The rise of 'Indicatocracy' and the demise of strategic and operational autonomy in professional organizations

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Abstract:

In order to re-engage organizational studies with organization design and formal structures, this paper explores the contemporary rise of a new type of organization, which we label 'indicatocracy'. As a neologism combining of the concepts of "bureaucracy" and "indicators", we define indicatocracy as a new organizational form that operates at the level of an organizational field, spanning across multiple professional organizations through the disciplinary power of indicators. Exploring the characteristics of indicatocracies as compared to classic approaches to bureaucracies and markets, we reveal their central disciplinary effects and how they constitute central vehicles for introducing change within professional bureaucracies through increased managerial control, thus reshaping internal and external power structures. We make propositions on the emergence and effects of indicatocracies, and propose a research agenda to stimulate future research on indicatocracies.

Keywords: organizational design, formal structure, indicatocracy, standards

INTRODUCTION

Over the last decades, there have been rising debates about the tendency of scholars in organization theory to disengage from foundational topics in the discipline, such as organizational design (R. Greenwood and Miller 2010) and more generally the study of formal structures (Du Gay and Vikkelsø 2017). Interestingly, as Mintzberg's classic *'Structuring of Organizations'* (1979) is celebrating its 40th birthday, his model hasn't been significantly updated since the initial publication, and is still being taught as a comprehensive model of the variety of organizational structures in most MBAs and organizational behavior/theory courses.

Meanwhile, the period is marked by radical changes in terms of organizational structures: technologies reshape the boundaries of the firm and its productive activities, as evidenced by the rise of Global Value Chains connecting networks of organizations (Gereffi, Humphrey, and Sturgeon 2005; Christopher 2016), platform capitalism (Acquier 2018; Srnicek and De Sutter 2017) or the sharing economy (Acquier, Daudigeos, and Pinkse 2017) reshaping the boundaries between individuals, markets and organizations. Because they have refocused on their core competencies and outsourced non-strategic activities (Prahalad and Hamel 1990), organizations are no longer "islands" that can be studied as such, and looks like "archipels" that include several organizations (Hakansson and Snehota 1989).

For some observers, these evolutions constitute one of the multiple signals the demise of the American corporation (Davis 2009, 2016) and the collapse of traditional organizational forms. Increasingly, organizations as ostensible things seem to vanish and be substituted with fluid processes of organizing (Weick, 1979; Langley et al. 2013). Yet, while classic rigid structures seem to erode and pave the way for more fluid and evanescent structures, formality is far from disappearing: as noticed by Graeber (2015), the very extension of market and post-bureaucratic

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ideals goes hand in hand with an unprecedented extension of formal bureaucratic routines (see also Power 1997), sometimes hidden in less visible but still highly prescriptive algorithms (Eubanks 2017). These processes of organizing increasingly happen outside the classic frontiers of individual organizations, for example through standards (Brunsson and Jacobssson 2000) and meta-organizations (Arhne and Brunsson 2008), i.e. organizations whose members are not individuals but other organizations. As a result, such organizational transformations call for a major update for organizational design and renewed approach to the study of formal organizations and their new structural context.

However, these transformations have been studied from a variety of academic angles within management (accounting, supply chain management, ethnography, information technologies, strategy or innovation management) and social sciences (sociology, anthropology, economics or political science), but rarely from the angle of organization design or formal structures. For some observers, this 'fear of the formal' (du Gay and Lopdrup-Hjorth 2016) constitutes one symptom of a wider problem: the limited progress and relative 'fossilization' of organizational studies and organization theory (Miller, Greenwood, and Prakash 2009; Davis 2010, 2015; Daft and Lewin 2008). It also illustrates the 'relevance gap' in management research (Starkey and Madan 2001; Bartunek and Egri 2012; Rynes, Bartunek, and Daft 2001)- i.e. the gap between research, teaching and practice (Burke and Rau 2010; Pearce and Huang 2012)-, and the failure to engage in major societal issues related to organizational transformations. Exploring the reasons of this retreat from the study of organizational design, Greenwood and Miller (2010) point to the inherent complexity of design calling for researchers' direct commitment which has become incompatible with the growing professional constraints of publication within our field. As well, they point to theoretical shifts towards field-level perspectives, or to focus on

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parts of the design rather than developing a multidisciplinary and holistic perspective of the whole phenomenon of design (what Mintzberg called 'getting it all together').

Ironically, we believe that this retreat of management scholars from the study of organizational structures is partly due to some –largely untheorized– structural transformations of business schools themselves over the last decades, which have undergone fundamental transformations in terms of coordination mechanisms, logics, coordination and working conditions. Several researchers have documented parts of this overall change: while some studies explore the rise of rankings and their impacts on organizations (Espeland and Sauder 2007; Sauder and Espeland 2009) and the shift of academic institutions from academic to market logics (Gioa and Corley, 2002), others have denounced processes of taylorizing management research (Mingers and Willmott 2013), or described how professionals have progressively surrendered their professional autonomy (Alvesson and Spicer 2016). However, these elements have been considered in isolation and it is unclear whether and how they are linked together. Second, from an organizational design perspective, such shifts appears quite strange and paradoxical, given business schools and universities are usually portrayed as ideal-typical cases of professional bureaucracies (Mintzberg 1979), where professionals are supposed to control expert knowledge (Abbott 1988), resist change, enjoy –and protect– a high degree of autonomy, and exert power and control over field level frames (Royston Greenwood, Suddaby, and Hinings 2002).

