

**Three Studies of Institutional Transformation: Theorizing an Institutional Logic's Basis of Worth, The Role of Values in the Coherence of Institutional Logics, and Remaking Worth in Alberta's Oil and Gas Industry**

by

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## ABSTRACT

Values are core to institutions. The overarching aim of this dissertation is to examine institutional values and their role in enabling or constraining a widely examined phenomenon within organizational studies: transformations. Theoretically, my research contributes towards a growing body of work on understanding the processes by which institutions transform, and their implications on organizations. Empirically, my work focuses on long-term, longitudinal changes occurring in the oil and gas industry of Alberta, Canada. Overall, three studies presented in this thesis foreground evaluative processes constituting concerns about institutions in general, and the grand challenge of energy transitions in particular. The three studies tackle the theme of institutional transformations in unique ways. The first two studies adopt an institutional logics perspective, and the third uses an inductive approach to institutional analysis.

In the first study, I ask, *how do values bound institutional logics' susceptibilities to change and their effects on organizations?* I provide a values-based explanation for change and stability by theorizing a process of values commensuration anchoring institutional logics. Foregrounding the centrality of values, I conceptualize a logic's *basis of worth* as the superset of commensuration principles governing a logic's values which rule in the performance of certain values and rule out the performance of others. This study contributes by offering a theoretical grammar (Pentland, 1995) for analyzing how a logic's values endogenously explain change and stabilization, and extends organizational and management scholarship by offering a toolkit for investigating how new values manifest in logics (Lounsbury et al., 2021).

In the second study, I investigate the effect of values on the coherence of institutions within the interinstitutional system. I ask, *how do logics' constitutive values affect their coherence, and with what interinstitutional implications?* I present a theoretical model

explaining how values undergird the logics comprising the interinstitutional system. They constitute mechanisms that entail the *reconfiguration* or *reinforcement* of institutional logics, and the coherence of institutions within the interinstitutional system—i.e. the extent to which an institution continues to be a resilient pattern of social structure and activity. My model also offers insights on institutional incoherence or erosion—i.e. the extent to which the institution is susceptible to being weakened, and thus, undermined. This study explores the idea that the intensity of interinstitutional contradictions can change even as values-based dynamics effect the coherence or incoherence of institutions, and contributes by bringing in a values-based perspective that focuses on the role of reflexive and pre-reflexive agency in social action (Emirbayer & Mische, 1998). It also offers insights into the construction of grand challenges, and contributes towards theorizing variations in institutional complexity and hybridity.

In the third and final study, a historical, inductive case study of Alberta’s oil and gas industry between 1938 and 2019, I ask, *how are institutional values transformed?* I find that a recalibration of values was constitutive of the incumbent extractive institution’s transformation. I theorize how this recalibration transpired via an axiological motor consisting of two sets of opposing processes that remake “worth”—what I conceptualize as the registers or building blocks of values—across two dimensions. Overall, the transformation I studied constituted the construction of energy transitions as a grand challenge of the twenty-first century. I show how changing institutional values, driven by a process of remaking worth, underpin this construction. In doing so, this study contributes towards a constitutive approach to institutional analysis, and to the literature on grand challenges.

Overall, the three studies presented in this thesis foreground a constitutive approach to institutional analysis even as they tackle questions pertaining to stability and transformation

within institutions, and within the interinstitutional system. An analytical focus on values is the single thread running through all three studies. Taken together, the three studies advance research on institutional transformation processes, institutional complexity and hybrid organizations, and posit practical implications for policy around grand challenges. They contribute to our understanding of how values anchor institutions, and thus, their effects on organizations, and more broadly on the interinstitutional system.

## **PREFACE**

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*Let the focus be on your work, let it not be on the fruits of the work,*

*(The Bhagavad Gita)*

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## **Chapter 1 : Overview**

## INTRODUCTION

Scholars of management and organization have long recognized the importance of *individual* values to understanding action in and around organizations (Barnard, 1938; Hambrick & Mason; 1984). They have also affirmed that organizations face institutional pluralism owing to prescriptions from different *institutional* values (Kraatz & Block, 2008; March, 1976; 1994; March & Olsen, 2005; Selznick, 1957). Yet, they have attended sparingly to the question of how contradictory institutional values could constitute significant transformation across organizations. Transformations are a widely studied phenomenon in organization studies, and in this dissertation work, I focus on processes of transformation. Specifically, the overarching aim of this dissertation is to examine the role of institutional values in enabling or constraining transformations. I define institutional values as distinct conceptions of “the good”—that which is “worth having, doing, and being” (Kraatz et al., 2021: 478; see also Boltanski & Thévenot, 2006; Friedland, 2018; Friedland & Alford, 1991; Selznick, 1957, 1992)—manifested by institutions.

