WHY DO INDIVIDUALS PERCEIVE AND RESPOND TO THE SAME INSTITUTIONAL DEMANDS DIFFERENTLY?

ON THE COGNITIVE STRUCTURAL UNDERPINNINGS OF INSTITUTIONAL COMPLEXITY

Magdalena Cholakova
Rotterdam School of Management, Erasmus University
Department of Strategic Management & Entrepreneurship
Rotterdam, The Netherlands
cholakova@rsm.nl

Davide Ravasi
University College London
School of Management
London, United Kingdom
d.ravasi@ucl.ac.uk

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ABSTRACT

Research has begun to explore how individuals perceive and respond to institutional complexity differently. We extend such efforts and theorize how the complexity of individuals’ cognitive representations of the institutional logics (based on their perceived differentiation and integration of the external environment) and of their role identities (based on the pluralism and unity of their self-representations) can predict such variation. We argue that the former explains whether individuals are capable of enacting norms and beliefs from different logics and of envisioning possibilities to reconcile their contradictory demands, whereas the latter explains whether they are motivated to implement a given response.

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On the Cognitive Structural Underpinnings of Institutional Complexity

Institutional theorists introduced the notion of institutional complexity to refer to situations where actors “confront incompatible prescriptions from multiple institutional logics” (Greenwood et al., 2011, p. 318), manifesting in hard-to-reconcile pressures from constituents. Such circumstances represent ‘moments of flux and crisis, in which competing logics collide’ (Jarzabkowski, Smets, Bednarek, Burke, & Spee, 2013), and create novel situations that actors have not been socialized into, and for which they may have no readily available response (c.f., Battilana & Dorado, 2010; Reay & Hinings, 2009; Smets, Morris, & Greenwood, 2012).

Past research has observed that, confronted with institutional complexity, actors may respond differently (e.g. Binder, 2007; Purdy & Gray, 2009; Raaijmakers et al., 2015; Bertels & Lawrence, 2016; Murray, 2010). Early theoretical work explained such differences in responses in terms of the relative compatibility between the sets of “assumptions, values, beliefs and rules” (Thornton & Ocasio 1999, p. 804) that guide interpretation and prescribe action in the organization, referred to as institutional logics, and in terms of the degree to which logics are ‘represented’ internally in organizations (Besharov & Smith, 2014; Pache & Santos, 2010). These theories assumed that people act as ‘carriers’ of different logics, reflecting their professional training or work-group affiliation, and strive for their implementation in organizational structures and policies (Pache & Santos, 2010; Almandoz, 2012). Such assumptions allow to explain how organizations resolve internal tensions between groups, but they arguably restrict our capacity to account for possible variations in the way individuals themselves perceive the logics in play and commit to the role identities that they inform (Pache & Santos, 2013b), and how these perceptions can shape their responses.

Building on the idea that institutional logics “have a perceptual component that operates cognitively at the level of individuals” (Suddaby, 2010, p.17; George, Chattopadhyay, Sitkin, & Barden, 2006) and that individuals within an organization may perceive different degrees of compatibility between the same two
logics as they selectively “draw on, interpret and enact” them (Besharov & Smith, 2014, p.368; see also Pache & Santos, 2013b), recent theoretical work has therefore begun to examine the role of individual-level characteristics on the capacity of individuals to perceive and combine different logics. These theories explain individuals’ responses to institutional complexity in terms of their level of ‘familiarity’ with the relevant logics (Pache & Santos, 2013b), their apprehension of the malleability of the contradictions between the perceived logics (Voronov & Yorks, 2015), and more recently, the alignment between role and personal identities reflecting different logics (Wry & York, 2017). Yet, existing work still assumes that an inner motivation to enact a logic – because of internal accountability or identification – will necessarily imply knowledge of its prescriptions, and that, as long as an individual is knowledgeable about and committed to the multiple logics in play in a situation, she will reconcile and integrate their prescriptions. Past research shows, however, that actors confronting situations of novel complexity, such as those associated with career transitions (e.g. Meyer & Hammerschmid, 2006; Hwang & Powell, 2009; Amiot, Sablonniere, Terry, & Smith, 2007; Pratt, Rockmann, & Kaufmann 2006) or operating at the intersection of fields governed by different logics (e.g. Jain, George, & Maltarich, 2009), often have trouble reconciling different commitments and prescriptions. In adapting to such novel complexity, some individuals may rely on “provisional selves” as “to bridge the gap between their current capacities and self-conceptions” and their representations of what is expected in their new environment (Ibarra, 1999, p. 765).

