, which is what our framework contributes to explain.

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REFERENCES

- Adner, Ron, and Rahul Kapoor. 2010. "Value Creation in Innovation Ecosystems: How the Structure of Technological Interdependence Affects Firm Performance in New Technology Generations." *Strategic Management Journal* 31 (3): 306–33.
- Alaimo, Cristina, and Jannis Kallinikos. 2017. "Computing the Everyday: Social Media as Data Platforms." *The Information Society* 33 (4): 175–91.
- Aral, Sinan, and Dylan Walker. 2012. "Identifying Influential and Susceptible Members of Social Networks." *Science* 337 (6092): 337–41.
- Baldwin, Carliss Y., and C. Jason Woodard. 2009. "The Architecture of Platforms: A Unified View." In *Platforms, Markets and Innovation*, edited by Annabelle Gawer, 32. Cheltenham, UK and Northampton, MA: Edward Elgar.
- Beer, David. 2017. "The Social Power of Algorithms." *Information, Communication & Society* 20 (1): 1–13.
- Bennett, W. Lance, Alexandra Segerberg, and Shawn Walker. 2014. "Organization in the Crowd: Peer Production in Large-Scale Networked Protests." *Information, Communication & Society* 17 (2): 232–60.
- Bhargava, Hemant K. 2022. "The Creator Economy: Managing Ecosystem Supply, Revenue-Sharing, and Platform Design." *Management Science* 68 (7): 5233–51.
- Boudreau, Kevin. 2010. "Open Platform Strategies and Innovation: Granting Access vs. Devolving Control." *Management Science* 56 (10): 1849–72.
- Bourdieu, Pierre. 1969. "Intellectual Field and Creative Project." *Social Science Information* 8 (2): 89–119.
- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bourdieu, Pierre. 1979. "Symbolic Power." *Critique of Anthropology* 4 (13–14): 77–85.

- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Taste*. 11. print. Cambridge, MA: Harvard University Press.
- Bourdieu, Pierre. 1987. “The Force of Law: Toward a Sociology of the Juridical Field.” *The Hastings Law Journal* 38 (5): 814–53.
- Bourdieu, Pierre. 1989. “Social Space and Symbolic Power.” *Sociological Theory* 7 (1): 14–25.
- Bourdieu, Pierre. 1990. *The Logic of Practice*. Redwood City, CA: Stanford University Press.
- Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Cambridge, MA: Harvard University Press.
- Bourdieu, Pierre. 2005. “Principles of an Economic Anthropology.” In *The Handbook of Economic Sociology*, Second Edition. New York: Princeton University Press.
- Bourdieu, Pierre. 2011. “The Forms of Capital.” In *The Sociology of Economic Life*, 3rd ed, edited by Mark Granovetter and Richard Swedberg. New York: Routledge.
- Bourdieu, Pierre. 2020. *On the State: Lectures at the College de France, 1989-1992*.
- Bourdieu, Pierre, and Loïc Wacquant, eds. 2007. *An Invitation to Reflexive Sociology*. Repr. Cambridge; Malden, MA: Polity Press.
- Boyle, James. 2003. “The Second Enclosure Movement and the Construction of the Public Domain.” *Law And Contemporary Problems* 66 (1): 42.
- Bucher, Eliane, Christian Fieseler, Matthes Fleck, and Christoph Lutz. 2018. “Authenticity and the Sharing Economy.” *Academy of Management Discoveries* 4 (3): 294–313.
- Bucher, Eliane Léontine, Peter Kalum Schou, and Matthias Waldkirch. 2021. “Pacifying the Algorithm – Anticipatory Compliance in the Face of Algorithmic Management in the Gig Economy.” *Organization* 28 (1): 44–67.