While values are recognized as crucial to institutions and organizational theory, there have been challenges in precisely defining and operationalizing the concept within the institutional framework. These challenges stem from the complexity and contextual specificity of the construct of values, difficulties with measuring it objectively, and its intersection with other concepts such as norms, legitimacy, evaluations, and worth. With this dissertation work, I address some of these challenges through three separate studies. The first two studies present nuanced theoretical frameworks to explain how values constitute the stability and transformation of institutions, and the implications of values-based processes for organizations. The third and final study presents findings from an empirical examination of a transformation that occurred in the oil and gas industry of Alberta, Canada. In doing so, this study develops a process-theoretic

methodology, in part by using computational analysis, to capture how values undergirded the transformation under study.

Over the past few decades, institutional scholarship has been partial towards cognitive explanations of change and stability (DiMaggio & Powell, 1991; Meyer & Rowan, 1977; Glynn & D'Aunno, 2023). Institutions, in this recent tradition, have been conceptualized as socially constructed and routine-reproduced (Jepperson, 1991), structured by systems of regulative, normative, and cognitive elements. Processes of change, which result in the formation and transformation of institutions, have been found to be interest-driven and highly political. Our understanding of change processes has been much enhanced by some remarkable longitudinal field-level transformation studies, for example, in Norwegian fisheries (Holm, 1995), Swiss watchmaking (Raffaelli, 2019), Dutch breweries (Kroezen & Huegens, 2019), US publishing (Thornton, 2001, 2002; Thornton & Ocasio, 2008), US manufacturing (Lee & Lounsbury, 2015), US finance (Lounsbury, 2002), US healthcare (Goodrick & Reay, 2011; Goodrick, Jarvis, & Reay, 2020; Scott, Reuf, Mendel, & Caronna, 2000), and US mutual funds (Lounsbury, 2007).

Yet, across studies, the core motors driving interest and politics, and hence change, remain bereft of values (Van de Ven & Poole, 1995). Recent reviews of the field suggest that institutional analyses that do not account for values may be incomplete (Kraatz, Flores, & Chandler, 2020; Lounsbury, Steele, Wang, & Toubiana, 2021). Specifically, a change in values seems core to institutional transformations. For instance, all the fields/industries in the aforementioned longitudinal studies were culturally and socially important, wherein transformations entailed fundamental values-based changes to their respective contexts. Holm (1995) alludes to changing perceptions of the Norwegian fishing industry's impact on values of social equity (e.g. interests of fishermen versus merchants) and environmental equity (e.g.

maintaining herring populations). Therefore, while fisheries retained their importance for Norway's economy throughout, transformations at the level of fishing practices entailed significant shifts in conceptions of “good fishing”—broader level changes in values with implications for the field overall. Similarly, the US publishing industry's transformation entailed a stark difference in later practices as market values were prioritized over incumbent academic and social elite values—a difference that is not theoretically accounted for in Thornton and colleagues' studies of the industry's transformation (Thornton, 2001, 2002; Thornton & Ocasio, 1999). Additionally, a more recent spate of scholarship that examines how seemingly contradictory institutional templates are combined, and sustained, within novel forms of organizing such as Islamic banking (Gümüşay, Smets, & Morris, 2020a), community banking (Marquis & Lounsbury, 2007), and social enterprise (Battilana & Dorado, 2010; Battilana & Lee, 2014; Dorado, 2006; Pache & Santos, 2013) also raises interesting theoretical possibilities for values-based combinations (Gümüşay, Claus, & Amis, 2020b).

Overall, although their role in processes of transformation may have been undertheorized, the literature does fundamentally recognise that values are unique and incommensurable across different institutional spheres. For example, the institutions of the market and religion venerate contradictory values of wealth generation and sacredness respectively (Thornton, Ocasio, & Lounsbury, 2012; Gümüşay et al., 2020a). More generally, these institutional contradictions manifest in organizational practices (Lee & Lounsbury, 2015; Lounsbury, 2002), competencies (Durand, Szostak, Jourdan, & Thornton, 2013; Battilana & Dorado, 2013), decision making (Zilber, 2024), and beliefs (Mohr & Duquenne, 1997).