Therefore, we argue that in order to understand how individuals perceive the new demands, and envision ways to respond to them, we have to consider simultaneously both individuals’ representations of the logics in play, as well as their representations of the role identities, associated with these demands, which are internalized in their self-concept. Drawing on research from cognitive and social psychology, we theorize the former, using the complexity of an individual’s representation of the external environment
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(Scott, 1969; Suedfeld, Tetlock, & Streufert, 1992), and the latter using the complexity of her self-representations (Linville, 1985). The complexity of one’s representations of the external environment reflects one’s knowledge of a given domain and is based on the number of constructs that she perceives when defining it, and the links that she can build among them, whereas the complexity of one’s self-representations reflects one’s self-knowledge and is based on the number of role identities that she has developed and the extent to which they are integrated within a coherent core self. We argue that the former will influence the extent to which an individual is capable of perceiving and enacting norms and beliefs from different logics (as opposed to only one of them), and of envisioning possibilities to reconcile apparently contradictory logics while doing so (as opposed to clearly demarcating their enactment). On the other hand, the complexity of one’s self-representations, will influence the willingness and emotional capacity to implement a selected response. Considering both of these aspects simultaneously allows us to theorize more comprehensively how and why individuals may respond differently to institutional complexity, by accounting not only for their ability to comprehend and enact different logics, but also for their motivation to act in accordance with their various prescriptions and cope emotionally with the responses they have chosen.

A COGNITIVE STRUCTURAL PERSPECTIVE ON INSTITUTIONAL COMPLEXITY

Research on cognitive structure and cognitive complexity originated from an interest in understanding how individuals perceive their social world and respond to changes within it (Bieri, 1955). Some of the early works, starting with Kurt Lewin’s field theory (1936), considered the individual’s situation (or ‘life-space’) as a function of both the person and his/her environment, and emphasized the role of perception in explaining how an individual moves towards desired or away from undesired states. These studies focused on identifying the constructs that individuals use to differentiate, or unite objects in their
environment (Scott, 1963; Zajonc, 1960), and defined a cognitively complex individual as someone whose system of cognitive constructs differentiates highly among events, people, or objects (Bieri, 1955, 1966). Later work enriched this perspective by arguing that one should focus not only on how well an individual differentiates among objects in their environment, but also how integrated these differentiated representations are (Harvey, Hunt, & Schroder, 1961; Wyer, 1964; Scott, 1969). Having high differentiation and high integration of a given domain was considered beneficial as it equipped the individual with a richer and more nuanced understanding of the domain, and enhanced their behavioral repertoire and capacity to adapt to changes in their environment.

In addition to addressing the complexity of one’s cognitive representation of their external environment, based on the number of construct dimensions, with which one can perceive and describe the people, events and objects in their environment, and the relationships among them (Bieri, 1955; Scott, 1969; Suedfeld, Tetlock, & Streufert, 1992), subsequent research in this field extended its focus to the complexity of one’s representations of their own self, by exploring the number of role identities they have and the extent to which they are united within one’s core self (Block, 1961; Campbell, Assanand, Di Paula, 2003; Donahue, Robins, Roberts, & John, 1993; Linville, 1985; Rogers, 1959). Research in this domain has emphasized that greater self-complexity can support an individual’s well-being by helping them cope better with stressors and change events.

In the following section, we outline each of these two aspects and begin to illustrate the way they can jointly influence individuals’ perception of and response to novel institutional complexity.

**Representations of the External Environment: Differentiation and Integration**

Cognitive differentiation has been defined as the extent to which a given cognitive domain – understood as a cognitive representation of a “particular class of objects” (Scott, 1969, p.261) – is “broken up into clearly defined and articulated parts” (Wyer, 1964, p.496), and as the granularity of one’s perception of
each object in terms of constitutive attributes that characterize this object and distinguish it from others (Scott, 1969). Cognitive differentiation, however, does not necessarily imply an integrated organization of this knowledge: an individual characterized by high differentiation may be able to “entertain multiple alternatives”, see “both poles of a conflict”, and give “equal plausibility of both sides”; however, she may still be unable to “encompass these possibilities into a meaningful integrative framework” (Harvey & Schroder, 1963, p.148). Cognitive integration, on the other hand, has been considered as the extent to which an individual traces connections among the various attributes of objects within a given cognitive domain (Harvey et al., 1961; Tetlock, 1986). Differentiation and integration are thus seen as the fundamental cognitive structural properties that define how our perceptions of the environment are organized (Scott, Osgood, & Peterson, 1979), where differentiation is considered to be a necessary but not a sufficient condition for integration (Tetlock, 1986).

To apply this cognitive structural lens to our study of how individuals perceive institutional complexity, we can conceive of the particular situation an individual confronts as a cognitive domain, the different logics that may apply to the situation and guide action as the objects of this domain, and the elements of each logic as the attributes of each object. Following Thornton, Ocasio and Lounsbury, we assume here that, at the individual level, logics can be understood as “learned knowledge structures” that direct attention and guide interpretation (2012, p. 83-84; see also DiMaggio, 1997), and that “individuals learn multiple contrasting and often contradictory institutional logics through social interaction and socialization” (2012, p.83). Depending on their life experiences, then, individuals differ in the number of logics they are aware of (McPherson & Sauder, 2013) – or, in other words, that are ‘available’ for them to use in social interaction (Thornton et al., 2012) – and in the sophistication of their understanding of these logics (Pache & Santos, 2013b). This assumption is consistent with the more general idea that individuals tend to behave according to cultural norms and beliefs that operate under the threshold of their
consciousness, but some display a heightened awareness of the norms and beliefs that characterize their own culture or other ones (Berry, 1997).