- Busch, Christoph, Inge Graef, Jeanette Hofmann, and Annabelle Gawer. 2021. "Uncovering Blindspots in the Policy Debate on Platform Power: Final Report." European Commission. <https://platformobservatory.eu/app/uploads/2021/03/05Platformpower.pdf>.
- Caillaud, Bernard, and Bruno Jullien. 2003. "Chicken & Egg: Competition among Intermediation Service Providers." *RAND Journal of Economics* 34 (2): 309–28.
- Calo, Ryan, and Alex Rosenblat. 2017. "The Taking Economy: Uber, Information, and Power." *SSRN Electronic Journal*. <https://doi.org/10/gfvmg3>.
- Castelló, Itziar, and David Lopez-Berzosa. 2021. "Affects in Online Stakeholder Engagement: A Dissensus Perspective." *Business Ethics Quarterly*, DOI: doi.org/10.1017/beq.2021.35.
- Castells, Manuel. 2011. "Network Theory: A Network Theory of Power." *International Journal of Communication* 5: 773–87.
- Clegg, Stewart R. 1989. *Organization Theory and Class Analysis: New Approaches and New Issues*. New York: De Gruyter.
- Costa, Ricardo L. 2006. "The Logic of Practices in Pierre Bourdieu." *Current Sociology* 54 (6): 873–95.
- Crémer, Jacques, Yves-Alexandre de Montjoye, Heike Schweitzer. 2019. *Competition Policy for the Digital Era*. European Commission. <https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>.
- Constantinides, Panos, Ola Henfridsson, and Geoffrey G. Parker. 2018. "Introduction—platforms and infrastructures in the digital age." *Information Systems Research* 29 (2): 381-400
- Culpepper, Pepper D., and Kathleen Thelen. 2020. "Are We All Amazon Primed? Consumers and the Politics of Platform Power." *Comparative Political Studies* 53 (2): 288–318.

- Curchod, Corentin, Gerardo Patriotta, Laurie Cohen, and Nicolas Neysen. 2019. “Working for an Algorithm: Power Asymmetries and Agency in Online Work Settings.” *Administrative Science Quarterly* 65 (3): 644–76.
- Cusumano, Michael A., Annabelle Gawer, and David B. Yoffie (2019). *The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power*. New York: Harper Business, 2019.
- Cusumano, Michael, Annabelle Gawer, and David Yoffie. 2021. “Can Self-Regulation Save Digital Platforms?” *Industrial and Corporate Change* 30 (5): 1259–85.
- Cutolo, Donato, and Martin Kenney. 2020. “Platform-Dependent Entrepreneurs: Power Asymmetries, Risks, and Strategies in the Platform Economy.” *Academy of Management Perspectives* 35 (4): 584–685.
- Dewey, John. 1939. *Freedom and Culture*. New York: Putnam.
- Eaton, Ben, Silvia Elaluf-Calderwood, Carsten Sørensen, and Youngjin Yoo. 2015. “Distributed Tuning of Boundary Resources: The Case of Apple’s IOS Service System.” *MIS Quarterly* 39 (1): 217–43.
- Etter, Michael, and Oana Brindusa Albu. 2021. “Activists in the Dark: Social Media Algorithms and Collective Action in Two Social Movement Organizations.” *Organization* 28 (1): 68–91.
- European Commission. 2022a. “Deal on Digital Markets Act.” March 24, 2022. <https://www.europarl.europa.eu/news/es/press-room/20220315IPR25504/deal-on-digital-markets-act-ensuring-fair-competition-and-more-choice-for-users>.
- European Commission. 2022b. “The Digital Services Act Package.” <https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package>.
- Evans, David. 2003. “Some Empirical Aspects of Multi-Sided Platform Industries.” *Review of Network Economics* 2 (3).