Prior accounts see dyadic values-based contradictions as either preventing or triggering transformations *within* institutions. One stream of studies finds that when contradictions become

more salient, transformations are more likely to be resisted (Townley, 2001; Marquis & Lounsbury, 2007). For instance, Lee and Lounsbury (2015: 861) show that when industrial facilities were located in politically conservative communities, market-driven values were “amplified,” and their polluting practices less likely to be transformed by environmental regulations. Another stream finds that values-based clashes can also *trigger* transformations (Haveman & Rao, 1997; Rao, Monin, & Durand, 2003; Weber, Heinze, & DeSoucey, 2008). For instance, “opposing” market-oriented values disrupted domains like yoga (Munir, Ansari, & Brown, 2021: 3), publishing (Thornton, 2001), and higher education (Kraatz, Ventresca, & Deng, 2010). Additionally, contradictions can provoke changes *across* a system of institutions. For instance, Friedland and Alford (1991: 239-240) highlighted how the emergence of individualism as a value transformed both the market and religion as institutions, redefining their contradictions and interdependencies. Namely, individualism manifested in a more “personalized” religious system than before, and a market “divorced from” earlier notions of wealth accumulation through birthright.

Recent scholarship has highlighted that values are implicated in grand challenges such as the dismantling of cherished societal institutions like democracy (Adler et al., 2022; Lounsbury & Wang, 2020), and the problems of capitalism (Adler, 2001, 2019; Amis et al., 2021; Lucas et al., 2022) and inequality (Gümüşay et al., 2020b). Shared perceptions of “the good” manifest in social evaluations, such as according status to certain groups (Dacin et al., 2010), and stigmatizing certain others (Wang, Raynard, & Greenwood, 2021). These emerging streams of scholarship probe into the interplay between organizational activity and broader societal level dynamics, taking seriously the question of how contradictory institutional contexts matter for organizational outcomes. Yet, the underlying incommensurable values that underpin these



contradictions have only been treated descriptively, even as their salience in institutional processes has not specifically been theorized. This is a considerable gap in our understanding of these processes, not least because, as I discussed above, values not only constitute susceptibilities to transforming, but also have a larger role in animating inter-institutional dynamics and in addressing contemporary matters of relevance to organizational scholars.

Several of the above cited studies constitute a flourishing stream in institutional literature that focuses on organizational dynamics arising from contradictory institutional spheres or “orders.” This stream of literature uses the institutional logics perspective—a robust framework for analyzing how organizations respond to a plurality of values (Friedland & Alford, 1991; Lounsbury et al., 2021; Thornton et al., 2012). Institutional logics are defined as “the socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality” (Thornton & Ocasio 1999, p. 804). Although central to the concept of logics, the role of values at the nexus of organizations and logics have not been sufficiently examined (Lounsbury et al., 2021). Yet, this role is clearly thematic across extant studies using the institutional logics perspective. For example, considerations of sustainability in the commensuration of the market logic affects business organizations (Amis & Greenwood, 2022; Espeland & Stevens, 1998), while combining logics with competing values-bases impacts hybrid organizations (Dorado, 2006; Gümüşay et al., 2020a).

The first two studies of this dissertation explain how values constitute the stability and transformation of institutional logics, with ensuing implications for organizations and the interinstitutional system. The third and final study traces the role and trajectory of changing

institutional values during a transformation occurring in the oil and gas industry of Alberta, Canada.

## **STUDY 1: THEORIZING AN INSTITUTIONAL LOGIC'S BASIS OF WORTH**

In my first study, I ask, *how do values bound institutional logics' susceptibilities to change and their effects on organizations?* I provide a values-based explanation for change and stability by theorizing a process of values commensuration anchoring institutional logics. Institutional logics can be variably susceptible to change and stabilization, with important effects on organizations. However, the role of values in this process remains underexplored. Drawing on insights from extant literature, I theorize a process of values commensuration anchoring institutional logics. I integrate the institutional logics perspective with Boltanski and Thévenot's (2006) convention theory, introducing the concept of a logic's basis of worth. This concept manifests the set of commensuration principles available to actors in performing a logic's values, anchoring the logic's susceptibility to transform, endure, or cohere. Importantly, basis of worth is not static, but is reconfigured through three pathways: displacement, hybridization, and adaptation. These dynamics operate both within a logic and across logics in a process that is endogenous to the institutional system. Using extant studies of logic change and stabilization, and contemporary examples, I show how basis of worth anchors the possibilities for and constraints on a logic's transformation, endurance, and coherence.

This study makes three contributions. First, in delineating a logic's (abstract) basis of worth from its (particular) values, I build a theoretical grammar—a finite lexicon together with a set of rules and constraints (Pentland, 1995)—for analyzing how a logic's values endogenously explain change and stabilization (Cornelissen, 2023; Reinecke & Lawrence, 2022). This paves the way for an original and holistic framework that conceptualizes the diversity of

interinstitutional values as rooted in underlying commensuration processes, and thus provides a novel explanation for the “partial autonomy of social structure and action” (Thornton et al., 2012: 63; see also Seo & Creed, 2002; Dorado, 2005). Second, I theorize how values bound the effects of institutional logics on organizations through three pathways of commensuration anchored to a logic’s basis of worth. In thus accounting for logics’ susceptibility to change and stabilization, I show how basis of worth parsimoniously explains previously inchoate findings. This conceptualization provides a values-based explanation for how logics might cohere and endure by resisting transformation, a much-needed theoretical advancement (Lounsbury et al., 2021). Finally, this work extends organizational and management scholarship by offering a toolkit for investigating how new values manifest in logics. My account views friction arising from interinstitutional contradictions as potentially generative (Fisher, Kotha, & Lahiri, 2016; Stark, 2009) by giving rise to new commensuration principles, and hence potentially new bases of worth.