Differentiation then, understood as the granularity of one’s representation of a cognitive domain, is considered to refer to one’s capacity to make fine-grained distinctions between the different logics in play\(^1\). An individual characterized by high differentiation will be familiar with the different logics, and able to distinguish them along multiple elements\(^2\) (e.g. sources of legitimacy, authority, identity, etc.). For instance, she will associate a family logic with the promotion of the well-being of the family, unconditional loyalty, patriarchal authority, etc., and a business logic with profit seeking, market competition, hierarchical authority, etc. High differentiation, we argue, affects an individual’s capacity to respond to institutional complexity, by helping her grasp the more general norms and values informing the demands of her constituents.

Integration, instead, represents the amount of connections that an individual can draw across logics – or in other words, the extent to which she perceives two or more elements from different logics to be relatively compatible. If an individual has highly differentiated perceptions of the logics of family and business, low integration will be manifested in her perception of the two logics as largely incompatible. For instance, she may be uncomfortable at – or even unable to imagine – the idea to be unconditionally loyal to her employer, or to use economic rewards to direct her children’s behavior. Instead, high integration may be manifested in seeing unconditional loyalty to the organization (family logic) as a way to enhance competitiveness and profitability (business logic).

\(^1\) Following earlier work (e.g. Besharov & Smith, 2014; Pache & Santos, 2010, 2013b), when theorizing the impact of structural components of cognition on individuals’ perceptions of and responses to institutional complexity, we will consider the simplified case of individuals potentially handling two different logics – as opposed to three, or more. This simplification does not appear problematic, because past research shows that in most circumstances individuals really confront two logics (Greenwood et al., 2011) – either because they have to resolve their conflicting demands, or because they are considering their possible hybridization.

\(^2\) By elements of a logic, we refer to the fundamental assumptions and beliefs that, according to Thornton, Ocasio and Lounsbury (2012), distinguish between logics along certain analytical categories.
The different combinations of differentiation and integration therefore are: low differentiation and low integration, which we refer to as struggling with complexity; high differentiation and low integration, which we refer to as buffering complexity; and high differentiation and high integration, which we refer to as embracing complexity. We exclude conceptually one of the four combinations, namely low differentiation and high integration, because, as discussed by Scott (1969), it is not possible to draw many connections (hence integrate) across what is otherwise largely a uni-dimensional cognitive domain (low differentiation). As Streufert and Swezey also remark, “integration without differentiation is impossible” (1986, p.63). The three combinations that we have outlined are presented in Table 1.

Representations of Self: Self-Pluralism and Self-Unity

When addressing the internal structure of one’s self-representations, research in cognitive complexity has focused on two aspects – namely, the pluralism and the unity of one’s self concept (Campbell, Assanand, & Di Paula, 2003; Linville, 1985; Rafaeli-Mor, Gotlib, & Revelle, 1999; Rafaeli-Mor & Steinberg, 2002). People who have a high level of self-pluralism are characterized by having multiple, yet distinct and non-overlapping self-aspects within their core self-definition (Linville, 1985). In the symbolic interactionist perspective we adopt in this paper (Cooley, 1902; Mead, 1934), these self-aspects correspond to the role identities that, at any point in time, rank highly in one’s salience hierarchy and are central to one’s self definition. Having high self-pluralism, however, does not, in and of itself, suggest that individuals would also have developed a fine-grained understanding of when and how each of the roles within their self should be enacted, and how they fit within their overall core self. Even though some authors have emphasized the benefit of having multiple, non-overlapping role identities, other researchers have argued that such pluralism may also cause self-fragmentation, a condition associated with emotional
distress and/or reacting haphazardly to situations (Block, 1961; Lutz & Ross, 2003; Rafaeli-Mor & Steinberg, 2002). This condition, scholars argue, is due to the absence of an “internal reference which can affirm his continuity and self-integrity” (Block, 1961, p. 392; see also Lutz & Ross, 2003), and the difficulty to reconcile multiple identities within a core sense of self (Amiot et al., 2007). In order to understand how individuals respond to and cope with this, prior research has focused on “how different identities become integrated in the self” (Amiot et al., 2007, p. 370) and whether or not individuals have the capacity to establish “higher-order superordinate self-abstractions” that can facilitate the integration of different self-representations and thus help them better address any contradictions among them in response to change events (Amiot et al., 2007, p. 370; see also Mascolo & Fisher, 1998). Self-unity, therefore, has been argued to be an important complement of self-pluralism, serving to prevent feelings of self-fragmentation (Block, 1961; Campbell et al., 2003). The presence of self-unity allows individuals to effectively integrate multiple identities within a consistent, coherent core self, thus minimizing the experience of cognitive dissonance or self-incongruence (Lecky, 1945). Having self-unity provides guidance about when to enact different roles, and how each of them can be accommodated within a core sense of self. In the absence of unity, individuals’ response to multiple demands, even if ultimately synergistic, may be short-lived because of the stress and burnout the perceived self-incongruence generates for them (see also Brandl & Bullinger, 2017 on the influence of self-verification tensions).