The objective of this paper is to contribute to renew the study of organizational structures by theorizing one new organizational form which has experienced a strong rize over the last decades: indicatocracy. As a neologism combining the concepts of "bureaucracy" and "indicators", we define indicatocracy as a new organizational form that operates at the level of an organizational field, spanning across multiple individual professional organizations through the disciplinary power of indicators. Indicatocracies constitute central vehicles for introducing

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change in professional bureaucracies through increased managerial control and shifting logics from professional to market logics. As compared to classic professional bureaucracies, indicatocracies present a high degree of managerial control (high power of middle managers), a low level of operational autonomy (lowered professional power), and a low level of strategic autonomy (low power of top management), as external agencies tend to 'absorb' strategy and standardize the rules of the game among field members. Although largely overlooked in the entirety of the phenomenon, the rise of indicatocracy is a major phenomenon of our time with extensive disciplinary effects, which plays a key role in modernizing public and professional structures by bringing managerial rationales into established professional bureaucracies (such as universities or hospitals) and to make them managerially accountable. While indicatocracies have positive consequences, they also raise important questions related to power, responsibility, sense of purpose and homogenizing/isomorphic forces which shape organizations.

In line with the comprehensive tradition of organizational design meant to 'getting it all together', we theorize indicatocracy by integrating different theories which have touched upon the phenomenon we study. For that reason, we build our model by integrating elements from neo-institutional theories, critical management studies, organizational design and work transformation. The paper is organized as follows: in a first section, we review the literature on professional bureaucracies. We stress that paradoxically, the literatures highlight that they simultaneously became during the last decades more bureaucratized and commodified. In a second section, we formulate the key characteristics of an *indicatocracy* (see Graph 1.). In a third section, we stress that indicatocracy can be understood as an hybrid form, between *markets* and *bureaucracies* (see Table 1). In a fourth section, we formulate propositions on the emergence of indicatocracies, and their impacts on competitive and organizational dynamics

among and within member professional bureaucracies. We show that partly . In the conclusion we propose a research agenda to study indicatocracies.

Overall this article makes different theoretical contributions. First, we contribute to the literature of organizational design and formal structures by theorizing indicatocracy as a new organizational form spanning across various organizations within a given organizational field, with strong societal consequences. Second, we contribute to neo-institutional perspectives by connecting macro field-level processes of isomorphism with meso-level structural changes and micro-level transformation of work. Third, we bridge and combine different theoretical perspectives on the same object, enabling to develop a multilevel and multi-theoretical perspective on indicatocracies.

1. THE PARADOXAL TRANSFORMATION OF PROFESSIONAL BUREAUCRACIES

Professional bureaucracy is one of the five types of organization theorized by Mintzberg (with simple structure, machine bureaucracy, divisionalized form and adhocracy). This typology is still taught today within business schools, while many changes took place during the last forty years (network development, platform economics, etc.). Notably, the literature emphasizes that professional bureaucracies (hospitals, universities, etc.) have undergone a deep transformation (Brock, Hinings, and Powell, 2012). Paradoxically, research suggests that these organizations have simultaneously become more bureaucratized and commodified.

1.1. THE PROFESSIONAL BUREAUCRACY AS INITIALLY THEORIZED BY MINTZBERG

As initially defined by Mintzberg (1979, 1980), the key part of professional bureaucracy is its operational core, constituted by definition of the professionals themselves. With recognized expertise, they have broad autonomy and are in a position to decide what to do in the

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organization and how to do it. This type of organization is by nature very decentralized, and the strategic apex, the middle line and the technostructure are relatively small in comparison with the operating core. In order to help professionals carry out their mission, however, support staff is often quite large. Within the professional bureaucracy, the complexity of the activities carried out by the professionals means that the main coordination mechanism is the standardization of qualifications: it is because the professional is qualified that everyone knows what he has to do and what the others have to do and that the organization works. According to Mintzberg, such an organizational form is particularly adapted to complex and stable environments. For Mintzberg, ideal-typical examples of professional bureaucracy are organizations such as hospitals, universities, business schools or law firms.

1.2. A BUREAUCRATIZATION OF PROFESSIONAL BUREAUCRACIES?

However, the literature shows that all these organizations that were classified in the late 1970's by Mintzberg as professional bureaucracies have deeply changed. On the one hand, the literature reports a dynamic of bureaucratization of these organizations. The number of administrative staff in universities exploded and they became "bureaucratised" (Gornitzka, Kyvik, and Larsen, 1998). Knowledge intensive firms have seen the rise of new forms of "bureaucratization", and the development of more hierarchy, more centralization and more standardization (Kärreman, Sveningsson and Alvesson, 2002). Hospital, under the influence of doctrines such as New Public Management and Managerialism (Carvalho and Santiago, 2016), can be described as a "neo-bureaucracy" (Harrison and Smith, 2003). This transformation appears to be a consequence of the rules promulgated not by the hospital hierarchy, but by external agencies (Harisson and Smith, 2003), as well as by the conversion of certain doctors into "organizational leaders" (Baker and Denis, 2011). Such a change has led professionals to

rethink their professional identity, and to consider, like the engineers interviewed by Mueller and Carter (2007) that they are now "all managers."

1.3. A COMMODIFICATION OF PROFESSIONAL BUREAUCRACIES?

At the same time, the literature on those organizations also indicates that they are more and more organized in reference to market logic. This is due to the fact that several external actors are now evaluating and comparing professional bureaucracies, and place them in competition with each other. For instance, according to Gioia and Corley (2002), the development of rankings by media is the factor that has the most influence on business schools education, and has pushed business school to put more and more emphasis on their image. This search for a good market image, coupled with the willingness of public authorities to better evaluate professional organizations, explain the rise in accreditation practices that have affected both hospitals (Brubakk et *al*., 2015), and business schools. Julian and Ofori-Dankwa (2006) evoke a trend towards "accreditocracy" in business schools, which they say is detrimental in terms of strategic decisions. More broadly, this competition makes bureaucracies more comparable and leads to a standardization of tasks across organizations. The professionals themselves evoke the "taylorization" of their activity, whether they are doctors (Hartzband, and Groopman, 2016), or academic (Mingers and Willmott, 2013). Accordingly, this "hyper-rationalization" of tasks leads to a loss of autonomy for professionals (Germov, 2005).