- Faraj, Samer, Stella Pachidi, and Karla Sayegh. 2018. "Working and Organizing in the Age of the Learning Algorithm." *Information and Organization* 28 (1): 62–70.
- Fayard, Anne-Laure, and John Weeks. 2014. "Affordances for Practice." *Information and Organization* 24 (4): 236–49.
- Flyverbom, Mikkel, Ronald Deibert, and Dirk Matten. 2019. "The Governance of Digital Technology, Big Data, and the Internet: New Roles and Responsibilities for Business." *Business & Society* 58 (1): 3–19.
- Fuchs, Christian. 2007. *Internet and Society: Social Theory in the Information Age*. New York: Routledge.
- Furman, Jason. 2019. "Unlocking Digital Competition: Report of the Digital Competition Expert Panel." https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf.
- Garud, Raghu, Arun Kumaraswamy, Anna Roberts, and Le Xu. 2022. "Liminal Movement by Digital Platform-Based Sharing Economy Ventures: The Case of Uber Technologies." *Strategic Management Journal* 43 (3): 447–75.
- Gawer, Annabelle. 2014. "Bridging Differing Perspectives on Technological Platforms: Toward an Integrative Framework." *Research Policy* 43 (7): 1239–49.
- Gawer, Annabelle. 2021. "Digital platforms' boundaries: The interplay of firm scope, platform sides, and digital interfaces." *Long Range Planning* 54 (5): 102045.
- Gawer, Annabelle, and Rebecca Henderson. 2007. "Platform Owner Entry and Innovation in Complementary Markets: Evidence from Intel." *Journal of Economics & Management Strategy* 16 (1): 1–34.

- Gawer, Annabelle, and Nick Srnicek. 2021. "Online Platforms: Economic and Societal Effects," Panel for the Future of Science and Technology. [https://www.europarl.europa.eu/stoa/en/document/EPRS_STU\(2021\)656336](https://www.europarl.europa.eu/stoa/en/document/EPRS_STU(2021)656336)
- Ghosh, Arpita, and Patrick Hummel. 2014. "A Game-Theoretic Analysis of Rank-Order Mechanisms for User-Generated Content." *Journal of Economic Theory* 154 (November): 349–74.
- Gillespie, Tarleton. 2010. "The Politics of 'Platforms.'" *New Media & Society* 12 (3): 347–64.
- Goldhaber, Michael H. 1997. "The Attention Economy and the Net." *First Monday* 2 (4). DOI: 10.5210/fm.v2i4.519.
- Gulati, Ranjay, Phanish Puranam, and Michael Tushman. 2012. "Meta-Organization Design: Rethinking Design in Interorganizational and Community Contexts." *Strategic Management Journal* 33 (6): 571–86.
- Hilferding, Rudolph. 2005. *Finance Capital: A Study of the Latest Phase of Capitalist Development*. London: Taylor & Francis Ltd.
- Hippel, Eric von. 2006. *Democratizing Innovation*. Cambridge, MA: MIT Press.
- Hunsinger, Jeremy, and Andrew Schrock. 2016. "The Democratization of Hacking and Making." *New Media & Society* 18 (4): 535–38.
- Hurni, Thomas, Thomas L. Huber, and Jens Dibbern. 2022. "Power Dynamics in Software Platform Ecosystems." *Information Systems Journal* 32 (2): 310–43.
- Ignatow, Gabe, and Laura Robinson. 2017. "Pierre Bourdieu: Theorizing the Digital." *Information, Communication & Society* 20 (7): 950–66.
- Introna, Lucas D. 2016. "Algorithms, Governance, and Governmentality: On Governing Academic Writing." *Science, Technology, & Human Values* 41 (1): 17–49.

Jacobides, Michael G. 2021. “What Drives and Defines Digital Platform Power?” Evolution Ltd White Paper. <https://www.evolutionltd.net/post/what-drives-and-defines-digital-platform-power>. .

Jacobides, Michael G., Martin Bruncko, and Rene Langen. 2020. “Regulating Big Tech in Europe: Why, so What, and How Understanding Their Business Models and Ecosystems Can Make a Difference.” Evolution Ltd White Paper. <https://www.evolutionltd.net/post/regulating-big-tech-in-europe>.