Self-pluralism affects an individual’s response to institutional complexity because it influences the sets of expectations (social roles), associated with the multiple logics in play that she perceives as motivating and to which she feels compelled and accountable to attend. To theorize the impact of self-pluralism on an individual’s response to institutional complexity, we adopt the simplifying assumption of circumscribing our analysis to role identities that are relevant to the logics in play. Based on this
assumption, we consider an individual characterized by low self-pluralism when only one of the logics in play is represented among the identities that constitute her core self.

We again outline three possible combinations of these two factors. The first one is based on low self-pluralism and high self-unity, which we refer to as a \textit{rigid core self}. Such a self-representation is dominated by a single identity that shapes individuals’ responses across different situations (Roccas & Brewer, 2002; Linville, 1985; Amiot et al., 2007), thereby reinforcing a strong sense of self-consistency and congruence (Lecky, 1945). The second one is based on high self-pluralism and low self-unity, which we refer to as a \textit{fragmented core self}. Even though those individuals would have developed multiple identities that they consider important and relevant for their self-definition, it would be difficult for them to draw connections among each of them (Lutz & Ross, 2003; Block, 1961) and they will tend to behave differently across situations, often lacking oversight as to whether and how their different identities fit together. The last one is based on high self-pluralism and high self-unity, which we refer to as an \textit{agile core self}. Such individuals are able to create connections among their various identities, and thus find “meaningful higher order self-representations… which bind the different self-components” (Amiot et al. 2007, p.370). Such higher-order self-representations are key to responding successfully to conflicting demands as otherwise individuals have been found to experience a mismatch between their identities and their expected behavior (see Brandl & Bullinger, 2017). Finally, we exclude conceptually the combination of low self-pluralism and low self-unity since if the individual has a low level of self-pluralism, she would have one core identity, in which case it would not be meaningful to have low self-unity as well (Campbell et al., 2003). The three combinations are summarized in Table 2.

\begin{center}
\textit{COGNITIVE COMPLEXITY AND RESPONSES TO MULTIPLE LOGICS}
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In the previous section, we have theorized how the complexity of an individual’s representations of the external environment and of her own self, influence how she experiences institutional complexity. In this section, we use these theoretical arguments to examine how different combinations of these four structural properties of cognition may influence the responses individuals are more likely to enact when addressing institutional complexity. We focus on situations of novel complexity, where individuals do not rely on automatic or routine responses but rather attend effortfully to the situation, triggering “bottom-up attention processes” (Thornton et al., 2012, p. 84). We organize our arguments by grouping individuals according to the complexity of their representations of the external environment (logics) and theorize the implications of having a rigid, fragmented or an agile core self on the type of response that they would be motivated to enact to the perceived institutional complexity. The response types that individuals are likely to exhibit, based on our classification, are summarized in Figure 1.

Our arguments are based on the assumption that, in a given situation, an individual’s actions will reflect her current level of understanding of the logics that she perceives to be relevant to the situation. However, neither the complexity of one’s representation of the external environment, nor of her self, represent static structural properties of an individual’s cognitive system (Rafaeli-Mor & Steinberg, 2002; Scott et al., 1979). Albeit slow to change, they are subject to gradual development, given certain stimulations in the external environment – possibly based on the very tentative engagement with multiple logics (Creed, DeJordy, & Lok, 2010). In this respect, cognitive complexity can be understood as both shaping and being shaped dynamically by one’s experiences across existing institutional settings.

High Differentiation and High Integration: Embracing Complexity
As discussed in the previous section, decision makers characterized by high differentiation and high integration are more likely to embrace complexity as an opportunity for novel action. Yet, the specific form that the response of these individuals will take – we argue – depends further on the complexity of their representation of self, based on their level of self-pluralism and self-unity, which we outline below.

**High self-pluralism and high self-unity (agile core): Synthesis.** When characterized by high self-pluralism and high self-unity, an individual will feel compelled to enact all the logics in play, because she perceives role identities associated with these logics as core to her sense of self. When characterized also by high differentiation and integration, she will be not only motivated, but also able to respond to institutional complexity by engaging in activities or designing structures that synthesize elements from different logics, and attempting to simultaneously enact the related role identities into new hybrid structures and practices (see, for instance, Jay, 2013; Dalpiaz et al., 2016). She will implement this response in a confident, consistent way, her high degree of self-unity enabling her to attend to different expectations comfortably, and to reconcile possible tensions within her core sense of self.

An example of this type of response can be found in Binder’s (2007) study of how three departments within a transitional housing organization respond differently to institutional complexity. Anna, the leader of one these departments, “rather than seeing the two aspects of her environment as being at cross-purposes with one another, and as fundamentally uncoupled,” creatively blended elements of the bureaucratic logic behind funding regulations and the professional logic of childhood education “to ensure the smooth flow of resources into her department,” but also “to stay true to … her commitment to her professional ideology: children’s health and wellbeing” (Binder, 2007, p.556-559).

A second example can be found in the case of Alberto Alessi, who integrated the logics of industry and the arts to produce new hybrid practices to design and commercialize kitchenware that target simultaneously cultural institutions and affluent customers (Dalpiaz et al., 2016). The development of
these practices reflected the gradual complexification of Alberto Alessi’s understanding of his self as performing simultaneously the role of an industrial manufacturer and an ‘artistic mediator’.