## **STUDY 2: THE ROLE OF VALUES IN THE COHERENCE OF INSTITUTIONAL LOGICS**

From Study 1 I found that the performance of values entails dynamic processes of commensuration with implications for institutional change and stability. Commensuration processes constitute differences in the susceptibility of institutional logics to cohere, transform, or endure, and in doing so, sustain differences—contradictions—between different institutions. Following on from these explanations, Study 2 is a deeper investigation into the coherence of the logics underpinning institutions. By institutional coherence I mean the extent to which an institution continues to be a resilient pattern of social structure and activity. In this study, I ask, *how do logics’ constitutive values affect their coherence, and with what interinstitutional implications?* I present a theoretical model that offers insights on institutional coherence, and

also on institutional incoherence or erosion—i.e. the extent to which the institution is susceptible to being weakened, and thus, undermined. This study also explores the idea that the intensity of interinstitutional contradictions can change even as values-based dynamics effect the coherence or incoherence of institutions. I assume a pragmatist perspective to conceptualize institutional values as coherent conceptions of the good associated with each institution, and use the concept to theorize how coherence is maintained by institutional actors via the enactment of values. Values anchor and undergird the logics comprising the interinstitutional system. I argue that values-based mechanisms constitute the coherence of institutional logics via *reconfiguration and reinforcement*. When logics are reconfigured or reinforced, evaluative principles may be added or modified within the existing set of evaluative principles constituting extant institutional values that are available to actors. Overall, I present a theoretical model encapsulating these interinstitutional dynamics, and depicting the coherence of institutions as an outcome of these dynamics.

I use two thought experiments based on contemporary concerns as exemplars to flesh out the theoretical processes in my model. The first thought experiment broaches the question of the extent to which the availability of lab grown meats—meats “cultivated” from a single cell of an animal—might transform practices of vegetarianism, thereby altering the very bounds of morality, and hence affecting institutions of which vegetarianism forms a core practice. The second thought experiment draws from recent work in political theory to explain how the prioritization of values—liberal versus conservative, and vice versa—is the mechanism undergirding the observed political polarization in the US. This polarization finds expression in the widening of contradictions between other institutions, such as that between democracy and capitalism, and ensuing concerns about the “erosion” of democracy.

This study contributes, first, by bringing in a values-based perspective to institutional scholarship that focuses on the role of reflexive and pre-reflexive agency in social action (Emirbayer & Mische, 1998; Kraatz et al., 2020). Institutional values provide actors with bases for “political action” (Seo & Creed, 2002: 223). In prioritizing certain values over others when choosing from tools in their cultural repertoire, a skilled actor constructs meanings (Swidler, 1986). The theoretical model proposed in this study contributes towards grand challenges scholarship by offering insights into the construction of grand challenges. Specifically, the pragmatic explanation of how standards of evaluation evolve as well as transform offers insights into how prevalent concerns about institutional incoherence or erosion may graduate onto “becoming” grand challenges, and thereby catch the attention of policymakers. Second, this study contributes by theorizing variations in institutional complexity and hybridity. It suggests that the creation of new and innovative forms of organizing via the combination of different logics is a function of an underlying process rooted in the prioritization of institutional values. It is also a function of the current “state” of the interinstitutional system, and what concerns are considered worthy of actors’ attention.

### **STUDY 3: REMAKING WORTH IN ALBERTA’S OIL AND GAS INDUSTRY**

In the third and final study, I examine the transformation of Alberta’s oil and gas industry via an in-depth historical study between 1938 and 2019. Using an inductive, longitudinal research design, I ask, *how are institutional values transformed?*

I chose the oil and gas industry within the province of Alberta in Western Canada to study this question. Alberta is known as Canada’s “energy province,” and the oil and gas industry is central to its economy. In 2019, Alberta produced over 81% of Canada’s total crude oil, contributing \$71 billion to nominal gross domestic product (Natural Resources of Canada,

2019). However, non-producing well sites in the province have been increasing rapidly. The number of inactive oil wells—those that do not currently produce any oil or gas—has increased by 49% over the last decade to 90,000, and the number of orphaned oil wells—the responsible oil companies for which became insolvent—increased from 100 to 3,700 between 2012 and 2018 (Dachis, Shaffer, & Thivierge, 2017). The provincial energy regulator has implemented several programs to manage the consequences of oil and gas liabilities. These “unfunded liabilities,” estimated between \$58 billion and \$260 billion, have been described in the popular media as “the biggest single issue that has ever faced [Alberta],” “a mess,” and “a ticking time bomb.” In sum, the extractive institution underpinning the industry, formerly characterized by a profitmaking mindset, was transformed by liability considerations—that is, considerations related to the legacies of the industry’s activities and their broader impacts on stakeholders.

