Functionaries: A Distributional Approach to Institutional Analysis

Abstract

This paper outlines a distributional approach to institutional analysis that conceptualizes institutions as distributions of knowledge and activity across people. We argue that institutionalization and institutional change are best understood by focusing on actors with the requisite knowledge and motivation to keep institutional patterns going, fix them when they go awry, or transform them when required, here called *functionaries*. The distributional approach allows us to distinguish between two main types of institutional change often conflated in the literature: Content-based and formal change. Content-based change, the one most often discussed, involves the importation, recombination, or expansion of institutional logics. In contrast, formal change, often neglected in the literature, refers to shifts in the distribution of knowledge and activity within an institution, leading to dynamics of centralization and decentralization of institutional patterns. In this way, the distributional approach highlights the role of functionaries in both institutional stability and change, providing a micro-level perspective on institutional dynamics.

Keywords: institutions, theorizing, functionaries, change, entrepreneurship.

Introduction

Institutional theories stress a complementarity between the objective and the subjective (Martin, 2001). Objectively, institutions are repeated behavioral patterns, downstream consequences, and related self-correcting mechanisms (Jepperson, 1991). Subjectively, institutions are schemas, skills, and habits (broadly, knowledge) enabling such systematically patterned conduct (Powell & DiMaggio, 1991). The typical strategy used to integrate two poles is the "dialectic of institutionalization" (Barley & Tolbert, 1997; Berger & Luckmann, 1966). The story goes like this. First, institutions emerge via people's creative activity. However, eventually, the patterns become habitualized, externalized, typified, and transmitted as taken-for-granted realities to the next generation. Finally, the patterns become sedimented, with everyone assuming that this is how things are done (Tolbert & Zucker, 1996). Despite its undeniable theoretical appeal, this model leaves us with a widely acknowledged conundrum for institutional theory (Battilana & Casciaro, 2012). Once institutionalized, actors will *reproduce* patterns: Actors see the pattern externalized by other actors, internalize the pattern, and then externalize the pattern themselves, which provides more evidence of the pattern for other actors. Nevertheless, aside from error and exogenous shocks, the theory cannot convincingly account for how these patterns change (Clemens & Cook, 1999), nor does it provide a credible account of how the patterns are maintained in the face of inevitable decay (Lawrence & Suddaby, 2006).

To address this and other foundational issues, we expand on this recent reconfiguring of the conceptual underpinnings of institutional and organization theory (Bitektine et al., 2020; Cardinale, 2018; Hallett & Hawbaker, 2021). We develop a productive way forward by elaborating the classic imagery of a "dialectic of institutionalization." Specifically, we examine the implications of the relatively neglected image of institutions as *distributions*—of knowledge and expertise across people (Carley, 1991, p. 332; Reay, 2010). We argue that institutionalizing any set of patterns involves a reorganization or radical change in the distribution of activities and

knowledge. We contrast this "formal" approach to the analysis of institutions and institutionalization with the substantive imagery dominant in the literature, where change happens via creative recombination and bricolage of institutional elements by agentic actors who bridge institutional boundaries or are located at the interstices of institutional spheres.

The sociological take on institutions departs from observing more or less regular patterns of activity persisting across generations. In Hughes's classic statement, what all usages of the term "institution" in sociology have in common is the idea of "some sort of establishment or relative *permanence* of a distinctly social sort" (1936, p. 180, italics added). The notion of "permanence" is not as popular as other core sociological ideas like anomie, bureaucracy, alienation, or modernity. Nevertheless, all the classical theorists dealt with it in some form (Lizardo, 2022). The creation, maintenance, destruction, and regeneration of some sort of permanence in social life are the core problems that institutional theory is meant to solve. For people, social life *feels* like it is built on regularities routinely identified and engaged with (Martin, 2001). These are durable enough that people come to expect them, more or less, across distances, people, and time (Tolbert & Zucker, 1996). These observations inspire a "minimalist" definition of institutions: A persistent, more or less permanent, pattern of practices, cognitions, and feelings endowed with self-correcting tendencies in cases of deviation (Durkheim, 1895/1982, p. 47; Jepperson, 1991, p. 145; Martin, 2001, p. 194).

A concern with permanence and "self-correction," however, has the danger of leading analysts to emphasize the top-down aspects of institutions that seem to constrain people's actions and cognitions and which, in some settings, seem to mysteriously go on independently of people. This objectifying view corresponds to the folk phenomenological stance toward those institutional patterns that have come to acquire obdurate durability and permanence. In this case, people often (but not always) perceive such regularized patterns as being "out there" independently of their activity (Martin, 2001, p. 194). People presume the pattern will continue, even when some stop actively instantiating it. The institutional pattern feels like it "hangs above"

social life, constraining people's actions (Durkheim, 1895/1982). Following this hunch led analysts to emphasize the "macro" aspects of institutions, particularly those that helped understand the origins of homogeneity, equilibrium, and "isomorphism" across fields of striving (DiMaggio & Powell, 1983). Institutions came to be conceived mainly in their status as "sedimented reifications" (Tolbert & Zucker, 1996), grounded in well-established habits and pre-reflexive heuristics, losing their connection to agency, reflexivity, process, and human activity more generally.

The last two decades have seen a resurgence of theoretical and empirical work in institutional theory aiming to correct these tendencies (Hallett & Hawbaker, 2021, p. 5ff). Particularly, action-oriented imageries of actors *within* institutions emphasizing embedded agency, institutional entrepreneurship, and institutional work have taken hold (Battilana, 2006; Battilana et al., 2009; Lawrence et al., 2011; Seo & Creed, 2002). Here, institutions are not only sources of constraint but also enable specific modes of activity, interaction, cognition, and affect (Zilber, 2009). Institutional entrepreneurs identify contradictions and opportunities in existing institutional orders, sometimes pushing institutional patterns in transformative directions. This emphasis on institutional work puts the focus squarely on the routine activities of people within institutions, refusing to consider macro-patterns as either "unpeopled" or *self*-reproducing: The persistence of institutional patterns and their possible transformation *takes work*.

In this way, a concern with the micro-foundations of institutions has eclipsed previous emphases on top-down regular or cognitive-constitutive aspects of institutional patterns (Harmon et al., 2019; Powell & Rerup, 2017). In this sense, actors and actorhood have made a comeback, with recent strands in institutional theorizing focusing on how actors operate *within* and *across* institutional boundaries (Bitektine et al., 2020; Voronov & Weber, 2020). Finally, inhabited institutionalism puts the spotlight on the experience and lifeworld of people within institutions, pointing to processes by which people embody institutional patterns and

reproduce and transform them via episodes of everyday interaction (Hallett & Hawbaker, 2021).

The distributional approach we propose fits within this recent stream of theorizing in institutional theory (e.g., Zilber, 2009), borrowing core imagery and theoretical inspiration while aiming to develop critical thematic and conceptual elements that remain under-theorized. Notably, the distributional approach theorizes institutional *process* over established patterns, focusing on the routine work of upkeep, maintenance, and, every so often, the transformation of institutional patterns, localizing the origins and motivations of institutional entrepreneurs, and providing strong micro-foundations for processes of institutional emergence, maintenance, and change. Here, we are less interested in differentiating between different lines (or developing variants) of institutional theory (e.g., Hallett & Hawbaker, 2021). Instead, our distributional approach is broadly ecumenical, drawing liberally from classic sociological institutionalism (including neo-and contemporary inhabited institutionalism approaches), agency-centric work on institutions from management and organizational studies (inclusive of embedded agency and institutional work perspectives), and relatively under-exploited lines of thinking in the classical tradition of social-phenomenology, ethnomethodology, and Weberian sociological theory. Our primary aim is to contribute to recent work emphasizing a naturalistic approach to the social ontology of institutions, one based on empirically grounded work across various arenas of institutional life.

Institutions as Distributions

Our point of departure, drawing on social phenomenology (see, e.g., Reay, 2010; Schutz & Luckmann, 1973), conceptualizes institutions primarily as *distributions*—of knowledge, activities, or specific "structures of feeling"—across a population, which may or may not correspond to explicitly recognized boundaries, such as those separating nations, institutional "sectors," or societal "spheres." While not typically theorized explicitly, many central phenomena of interest to institutional theorists emerge as a byproduct of the *distributed* nature of

institutions and the contingent "accumulation" of pockets of institutional activity and knowledge in certain domains. Distribution implies that some institutional activities are thus "insulated" away from other people's attention or inspection at specific sites where a lot of the institutional work happens (Meyer & Rowan, 1977; Reay, 2010). In the distributional approach, knowledge and activities are rarely homogeneously bounded within distinct institutional spheres or sectors (Thornton et al., 2012), with spillover and mixing being the norm and neat boundaries separating pure logics from one another the exception (if ever the empirical case).