**High self-pluralism and low self-unity (fragmented core): Fragile synthesis.** In the presence of high self-pluralism, but low self-unity, an individual characterized by high differentiation and integration may be able to envision ways to simultaneously enact the prescriptions from different logics, but her ‘embracement’ of complexity may be troubled and short lived, which we label as ‘fragile’. By lacking clarity as to how the different role identities fit within their core self, and how potential role conflicts can be addressed (Block, 1961; Campbell et al., 2003), the individual will lack the confidence, direction and deliberation to pursue hybrid strategies (despite being committed to enact the relevant role identities), and may be induced to give up her efforts because she experiences the situation as excessively taxing (cognitively and emotionally).

Finding examples of fragile synthesis in previous literature is not easy, as this response has not been described as such before, however, it could be represented in Battilana and Dorado’s (2010) work on microfinance ventures, where they explained the failure of one of the ventures with the inability of leaders to instill in their employees an overall sense of self that could direct and justify implementing simultaneously a commercial and a social welfare logic.

**Low self-pluralism and high self-unity (rigid core): Selective coupling.** Finally, when characterized by a rigid sense of self, the individual would have one role identity dominating the salience hierarchy and would thus tend to behave similarly across different contexts. Coupled with high differentiation and integration, this combination of factors is likely to result in the selective coupling response described by Pache and Santos (2013a). This individual will be aware of logic-specific expectations associated with different social roles (high differentiation) and will see opportunities to attend to these expectations (high
integration). Low self-pluralism, however, will induce her to focus only on the core role identity, and to enact prescriptions of other logics only to the extent that those are compatible with this identity.

We can find an example of this response in some of the traders interviewed by Lok (2010) who, while familiar with both the traditional “shareholder value maximization” logic and the rising “enlightened shareholder” logic, were committed to the maximization of the value of their clients’ portfolios, and “selectively” appropriated practices from the other logic to legitimate themselves with some constituents, only “in the service of their pre-existing trader identity” (p. 323-324).

**High Differentiation and Low Integration: Buffering Complexity.**

When decision makers possess a nuanced understanding of different logics (high differentiation), but see their prescriptions as incompatible (low integration), they will instead *buffer* complexity, by selecting responses that allow them to attend to these prescriptions separately or symbolically in order to minimize interference between activities enacting either logic. Their exact response will again depend on the manner in which the pertaining role identities are represented and united within their core self.

**High self-pluralism and high self-unity: Compromise.** Having an agile core induces an individual to perform multiple roles, associated with the logics in play and to do so with ease, as the high self-unity provides direction to the manner in which her roles fit within her core self. The relatively low degree of compatibility that she sees in the different logics she considers (low integration), however, will make it difficult for her to enact elements of both synergistically or in novel ways. Instead, we argue, this individual will search for *compromise* (Oliver, 1991), or, in other words, will try to enact each logic – which, because of her high differentiation, she understands well – to a limited degree, and only to the extent that doing so does not hinder attendance to the competing set of prescriptions and expectations.

In our framework, we consider ‘compromise’ as an attempt to conform to a minimum set of prescriptions from one logic in a way that does not undermine the enactment of the other logic. For
example, in their study of community mental health centers diversifying into drug abuse treatment, D’Aunno, Sutton and Price (1991) have shown the challenge of reaching a compromise: centers that attempted to legitimize themselves in both the mental health sector and the field of drug abuse ended up adopting contradictory practices that reduced the support from their traditional constituents.

**High self-pluralism and low self-unity: Compartmentalization.** This combination refers to an individual characterized by a fragmented self, who tends to act differently across contexts, lacking a clear, coherent and stable core self that ties her different roles together (Block, 1961). Coupled with a high differentiation and a low integration, we expect this combination to result in a compartmentalized response to multiple logics (Greenwood et al., 2011). This individual, we argue, will recognize different logics (because of self-pluralism) and feel compelled to attend to the related sets of role expectations. Low self-unity, however, will cause tension because of her inability to reconcile different role identities into a coherent sense of self. Under these conditions, we expect that she may attempt to enact different logics in a sequential and clearly demarcated manner, without attempting to build any linkages among them.

An excellent example of compartmentalization as a response to institutional complexity can be found in the experience of homosexual ministers in main-line Protestant denominations, described by Creed and colleagues (2010). For these ministers, the inability to reconcile their religious, family, and sexual identities (low self-unity) initially manifested in the “compartmentalization” of the personal and the religious spheres of their lives; only after “theologizing the personal” – that is, revising their understanding of Christian teachings and church practices “to make institutional premises of incompatibility disappear” (Creed et al., 2010, p.1350) (moving from low to high integration and self-unity) – did they shift their response from buffering to embracing and reconciling contradictions.

**Low self-pluralism and high self-unity: Decoupling.** This individual could be relatively inflexible in accommodating prescriptions and expectations that do not fit within her core self (self-unity). While aware
of different logics in play in a situation (high differentiation), she not only sees little opportunity to reconcile them and enact principles of both in her responses (low integration), but also displays only minimal commitment to all but the role identity shaping her self-definition.