Seeking a contextual understanding and a comprehensive view of the topic, I employ a qualitative research design (Creswell, 2007; Langley, 1999). I compiled a rich dataset covering the years from 1938 to 2019 consisting, at the core, of a comprehensive, longitudinal set of records issued by different regulatory organizations, and their three key pieces of enabling legislation. From these documents, I understood the state of the practice of regulations, as well as the kind of claims about prevalent beliefs that undergirded them (Carruthers & Espeland, 1991). I read multiple histories pertaining to oil and gas regulation in Alberta (e.g. Breen, 1993; Jaremko, 2013). Additionally, I consulted secondary publications to develop a broad sense of multiple perspectives on the industry.

I also analyzed 112 interviews, of which 79 were transcripts of interviews conducted during the 1980s as part of an oral history project sponsored by a provincial historical society. These interviews complemented the archival data with retrospective reflections of industry

actors. Additionally, I conducted 33 original interviews during 2018 and 2019 with individuals representing different industry and non-industry stakeholder organizations. Using a combination of process theoretic and qualitative computational methods, I focus on the registers or building blocks of values—what I call “worth”—that drive the practices and beliefs during different points in time in the industry. My findings show how the remaking of worth entailed opposing processes of *dismantling* and *deifying*, versus *fortifying* and *trivializing*.

This study’s findings present two contributions to institutional theory. First, a theory of remaking worth explains the recalibration of institutional values via what I call an “axiological motor of worth.” This extends existing teleological and outcomes-based explanations of institutional change (Suddaby, 2010; Van de Ven & Poole, 1995), furthering “a constitutive approach” (Lounsbury & Wang, 2020: 1; Lounsbury et al., 2021). Specifically, my findings address the neglected question of *why* institutional transformations occur in the first place. In the context of energy transitions, I show how the tension between economic growth and its material consequences (Wright & Nyberg, 2017) changes incumbent institutional values. A second, related, contribution pertains to the construction of the grand challenge of energy transitions in Alberta. Specifically, I explain how values, in being driven by worth, anchor outcomes that construct such challenges (Ferraro, Etzion, & Gehman, 2015). For instance, my process model of values’ recalibration throws light on the evaluative processes that could produce institutional structures such as social class and stigma hierarchies.

## **Chapter 2 : Theorizing an Institutional Logic's Basis of Worth**



## INTRODUCTION

*The notion of value loses all meaning if values are not seen as receptacles to be pierced, statues to be broken open to find what they contain, whether it is the most noble or the most base.*

—Deleuze (1986: 55)

Management scholars have long recognized the importance of values to understanding action in and around organizations (Barnard, 1938; Hambrick & Mason, 1984; Kraatz & Block, 2008; Kraatz, Flores, & Chandler, 2020). As Selznick (1957) famously observed, organizations become institutions to the extent they are infused with values beyond the technical requirements at hand. Within the “interinstitutional system,” organizations navigate competing prescriptions from disparate values. These values constitute competing institutional logics—socially constructed, historically developed systems of cultural elements that provide individuals and organizations with templates for organizing their thoughts and behavior (Friedland & Alford, 1991; see also Haveman, Joseph-Goteiner, & Li, 2023; Lounsbury, Steele, Wang, & Toubiana, 2021; Thornton, Ocasio, & Lounsbury, 2012). The logics framework has explained how organizational change and stability are rooted in the logics they are embedded in. For example, past studies have shown that incumbent logics are susceptible to three outcomes: *transformation* via displacement by new logics (Thornton, 2001; 2002), *endurance* in hybrid forms via combination with other logics (Gümüşay, Smets, & Morris, 2020a), and *coherence* across time via adaptation to shifting contexts (Rao, Monin, & Durand, 2003, 2005).