Two Forms of Institutional Expertise

For the distributional approach to do the relevant conceptual work, it is important to distinguish between two kinds of institutional expertise: *contributory* and *interactional*. We borrow this distinction from the work of Harry Collins and collaborators in Science and Technology Studies (e.g., Collins and Evans 2008). While often conflated in institutional analysis, distinguishing these two forms of expertise is crucial for identifying core institutional actors and patterns of institutional change. In what follows, we outline the primary conceptual differences between these forms of institutional knowledge.

Interactional Expertise

Most people have various levels of *interactional* expertise relative to most well-established institutional patterns. This knowledge-by-acquaintance is typically *declarative* so that a person could pass as a "member" by overtly displaying (in talk or other public performance) such knowledge to an interested stranger (e.g., about how financial banks—superficially—work). Interactional expertise suffers from the "knowledge illusion," in that most people radically overestimate the amount of knowledge they have about everyday institutional functioning, mostly because they have meta-knowledge that even though they may not possess the relevant knowledge, that know-how and more intricate understanding of the underlying institutional workings is indeed possessed by relevant specialized others out there, in a (distributed)

"community of knowledge" (Rabb et al. 2016).

Contributory Expertise

Far fewer people will have *contributory* expertise to keep institutions going (Weber, 1913/1981). In contrast to interactional expertise, contributory expertise relies on non-declarative "knowledge-how" regarding how to maintain and reproduce institutional patterns (Lizardo, 2017). This knowledge is *tacit* because it is hard to put into context-free, easily communicable formats (Gascoigne & Thornton, 2014). This last feature also makes it hard to transfer contributory knowledge across pockets of institutional order and activity. In this way, the "vertical insulation"—in Reay's (2010) terms—of knowledge across individuals, with the requisite knowledge encoded in implicit schemes of practical action, perception, and cognition (Bourdieu, 1980/1990), contributes to the typical state of "horizontal" insulation of knowledge and activities across settings, ecologies, and fields constitutive of most institutional orders.

Functionaries

Notably, the division between interactional and contributory experts in the population implies that all (centralized) "institutions" rely on a small cadre of contributory experts, which we refer to as *functionaries*. In using this term, we take inspiration from Alfred Weber's (1910/2007) much-neglected popular essay "*Der Beamte*" (typically translated into English as the "civil servant," "official," or "functionary"). While we borrow Alfred Weber's term, we do not subscribe to the substantive theory described there, in which an impersonal bureaucratic, machine-like apparatus absorbed dedicated officials and threatened to reduce all social life and all social action to that of colorless, robotic automata. In fact, we see this vision of (one facet of) institutionalization in the form of a mechanical self-reproducing apparatus as the one we wish to dispel, an image that is produced and reproduced by the very *invisibility* of the maintenance and repair labor of functionaries.

In this last respect, while in the contemporary world, functionaries are *usually* found

ensconced within hierarchical, bureaucratic organizations, there is no one-to-one mapping between functionaries as a type of institutional actor and any particular organizational form or structure. Functionaries can exist within many organizational forms (collegial, hierarchical, network-like) and, within an organization, can occupy various roles, functions, and levels. Functionaries may even exist outside, betwixt, and between organizations, occupying various interstitial positions in "linked" inter-organizational ecologies or may even exist as "avatars" of one institutional order ensconced within another (Abbott, 2005).

Similarly, while many functionaries use their contributory expertise, as we will see later, to exercise a particular form of authority or domination, functionaries are not *necessarily* in the business of exercising power, authority, or domination over others, except when that exercise of power and authority is crucial to the type of institutional pattern they are in the job of maintaining or repairing. In the end, whether functionaries are concentrated within particular forms of organization, tend to occupy particular roles or positions within organizations, or exercise particular forms of power, authority, or domination are empirical (and sometimes historical) questions, not ones to be decided from the armchair via definitional fiat.

What, then, are functionaries? Rintamäki et al. (2024, pp. 2–3) define functionaries as "elite actors responsible for the operation of the institution[…]functionaries are not only capable of socializing, maintaining traditions, and enforcing rules; they are also capable of making changes within an institution to defend the institution from unwanted disruption and deviant activities and practices." We endorse most aspects of this definition, although whether functionaries are "elites" is itself an empirical question (in most cases, they are not elites). It is, instead, the central role functionaries play in institutional maintenance, repair, and transformation that qualifies them as functionaries.

In terms developed earlier, Functionaries can be considered a special class of individuals who have extensive contributory expertise in institutional pattern production and repair in a given institutional domain of activity. This practical knowledge results from actively partaking

in the (re)production process. Thus, functionaries (1) actively maintain a pattern and, as a result, develop (2) specialized contributory knowledge, allowing them to maintain the pattern and repair it when it is subject to natural processes of entropy and dissipation (Zucker, 1988), or is actively disrupted by maintainers of other patterns, such as professional armies. They use this knowledge to adapt administrative practices in the service of maintaining the phenomenological relevance of the institution for the larger, non-specialist portion of the population. Otherwise, functionaries can radically repurpose these practices to create a new set of patterns. Compared to the rest of the population that does not satisfy these criteria, this class of actors is significantly smaller.

At the risk of over-simplification, the two criteria mentioned earlier highlight the role of functionaries in institutional stability and institutional change. We argue that in maintaining these patterns, functionaries ensure that these are confronted and "felt" by the majority of the non-contributory population; thus, functionaries are the link between the work of core actors in institutions and the typical externalizing phenomenology of the (non-functionary) folk. As a result, most of the population so affected comes to experience these as objective, durable, and stable, and even feel like they "live" in them (A. Weber, 1910/2007); this generates the sense (among non-contributor interactional experts) that the pattern would persist even if no particular people were tending the ship. These are the "container" institutions of classical institutional theory, with the "power container" of the state being probably the most (experientially) prototypical one for most humans in recorded history (Giddens, 1987). It is no wonder that states—or, more experientially likely, their armies (Martin, 2005)—are also the experiential inspiration for conceptualizing many of the abstract "structures" that somehow stand opposed to "agency."

The distributional approach invites us to consider institutionalization processes as dynamic and grounded in human cognition, feeling, activity, and materiality (Haack et al., 2019). Rather than thinking of institutionalization as establishing a static order (of activity,

thinking, or feeling), the distributional approach proposes social, cultural, and material *entropy* as the norm (McDonnell, 2016). Most institutional "work," therefore, is (literally) closer to "housekeeping": Namely, the upkeep of institutional order from being overtaken by the inevitable "dirt," entropy, and disorder seeping in from next door (Douglas, 1966). Even in so-called "high reliability" organizations (Vaughan, 2021), accidents, disruptions, and unanticipated consequences are "normal" (Perrow, 1999). All of this must be "continually countered by active intervention" (Zucker, 1988, p. 26), as even the observation of cultural stability is made possible by fleeting, incremental moments of creativity on the part of particular actors trying to maintain the semblance of a pattern. Indeed, the existence of committed "pattern reparation experts" may be a signal of the most potent form of institutionalization possible (Weber, 1913/1981).

However, our best-established theories typically ignore this housekeeping labor, consigning it as reproductive or repetitive in favor of creative, agentic, or "entrepreneurial" work that is keyed to institutional change, innovation, and disruption. As Dominguez Rubio notes,

> Most modern theories and narratives of social and political change are told from the perspective of those who are in charge of imagining and producing the new…since they have been considered the only ones capable of productive political, economic, or social value. Meanwhile, the ordinary labor of the "others of creation"—e.g., housekeepers, cleaners, plumbers, care workers, mechanics, or [art] conservators—has been deemed irrelevant since it plays a "merely" reproductive role and therefore lacks any creative (and with it political, economic, or social) value (2020, p. 37).

In this paper, we argue that the dichotomy separating actors in charge of difference (innovation, creativity, or disruption) and repetition (repair, conservation, housekeeping) is misleading, as both functions are likely to be taken up by functionaries, and the latter is arguably more vital for the everyday life of institutions and organizations. For instance, committed institutional repair experts are likely, in their attempt to "fix" the malfunction, to produce "more" instances of the same pattern (Hilbert, 1987). We propose that, in the modal case, (contributory) knowledge and

activity necessary to (re)produce patterns of regularized conduct are unevenly distributed and concentrated in a set of people who engage in the relevant reproductive activity. Note in this respect that while the "repair labor" (as a form of "institutional work") of institutional functionaries can be very much conspicuous and overt—especially when there are explicit threats to their authority and discretion (Micelotta & Washington, 2013)—our emphasis here is on the large part of the repair labor iceberg that remains safely out of the view of most people.