1.4. THE EMERGENCE OF A NEW STRUCTURAL CONFIGURATION

Given the changes within hospitals, business schools and universities over the last decades, it is increasingly questionable whether these organizations still qualify as professional bureaucracies according to Mintzerg's framework. Moreover, the literature does not agree on their organizational nature, some stressing that they resemble more and more to classic machine bureaucracy, while others that they are now competing in an economic market. Our thesis is

that in order to describe these organizations that once have been theorised as a professional bureaucracy, it is necessary to introduce a new configuration: indicatocracy.

2. PATTERNS OF INDICATOCRACIES

To introduce the concept of indicatocracy, we develop an ideal-typical description of this organizational form and its characteristics. Ideal-types are frequently used to introduce and describe new organizational forms (Weber, 1978; Mintzberg, 1979; Powell, 1990; Williamson, 1991; Ouchi 1980). We define indicatocracy as an organizational form that operates at the level of an organizational field, spanning across multiple individual professional organizations through the disciplinary power of indicators. Graph 1 provides a representation of how such organizational form operates.

Graph 1: Indicatocracy as a new organizational form - a graphic representation
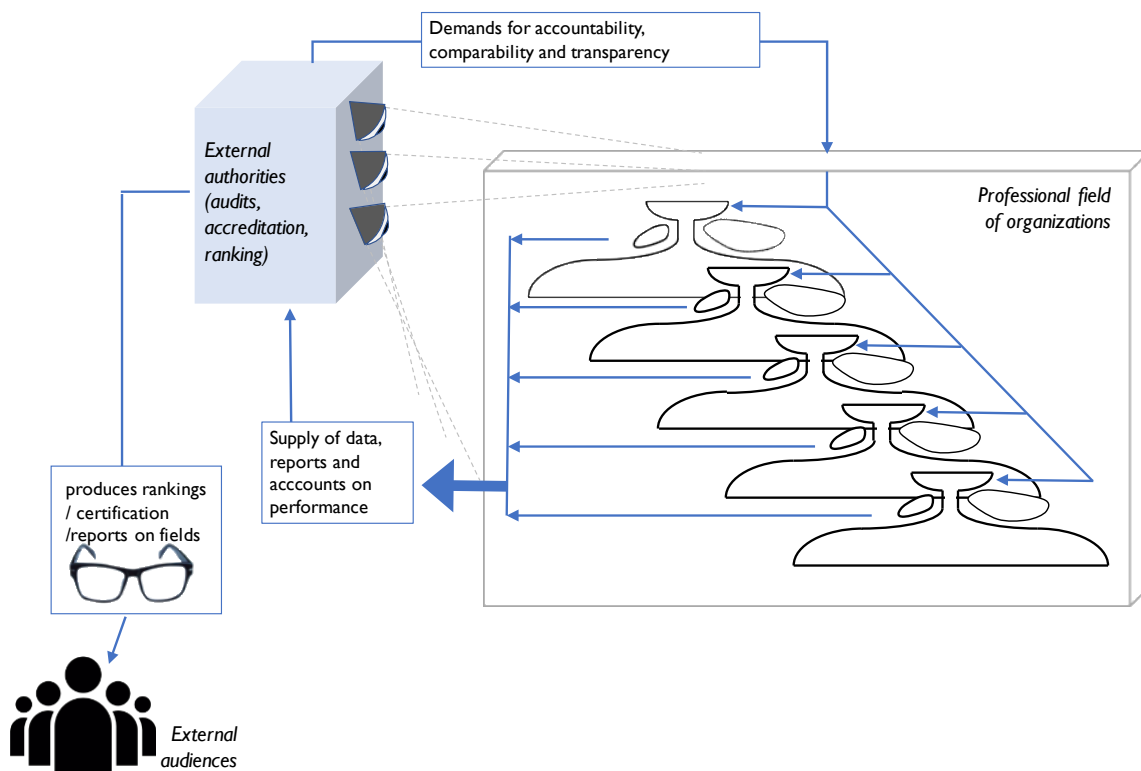
2.1. ORGANIZING ORGANIZATIONAL FIELDS

One of the key feature of indicatocracy is that it operates at the scale of an "organizational field" (DiMaggio & Powell, 1983), i.e. to "a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field' (Scott, 1995: 56). Indicatocracy thus concerns a collective of organizations of the same field, which it aims at structuring and regulating.

2.2. COORDINATION BASED ON QUALITATIVE AND QUANTITATIVE INDICATORS

Indicatocracies typically develop in situations where external audiences (public or private authorities, funding agencies, clients, users) face a high level of complexity and uncertainty about the quality and performance of the goods and services produced by the organization. For that reason, external agencies define and produce indicators of performance through certification, field reports and ranking systems, to produce information towards external audiences. Such indicators are intended to apply to all the organizations of the field, and can be both qualitative and quantitative. Qualitative indicators make it possible to give (or not) distinctive qualities to certain organizations of the field, and can be in particular accreditations, labels, etc. The rise of these indicators is linked to the development of an audit society (Power, 1997), which has led to an explosion of tools aimed at ensuring certain qualities of organizations, that these qualities concern the quality of products / services (Guler et al., 2002), the environment (King et al., 2005), accounting (Jamali, 2010), etc. Quantitative indicators are intended to potentially evaluate all organizations in the field. They enable to rank organizations against each other, and their development is associated with the rise of best practices logic and benchmarking among organizations.

2.3. AN UNDERLYING PRINCIPLE OF DECONTEXTUALIZATION AND COMPARABILITY

Indicatocracies produce comparability, accountability, transparency and competition among organizations of a given field. The basic postulate underlying indicatocracies is that it is possible to compare organizations of the same field with each other, despite the important differences that may exist between these organizations and all their singularities (Karpik, 2007). As a result, indicatocracies are organizations that fundamentally decontextualize organizations, flattening their specificities.