Jordan, Tim. 2009. “Hacking and Power: Social and Technological Determinism in the Digital Age.” *First Monday* 14 (7). DOI: <https://doi.org/10.5210/fm.v14i7.2417>.

Joyce, S., & Stuart, M. (2021). Trade union responses to platform work: An evolving tension between mainstream and grassroots approaches. In *A Modern Guide To Labour and the Platform Economy*, edited by Jan Drahokoupil and Kurt Vandaele. Cheltenham, UK and Northampton, MA: Edward Elgar.

Julien, Chris. 2015. “Bourdieu, Social Capital and Online Interaction.” *Sociology* 49 (2): 356–73.

Jung, Yusun, and Kalle Lyytinen. 2014. “Towards an Ecological Account of Media Choice: A Case Study on Pluralistic Reasoning While Choosing Email.” *Information Systems Journal* 24 (3): 271–93.

Just, Natascha, and Michael Latzer. 2017. “Governance by Algorithms: Reality Construction by Algorithmic Selection on the Internet.” *Media, Culture & Society* 39 (2): 238–58.

Just, Sine N. 2019. “An Assemblage of Avatars: Digital Organization as Affective Intensification in the GamerGate Controversy.” *Organization* 26 (5): 716–38.

Katz, Michael L., and Carl Shapiro. 1985. “Network Externalities, Competition, and Compatibility.” *The American Economic Review* 75 (3): 424–40.

- Kelkar, Shreeharsh. 2018. "Engineering a Platform: The Construction of Interfaces, Users, Organizational Roles, and the Division of Labor." *New Media & Society* 20 (7): 2629–46.
- Kenney, Martin, Dafna Bearson, and John Zysman. 2019. "The Platform Economy Matures: Pervasive Power, Private Regulation, and Dependent Entrepreneurs." *SSRN Electronic Journal*. DOI: 10.2139/ssrn.3497974.
- Khan, Lina M. 2018. "Sources of Tech Platform Power." *Georgetown Law Technology Review* 2 (2): 325–34.
- Kitchens, Brent, Steve L. Johnson, and Peter Gray. 2020. "Understanding Echo Chambers and Filter Bubbles: The Impact of Social Media on Diversification and Partisan Shifts in News Consumption." *MIS Quarterly* 44 (4): 1619–49.
- Kolagar, Milad, Vinit Parida, and David Sjödin. 2022. "Ecosystem Transformation for Digital Servitization: A Systematic Review, Integrative Framework, and Future Research Agenda." *Journal of Business Research* 146 (July): 176–200.
- Kornberger, Martin. 2017. "The Visible Hand and the Crowd: Analyzing Organization Design in Distributed Innovation Systems." *Strategic Organization* 15 (2): 174–93.
- Kornberger, Martin, Dane Pflueger, and Jan Mouritsen. 2017. "Evaluative Infrastructures: Accounting for Platform Organization." *Accounting, Organizations and Society* 60 (July): 79–95.
- Kretschmer, Tobias, Aija Leiponen, Melissa Schilling, and Gurneeta Vasudeva. 2022. "Platform Ecosystems as Metaorganizations: Implications for Platform Strategies." *Strategic Management Journal*, 43 (3): 405-24.
- Krona, Michael. 2015. "Contravigilancia y videoactivismo desde la plaza Tahrir. Sobre las paradojas de la sociedad contravigilante." In *Videoactivismo y movimientos sociales*, edited by David Montereio and Francisco Sierra, 17. Barcelona: Gedisa.