Two Kinds of Institutional Distribution

The distributional hypothesis implies that no single person can actively maintain all regular patterns of conduct, nor can they be a contributory expert in every possible pattern. Similarly, it is unlikely that every person will know how to produce all patterns and actively maintain them (Collins and Evans, 2008). Thus, the activities and knowledge-producing patterns are *unevenly* and *lumpily* distributed (Berger & Luckmann, 1966, pp. 157–158; Carley, 1991, p. 332); people can participate in an institution without having "full knowledge" of all the regulatory, technical, and normative details that make it work. As Max Weber once noted,

> No ordinary consumer today has even proximate knowledge about the production techniques of the goods he uses daily; most do not even know of which materials and by what industry these goods are produced. The consumer is interested only in those expectations of practical importance for him regarding the performance of these artifacts. The same applies to social institutions such as the monetary system. The money user does not know how money actually acquires its remarkable singular qualities, for even the specialists argue strenuously about that (Weber [1913] 1981:177–178).

Institutional patterns can be exhaustively accounted for by looking at the distribution of three elements: activity (Haslanger, 2018), knowledge (Reay, 2010), and structures of feeling (Williams, 2015). Patterns are maintained when those people with requisite contributory knowledge are committed to furthering the activity necessary to carry out the pattern, reinforcing the relevant patterns of thinking and doing, and buttressing particular ways of

seeing and feeling. We can focus on one critical formal characteristic of this distribution: its spread or concentration, yielding two ideal-typical patterns of institutionalization: *Decentralized* and *centralized*.

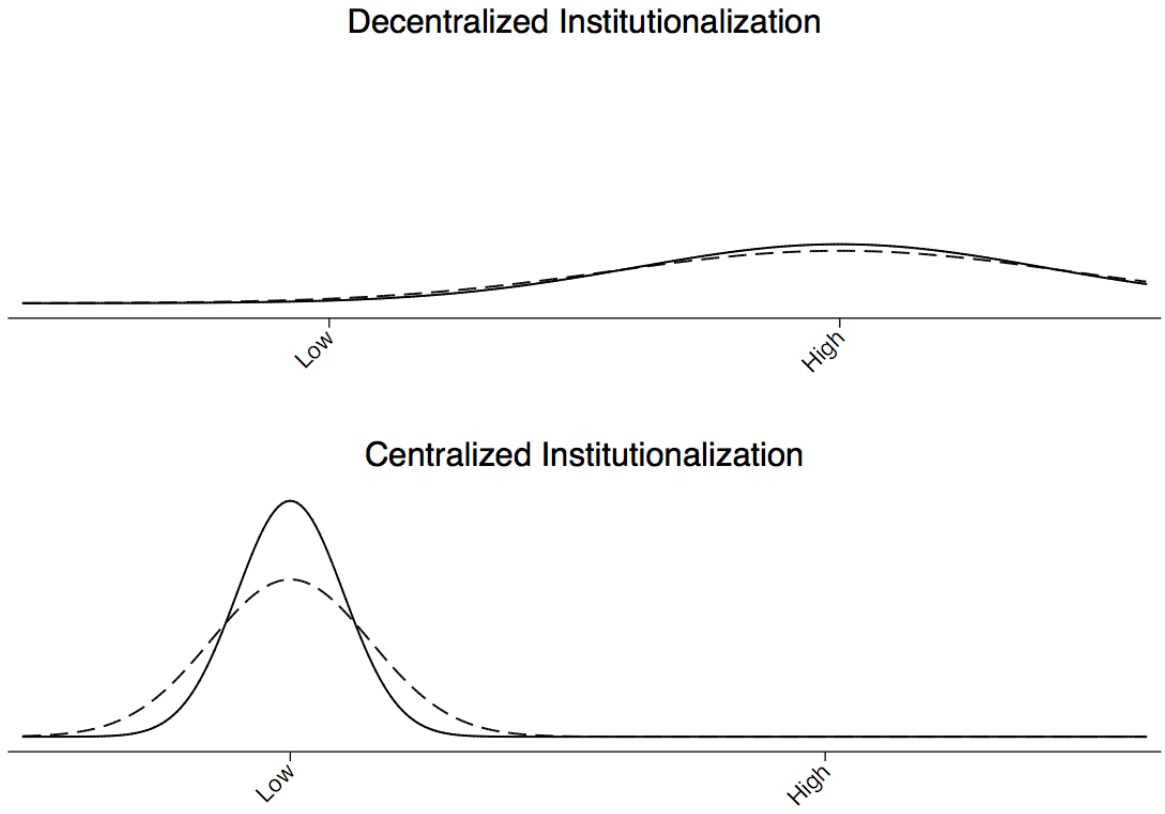

Figure 1. Ideal-Typical Distributions of Institutionalization
Note: The dashed line is the distribution of knowledge (i.e., contributory expertise). The solid line is the distribution of activity.

Decentralized Institutonalization

We begin with the (limiting) case of decentralized institutionalization, namely, when a set of patterns is maintained *evenly by most of the people* to whom the pattern can be ascribed. The theoretically interesting cases of decentralized institutionalization, when the pattern requires deep expertise and commitment, are exceptional. Another set of commonplace cases, when the pattern requires trivial amounts of energy and knowledge, are of lesser theoretical interest—e.g., the "institution" of the handshake (Sewell, 1992); we focus our discussion on the

former kind.

For various reasons, pure cases of decentralized institutionalization are atypical. First, individuals have limited time and energy (McPherson, 2004). If most people contribute an equivalent amount of their day to reproducing a set of patterns, these patterns are decentralized. The telling question is, if a person is selected at random, what is the probability they devote a significant portion of their day to cultivating whatever activities, feelings, and cognitions constitute a pattern? If the probability is high, this is a case of decentralized institutionalization. Second, individuals face knowing and learning limitations at a contributory level; we can only be experts at a few things. Here, the most economical form of knowledge is "knowing that" a pattern exists, being able to refer to it in a summary fashion, and perhaps maintaining minimal "interactional" expertise. "Knowing how" to produce a pattern (i.e., contributory expertise) is much more time and effort-intensive. One way of simplifying this limiting factor is to conceive of knowledge in terms of the extent to which an individual would have the skills necessary to reproduce a set of patterns should they be so required. If a person is selected at random, what is the probability they know nearly everything there is to know about producing a pattern? Again, if this probability is high, this is decentralized institutionalization.

These two constraints suggest four propositions. First, the persistence of decentralized patterns is confined to a relatively small group, and nearly everyone in the group engages in the same activities and has similar knowledge. Therefore, if someone stops reproducing a pattern, any other member could replace them (i.e., minor specialization and high redundancy), paralleling Durkheim's (1933) argument for what constituted the strength (and weakness) of "mechanical" solidarity; mechanical solidarity is strong (in the interpersonal sense) but brittle in the macro-societal sense as groups can splinter off and sustain an alternative set of patterns (Breiger & Roberts, 1998). For instance, the pattern known as the "Cambridge University Boat Club Race" approaches the ideal-typical decentralized institution pattern; accordingly, most

maintenance of this pattern does not require specifically designated functionaries or custodians; instead, predictable and routine instances of breakdown are repaired by members of the community acting in concert using various normalizing, negotiating, and social control strategies (Lok & de Rond, 2013).

Second, when a set of patterns extends beyond a few people, consistency will be significantly reduced, and the relative "cost" of enacting the pattern (in terms of time and energy commitment) will increase. This type of institutionalization would exhibit much heterogeneity over space and time, but we may also see "the reinvention of many wheels" (Simon 2013:235). As noted earlier, the exception is when the pattern is very simple. For example, nearly everybody in the West contributes to maintaining the "handshake" pattern for greeting people (a pattern radically disrupted by the COVID-19 pandemic). These practices are institutionalized in a decentralized way. They are exceptional because the number of people participating in them can be staggeringly large. In this respect, practices subject to decentralized institutionalization at scale, like speaking one of the modern national languages (Anderson, 1991), are likely to be thought of as "shallow" and not "deep" (Sewell 1992).

Third, those who devote most of their life and day to expertise-greedy decentralized patterns, and where the group maintaining pattern is both small and highly identified with it, will also feel a strong sense of insider-outsider boundaries (Douglas, 1966). For decentralized institutionalization, the primary boundary is between "believers" and "nonbelievers." The primary boundary mechanism of interest is proselytization (or how nonbelievers are incorporated into the pattern) and ex-communication (or how waning believers—or "free riders"—are removed from the group). The "outsiders" or "non-believers," however, are minimally impacted by the activity of "insiders," if at all.