And yet, contrary to the epigraph’s admonition, values and their role at the nexus of organizations and logics have not been sufficiently “pierced” to “find what they contain.” Although past studies have found that logics can be variably susceptible to the three outcomes mentioned above, these susceptibilities have merely been described in terms of values but a values-centric explanation continues to elude us (Lounsbury et al., 2021). For example, carriers

of the religious logic tend to “reject the relativization of their values,” making the logic more impervious to transformations (Gümüşay, et al., 2020a: 127; Gümüşay, 2020) than, say, a market logic or a corporate logic. In this paper, I argue that variations among logics to transform or not are anchored in multi-level processes of *values commensuration*: the evaluation and justification of alternative values relative to a common standard (Espeland & Stevens, 1998: 315; see also Stark, 2009).

In explaining values commensuration, I introduce the concept of a logic’s *basis of worth*—a register of particularly aligned and prioritized *commensuration principles* against which extant values and potential alternatives are evaluated. My theorization entails a practice-theoretic understanding: a logic’s values are not abstract and immutable givens, but are performed in practice by actors drawing from a finite but extensive universe of principles, even as they engage in commensuration processes. To delineate between the commensurable and the incommensurable, I derive commensuration principles from Boltanski and Thévenot’s (2006) convention theory, which provides a parsimonious, compatible, and familiar vocabulary of tangible values and a framework for understanding how actors interpret, evaluate, and justify their actions based on different value systems (Cloutier & Langley, 2013; Demers & Gond, 2020). I draw from convention theory to ground my theoretical arguments in past empirical studies and contemporary examples.

My values-based explanation constitutes a theory of logic change and stabilization that is endogenous to the interinstitutional system, and occurs at two levels. First, at the level of a particular logic, its basis of worth (re)calibrates alignments and priorities with a dynamic universe of commensuration principles. Second, at the level of the interinstitutional system, multiple bases of worth afford latent exaptive possibilities (Gould & Vrba, 1982; Marquis &

Huang, 2010; Sedita, 2012), potentially modifying the existing universe of principles available to actors, and unsettling conceptions of the good (Swidler, 1986). Thus, at both levels, the range of values that could be performed by actors is anchored to logics' bases of worth.

My primary contribution lies in clarifying how values bound institutional logics' susceptibility to change and stabilization—a crucial oversight in the literature that has inhibited a fulsome understanding of the effects of institutional logics (Lounsbury et al., 2021). Via my basis of worth concept, I build a theoretical grammar—a finite lexicon together with a set of rules and constraints (Pentland, 1995)—for analyzing how a logic's values endogenously explain change and stabilization (Cornelissen, 2023; Reinecke & Lawrence, 2022). This paves the way for an original and holistic framework that conceptualizes the diversity of interinstitutional values as rooted in underlying commensuration processes, and thus provides a novel explanation for the “partial autonomy of social structure and action” (Thornton et al., 2012: 63; see also Seo & Creed, 2002). Second, I theorize how values bound the effects of institutional logics on organizations through three pathways of commensuration. I show how basis of worth anchors these pathways, accounting for logics' susceptibility to change and stabilization, and parsimoniously explaining previously inchoate findings. Specifically, by delineating a logic's (abstract) basis of worth from its (particular) values, I provide a values-based explanation for how logics might cohere and endure by resisting transformation, a much-needed theoretical advancement (Lounsbury et al., 2021). Finally, my work extends organizational and management scholarship by offering a toolkit for investigating how new values manifest in logics. My account views friction arising from interinstitutional contradictions as potentially generative (Fisher, Kotha, & Lahiri, 2016; Stark, 2009) by giving rise to new commensuration principles, and hence potentially new bases of worth.

## **THEORETICAL MOTIVATION**

Extant literature abounds with studies of how institutional logics change or persist, and associated consequences for organizations and their stakeholders (Cloutier & Langley, 2013; Lounsbury et al., 2021; Thornton et al., 2012). From my review of the literature, I delineate three core dynamics, each revealing a fundamental but undertheorized role played by values. First, in studies of logic transformation, “Logic A”—associated with one set of values—is displaced by “Logic B”—associated with a different set of values. These studies highlight differences across values associated with two separate logics even as latent commonalities are surfaced at their cores (Lounsbury, 2007; Thornton, 2001, 2002). Second, scholars have examined logic endurance within hybrid organizations or institutionally complex fields. In these studies, contestations that are rooted in values clashes are foregrounded, as “Logic A” and “Logic B” combine to form a “Logic AB” hybrid (Battilana & Dorado, 2010; Gümüşay et al., 2020a; Pache & Santos, 2013; Smith & Besharov, 2019). Third, longitudinal studies focus on multilevel processes whereby a logic’s values are reprioritized in response to broader societal level cultural shifts (Haveman & Rao, 1997; Kroezen & Huegens, 2019; Rao, Monin, & Durand, 2003). As a result of these processes, an incumbent “Logic A” adapts and morphs into “Logic A’,” and in doing so, coheres across time in the field.