- Lanier, Jaron. 2018. *Ten Arguments For Deleting Your Social Media Accounts Right Now*. Random House.
- Lessig, Lawrence. 2009. *El Código 2.0*. Madrid: Traficantes de Sueños.
- Levina, Natalia, and Manuel Arriaga. 2014. “Distinction and Status Production on User-Generated Content Platforms: Using Bourdieu’s Theory of Cultural Production to Understand Social Dynamics in Online Fields.” *Information Systems Research* 25 (3): 443–666.
- Lianos, Ioannis, and Bruno Carballa-Smichowski. 2022. “A Coat of Many Colours: New Concepts and Metrics of Economic Power in Competition Law and Economics.” *Journal of Competition Law & Economics*. DOI: 10.1093/joclec/nhac002.
- Lupton, Deborah. 2016. *The Quantified Self*. Hoboken, NJ: John Wiley & Sons.
- Lynskey, Orla. 2017. “Regulating ‘Platform Power.’” *LSE Legal Studies Working Paper* 1. DOI: 10.2139/ssrn.2921021.
- Lynskey, Orla. 2019. “Grappling with ‘Data Power’: Normative Nudges from Data Protection and Privacy.” *Theoretical Inquiries in Law* 20 (1): 189–220.
- Lyon, David. 2018. *The Culture of Surveillance: Watching as a Way of Life*. 1st edition. Cambridge; Medford, MA: Polity Press.
- Maddox, Jessica, and Jennifer Malson. 2020. “Guidelines Without Lines, Communities Without Borders: The Marketplace of Ideas and Digital Manifest Destiny in Social Media Platform Policies.” *Social Media + Society* 6 (2). DOI: 10.1177/2056305120926622.
- Margetts, Helen, Vili Lehdonvirta, Sandra González-Bailón, Jonathon Hutchinson, Jonathan Bright, Vicki Nash, and David Sutcliffe. 2021. “The Internet and Public Policy: Future Directions.” *Policy & Internet*. DOI: 10.1002/poi3.263.

- Martin, Kirsten E. 2022. "Algorithmic Bias and Corporate Responsibility: How Companies Hide behind the False Veil of the Technological Imperative." In *The Ethics of Data and Analytics: Concepts and Cases*. New York: Auerbach Publications.
- McCoy, Jennifer, Tahmina Rahman, and Murat Somer. 2018. "Polarization and the Global Crisis of Democracy: Common Patterns, Dynamics, and Pernicious Consequences for Democratic Polities." *American Behavioral Scientist* 62 (1): 16–42.
- McIntyre, David, Arati Srinivasan, Allan Afuah, Annabelle Gawer, and Tobias Kretschmer. 2021. "Multi-Sided Platforms as New Organizational Forms." *Academy of Management Perspectives* 35 (4): 566–83.
- Noble, Safiya Umoja. 2018. *Algorithms of Oppression: How Search Engines Reinforce Racism*. Illustrated edition. New York: NYU Press.
- O'Connor, Cailin, and James Owen Weatherall. 2019. *The Misinformation Age: How False Beliefs Spread*. New Haven, CT: Yale University Press.
- Orlikowski, Wanda J., and Susan V. Scott. 2015. "The Algorithm and the Crowd: Considering the Materiality of Service Innovation." *MIS Quarterly* 39 (1): 201–16.
- Pasquale, Frank. 2015. *The Black Box Society: The Secret Algorithms That Control Money and Information*. Cambridge, MA: Harvard University Press.
- Philbeck, Thomas, and Nicholas Davis. 2018. "The Fourth Industrial Revolution: Shaping a New Era." *Journal of International Affairs* 72 (1): 17–22.
- Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology* 24 (1): 1–24.
- Richards, Neil M. 2012. "The Dangers of Surveillance Symposium: Privacy and Technology." *Harvard Law Review* 126 (7): 1934–65.