### 2.4. EXTERNAL AND CENTRALIZED CONTROL

In indicatocracies, control is shaped in an hybrid way between bureaucracies and markets: it is both externalized and centralized into external agencies, which become the key part of the organizational configuration. By doing so, these external agencies exert strong homogenizing forces and isomorphic pressures over organizations of the field. In order to function at the operational level, indicatocracy relies on a certain number of actors responsible for designing the indicators within the field, gathering information in order to document the indicators, and verify that the information transmitted by the organizations within the field is correct. For obvious reasons of legitimacy, such entities must by definition be in a position of outwardness with respect to organizations in the field. These entities may be emanations of the organizations of the field themselves, and in particular can be meta-organizations (Arhe and Brunsson, 2006), which bring together a collective of organizations according to democratic logic. They may also be independent ranking and rating entities completely external to the field members (as the Michelin guide in the world of restaurants, or media and with the rankings of business schools).

2.5. STRUCTURAL TRANSFORMATIONS WITHIN MEMBER ORGANIZATIONS

Individual organizations belonging to an indicatocracy have to perform various intra-organizational transformations to feed external authorities and their models (see Graph 2). As

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compared to classic professional bureaucracies, organizations belonging to indicatocracies present several characteristics: a bigger *technostructure* to make the activity auditable, produce accounts of performance and implement standards. As experts get ranked and activity audited, middle line (staff managers) is increased to manage operationals. While these elements towards managerial bureaucratization may suggest a move towards configuration of *machine bureaucracies*, a significant different lies in the limited role of the strategic core (atrophied strategic apex): as performance criteria and control are externalized, the top management latitude to define a strategy that would be unique to the organization is radically reduced. As such, the rise of indicatocracies creates simultaneous pressures towards managerialization and isomorphism (organizations adopting the same type of strategy, organization, and performance metrics).

Graph 2: Formal organizational impacts of an indicatocracy on a typical professional bureaucracy

Classic professional bureaucracies
(Mintzberg, 1979)

« Indicatocratized » professional bureaucracies
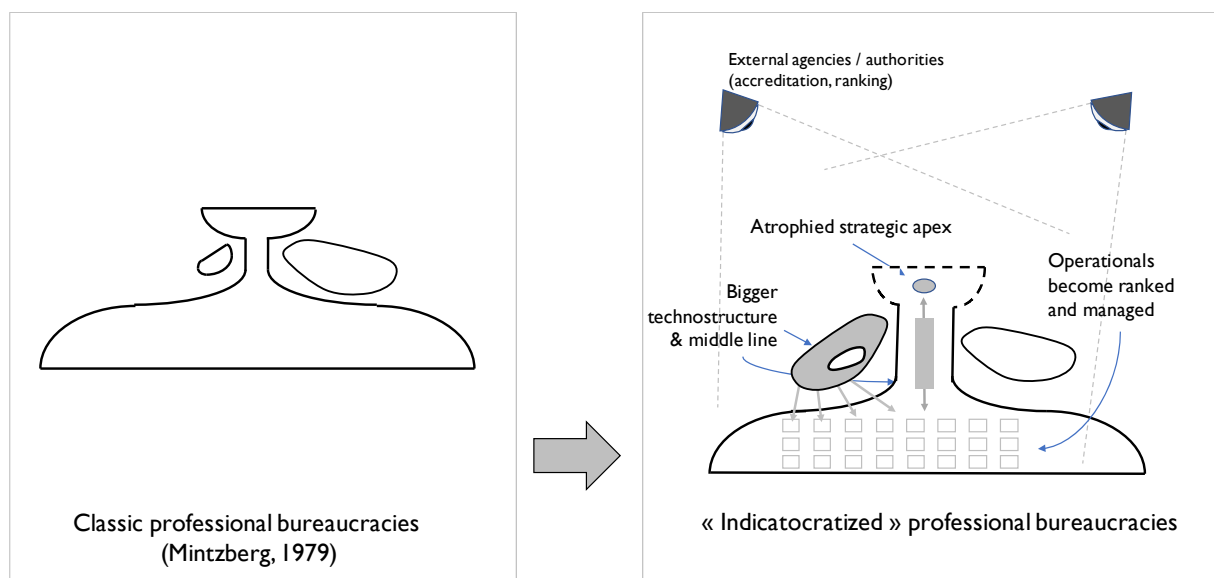
3. INDICATOCRACY, AN HYBRID FORM BETWEEN MARKETS AND BUREAUCRACY

In the literature, 'market' and 'bureaucracy' have traditionally been presented as two alternatives to organizing transactions. However, the past decades have witnessed the generalization of hybrid organizational forms, combining both market and bureaucratic elements. If we look at the features of indicatocracies, and compare to bureaucracies and markets, it can be seen a hybrid form bridging these two modes of social organization.

Table 1: ideal-typical forms of Bureaucracy, Markets and Indicatocracy

	BUREAUCRACY	INDICATOCRACY	MARKET
UNIT OF ANALYSIS	Organization	Organizational field	Market relationship
OVERARCHING PRINCIPLE	Depersonalizing	De-contextualizing	Dis-embedding
CENTRAL COORDINATION MECHANISM	Rational/legal authority based on rules and hierarchy	Assurance- or performance-based indicators	Price mechanism
NORMATIVE IDEAL	Rationality and standardization	Accountability, transparency and comparability	Pure and perfect competition
CONTROL MECHANISMS	Internal & centralized	External & centralized	External & decentralized
KEY PART	Strategic apex	External authorities (ranking and regulation agencies)	Marketplace
MAIN PURPOSE	Rationalizing and standardizing goods and services	Increasing external control and introducing efficiency rationales	Setting-up an exchange system of standardized goods (with observable and codified quality conventions)
MANAGERIAL LATITUDE	High	Medium : increased managerial control of professional workers, but weak strategic latitude (strategy and objectives are defined outside the organization)	Low

3.1. BUREAUCRACIES

Classic bureaucracies present several common characteristics: they rely on a set of formal and rationally justified rules issued by a centralized strategic unit, having hierarchical authority and managerial latitude on the operational basis of the organization (see Chandler's "visible hand" of managers). They are typically analyzed at the intra-organizational level (be it a company, public service, etc.). Ideal typical descriptions of bureaucracies rely on an overall principle of depersonalization, where authority is no longer granted to a physical person based on charisma or tradition, but to an employee with specific contractual relationship, holding a role and selected because of his expertise, occupying a specific position in an "bureau". As coordination relies on formal rules, bureaucracies have often been described as machines (Morgan) that are particularly efficient at engineering and producing complex standardized goods and services at a high scale, but at the expense of bureaucratic drifts (inertia, lack of flexibility, lack of adaptation to local needs, and low ability to integrate individual expectations). Within the different forms of bureaucratic organizations, professional organizations constitute a specific configuration which exhibit several characteristics: professional organizations are marked by strong operational power and autonomy, weaker centralization and managerial power, coordination based on standardized expertise, complex activities, collegiate decision making and limited technostructure, more limited economies of scale and a strong tendency to resist any form of change which would threaten the expertise, latitude and power of operationals.