Finally, the *objective* fact of the matter regarding whether a pattern is institutionalized in a decentralized manner or not may not correspond to people's *intuitions* in this respect. That is, the folk may think something is institutionalized in a decentralized way when, *in fact,* it is

actually centrally institutionalized. The most conspicuous example, as argued by Putnam (1975), is the semantics of language with regard to natural kinds (and perhaps every kind of term). Most people believe that the semantic content of most terms is maintained in a largely undifferentiated pool of knowledge maintained by every individual in the linguistic community. Still, as Putnam argued, even for seemingly consensual terms (like "gold"), the ultimate meaning that fixes references may, in the end, be maintained by a select pool of "experts" (functionaries in our terms) to which the folk ultimately defer. There is thus a "division of linguistic labor" for fixing the references of terms subject to technical definitions as to their underlying essences (e.g., "generalized personality disorder") to which the folk do not have direct access; so even in the case of language—as intimated by Weber—institutionalized follows the centralized pattern.

Money is another social kind that is subject to both types of formal institutionalization dynamics. Consider local currencies (a.k.a. complementary currencies or LETS) (Grover, 2006; Lietaer & Dunne, 2013; Werner, 2008). These are often explicitly institutionalized in a decentralized manner, requiring almost full participation in maintenance and repair by the population of users. Within the relevant population of a local currency system, a large proportion of the people engage in activities necessary to reproduce local currencies. Accordingly, decentralized institutional pattern maintenance systems should show much greater volatility, which is what we see. For instance, how the local communities structure their currency differs over space. For example, the Complementary Currency Resource Center (2016) tracks twenty-three different kinds of currency systems. Also, maintaining currency systems over time is often very uncertain. As Chris Sunderland, co-founder of the Bristol Pound, notes, "It is relatively easy to launch a local currency. It's much more difficult to sustain it" (Kermeliotis, 2014). Although in an already established local currency, there are more who have the requisite contributory expertise to maintain the currency, if the system is to be successful (i.e., persistent), a greater proportion of the relevant population is required to continually

engage in maintenance and proselytization. A challenge that even the longest-running local currency in the US, the *Ithaca Hour*, eventually failed to overcome (Khromov, 2011; Maurer, 2005). Therefore, this form of institutionalization runs into commitment problems.

Centralized Institutionalization

Centralized institutionalization occurs when a set of patterns is maintained by only a few people, with a much larger number impacted by the patterns but only having interactional expertise with them (Weber, 1913/1981). Thus, we can recast our question: if a person is drawn at random, what is the joint probability they do not devote most of their day to sustaining a pattern but at the same time know about the existence of the pattern? If the probability is high, this is a case of centralized institutionalization. The distribution of contributory expertise is likely even more unequally distributed than activity, familiarity, or feeling, typically because knowing how to produce a set of patterns is embodied in a few people but also because no single person knows how to produce the entire set of patterns.

Even *within* the subset of people who actively contribute to enacting the pattern, knowledge of how to reproduce the patterns is itself cognitively "distributed" in Hutchins's (1995) sense, such that "running" an institution is closer to steering a large naval vessel than driving a car. Not one contributory expert is sufficient to keep an institutional pattern going. Actors may specialize in one fragment of the total pattern or another, and together, these specialists can produce the complete set of patterns, standing in contrast to decentralized institutionalization, in which nearly everyone in the relevant population has more or less comparable knowledge about a set of patterns. We argue that this centralized institutionalization is likely to be the modal type, especially related to the most durable and historically significant sets of patterns, such as markets, politics, art, and science.

We propose three propositions regarding centralized institutionalization. First, unlike decentralized institutionalization, the number of people impacted by the centralized patterns is potentially enormous, even without losing consistency over time and space (Giddens, 1984),

meaning the pattern is likely to be more persistent. Second, although the boundary that divides insiders and outsiders remains important, centralized institutionalization includes a significant boundary between the "laity" and the "functionaries"—or, those who devote most of their time and knowledge to a pattern and those who only devote a minimal amount (Weber, 1921-1922/1978, p. 251). It is here where most people can "take it for granted" that patterns will persist, yet they do not know how to make the pattern persist (Tolbert & Zucker, 1996). As C. Wright Mills once put it, "[E]veryone knows somebody has got to run the show… [o]thers do not care, and besides, they do not know how" (Mills, 1956, p. 294). For most, the insider-outsider boundary is less salient, and people are likely to feel that the pattern has a life of its own. Thus, while incorporating new people into the laity (through proselytization) remains an important mechanism, removing deviant actors from the laity (through ex-communication) is less significant for centralized institutionalization. Instead, recruiting, training, and retaining functionaries—and cultivating a functionary's "ethos"—are the most effective organizational mechanisms of interest in centralized institutionalization (Schneider 1987; March and Simon 1993).

Consider national currency systems. The US Dollar (USD), for instance, is likely used by nearly all occupants of the United States. Although most U.S. occupants use this currency, likely few actively engage in the actions to produce it or even know how one would produce the national currency if one were given the opportunity. Most know little about how national currencies are created, how our phones can interact with bank computers to transfer money in our accounts, how ATMs are stocked with cash and able to reconcile with distant banking centers, or what is needed for our check to transfer of money between two legally and geographically unconnected banks. Furthermore, our continued use of national currency does not bestow contributory knowledge, and even among fiscal and monetary experts, this knowledge is unevenly distributed. Taking the printing of monetary notes as one aspect of the production of national currencies, a single company – De La Rue – plays a role in printing paper

currency for the majority (about 140) of the nearly 200 nation-states[1] on the globe and of the 18-25 billion banknotes printed by private companies, De La Rue prints over a third of it (De La Rue plc, 2020; Tovey, 2015).

Functionaries in Centralized Institutions

The contributory activity of experts sustains institutional patterns, with the limiting case being everyone's expertise in a low-cost, maximally decentralized pattern (Collins & Evans, 2008). As noted earlier, in decentralized pattern maintenance and repair, contributory expertise and pattern-maintenance activity are (more or less) evenly distributed. With centralized maintenance and repair, the majority engages the downstream outcomes or products (as either "goods" or "bads") of the institution but are not involved in their creation and upkeep. Therefore, only interactional expertise is required from most, leaving the contributory role to a smaller set. By isolating the modal process of institutional upkeep and repair to a relatively small handful of contributory experts, we can also derive tractable and observable microfoundations to known and well-researched meso-level mechanisms of institutional maintenance (Lawrence and Suddaby, 2006). This section details some of these micro-level centralized institutionalization mechanisms, focusing on the few experts keeping institutions going, which we refer to as functionaries. This last task is crucial in institutional analysis, given the critical role centralized institutionalization plays in differentiated societies and the significance of "professionally mediated" institutionalization in the literature (Powell & DiMaggio, 1991).

Maintenance and Repair

Centralized institutionalization exists when particular groups with extensive contributory expertise, embodied mainly as tacit knowledge, are responsible for maintaining a pattern. The practical knowledge of functionaries results from their recurring role in the

[1] The number of recognized nation-states varies depending on the source.

(re)production process. Pattern maintenance requires a source of *motivation* for functionaries to "carry out" the pattern over and over again (Abrutyn & Lizardo, 2022). Substantively, contributory institutional experts may be motivated to do so under two conditions. First, there is a felt *moral* obligation to the pattern or otherwise an expected payoff for recreating the pattern. Second, contributory experts may sustain the pattern because they believe other experts are committed to their maintenance; that is, they have a "third-order belief" that the pattern is seen as desirable (Correll et al., 2017). In centralized institutionalization, pattern maintenance does not require the majority to be intrinsically or extrinsically motivated to maintain and repair the pattern. The motivation for pattern upkeep is an essential source of variation (and distinction) among functionaries. As a result of their motivated commitment to the pattern, functionaries develop specialized contributory expertise, allowing them to maintain the pattern and repair it. In this sense, the meso-level practices of embedding and routinizing (e.g., Currie et al., 2012)—i.e., the extension of the moral obligations and motivations for maintaining institutional patterns into day-to-day life (Lawrence and Suddaby, 2006:230)—may be unique burdens of functionaries.

Repair is required when the pattern becomes vulnerable to undirected processes of entropy and dissipation (McDonnell, 2016; Zucker, 1988). Alternatively, the pattern could be actively disrupted by other functionaries interested in maintaining different patterns, seeking to replace dominant ones, the core animating dynamic in the various sociological traditions of field theory (Kluttz & Fligstein, 2016). In either case, functionaries use their expertise to either adapt administrative practices to preserve the phenomenological relevance of the pattern for the more extensive set of non-specialists (i.e., laity) or otherwise radically repurpose these practices to create a new set of patterns—forms of creative adaptation and repurposing that that are elsewhere called "enabling work" (Riehl et al., 2018; Lawrence and Suddaby, 2006). Compared to people not satisfying these criteria, contributory institutional experts are a much smaller group. In this way, the distributional approach highlights the role of functionaries in

institutional stability *and* institutional change. This section delineates the role of functionaries for stability—i.e., the development, maintenance, and repair of patterns. The next section deals with patterns of institutional change instigated by functionaries.