### **The Transformation of Logics**

First, logic transformation—the “tearing down of old logics and the construction of new ones” (Lounsbury, 2002: 255)—has played a central role in changes across fields such as academic publishing (Thornton, 2001, 2002; Thornton & Ocasio, 1999), finance (Lounsbury, 2002), and liberal arts colleges (Kraatz, Ventresca, & Deng, 2010). In short, transformation entails the displacement of Logic A by Logic B. For instance, Thornton (2002: 82) found that as

the publishing industry transitioned to a market logic, organizations which continued to embody the older editorial logic became “particularly vulnerable” to pressures to adopt a divisional structure. These two logics—editorial and market—embodied “two different forms of capitalism—personal and market” (p. 82). Thus, although editorial “core values” were different from those of the business corporation, it still resonated with the infringing market logic’s capitalist ethos (Voronov & Weber, 2016).

In contrast, Townley’s (2002)<sup>1</sup> study of museums highlights the values-based conflicts accompanying the introduction of business plans and performance management. Values related to being “preservers and interpreters of heritage” came into confrontation with the economic values inherent in “market operations” (Townley, 2002: 175). As a result, new measures were “dismissed” and “rejected” (p. 175). One interpretation is that a lack of latent values-based commonalities between museums’ incumbent logic and the new logic prevented transformation. In sum, a close reading of findings related the success of an incumbent logic’s transformation to values-based differences with the prevalent cultural context (Lounsbury, 2007; Thornton, 2001). Namely, transformation was more difficult when there was a dissonance between underlying values of the incumbent logic A and the new logic B respectively.

Studies have also found that transformation entails dissonance between extant organizational values and newly introduced measures of evaluation. For example, when introduced, enrolment management—a new market-based standard used to evaluate performance of US liberal arts colleges—was dissonant with the college’s extant values (Kraatz et al., 2010). Incumbent professional editorial values in publishing were dissonant with new measures of

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<sup>1</sup> Although Townley’s (2002: 167-169) study of Canadian museums does not explicitly draw on the institutional logics perspective, it nonetheless refers to two specific organizing templates—viz., a “preserve, protect and present” template, and a “business planning and performance management” template. It draws on different values and rationalities underlying the transformation of organizing templates and associated practices.

evaluating publishing as a business (Thornton, 2001; 2002). Overall, even as extant values and new measures of evaluating became dissonant, the ease of transformation was contingent on the resonance of underlying ethos of the incumbent and the new logic. These studies raise questions regarding the values-based limits of a logic's transformation, that is, the extent to which a logic remains a coherent template of organizing, even as its values change. Thematic here is the role of values as a core medium and outcome of transformation.

### **The Endurance of Logics**

Second, scholars have examined the co-existence of multiple logics within organizations and institutionally complex fields, whereby these logics are “made to last”—or endure—despite values-based contestations (Gümüşay et al., 2020a: 124; Smith & Besharov, 2019). For instance, Gümüşay and colleagues (2020a: 127) pointed out that actors embedded in a religious logic might adhere to “absolute moral principles,” making the logic dissonant with comparatively less rigid market values. This “low compatibility” between constituent logics of the religion-market hybrid, fomented by dissonant values, makes it prone to “heated conflict.” In other words, endurance can be understood as the stabilization of a Logic AB hybrid despite values-based contestation between Logics A and B.

Lee and Lounsbury's (2015) study reveals crucial values-based insights with regard to endurance at the supra-organizational level. They found that the dissonance of values between existing community and societal logics underlie variations in environmental practices of industrial facilities across Texas and Louisiana in the US:

We explain how logics with a similar underlying value basis, proenvironment and state regulatory logics on one hand and politically conservative and market logics on the other, can interact and amplify each other. But the study of how values and related foci such as emotions, passion, and ideology relate to institutional logics is relatively underexplored and needs further theorization and empirical investigation. (Lee & Lounsbury, 2015: 861)

Thus, values' dissonance can create heightened contestation between coexisting logics, and resonant values can amplify each other in ways that are consequential to organizations.

Indeed, studies have shown that much work goes into maintaining resonance between values within hybrid organizations. For example, in social enterprises—hybrid organizations that combine a social welfare or development logic with a commercial or market-based logic—“ostensibly incompatible demands” (Smith & Besharov, 2019: 2) are combined into a “desired set of values” that resonated with the organization’s goals and the prevailing institutional sentiments (Battilana & Dorado, 2010: 1420; see also Battilana & Lee, 2014; Pache & Santos, 2013). The resonance or dissonance of values is also mobilized as a means of evaluation (De Clercq & Voronov, 2011; Pache & Santos, 2013). Pache and Santos (2013: 983), for example, found that volunteers enjoy higher professional legitimacy in social enterprises originating from the social sector (versus the corporate sector) and are heralded as embodying “selfless commitment to a social mission”—values associated with a social welfare logic.