3.2. MARKETS

At the other extreme, markets constitute an alternative to such "islands of conscious power", where transactions are based on short term contracts and coordinated by the price mechanism,

between a multitude of anonymous agents. Transacting agents interact freely and are not known *a priori*, and can be both individuals or organizations. While bureaucracies are based on a principle of depersonalization, markets are based on a principle of dis-embedding, enabling agents to transact freely and independently from one another. A key driving force of markets is competition, led by the invisible hand. As compared to bureaucracies, markets both decentralize and externalize the control of behaviors, by creating incentives which shape behaviors and drive adaptation and innovation from competitors. However, market raise risks of opportunism and deception, which increase as transactions become more complex and as information is asymmetric among participants (Williamson, 1984). For that reason, market best function in situations where goods and services are sufficiently standardized, understandable and observable, with sufficiently codified quality conventions.

3.3. INDICATOCRACY AS AN HYBRID FORM

When we compare indicatocracy with market and hierarchy, this form appears as having intermediate characteristics to these modes. The unit of analysis to which indicatocracies operates is a group of organizations of a same field that is not as vast as a market (that is made of thousands of agents), but is much larger than a classical hierarchy, which operates at the scale of an organization. Indicatocracies leads to a form of decontextualization that appears to be more powerful than the depersonalization produced by the bureaucracy, but less than the disintegration between the social and the economy generated by the market. The coordinating mechanism that governs indicatocracy includes indicators that are both quantitative and qualitative and which goes beyond price mechanisms, but are softer than conventional hierarchical rules. In indicatocracies, behavioral control is outsourced as it is in the market, but it is decentralized as well as within the hierarchy, since it is produced by a number of external

authorities (media, organizations). Finally, the managerial latitude is by nature less important than within the bureaucracy, but more important than within the market.

4. THE RISE OF INDICATOCRACIES: CAUSES AND EFFECTS

Existing literature on the evolution of professional bureaucracies has largely documented enabling factors, largely exemplified by the diffusion of a neoliberal ideology within concepts such as New Public Management (Bleiklie 2019; Connel & al; 2009) and the willingness to mitigate the traditional drifts of classic bureaucracies by regaining control and accountability over professionals. While these ideological shifts certainly produce enabling factors creating a favorable context for the emergence of indicatocracies, they don't fully explain how professional organizations progressively transform themselves into indicatocracies. In particular, there is a central puzzle in the emergence of indicatocracies: indicatocracies are depriving professionals of part of their power and autonomy and imply major identity shifts for professionals who increasingly turn into managers. In most situations, such emergence involves powerful and skilled professionals to take part and cooperate in processes which go against their autonomy and power. As explained by Alvesson & Spicer (2016), such processes involve professionals to voluntarily surrender their professional autonomy. In this section, we make propositions on the different mechanisms of how such paradox is managed to secure the emergence of indicatocracies, and explore their organizational consequences.

4.1. MECHANISMS OF EMERGENCE:

Indeed, how to secure the active participation of powerful professionals in the emergence of a system that may go against their autonomy and the potential interest of dominant organizations? The emergence of indicatocracies implies a certain degree of collaboration from professionals

and major actors of the field. To achieve this, there are different potential strategies to secure the participation of dominant professional organizations in the field and their members: coercion, seduction and concealment.

Coercive strategies:

Coercion involves active and explicit reshuffling of resources and power. Such coercive dynamics more likely to occur in situations where resources are highly concentrated by a centralized authority (Pfeffer & Salancick, 1978).

> *Proposition 1: the higher the centralization of resources needed for professional bureaucracies, the more external authorities can use coercive strategies to develop indicatocracies*

Seduction strategies:

In situation where resources are more diffused and less centralized, less confrontational processes such as seduction are likely to be found (NKomo, 2009). Seduction constitutes an alternative strategy to coopt dominant professional organizations and key professional members, who may otherwise use their resources to block processes of institutional change (Suddaby & Viale, 2011). We define seduction strategies as *a series of practices meant to attract professionals and professional organizations by creating opportunities and interest for professionals of the field, as well as dominant organizations to participate in the emergence of indicatocracies*. By doing so, indicatocracies create a context where the emergence of external agencies take power over the field, without going against the direct interest of established professionals. Instead, they actually promote them by offering spaces to promote their vested interest. In such situations, indicatocracies secure their emergence and legitimacy by enhancing the power of dominant actors and high status organizations, or creating new opportunities for them. Within business schools, rankings of researchers' performance according to publication

records, journal rankings and impact factors created incentives for researchers, contributing to increase wages, employability and decreasing teaching hours for high publishing faculty (Nkomo, 2009). Rankings also created strong isomorphic forces over the field of business schools, thus creating a bigger, more international and fluid job market for international academics, as well as accelerating the shift towards international academic performance criteria in countries where research was national or less prevalent in the historical tradition in business education (Adler & Harzing 2009).

Within schools, the increased bureaucratization following the diffusion of accreditation and rankings also contributed to create a new positions, offering the opportunity of a managerial career for lower performing researchers or professors, who could now access alternative managerial positions.