We expect that such individuals would engage in decoupling symbolic conformity to prescriptions from one logic from the substantial implementation of behaviors prescribed by another (Boxenbaum & Johnsson, 2008). They will enact the prescriptions of the logic that more closely matches their core role identity, and conform only ‘ceremonially’ to constituents’ demands reflecting a different logic (Meyer & Rowan, 1977) – at least to the extent that they can avoid the close scrutiny of these constituents.

**Low Differentiation and Low Integration: Struggling with Complexity**

Lastly, individuals with low differentiation and low integration would tend to interpret events and situations only through a single perspective, and have little understanding or awareness of any alternative ones.

Such individuals would be familiar with only one of the logics in play, and remain unable to appreciate the fundamentally different beliefs, goals, and values (logics) that inform some of the demands they confront. When facing novel complexity, they will struggle to understand the principles behind some of the demands they face, and – because of their poor understanding of these principles – they will have difficulties envisioning ways of addressing these demands outside of the particular terms in which they are expressed.

**High self-pluralism and high self-unity: Negotiation.** Individuals with agile cores will have internalized multiple social roles and accommodated them within a coherent sense of self. In the presence of low differentiation and low integration, however, they will have only a limited understanding of the expectations associated with the role identities embedded in logics with which they are not familiar. As discussed previously, this could be the case of individuals transitioning to a new career at the intersection
of different fields (e.g. Jain et al., 2009) or exposed to shifting expectations due to institutional change (e.g. Sanders & McClellan, 2014).

When confronted with role expectations and demands that appear inexplicable and/or incompatible with their dominant logic, such individuals – because of their high self-pluralism – will feel compelled to attend to these expectations (rather than defying some of them, as discussed later), but will find it difficult to do so because of their limited understanding of them, or because of the discrepancy between these demands and how they would behave based on their own dominant logic. Under these circumstances, individuals will engage in a negotiation with their constituents in order to work out a form of compliance that will enable them to enact their role identities, while remaining consistent with the general principles they operate upon, based on the logic associated with their core self (rather than searching for a compromise between different logics). These arguments are consistent with the observation that transitions to new roles are characterized by the attempt to ‘negotiate’ role definitions and expectations to preserve valued aspects of self, associated with one’s other role identities (Ibarra, 1999; Nicholson, 1984).

We can find a good example of this response in an experimental study of how child-care managers respond to conflicting pressures to implement new pedagogical methods (Raaijmakers et al., 2015). These managers, when aligned with the request (that is, subscribing to its logic), handled conflicting pressures for and against the proposed method by engaging in ‘accommodative’ tactics and negotiated limited, experimental implementation of the new methods.

**High self-pluralism and low self-unity: Situational compliance.** A fragmented self, combined with a narrow and coarse-grained understanding of the logics in play, will push individuals to enact multiple role identities (high self-pluralism), without having a clear understanding of how to address complexity. Compared to individuals with an agile core, their lack of a clear sense of self decreases their confidence, deliberation and consistency to effectively engage in negotiation. Absence of clear understanding of when
to enact their different role identities (low self-unity) may then induce them to mimic behaviors that they observe around them, without necessarily being able to connect how these behaviors relate to different logics (due to low differentiation) or how to accommodate them within their core self.

This idea is aligned with Pache and Santos’ observation that compliance involves “different degrees of consciousness, ranging from taken-for-granted habit, unconscious imitation, and voluntary compliance” (2013b, p.13). Finding specific examples of situational compliance in past studies of institutional complexity, however, is not easy because of the tendency of researchers to focus on consistent patterns (e.g. Purdy & Gray, 2009; Reay & Hinings, 2009), rather than erratic behavior.

**Low self-pluralism and high self-unity: Defiance.** Finally, individuals characterized by a rigid core, combined with a narrow and coarse-grained understanding of their environment (low differentiation and integration), will act inflexibly across different situations. These individuals will thus tend to respond to institutional complexity by defying demands that they see as incompatible with the general principles that they feel apply to the situation and/or are incoherent with their sense of self. Pache and Santos consider defiance as the “explicit rejection of at least one of the institutional demands in an attempt to actively remove the source of contradiction (2010, p.463).” This can be exemplified by Murray’s account of scientists’ resistance to DuPont’s patenting of genetically modified mice for oncological research, where only coercive pressure will induce these individuals to conform reluctantly to their prescriptions (Murray, 2010). A similar example could be found in the struggle that East Germans may have experienced after the reunification, when they were confronted with the need to engage with the new ‘capitalist’ logic, severely conflicting with their dominant ‘socialist’ logic (Haack & Sieweke, 2018).

**DISCUSSION AND CONCLUSION**

In this paper, we have theorized how structural components of cognition influence how individuals experience and respond to institutional complexity. Our theoretical ideas offer a comprehensive theoretical
account of the observed, but still largely unexplained, variation in individual responses to ‘novel’ institutional complexity caused, for instance, by institutional change (e.g. Reay & Hinings, 2009), new field formation (e.g. Purdy & Gray, 2009), or cross-field interactions (e.g. Murray, 2010). While past research has consistently shown that different actors may respond differently to these unsettled institutional circumstances, current theories of how actors engage with and respond to the same conditions of complexity, has offered only a partial explanation of the factors involved.