In their role as pattern-maintainers, functionaries ensure most large-scale institutional patterns, from militarized policing to routine taxation (Lawrence and Suddaby, 2006), are confronted and "felt" as real by the non-contributory majority. As a result, most people affected by the pattern experience it as objective, durable, and stable. They even feel like they "live in" it, generating the sense (among non-contributors) that the pattern would persist even if no particular people were operating the ship. These are the traditional "sectoral" institutions of institutional theory, with the "power container" of the state being probably the most (experientially) typical one for most humans in recorded history (Giddens, 1987). Nevertheless, the (Western Catholic) "church," especially during counter-reformation efforts, was not far behind (Gorski, 2000). It is no wonder that states (or, more experientially likely, their armies) are also the source domain for so many abstract "structures" that somehow stand opposed to "agency" (Martin, 2009).

Pattern Reification

In an early intervention into the discourse on "measuring culture," Swidler and Jepperson (1994) argued that cultural elements lie on a continuum of *living* to *dead*. Some are highly contested and contestable (and therefore living); others are highly institutionalized and taken for granted (and therefore dead). In making this argument, they suggest, in passing, a distinction between "most people" and "specialists" as it relates to institutions:

> Perhaps some *specialists* directly debate, manage, or reiterate the defining rules that make an entity a university: judges who must decide whether some organization calling itself a university can really claim tax exemption, state legislatures attempting to enhance the stature of their state colleges by renaming them. Codified in charters and laws are articulated rules that make a set of relations a university, a corporation, or a marriage. But for *most people* these are simply objective structures, not matters of 'culture'. Our point is that they are indeed culture, but culture *congealed* in forms that

> require less by way of *maintenance*, ritual reinforcement, and symbolic elaboration than the softer (or more 'living') realms we usually think of as cultural (Jepperson & Swidler, 1994, pp. 362–363, italics added).

In this passage, Swidler and Jepperson provide a vivid picture of both the phenomenological feel of centralized institutional patterns (as congealed, dead, or static) and their strong dependence on the hidden-from-view labor of functionaries that belies that status since, from the functionaries' perspective, institutions are live, fragile, and always dependent on someone "showing up." Centralized institutions thus lead a double life. Malleable, vulnerable, and in constant flux from the viewpoint of the small group of pattern-maintaining functionaries, congealed, big, powerful, and just "out there" for most of us. Centrally institutionalized patterns require Weberian "specialists" (whether they are truly "without spirit" (Weber, 2001, p. 124) is an empirical question) who engage in direct and deliberate pattern maintenance (see also DiMaggio 1988:14). For functionaries, the patterns will seem more "living" and perhaps "softer," "malleable," "fragile," and far less taken for granted. For "most people," the same patterns are taken-for-granted objective structures, sometimes decried (e.g., courts, the IRS), but typically ignored or kept in abeyance until they become relevant.

In *Economy and Society*, Weber ([1922] 1978:221, 234–36, 251, 425–65, 948–52, 967–88, 1314–1447) identifies numerous historical examples of functionaries maintaining institutional patterns in statecraft, military, private enterprise, charitable organizations, and religion. For Weber, the critical distinction between the functionary and the laity was the form of expertise commanded by the functionary. What linked all the distinct functionaries together, however, was a committed purpose in institution maintenance: Namely, to act as the bureaucratic vehicles via which "objective" tasks are carried out:

> Bureaucratization offers above all the optimum possibility for carrying through the principle of specializing administrative functions according to purely objective considerations. Individual performances are allocated to functionaries who have specialized training and who, by constant practice increase their expertise. "Objective" discharge of business primarily means a discharge of business according to calculable

> rules and "without regard for persons." (Weber [1922] 1978:975 original emphasis omitted)

Interestingly, in carrying out tasks perceived by the laity to be "objective"—and sometimes even seemingly "disinterested" (Bourdieu, 1994/1998)—functionaries also work to perpetuate the notion that institutions are discrete entities "out there" in the world—containers, substances—that exist above and beyond people and their upkeep and repair activities. As Meyer and Jepperson (2000, p. 116) memorably put it, in "enacting" patterns, functionaries pull off the trick of seeming to be "agents of no real principal." While people exposed to institutional patterns tend to reify them as objective entities more or less spontaneously, functionaries (in service of their duties) seek to generate this same impression more strategically.

Institutional Work

Besides knowledge and motivation, the other way in which we may distinguish functionaries from the laity is in the work functionaries carry out to ensure that the majority of non-specialists rely on these patterns and "take them for granted" (Berger & Luckmann, 1966). We point to two general (but not exhaustive) types of "institutional work" (Simon 2013) by which functionaries achieve pattern maintenance: (1) *administrative work*, whereby the functionaries handle the background, often mundane task of keeping the machinery of institutionalization operational and producing the expected physical evidence (e.g., sending and reading emails, disseminating forms, replenishing office resources, etc.), and (2) *regulative/coercive work*, whereby the functionaries exert "coercive pressure" on non-specialists—whether physical or "psychic" as noted by Weber (1913/1981, p. 163)—when the required adherence to the pattern (however minimal) is slipping or is being directly or indirectly challenged.

Institutional upkeep work includes both passive reminders of social expectations (such as when a university administrator emails faculty and staff about codes of conduct when representing the university off campus), legal structures such as formal rules and laws, and perhaps even physical force or violence, a task which, naturally, may be delegated to its own set

of functionaries or "violence specialists" (Collins 2008). In this last respect, we should not equate "institutionalization" with the *lack* of regulation or coercion regarding the maintenance of that pattern among the laity—as in some strands of "cultural-cognitive" institutionalism (Scott, 2013, p. 79ff). This tendency is counterproductive, given that most institutional theories, from Durkheim onward, highlight the importance of regulative work in maintaining institutional patterns through meso-level practices such as policing, deterrence, and mythologizing (Lawrence and Suddaby, 2006:230). That being said, the mundane tasks and physical evidence involved in administrative work are often overlooked in institutional theory and yet proportionally more significant for institutional stability.

If functionaries devote most of their learning and activity to one set of patterns, it follows they cannot devote the same amount of time to producing other sets of patterns. Thus, becoming a functionary places one on a specialized occupational trajectory, and these occupational trajectories provide for the continuation of the patterns. The relatively totalizing role of "the priest" as the primary functionary in the Catholic Church is an extreme but clear expression of this tendency. We may also predict that, unlike the majority, who can take both the pattern's existence and persistence for granted, functionaries are likely more intimately aware of the practical and ethical complexity of pattern maintenance and the importance of their active role in this maintenance. In centralized regimes, only a few people maintain central forms of knowledge and activity; without these few, the contributory expertise may be lost entirely; this could be simple, like the proper pronunciation of the ineffable Tetragrammaton (Wilkinson, 2015), or more extensive, such as much of Ancient Athenian religious practice. As only Athenian priests knew the proper way to perform ritual speeches, this contributory knowledge was lost, and only residual traces of their activities were documented. Priests are noted in the written record for "their specialist role as ritual speakers on behalf of the *polis*, rather than in an attempt to preserve the content of their speech" (Hitch, 2011, p. 118). While serving life-long tenures is one strategy for continuity (e.g., typical in the Athenian priesthood),

mechanisms are needed by which expertise is passed on lest it dies with those few (Simon 2013).

Similarly, there may be "dirty little details" involved in maintenance, and functionaries decide at their discretion that the laity need not know of such unpleasantries, especially if such knowledge threatens the laity's "belief" in (the unproblematic functioning of) the institution (Bourdieu, 1980). Centralized institutions develop bifurcations of knowledge into "esoteric" (what few know) and "exoteric" (what "everybody" knows) kinds. The former includes technically complex (and probably banal) knowledge and morally or ethically compromising knowledge about the "real workings" of the institution, to which only a few insiders are privy. Horizontal knowledge-insulation processes keep esoteric knowledge from the prying eyes and ears of the laity (Reay, 2010). Functionaries thus may possess exclusive views to the backstage where "the sausage is made." Revelations of this insider knowledge to the laity can cause disruptions (and, in extreme cases, existential threats) to the pattern. For instance, dramatic deconversion and disaffiliation processes among Catholics following the revelations of decades of pedophilia among priests (e.g., Almási-Szabó, 2024) show that no pattern, however old and robust, is invulnerable to "loss of faith" among those who engage it mainly via interactional expertise.

Functionaries must also be recruited, motivated, and retained. Should someone learn what is necessary to perform as a functionary, the set of patterns would still decay without a critical mass of people with this knowledge being *motivated* to engage in the activity. The job of specialized pattern maintenance enacted by functionaries could be performed in a purely perfunctory, ritualistic way driven primarily by the extrinsic motivations provided by the institution to keep functionaries from shirking on their repair and maintenance work (Merton 1940). However, it is unlikely that institutional patterns could be adequately maintained if all functionaries operated exclusively this way. Instead, as Weber argued, successful centralized institutional patterns are likely to be maintained and repaired by functionaries who develop an appropriate "ethos" concerning the pattern (Metz-McDonnell, 2020, p. 9ff). Functionaries that do not develop such an ethos may leave the field or fail to maintain the patterns.