> *Proposition 2a: indicatocracies gain the support of professionals by creating opportunities and additional resources for professionals*

The same mechanism happens with organizations, at the level of the field. As field-level change may be blocked by dominant organizations within the field (Dacin, Goodstein & Scott, 2012), high-status organization must endorse rankings, audits and be coopted in the development of indicatocracies. Various mechanisms may be used by external agencies to be endorsed by dominant organizations of the field. A first mechanism is to maintain dominant status hierarchies, which are reflected and formalized -rather than disrupted- by rankings. Reflecting existing status hierarchies enables to secure both the participation of the dominant actors of the field, and the credibility of the rankings for external audiences (ref). Through this process, indicatocracies extends and formalize the dominance of high status organizations over the field, opening new opportunities for them by extending their perimeter and market.

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Proposition 2b: indicatocracies gain the support of dominant professional organizations of the field by reflecting and formalizing existing status hierarchies within the field rather than disrupting them

A third seduction strategy consist in opening the governance and operational processes of external agencies to organizations of the field that they are meant to regulate. Such structural openness is particularly visible in accreditation processes within business schools, as audits are performed by business schools professionals, and as auditing bodies such as EFMD present themselves as "membership driven organizations with 900+ members", "dedicated to management development" (EFMD website). Schools represented in governing bodies are also labelled and go through the accreditation process. Likewise, many such external agencies that are established to govern the field adopt the form of professional meta-organizations (Ahrne & Brusson, 2005; Berkowitz & Dumez, 2016), i.e. organizations who are formed and governed by organizations -rather than individuals-. Opening the governance structure, decision making processes and operational mechanisms to field members establishes to sense of control and compatibility with professional values of community-based regulation.

Proposition 2c: indicatocracies gain the support of professional organizations of the field by opening their governance and operational structure to field members that they are likely to govern

Concealment strategies:

Concealment strategies constitute a third basic mechanism favoring the development of indicatocracies. Concealment strategies consist in *practices meant to hide the potential threats and harmful effects that indicatocracies represent for professionals and their organizations.* Such concealment strategies help to create the perception that developing indicatocracies does not endanger their autonomy. Empirically, various practices may reflect such strategies, such

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as creating local opportunities to decouple audits and structure from actual practices, creating the belief that professionals and organizations can "game" the system and turn it to their advantage (Alvesson & Spicer 2016). The formal structure of accreditations, inspired by total quality management models and requiring formal procedures and quality frameworks instead of actual achievements can also play such a role.

Rankings are different from accreditations as they tend to impose externally defined performance models, and are more oriented towards metrics and measurable outcomes. However, organizations may still experience some leeway through the diversity of rankings and of ranking categories (see Financial Times), making it possible for all organizations to score better in specific categories and strategically choose to promote in the most relevant rankings according to their own resources and objectives.

> *Proposition 3: indicatocracies gain the support of professional organizations of the field by tolerating decoupling within target organizations, multiplying the number of audits and rankings and creating some leeway to limit their disciplining effects on professional bureaucracies*

Temporal dynamics and diffusion:

Through concealment strategies, external authorities may develop in an unobtrusive way, not creating too much disturbance and change within target organizations. This is particularly true at the beginning of the life of standards, when standards need to build a strong network to legitimize themselves (Katz and Shapiro, 1985; Arthur, 1988). But over time, the relative power of standard setters, ranking systems and organizations decreases through lock-in effect: once in, it becomes difficult for an organization to step out of rankings and standards, because of reputational risks and costs (cf. grande cuisine). For that reason, concealment is likely to become less and less necessary for indicatocracies to diffuse over time.

Proposition 4a: concealment strategies are most prevalent in the emergence stage of indicatocracies

Proposition 4b: concealment strategies decrease with the diffusion and legitimacy of standards and rankings.

4.2. EFFECTS OF INDICATOCRACIES:

These propositions will be fully developed in the full version of the paper

Competitive dynamics:

Proposition 5: indicatocracies frame competition around a dominant design

Proposition 5b: indicatocracies create "red queen effect" among organizations

Proposition 6: indicatocracies displace strategy and innovation outside organizations of the field

Proposition 7: indicatocracies inhibit radical innovation within member organizations and are thus more subject to disruptive innovation from organizations outside the field

Organizational dynamics:

Proposition 8: indicatocracies create functional stupidity within member organizations

Proposition 9: indicatocracies reframe internal power-games among professionals within member organizations

Proposition 10: indicatocracies displace power games outside organizations

CONCLUSION: A RESEARCH AGENDA ON INDICATOCRACIES

In this paper, we introduced a new organizational form: indicatocracy. This form operates at the level of an organizational field, spanning across professional organizations through the disciplinary power of indicators. We explored the characteristics of indicatocracies as compared to bureaucracies and markets. We stressed their central disciplinary effects and how they constitute central vehicles for introducing change within professional bureaucracies.

This research is a first attempt to theorize indicatocracies, their origins and impacts. It opens up a number of questions that need to be explored in future research. Beyond the propositions formulated, it is necessary to better understand the conditions and processes leading professional organizations to resist or gradually turn into indicatocracies. It would be particularly valuable to understand why indicatocracies develop in some sectors and not in others, and to explore mechanisms of resistance to the emergence of indicatocracies. What are the cultural and professional dimensions that make indicatocracies spread in some sectors and countries?

As we stressed, indicatocracy is the consequence of the empowerment of external actors (external authorities, accreditation bodies, ranking organizations, etc.). While a great amount of research has explored the role of rankings on organization, ranking or accrediting organizations remain understudied. Researchers should explore these organizations, their governance and relationship with professional organizations they regulate, as well as their relationship with other ranking or accrediting bodies. The literature on meta-organizations could be used in this perspective.

Beyond a better understanding of indicatocracies, an important research avenue for the future is to develop configurational approaches of such organization of organizations. Within

organization studies, such approaches have been developed so far at the intra-organizational level (and from this point of view, the typology of Mintzberg still constitutes a classic). As we already mentioned, the last decades have been marked by the rise of new forms of organization of organizations, but organizational theory did not really provide a typological overview. By definition, such configurational approach should reflect the many forms of organization of organizations described in recent decades. We think about networks, meta-organizations, communities, supply chains, etc. In addition, it should also build on the concepts used at the intra-organizational level.