- Rikap, Cecilia, and Bengt-Åke Lundvall. 2021. *The Digital Innovation Race: Conceptualizing the Emerging New World Order*. Cham, Switzerland: Springer International Publishing.
- Rochet, Jean-Charles, and Jean Tirole. 2003. "Platform Competition in Two-Sided Markets." *Journal of the European Economic Association* 1 (4): 990–1029.
- Rodon Modol, Joan, and Ben Eaton. 2021. "Digital Infrastructure Evolution as Generative Entrenchment: The Formation of a Core–Periphery Structure." *Journal of Information Technology* 36 (4): 342–64.
- Romele, Alberto, and Dario Rodighiero. 2020. "Digital Habitus or Personalization Without Personality." *HUMANA.MENTE Journal of Philosophical Studies* 13 (37): 98–126.
- Sandberg, Jörgen, and Mats Alvesson. 2011. "Ways of Constructing Research Questions: Gap-Spotting or Problematization?" *Organization* 18 (1): 23–44.
- Scherer, Andreas Georg, and Cristina Neesham. 2020. "New Challenges to Enlightenment: Why Socio-Technological Conditions Lead to Organized Immaturity and What to Do About It." *SSRN Electronic Journal*. DOI: doi.org/10/gj8mhq.
- Scherer, Andreas Georg, Cristina Neesham, Dennis Schoeneborn, and Markus Scholz. 2020. "Call for Submissions Business Ethics Quarterly Special Issue on: Socio-Technological Conditions of Organized Immaturity in the Twenty-First Century." *Business Ethics Quarterly* 30 (3): 440–44.
- Schwab, Klaus. 2017. *The Fourth Industrial Revolution*. New York: Crown Business.
- Seymour, Richard. 2019. "The Machine Always Wins: What Drives Our Addiction to Social Media." *The Guardian*, August 23, 2019, sec. Technology.
- Srnicek, Nick. 2016. *Platform Capitalism*. Cambridge; Malden, MA: Polity Press.
- Stark, David, and Ivana Pais. 2020. "Algorithmic Management in the Platform Economy." *Sociologica* 14 (3): 47–72.

- Stigler Committee on Digital Platforms. 2019. “Final Report.” Stigler Center for the Study of the Economy and the State. <https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf> .
- Striphas, Ted. 2010. “How to Have Culture in an Algorithmic Age.” *The Late Age of Print*. <https://www.thelateageofprint.org/2010/06/14/how-to-have-culture-in-an-algorithmic-age/>.
- Teece, David J. 2017. “Dynamic Capabilities and (Digital) Platform Lifecycles.” In *Entrepreneurship, Innovation, and Platforms (Advances in Strategic Management, vol. 37)*, 211–25. Bingley, UK: Emerald Publishing Limited.
- Thelen, Kathleen. 2018. “Regulating Uber: The Politics of the Platform Economy in Europe and the United States.” *Perspectives on Politics* 16 (4): 938–53.
- Tiwana, Amrit, Benn Konsynski, and Ashley A. Bush. 2010. “Research Commentary—Platform Evolution: Coevolution of Platform Architecture, Governance, and Environmental Dynamics.” *Information Systems Research* 21 (4): 675–87.
- Trittin-Ulbrich, Hannah, Andreas Georg Scherer, Iain Munro, and Glen Whelan. 2021. “Exploring the Dark and Unexpected Sides of Digitalization: Toward a Critical Agenda.” *Organization* 28 (1): 8–25.
- Tsoukas, Haridimos, and Mary Jo Hatch. 2001. “Complex Thinking, Complex Practice: The Case for a Narrative Approach to Organizational Complexity.” *Human Relations* 54 (8): 979–1013.
- Vaast, Emmanuelle, Elizabeth J. Davidson, and Thomas Mattson. 2013. “Talking about Technology: The Emergence of a New Actor Category Through New Media.” *MIS Quarterly* 37 (4): 1069–92.
- Valdez, Jimena. 2022. “The Politics of Uber: Infrastructural Power in the United States and Europe.” *Regulation & Governance*. DOI: 10.1111/rego.12456.