Existing research documenting individuals’ responses to institutional complexity has so far focused either on what individuals know about the logics (knowledge component) and/or the identities that they inform (Wry & York, 2017), or has addressed how they feel about them (affect component) (see also Toubiana & Ziestma, 2017; Voronov & Yorks, 2015; Wry & York, 2017; Pache & Santos, 2013b). These studies lay critical foundations for future research on how individuals address institutional complexity, as they begin to theorize the relevance of both one’s understanding of the logics and of the role identities in play. However, given our focus on novel institutional complexity, we propose that there is another aspect that is particularly important, yet has received much less research attention in the institutional literature so far, namely how this knowledge is organized and represented internally within the individual’s cognitive structure (Scott, 1969; Block, 1961; Amiot et al., 2007). In order to theorize the influence of cognitive structure on how individuals experience and respond to institutional complexity, we have drawn on research within social and personality psychology that has addressed how individuals structure their perceptions of the external environment and of their own selves. We have argued that the differentiation and integration of their perceptions of the external environment will influence whether they see institutional complexity as an opportunity to generate novel action that they can embrace; as a set of fundamentally incompatible prescriptions that need to be buffered somehow; or as a tension between bothersome and, to some extent, inexplicable demands, which they struggle to accommodate. Within these
three general categories, we have further argued that different combinations of self-pluralism and self-unity (namely agile, fragmented or rigid core) will contribute to shape individuals’ specific responses to complexity, depending on their motivation to enact multiple roles (in response to the prescriptions and expectations associated with these logics), and to preserve a coherent sense of self while doing so. The proposed framework aims to extend our understanding of why individuals confronted with the same institutional complexity can perceive and respond to it very differently.

We believe that our conceptual framework opens up an important research agenda as it offers us a much more nuanced understanding of the factors that can explain whether and how individuals grappling with multiple conflicting logics may be able and motivated to enact and sustain a certain response to them. This enriches McPherson and Sauder’s (2013) notion of logics as “tools” and “implements that can be used by whoever picks them up” and “in ways that suit the purpose at hand” (p. 14) as it helps us understand why certain individuals may have a significantly easier or harder time of doing so, as compared to others, and provides guidance as to the ways in which we could anticipate this. The proposed framework could for instance explain why only some of the professionals within the court negotiations could flexibly engage with logics from other court actors, whereas others could not. As McPherson and Sauder (2013) have shown, the probation officers had the greatest flexibility in shifting among different logics in the court, whereas the clinicians predominantly stayed within one logic (rehabilitation), yet with a few exceptions. We argue that by studying how individuals negotiate the way they connect elements across different logics, as opposed to shifting among logics, and how they unite their role identities under a coherent core self, we can better understand and predict when and why some individuals may be better equipped to cope with and respond to conflicting institutional demands as compared to others.

Implications for Future Research
**Extending the Notion of Self-Pluralism.** Building directly on the previous point, future research could also explore how individuals may benefit from the complexity of their self-structure beyond the identities directly informed by the logics at play. Even though in this paper we have used the simplifying assumption of focusing only on role identities informed by the logics in play, it is theoretically possible that individuals may be committed to a greater number of role identities, not all of which associated with the logics in a given situation (Thornton et al., 2012). These identities may be based on prior life experiences, as well as vicarious observation and/or interaction with family, friends or individuals with very different backgrounds and institutional biographies (Bertels & Lawrence, 2016; Pache & Santos, 2013b). Having such broader sets of role identities in general may increase individuals’ overall capacity for flexible adaptation to any new (role) demands, allowing them to more fluidly integrate a new role identity into their already existing core self. Future research could therefore explore whether individuals characterized by multiple non-overlapping role identities, which are united in a core sense of self, can be better equipped to cope in situations of novel institutional complexity, as they could flexibly draw on elements from their existing role set to construct and negotiate the integration of a new role identity, thus increasing their capacity to respond to conflicting demands.

**Experimental investigation of micro-level institutional processes.** In recent years, there have been repeated calls for the use of micro-research methods in institutional theory (Powell & Colyvas, 2008; Thornton & Ocasio, 2008). The grounding of our ideas in research on cognitive psychology makes our framework particularly suitable to support experimental studies, which are seen as an important direction for future research in institutional complexity (see Smith & Rand, 2017). In particular, the influence of the different types and combinations of complexity of self and the environment can be manipulated (based on vignettes) in order to evaluate their exact impact on how individuals interpret and respond to institutional complexity.
Past research on cognitive psychology has developed sophisticated methods to capture the complexity of external representations (e.g. Scott, Osgood, & Peterson, 1979; Streufert & Swezey, 1986; Suedfeld, Tetlock, & Streufert, 1992) and the complexity of self (e.g. Campbell et al., 2003; Linville, 1985; Rafaeli-Mor et al., 1999). These methods could be adapted to the specific case of institutional complexity to explore empirically the impact of cognitive complexity on individuals’ response to logic multiplicity.