To achieve this, an issue is certainly to reinvent the way in which management research is currently performed. In the last decades, many have voiced concerns about the evolution of academia towards quantitative approaches, fast publication, small isolated phenomenon and the subsequent neglect of more complex issues related to organizational design (see for example Greenwood & Miller 2009). Indicatocracies, as organizations of organizations, constitute complex entities, as they refer to multiple units of analysis that are embedded with each other, and as they are by definition more and more fragmented geographically. While it is possible to build theory on indicatocracies by connecting the rich literature on professional transformations and rankings, this should be completed by long-term research. While we all academics tend to be part of the same global indicatocracy that puts us in competition for publication, we instead need to unite ourselves, to collectively try to amend the existing indicators so that they push academics to adopt collective and long-term research behaviour.

References

Abbott, Andrew Delano. 1988. *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: University of Chicago Press.

Acquier, Aurélien. 2018. "Uberization Meets Organization Theory: Platform Capitalism and the Rebirth of the Putting Out System." In *The Cambridge Handbook of the Law of the Sharing Economy*, by Nestor M. Davidson, Michèle Finck, and John J. Infranca.

Acquier, Aurélien, Thibault Daudigeos, and Jonatan Pinkse. 2017. "Promises and Paradoxes of the Sharing Economy: An Organizing Framework." *Technological Forecasting and Social Change*, July. https://doi.org/10.1016/j.techfore.2017.07.006.

Alvesson, Mats, and André Spicer. 2016. "(Un)Conditional Surrender? Why Do Professionals Willingly Comply with Managerialism." Edited by Dr Marja Flory and Dr Juup Essers. *Journal of Organizational Change Management* 29 (1): 29–45. https://doi.org/10.1108/JOCM-11-2015-0221.

Ahrne, Göran, and Nils Brunsson. 2008. *Meta-organizations*. UK: Edward Elgar Publishing.

Ahrne, G., and N. Brunsson, N. 2011. "Organization outside organizations: The significance of partial organization." *Organization* 18 (1): 83-104.

Arthur, W. B. 1988. Competing Technologies: an overview. In G. Dosi, C. Freeman, R. Nelson, G. Silverberg, and L. Soete (eds.). *Technical change and Economic Theory*. London: Pinter.

Baker, G. R., & Denis, J. L. (2011). Medical leadership in health care systems: from professional authority to organizational leadership. *Public Money & Management*, 31(5), 355-362.

Bartunek, J. M., and C. P. Egri. 2012. "Introduction: Can Academic Research Be Managerially Actionable? What Are the Requirements for Determining This?" *Academy of Management Learning & Education* 11 (2): 244–46. https://doi.org/10.5465/amle.2012.0134.

Brock, D., Hinings, C. R., & Powell, M. (2012). *Restructuring the professional organization: Accounting, health care and law*. Routledge.

Brubakk, K., Vist, G. E., Bukholm, G., Barach, P., & Tjomsland, O. (2015). A systematic review of hospital accreditation: the challenges of measuring complex intervention effects. *BMC health services research*, 15(1), 280.

Brunsson, Nils., and Jacobsson, Bent. 2000. *A world of standards*. Oxford: Oxford University Press.

Burke, Lisa A., and Barbara Rau. 2010. "The Research–Teaching Gap in Management." *Academy of Management Learning & Education* 9 (1): 132–43. https://doi.org/10.5465/amle.9.1.zqr132.

Carney, Brian M, and Isaac Getz. 2016. *Freedom, Inc.: How Corporate Liberation Unleashes Employee Potential and Business Performance*. Place of publication not identified: Argo-Navis.

Carvalho, T., & Santiago, R. (2016). Transforming professional bureaucracies in hospitals and higher education institutions. In *Towards a comparative institutionalism: Forms, dynamics and logics across the organizational fields of Health Care and Higher Education* (pp. 243-269). Emerald Group Publishing Limited.

Christopher, Martin (2016). *Logistics & supply chain management*. UK: Pearson.

Daft, Richard L., and Arie Y. Lewin. 2008. "Perspective—Rigor and Relevance in Organization Studies: Idea Migration and Academic Journal Evolution." *Organization Science* 19 (1): 177–83. https://doi.org/10.1287/orsc.1070.0346.

David, P. A. (1985). CLIO and the economics of QWERTY. American Economic Review, 75, 332-337.

DiMaggio, P. J., and W. W. Powell (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48, 147-160.

Davis, Gerald F. 2009. *Managed by the Markets: How Finance Reshaped America*. Oxford: Oxford Univ. Press.

———. 2010. "Do Theories of Organizations Progress?" *Organizational Research Methods*. http://orm.sagepub.com/content/early/2010/08/06/1094428110376995.abstract.

———. 2015. "Celebrating Organization Theory: The After-Party." *Journal of Management Studies* 52 (2): 309–19. https://doi.org/10.1111/joms.12094.

———. 2016. *The Vanishing American Corporation: Navigating the Hazards of a New Economy*. First edition. Oakland, California: Berrett-Koehler Publishers, Inc.

Du Gay, Paul, and Signe Vikkelsø. 2017. *For Formal Organization: The Past in the Present and Future of Organization Theory*. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1433554.

Espeland, Wendy Nelson, and Michael Sauder. 2007. "Rankings and Reactivity: How Public Measures Recreate Social Worlds." *American Journal of Sociology* 113 (1): 1–40.

Eubanks, Virginia. 2017. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. First Edition. New York, NY: St. Martin's Press.

Gay, Paul du, and Thomas Lopdrup-Hjorth. 2016. "Fear of the Formal." *European Journal of Cultural and Political Sociology* 3 (1): 6–40. https://doi.org/10.1080/23254823.2016.1160658.

Gereffi, Gary, John Humphrey, and Timothy Sturgeon. 2005. "The Governance of Global Value Chains." *Review of International Political Economy* 12 (1): 78–104. https://doi.org/10.1080/09692290500049805.