Furthermore, if the social conditions for the production of this ethos are weakened, the recruitment of properly motivated functionaries can be disrupted, as work on priestly vocations suggests (Fishman, Gervasoni, and Stater 2015). In addition, institutional patterns maintained (and spread) by "true-believing" functionaries will have a competitive advantage over patterns being supported for largely ritualistic or extrinsic reasons. These latter patterns may have the impression of being dominant and yet "collapse" rapidly in the face of competition from patterns fostered by alternative cadres of true-believing functionaries. Especially if the latter is also committed "evangelizers" (Stinchcombe, 2002), and news about this spread among the laity, negating their previous "belief" on the externality and obduracy of the old pattern (Kuran, 1991).

Institutional Change

The distributional approach and the concept of the functionary offer several implications for how we approach institutional change (Clemens & Cook, 1999). This topic has, of course, received a great deal of attention in the literature. In the typical story, institutional entrepreneurs break out of the dialectic of institutionalization – e.g., by straddling "domains" or exploiting "contradictions" (see Rao et al., 2005) – altering the already established pattern. In a variant of this story, entrepreneurs operate at the "interstices" (Morrill 2006) of a much "larger" institution or even "larger" institutional field. Non-entrepreneurs more or less mindlessly reproduce a practice, even when it is not in their "best interest" to do so (Goldenstein & Walgenbach, 2019). In this literature, via their structural position, the entrepreneur either possesses a heroic perspective of the field or possesses a high capacity to "apprehend institutional contradictions" and can thus identify viable pathways for change—as opposed to the more clearly antagonistic practice of "disruption" (Lawrence and Suddaby, 2006:235)—and accumulate the resources necessary to instigate change (Voronov & Yorks, 2015); this cascade may lead to "endogenous" institutional change; namely the alteration of dominant patterns by

institutional insiders "from within" (Greenwood & Suddaby, 2006).

In acknowledging the importance of functionaries operating across or at the interstices of multiple institutional domains, the distributional approach brings attention to a relatively undertheorized set of processes accounting for institutional change. We outline three theoretical implications. We define entrepreneurship as the concerted effort by a functionary to mobilize knowledge in the service of producing more or less permanent change in an existing set of patterns. This definition of entrepreneurship is general enough to encompass all forms, whether of the economic, especially as developed in neo-Schumpeterian and Kirznerian approaches in Austrian economics (Kirzner, 1997), or the cultural or "institutional" kind (Battilana et al., 2009; Lounsbury & Glynn, 2001). In the distributional approach, an act of entrepreneurship happens if those reproducing a set of patterns change one or more of the patterns, combine existing ones with a new set of patterns, or expand the pattern's reach to those previously unexposed (Rao & Giorgi, 2006). The mechanisms that produce change do not differ across kinds of entrepreneurship (e.g., economic versus institutional). What differs is how functionaries mobilize particular knowledge, processes, and activities necessary to transform the older patterns into a newly formed set of patterns.

Non-distributional imageries rely on the notion of "logic" and "logic-blending" to account for institutional change (Hallett & Hawbaker, 2021). For instance, Rao and Giorgi argue that what is involved in institutional entrepreneurship is "exploit[ing] the pre-existing logic within the social system, or import[ing] a logic from a different domain" (2006:270). In the distributional approach, change is not conceived as the alteration of a "logic" (or template, or code, or recipe, etc.) abstracted from action, cognition, and feeling but rather as the modification of particular local practices and expertise. This proposition follows from the grounding of institutionalization in the functionary's routine activities and accrued contributory expertise. Functionaries are less likely than the laity to "take for granted" the production of a pattern of conduct (Jepperson & Swidler, 1994). Therefore, those at the heart of

institutional activity (and often the most intrinsically committed) will also be those most likely to alter the pattern of conduct (often in service of a pattern's reproduction, as discussed in the previous section).

In the distributional approach, the extent to which a pattern has "changed," or how novel a particular pattern may be, cannot be established by comparison to some global standard because there is no "global" set of institutional containers (e.g., "the state," "the economy," "religion," and so on) to be ostensibly pointed to. A pattern's novelty (or lack thereof) is based on a (temporally, spatially, and socially) situated perspective; what is novel here may be old news over there. The extent to which someone is entrepreneurial matters only for those already familiar, even if only minimally, with the local patterns, implying that despite being vulnerable to volatile church/sect dynamics (Troeltsch 1992), decentralized institutions are unlikely to experience entrepreneurship as practical innovation. Even though we expect far more pattern variability in decentralized institutionalization, the relevant actors are unlikely to perceive a potential entrepreneurial "project" as new or useful. Since there are very few stable and unique positions in a decentralized field, it is unlikely (but not impossible) that the pre-existing activities and knowledge structures defining the field are even perceived as inefficient or problematic in the first place. In contrast, centralized institutions are far more likely to generate the phenomenological experience of entrepreneurship and "permanent revolution" associated with endogenous change (Bourdieu, 1998-2000/2017). There is a role complementarity between the functionary and the entrepreneur.

There are two reasons institutional entrepreneurs should be more likely to arise among functionaries. First, because of their familiarity with persistent patterns and their possession of hard-to-gain and circumscribed knowledge, the functionary may "see" the potential impact of novelty in a way that non-functionaries cannot, accounting for the "vision advantage" of true entrepreneurs and their capacity to break stable institutional equilibria (Kirzner, 1997); distinct from the "structural" vision advantage of the network straddler (Burt, 2004). Functionaries are

structurally and culturally equipped to see "cultural holes," opportunities, and contingencies should they arise. Second, with highly centralized distributions of contributory expertise and activity, only a relatively small number of functionaries need to alter their activity to generate significant institutional change. The innovation travels quickly among functionaries and is later imposed on the (complacent) majority, with or without their knowledge. Opposition from the laity only occurs if changes in the pattern of conduct require changes in their previously gained interactional expertise.

Two Types of Institutional Change

For the distributional approach, the most socially consequential types of institutional change are those impacting the *distribution of knowledge and activity*. However, most contemporary institutional theories focus on *content-based mechanisms* to account for change—here, we borrow the Simmelian distinction between *form* and *content* (Lizardo, 2019). Thus, while non-distributional approaches focus on the transformation of substantive contents, distributional approaches bring attention to changes in the relative insulation of knowledge, cognitions, and structures of feelings, focusing on processes of knowledge redistribution and re-organization (on the horizontal plane) and processes of knowledge redescription and explicitation (on the vertical plane).

Substantive Change

From the content-based perspective, institutional change happens when established logics, worldviews, or schemas are (1) brought into places where they were absent before (Rao & Giorgi, 2006), (2) when new logics are produced by blending two pre-existing ones ("hybrid logics") (Wry et al., 2014), or when new people are exposed to a pre-existing set of logics or worldviews (Schofer & Meyer, 2005). These substantive mechanisms are importation, recombination, and expansion, respectively (see Figure 2, right).