The interplay between cognition and emotions. While we chose to focus on cognition, emotions play an important role in the process we examined as well. As Creed and colleagues (2010, p.1356) argue, the experience of incompatibility of institutional logics is “often highly emotionally charged,” as these contradictions are not only cognitively perceived, but also fully experienced. By focusing on the complexity of self-representations, we do touch upon individuals’ coping with negative emotions, to the extent that high self-unity helps manage the stress associated with conflicting role identities. Future research may want to examine the interplay between cognition and emotion further by mapping how one’s feelings towards a given logic can influence her perceptions and responses.

Consistent with earlier work on institutional complexity, in this paper, we have assumed that individuals differ mainly in terms of their relative understanding of different logics (see McPherson & Sauder, 2013; Pache & Santos, 2013b). However, individuals may differ also in terms of the extent to which they like or dislike principles associated with a particular logic. When strong emotions characterize a specific aspect of an individual’s ‘life space’, the differentiation between the attributes that describe specific objects within it decreases, hence resulting in a more coarse integration within their cognitive domain (Lewin, 1935). Future research, then, may explore whether the affective properties ascribed to the different logics within one’s cognitive domain can interact with individuals’ ability to effectively integrate across their elements, and contribute more effectively to building a well-rounded representation of the
individual decision maker within institutional theory research (see also Voronov & Vince, 2012; Creed, Hudson, Okhuysen, & Smith-Crowe, 2014).

**Exploring the antecedents and development of cognitive complexity.** Finally, future field-based research may investigate how the very engagement with institutional complexity may influence the evolving complexity of one’s representation of logics and self. In this paper, for the sake of simplicity, we have examined how, at a given point in time, the cognitive complexity of an individual will influence her response. Past research, however, shows that while some actors are relatively stable in their response, possibly to the point of jeopardizing their survival (Purdy & Gray, 2009), others may alter their response over time, likely based on a modified understanding of the different logics at play (Murray, 2010) as well as of their own self (Creed et al. 2010).
REFERENCES


<table>
<thead>
<tr>
<th>Definition from Psychology</th>
<th>Low differentiation and Low integration</th>
<th>High differentiation and Low integration</th>
<th>High differentiation and High integration</th>
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</thead>
<tbody>
<tr>
<td>Low differentiation and Low integration</td>
<td>Views an issue through a one-dimensional lens and would tend to discount alternative perspectives.</td>
<td>Can consider two (or more) distinct ways in which to view an issue/situation, yet does not have the capacity to draw connections between different perspectives on an issue.</td>
<td>Can apply different perspectives when interpreting an issue and can consider their ‘mutual influence and interdependence’.</td>
</tr>
<tr>
<td>Application to Institutional Logics</td>
<td>Granular understanding of one logic. No awareness or coarse-grained understanding of the second. If aware of a second logic, it is classified as incompatible with the first.</td>
<td>Can discern and distinguish both logics in play, yet attends to their demands sequentially or in a structurally demarcated manner only.</td>
<td>Granular understanding of both logics and ability to discern opportunities to integrate between their demands.</td>
</tr>
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</table>
### TABLE 2
Cognitive Structural Representation of the Self: The Motivation to Enact a Given Response

<table>
<thead>
<tr>
<th>Definition from Psychology</th>
<th>Low self-pluralism and High self-unity</th>
<th>High self-pluralism and Low self-unity</th>
<th>High self-pluralism and High self-unity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application to Institutional Logics</strong></td>
<td>Tends to act in accordance with a single (dominant) role identity and behaves similarly across situations, in accord with the prescriptions of the dominant role.</td>
<td>Experiences tension and anxiety associated with self-fragmentation, as she is unable to internalize their prescriptions, and responds by attending to their demands separately or fitfully.</td>
<td>Experiences a stable emotional pattern as she is motivated to act upon the prescriptions of both identities and is aware how to jointly address their demands.</td>
</tr>
</tbody>
</table>

- **Definition from Psychology**
  - Low self-pluralism and High self-unity: Has a single dominant role identity.
  - High self-pluralism and Low self-unity: Has both (multiple) role identities present in her self-concept, however, lacks a clear sense of where and how to enact them consistently.
  - High self-pluralism and High self-unity: Has both (multiple) role identities and is able to integrate them within a coherent core self.
### FIGURE 1

Cognitive Complexity and Responses to Institutional Complexity

<table>
<thead>
<tr>
<th>Cognitive Structural Representation of Core Self</th>
<th>Cognitive Structural Representation of the External Environment</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>High pluralism High unity</td>
<td>High differentiation High integration</td>
<td>Agile</td>
</tr>
<tr>
<td>High pluralism Low unity</td>
<td>High differentiation Low integration</td>
<td>Fragmented</td>
</tr>
<tr>
<td>Low pluralism High unity</td>
<td>Low differentiation Low integration</td>
<td>Rigid</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Compromise</td>
<td></td>
</tr>
<tr>
<td>Fragile Synthesis</td>
<td>Compartmentalization</td>
<td></td>
</tr>
<tr>
<td>Selective coupling</td>
<td>Decoupling</td>
<td></td>
</tr>
<tr>
<td>Embracing</td>
<td>Buffering</td>
<td></td>
</tr>
<tr>
<td>Struggling</td>
<td>Struggling</td>
<td></td>
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</tbody>
</table>