Germov, J. (2005). Managerialism in the Australian public health sector: towards the hyper-rationalisation of professional bureaucracies. Sociology of Health & Illness, 27(6), 738-758.

Gioia, D. A., & Corley, K. G. (2002). Being good versus looking good: Business school rankings and the Circean transformation from substance to image. Academy of Management Learning & Education, 1(1), 107-120.

Gornitzka, Å., Kyvik, S., & Larsen, I. M. (1998). The bureaucratisation of universities. *Minerva*, *36*(1), 21-47.

Graeber, David. 2015. *The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy*. Brooklyn, NY ; London$nMelville House.

Granovetter, Mark. 1985. "Economic action and social structure: The problem of embeddedness." *American Journal of Sociology*, 91(3), 481-510.

Greenwood, R., and D. Miller. 2010. "Tackling Design Anew:: Getting Back to the Heart of Organizational Theory." *Academy of Management Perspectives* 24 (4): 78–88. https://doi.org/10.5465/AMP.2010.24.4.3655970.a.

Greenwood, Royston, Roy Suddaby, and C.R. Hinings. 2002. "Theorizing Change: The Role of Professional Associations in the Transformation of Institutionalized Fields." *Academy of Management Journal* 45 (1): 58–80.

25

Guler, I., M. F. Guillen, and J. M. MacPherson. 2002. Global Competition, Institutions, and the diffusion of Organizational practices: the international spread of ISO 9000 Quality Certificates. *Administrative Science Quarterly*, 47, 207-232.

Håkansson, H., and I. Snehota. 1989. "No business is an island: The network concept of business strategy." *Scandinavian Journal of Management* 5 (3): 187-200.

Hartzband, P., & Groopman, J. (2016). *Medical taylorism*. New England Journal of Medicine, 374(2), 106-108.

Harrison, S., & Smith, C. (2003). Neo-bureaucracy and public management: the case of medicine in the National Health Service. Competition and Change, 7(4), 243-254.

Jamali, Dima. 2010. "MNCs and international accountability standards through an institutional lens: Evidence of symbolic conformity or decoupling". *Journal of Business Ethics*, 95, 617–640.

Jemielniak, Dariusz. 2014. *Common Knowledge? An Ethnography of Wikipedia*. Stanford, Calif: Stanford Univ. Press.

Julian, S. D., & Ofori-Dankwa, J. C. (2006). Is accreditation good for the strategic decision making of traditional business schools?. Academy of Management Learning & Education, 5(2), 225-233.

Karpik, L. 2007. *L'économie des singularité*s. Paris: Gallimard.

Kärreman, D., Sveningsson, S., & Alvesson, M. (2002). The Return of the Machine Bureaucracy?-Management Control in the Work Settings of Professionals. *International Studies of Management & Organization*, *32*(2), 70-92.

Katz, M. L., and C. Shapiro. 1985. Network externalities, competition, and compatibility. *American Economic Review*, 75, 424-440.

King, A. A., M. J. Lenox, and A. Terlaak. 2005. The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *Academy of Management Journal*, 48, 1091–1106.

Miles, R. E., and C. C. Snow. 1986. "Organizations: New concepts for new forms." *California Management Review* 28 (3): 62-73.

Miller, D., R. Greenwood, and R. Prakash. 2009. "What Happened to Organization Theory?" *Journal of Management Inquiry* 18 (4): 273–79. https://doi.org/10.1177/1056492609344672.

Mingers, John, and Hugh Willmott. 2013. "Taylorizing Business School Research: On the 'one Best Way' Performative Effects of Journal Ranking Lists." *Human Relations* 66 (8): 1051–73. https://doi.org/10.1177/0018726712467048.

Mintzberg, Henry. 1979. *The Structuring of Organizations: A Synthesis of the Research*. London: Prentice-Hall Internat.

Mintzberg, H. (1980). Structure in 5's: A Synthesis of the Research on Organization Design. Management science, 26(3), 322-341.

Mueller, F., & Carter, C. (2007). 'We are all managers now': Managerialism and professional engineering in UK electricity utilities. *Accounting, Organizations and Society*, *32*(1-2), 181-195.

Pearce, J. L., and L. Huang. 2012. "The Decreasing Value of Our Research to Management Education." *Academy of Management Learning & Education* 11 (2): 247–62. https://doi.org/10.5465/amle.2011.0554.

Powell, W. W. (1990). Neither market nor hierarchy. Research in organizational behavior, 12, 295–336.

Power, Michael. 1997. *The Audit Society: Rituals of Verification*. Oxford University Press.

Prahalad, C. K., and G. Hamel. 1990. "The core competence of the corporation". *Harvard Business Review* 68 (3): 79-91.

Rynes, Sara L., Jean M. Bartunek, and Richard L. Daft. 2001. "Across The Great Divide: Knowledge Creation And Transfer Between Practitioners And Academics." *Academy of Management Journal* 44 (2): 344-355.

Sauder, M., and W. N. Espeland. 2009. "The Discipline of Rankings: Tight Coupling and Organizational Change." *American Sociological Review* 74 (1): 63–82. https://doi.org/10.1177/000312240907400104.

Scott, Richard. 1995. I*nstitutions and organizations. Foundations for organizational science*. London: A Sage Publication Series.

Srnicek, Nick, and Laurent De Sutter. 2017. *Platform Capitalism*. Theory Redux. Cambridge, UK ; Malden, MA: Polity.

Starkey, Ken, and Paula Madan. 2001. "Bridging the Relevance Gap: Aligning Stakeholders in the Future of Management Research." *British Journal of Management* 12 (1): s3–26.

Weber, Max. 1978. *Economy and society: An outline of interpretive sociology*. Berkeley: University of California Press.

Williamson, Oliver. 1991. "Comparative Economic Organization: the Analysis of Discrete Structural Alternatives". *Administrative Science Quarterly*, 36, 26.

Yunus, Muhammad, and Karl Weber. 2011. *Building Social Business: The New Kind of Capitalism That Serves Humanity's Most Pressing Needs*. New York, NY: Public Affairs.