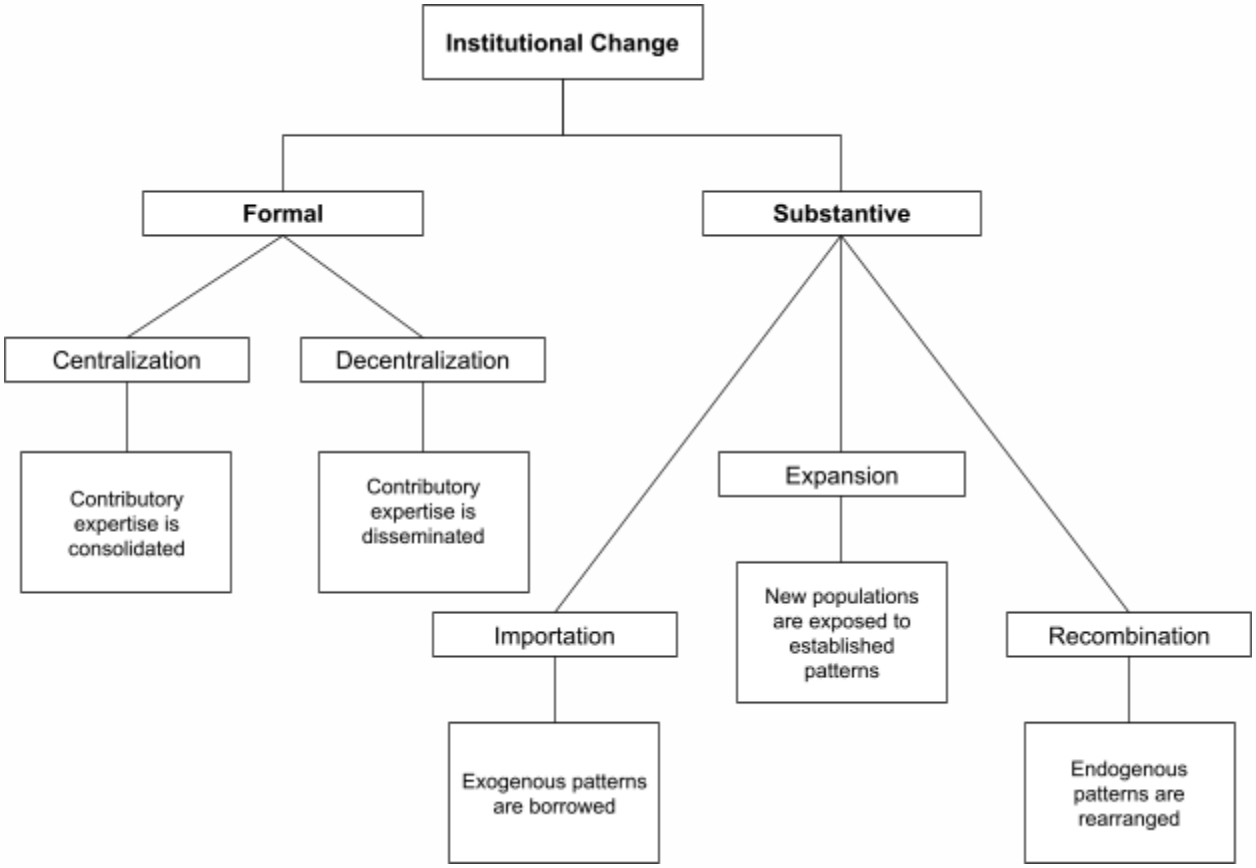

Figure 2. Types of Institutional Change

Importation—arguably the most commonly discussed form of content-based change in the "institutional logics" literature (Thornton et al., 2012)—occurs when new patterns compete with and eventually replace old patterns. For example, in a study of education publishing, Thornton and Ocasio (1999) find the dominant "editorial logic" (characterized by reputation and professionalism) of the 1950s and 1960s was displaced by the importation of a "market logic" (marked by market position and financial performance) during the 1970s and onward. In the distributional approach, this amounts to pattern establishment by a new cadre of functionaries unfamiliar with the old patterns, requiring retraining incumbent functionaries or recruiting new functionaries already possessing the new contributory expertise.

Recombination involves "blending" (rather than replacing) the new "logic" with the old

"logic" (Lounsbury, et al. 2021). Recombination is commonly construed as a "shock" introduced to the field in question, where the shock can be either internal (Rao et al., 2003) or external (Glynn & Lounsbury, 2005). From a distributional perspective, recombination occurs when a new pattern of conduct emerges from "mixing" two or more pre-existing patterns by a given set of functionaries—typically a pattern endogenous to the field with a pattern exogenous to it. Thus, recombination leads to two or more groups of functionaries joining to maintain the emergent pattern or retraining an existing group of functionaries into a hybrid order. Incumbent functionaries may be reluctant to adopt new contributory expertise, mainly when external shocks cause recombination outside their immediate control.

Expansion involves the adoption or diffusion of a pattern of conduct by, or the forced assimilation of, new populations who are now impacted by an exogenous pattern of conduct they had no say or role in creating (Lounsbury et al., 2021). Diffusion is a critical concern in the "world society" tradition (Meyer et al., 1997), whereby patterns that emerge in one location (typically the West) serve as "models" adopted by governmental and non-governmental organizations around the globe. Commensurate with the distributional approach, this literature suggests that the "adoption" of new institutional contents (Rogers, 2010) is achieved via the demographic transfer of those already with contributory expertise or the systematic training of a local cadre of functionaries who then serve as "carriers" of world cultural patterns (Kalberg, 2004). The spread of a pattern of conduct also occurs with, for example, state territory expansion, whereby people are (more or less) forced to acquire at least minimal interactional knowledge necessary to navigate new requirements.

Formal Change

As noted, non-distributional approaches tend to emphasize "content-based" mechanisms in accounting for institutional change to the neglect of changes emerging from the "formal" (distributional) properties of the knowledge and activities that institutions depend on (see Figure 2, left). These kinds of institutional change are as likely to feature innovation,

contestation, creativity, and conflict as the substantive mechanisms highlighted in recent discussions. The two kinds of formal institutional change naturally track our two types of steady-state institutionalization. First, a previously centralized set of patterns may become increasingly decentralized. The second goes in the reverse direction: A previously decentralized pattern comes to be "hoarded," expanded, and refined by a set of incipient functionaries, creating a bifurcation among people.

Centralized to Decentralized

The transition from centralization to decentralization is perhaps the most drastic form of institutional change, as demonstrated by the well-worn example of the Protestant Reformation and the spread of literacy in early modern Europe (Eisenstein, 2005). The centralization and hierarchy of the Catholic Church led many to overlook that, as Weber argues, "the Reformation meant less the entire removal of ecclesiastical authority over life than the replacement of the previous form of authority by a different one" (1905/2002, p. 2 original emphasis). Catholicism is an exemplar. Control of the majority of the relevant population involved "an extremely relaxed, practically imperceptible, and scarcely more than formal authority." As Weber argues, being Catholic made far fewer demands over the everyday lives of followers. Most of the (ritual) work of producing the "Catholic Church" was consolidated in the hands of far fewer functionaries and kept away from the masses. Should members of the laity directly challenge institutional patterns, designated authorities (e.g., the Pope and Cardinals) will ensure there are mechanisms in place to extract compliance and repair the pattern (e.g., "punishing heretics, but treating sinners gently" (Weber, 1905/2002, p. 2)).

Protestantism, in contrast, was founded on the "repudiation" of distant and relaxed control in favor of "an infinitely burdensome and earnest regimentation of the conduct of life [Lebensführung], which penetrated every sphere of domestic and public life to the greatest degree imaginable" (1905/2002, p. 2). Most members of the relevant population must invest considerable time and effort into training for the maintenance of the new pattern, a key

signature of decentralized institutionalization. No activity, even previously "profane" ones (most importantly, for Weber, work and industry), escaped the implications of the pattern – "penetrat[ing] every sphere of domestic and public life" believed (Weber, 1905/2002, p. 2). Work went from being a "curse," and a "burden" and thus outside of *la vie religieuse* in the old pattern to being a central part of the new pattern as a "calling." Although many knew how to reproduce the patterns of conduct that they believe make up their faith, they likely also felt it potentially fragile, requiring everyone to have the extrinsic or intrinsic motivation necessary to devote time to its reproduction, requiring "strong" (and for some unbearable) social monitoring and control systems precisely designed to punish "shirkers" who were not doing their fair share of institutional upkeep (Iannaccone, 1994), a mechanism quite absent (because superfluous) in Catholicism.

Centralized distributions like Catholicism incorporate many people with relatively high fidelity to the original patterns of conduct. Despite the contemporary Catholic Church boasting a membership of one billion (counting three-times-a-year members), a Catholic should be able to attend mass in Vatican City, Manila, Madrid, or Boston and identify a few dramatic differences in overall conduct. In contrast, even as most of the major (especially "mainline") Protestant denominations have retained the trappings of centralized pattern maintenance, evidence of "institutional legacies" (Greve & Rao, 2014) of its decentralized origins is abundant. For instance, identifying core "Protestant" practices and beliefs is relatively problematic (Green, 1996; McNeill, 1926; Woodberry & Smith, 1998). Even within more delimited denominations, such as contemporary Evangelicals (Dayton & Johnston, 2001; Guth et al., 1988), the service of one Evangelical church likely differs from another Evangelical church in significant ways (e.g., relative participation of women) in the same city. Finally, while both Protestantism and Catholicism are subject to controversy over practice, interpretation, scriptural reading, and values, only in Protestantism do we observe periodic "schisms" and "church-sect" split dynamics, whereby a new set of actors, having all the knowledge to produce the pattern among

themselves decide to "pack it up" and choose the "exit" option to form a new (labeled) pattern (Troeltsch, 1992).

Decentralized to Centralized

Contemporary attempts to "democratize" access to and the production of scientific knowledge represent an incipient (and obviously not yet successful) attempt to decentralize a centralized pattern (McCormick, 2009). However, the *longue duree* of Western science followed the opposite path, beginning as a decentralized gentlemanly hobby among a set of (usually aristocratic) equals (non-experts made many early scientific discoveries in their spare time), and turning into the unwieldy, anti-democratic, centralized "Golem" that it is today (Collins and Pinch 1998). Indeed, the decentralized nature of early Western science has led historians of science to frequently question what, exactly, they are historians *of* (Daston & Most, 2015, p. 382), when Western science began (Lindberg, 2008, p. 1), and the extent to which conceptions of what constituted "Western science" was the product of classification practices within the Western world specifically or was influenced by global perceptions of Western science, especially in nineteenth-century Egypt and China (Elshakry, 2010, p. 102).