- Walker, Michael, Peter Fleming, and Marco Berti. 2021. “‘You Can’t Pick up a Phone and Talk to Someone’: How Algorithms Function as Biopower in the Gig Economy.” *Organization* 28 (1): 26–43.
- Wu, Liang, Fred Morstatter, Kathleen M. Carley, and Huan Liu. 2019. “Misinformation in Social Media: Definition, Manipulation, and Detection.” *ACM SIGKDD Explorations Newsletter* 21 (2): 80–90.
- Ziccardi, G. (2012). *Resistance, Liberation Technology and Human Rights in the Digital Age*. Dordrecht, Netherlands: Springer Science & Business Media.
- Zittrain, Jonathan. 2009. “Law and Technology: The End of the Generative Internet.” *Communications of the ACM* 52 (1): 18–20.
- Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Profile Books.

TABLES

Table 1: Forms of Platform Power and the Organization of Immaturity

Form of power	Definition	Organization of Immaturity	Examples of the use of platform power
<i>Constitutional</i>	Design and control of the platform’s architecture (modules, interfaces, layers, and algorithms) and the capacity to define the rules, norms, categories, and languages that make up the digital interactions	Explicitly prescribes realities and actions, granting the platform owner a monopoly over legitimate symbolic violence. This leads to the delegation of users’ own independent reasoning and the emergent coordination of their actions by the platform.	<ul style="list-style-type: none"> - Definition of users’ requirements to join (e.g., require proof of identity to join Airbnb) - Definition of possible interactions (e.g., the introduction of the “like” button on Facebook) - Definition of allowed and forbidden users’ actions (e.g., the impossibility of editing a tweet on Twitter)
<i>Juridical</i>	Capacity to sanction via the created rules and the authority to arbitrate in disputes	Disciplines users’ voice and participation and align them to the platform’s interests and values	<ul style="list-style-type: none"> - Sanction rule infringement (e.g., suspension of a Lyft driver’s account for using an alternative route) - Report abuses (e.g., users flagging inappropriate content on Instagram) - Management of access to the platform (e.g., restrict blacklisted users from using Tinder)
<i>Discursive</i>	Power exercised in linguistic exchanges, which are embodied and learned but are also generative of the habitus	Shapes collective discourse. Asks users to delegate their own reasoning to the platform	<ul style="list-style-type: none"> - Discourses of efficiency, technological determinism, or complexity promoted by the platform owners (e.g., accuracy and neutrality of Google Search results) - Narratives created within users’ communities (e.g., the superiority of PC-Windows gamers over Mac users)
<i>Distinction</i>	Creation of categories and the mechanisms of categorization that drive user’s choice in the platform	Enacts the platform owner’s capability to shape behaviour and the digital habitus	<ul style="list-style-type: none"> - Definition of users’ performance, status, or visibility metrics (e.g., the definition of a property’s valuation metrics in Booking) - Creation of differentiated tools to define hierarchies among users (e.g., ability to view profiles while remaining anonymous for LinkedIn premium users)
<i>Crowd</i>	User influence on platforms by the shared mass of their actions, coordinated or not. They can become manipulated by the platform owner	Implicitly contest immaturity when used against platform power accumulation	<ul style="list-style-type: none"> - User viralization of a message or practice (e.g., coordination of a protest through a Telegram channel) - Force a change in the platform’s functionalities (e.g., the introduction of feedback options for service providers in UpWork) - Manipulation of users by covertly coordinating their actions (e.g., mobilization of Uber’s users to settle a regulatory dispute)
<i>Hacking</i>	Exploitation of platform’s features and categories for a different purpose than the one originally intended	Explicitly contests individual immaturity, as it requires the exercise of independent reasoning and the understanding of the platform’s rules	<ul style="list-style-type: none"> - Evade the platform’s restrictions on functionalities (e.g., jailbreaking of Apple’s iOS) - Performance of forbidden practices (e.g., get away with selling counterfeit products on Amazon) - Abuse the logic of the algorithm in users’ favor (e.g., disguise user’s IP to access additional content on Netflix)

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