The functionaries in the early decentralized era of Western science were mostly American and British Protestant missionaries who incorporated Western science into their proselytization—British missionary John Fryer started one of the first science magazines in China in the late 1870s, for instance (Elshakry, 2010).[2] These missionaries are exemplars of functionaries during a period of decentralized institutionalization: experts who maintain patterns of little consequence for "outsiders," but whose entrepreneurial goal is to expand the cultural power of their set of patterns to larger populations such that participation will evoke similar meanings across that population (Lizardo, 2016).

Now consider modern "bureaucratized" Western science, with contributory expertise

[2] Protestant missionaries were even one of the early adopters of the "Western science" label itself (Elshakry, 2010, p. 102)

typically reserved for highly-trained professional scientists. Being seen as a credible scientist stems, foremost, from educational attainment: the ability to work in science flows from academic training, leading to a tight coupling between the supposed ability to conduct science and credentialism, or at least using academic credentials as a "closure" mechanism to limit employment opportunities to select status groups (Tholen, 2020, pp. 286, 289). People can be divided into those who possess a high level of contributory expertise in the pattern (the scientists, data analysts, engineers, professors, etc.) and those who now depend on these functionaries to "see" the particular pattern (whether wanted or unwanted) reproduced. This newly formed "laity" may only possess interactional expertise with respect to the new, more complex pattern and cease being contributory participants (as they were in the decentralized stage).

Centralization and Hierarchy

Centralization and bifurcation of people into functionaries and laity implies an increase in "hierarchy." In the distributional approach, however, hierarchy and centralization are analytically distinct. Knowing that a pattern is centrally institutionalized tells us that its maintenance also depends on any given configuration of power relations. The concentration of expertise and responsibility for institutional upkeep, maintenance, and repair on functionaries is not equivalent to the concentration of authority in the same group (Weber [1922] 1978:948–9).

Centralized institutionalization may result in a traditional hierarchy where the majority is at the will of a powerful minority because they have monopolized the means of producing a set of patterns, as was likely the case with the emergence of historical state systems (Mann, 1986). Alternatively, the majority may afford the leisure of ignoring how certain institutionalized patterns are maintained and appreciate the various outputs produced by functionaries. Some of these downstream goods, such as the outputs of human resource offices, may even serve a hierarchy-attenuating function. However, functionaries may realize that, as they are the few with the requisite knowledge, they may use their unique position to gain power (Dobbin &

Sutton, 1998), providing an incentive to further manipulate the knowledge distribution in their favor. For instance, priests' monopoly over the "literacy" pattern and the functional use of this pattern for large-scale coordination and "disciplining" of big populations by state authorities gave this class more power than we would guess otherwise (Giddens, 1987).

Conclusion

We examine the relatively neglected image of institutions as *distributions*—of knowledge and expertise across people (Carley, 1991, p. 332; Reay, 2010). Specifically, we argue that institutionalizing any set of patterns involves a reorganization or radical change in the distribution of activities and knowledge. We contrast this "formal" approach to the analysis of institutions and institutionalization with the substantive imagery dominant in the literature, where change happens via creative recombination and bricolage of institutional elements by agentic actors who bridge institutional boundaries or are located at the interstices of institutional spheres.

Notably, the distributional approach is concerned with theorizing institutional *process* over established patterns, puts its focus on the routine work of upkeep, maintenance, and, every so often, the transformation of institutional patterns, localizes and theorizes the origins and motivations of institutional entrepreneurs, and aims to provide strong micro-foundations for processes of institutional emergence, maintenance, and change. Our proposed approach is broadly ecumenical, drawing liberally from classic sociological institutionalism (including neo-and contemporary inhabited institutionalism approaches), agency-centric work in management and organizational studies (inclusive of embedded agency and institutional work perspectives), and relatively under-exploited lines of thinking in the classical tradition of social-phenomenology and Weberian sociological theory.

Patterns of institutionalization can be exhaustively accounted for by considering the distribution of two elements: Activity and knowledge. First, (contributory) knowledge and

activity necessary to (re)produce patterns of regularized conduct are *unevenly distributed* and often concentrated in the hands of specialists or, following Weber (1910/2007), *functionaries*. Second, two steady-state distributional outcomes are empirically likely, which we refer to as *centralized* and *decentralized* institutionalization.

Decentralized institutionalization is constrained to relatively small communities (due to the knowledge acquisition and behavioral commitment bottleneck). It is subject to "church/sect" dynamics, which guarantee dynamism but also lead to instability. Centralized institutionalization can enjoy economies of scale. The upkeep role of functionaries (e.g., a literate priesthood) builds the "big" institutions (e.g., religion, debt economies, the state) for long temporal scales (e.g., millennia). Functionaries are central in the distributional formulation, underscoring their involvement in the constant "upkeep" of institutions and providing a new perspective on the routine affinity between stability and change.

A Distributional Research Agenda

In practice, a research agenda for a distributional approach to institutional analysis can be divided into the (1) formal and (2) substantive aspects of institutionalized patterns of conduct, followed by a consideration of the (3) intellectual and practical significance of studying functionaries. First, we must specify whether patterns of interest are centralized or decentralized, as this determines whether we seek out functionaries (as in most current work in organizational studies of expert and professional fields) or whether those sampled at random are equally suited as informants. For instance, Small's (2004) study of "Villa Victoria" could be seen as an examination of decentralized patterns maintaining a particular "narrative" of the neighborhood; as such, local sampling of lay informants was adequate. As noted, centralization is empirically distinct from hierarchy. A movement toward either centralization or decentralization can be accompanied by either a decrease or intensification of hierarchical distinctions, raising the question: Under what circumstances those who monopolize contributory knowledge—and therefore considerable influence over patterns—are both at the

bottom of a hierarchy thus engaging in institutional reproduction and their subjugation simultaneously? In the standard container/substance approach, this is most people, most of the time—save for the few heroic change agents. In the distributional approach, however, this becomes a critical empirical question.

Second, both centralized and decentralized patterns must deal with recruitment and training (Schneider 1987). However, some decentralized patterns are greedy, requiring a lot of time and energy from all (Shi et al., 2017); the continuous bringing of new members into the fold and the placement of procedures and safeguards ensure new members are trained to reproduce the pattern (e.g., "socialization"). Protestant evangelicalism is a prototypical example of this (Smilde, 2007). Similarly, turnover and retention will be a concern for the persistence of both kinds of institutionalization (Shi et al., 2017), but for centralized patterns, turn-over matters primarily for functionaries. The majority can come and go—e.g., immigration and emigration for nation-states—without much change. However, demographic shifts among functionaries are prime threats to institutional persistence, such as the Catholic priestly recruitment crisis (Fishman et al. 2015). Thus, research should examine the mechanisms via which functionaries are retained, particularly after investing time and resources into acquiring contributory knowledge. In addition, deinstitutionalization and even the "death" of some institutions could be recast as studies of the failure of mechanisms of recruitment, socialization, and retention of functionaries (Schneider 1987).

As bottlenecks of institutional reproduction and change, a primary question is where functionaries come from—also a classic Weberian question. Such a question dovetails with the renascent study of elites in sociology (e.g., Khan, 2012), in particular, those considering the educational and career pipelines of functionaries: how certain people get these positions and what sort of contributory knowledge they acquire along the way, but also what happens when contributory experts may be "overproduced" for the currently available roles. Although presidents, prime ministers, and CEOs are perhaps more typical functionaries—and of primary

concern for power-elite theorists—they are not always the most consequential, as we must also look to "the captains of their higher thought" (Mills, 1956, p. 4). Thus, scrutinizing "pipelines" is of utmost importance for a distributional approach, not only for quintessential cases of centralized institutionalization but also for maintaining (and changing) the myriad decentralized patterns.

The distributional approach also has implications for applied sociology. Consider, e.g., mass incarceration in the United States. Rather than consider this trend as precipitated by changes in intangible logics or templates, recent research has revealed that prosecutorial discretion—that is, the directed and "free" activity of flesh and blood functionaries—played a crucial role in the rise in rates of incarceration (Pfaff, 2017), a pattern not confined to the United States (Luna & Wade, 2012). What the distributional approach entails, however, is that real institutional change is not an abstract process of swapping one logic or template for another but of constraining the activity of functionaries (by using other functionaries) and reforming the organizations in which functionaries acquire their contributory knowledge and hone their upkeep activities.

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