Within Germany’s first Islamic bank, mechanisms of “polysemy” and “polyphony” “dynamically engaged” conflict and helped maintain the resonance of the religion-market hybrid’s values with the bank’s “vaguely worded” goals and measures of evaluation (Gümüşay et al, 2020b). As competing logics appeared more compatible, the Islamic bank was afforded the resilience to “institutionally bend.” In sum, studies of logic endurance have spotlighted the resonance or dissonance between associated values, which influences the extent to which logics coexisting in a hybrid organization may amplify or antagonize one another. Overall, a hybrid logic endures in so far as its values resonate with evaluative measures, as well as with the prevalent cultural context. Yet, the precarity of endurance—the extent to which the hybrid logic AB is “contested”—seems to be related to resonance between the values of Logics A and B.

## **The Coherence of Logics**

Third, although less common, a handful of studies have examined the longitudinal adaptation of field-level logics—the unfolding over time of “institutional definitions, rules, and expectations” (Haveman & Rao, 1997: 1606; see also Kroezen & Huegens, 2019; Rao et al., 2003). These studies draw attention to dynamics at multiple levels, finding that a field-level logic’s evolution can result from interactions with higher-order societal level logics. The result is that the logic coheres—hangs together as a stable set of practices and symbols—over time, even as it evolves. In short, endurance can be understood as a move from Logic A to Logic A’.

In an exemplary study, Haveman and Rao (1997) found that the evolution of thrift organizational forms in the US was contingent on technical conditions and broader belief systems associated with the progressive ideology’s emergence at the beginning of the 20th century. The once dominant “terminating” thrift form ultimately transformed into a “guaranteed stock” form through a process of institutional selection. As this transformation unfolded, values of “bureaucracy and voluntary effort” were gradually prioritized over “mutuality and structured individual effort” to accord with the broader-level cultural changes associated with the progressive movement (Haveman & Rao, 1997: 1644) that changed measures of evaluation in the thrift industry.

This trend of evolution in tandem with more modernized and progressive values was also observed in a study of rise of the nouvelle cuisine movement in French gastronomy (Rao et al., 2003, 2005). The authors found that an “initiator movement” exposed contradictions between the existing classical cuisine logic in the field and new emerging logics in adjacent fields, such as art and theater. As a result, the orthodox values associated with classical cuisine evolved to align with nouvelle cuisine. Kroezen and Huegens’s (2019: 976) more recent study of Dutch beer



breweries shows, reciprocally, how a traditional brewing logic re-emerged as more traditional values were resuscitated in response to “increasing exposure” to a global network of emerging craft brewing practices. Thus, a single logic at the field-level—as the cases of thrift organizations, French cuisine, and Dutch breweries show—may evolve over time through a process of selection and retention at the level of values. Overall, adaptation seems to be triggered by dissonance of the incumbent logic’s values with broader-level cultural dynamics and measures of evaluation, as a result of which the logic coheres despite dissonance.

### **Towards a Values-Based Theory of Logic Change and Stabilization**

Overall, looking across disparate literatures described above, I found that values were central to the transformation, endurance, and coherence of institutional logics. From my review of the literature I analyzed how incumbent values create possibilities for logic transformation, endurance, and coherence respectively. They do so on account of their resonance/dissonance along two dimensions (described and delineated in Figure 2-1), viz., 1) evaluative principles, and 2) values of the second logic (if applicable).

**Figure 2-1: *Synthesis of literature on logic change and stability***

<i>Resonance/Dissonance with Evaluative Principles</i>	Values are resonant	Less precarious endurance (e.g. Battilana & Dorado, 2010)	More precarious endurance (e.g. Gümüşay et al., 2020b)	No change
	Values are dissonant	Less difficult transformation (e.g. Thornton, 2001)	More difficult transformation (e.g. Townley, 2002)	Coherence (e.g. Haveman & Rao, 1997)
		Values are resonant	Values are dissonant	Not applicable (no other logic is in question)

*Resonance/Dissonance with other logic’s values*

As Figure 2-1 summarizes, incumbent values assume a central, if underspecified, role in explaining logic transformation, endurance, and coherence. Thematic to studies describing transformation via displacement, for instance, is the resonance or dissonance of an incumbent logic's values with measures of evaluation, and with those of an infringing logic. Newer values emerge, and older ones fade away to the extent that an incumbent logic's values—what Friedland (2017, 2018) called its substance—can be made *commensurable* with those of an encroaching logic (e.g., in publishing, finance, and liberal arts college admissions). Values commensuration refers to the evaluation of alternative values relative to a common standard, to effect “rational structuring” of choices and actions in the face of “practical problems” (Espeland & Stevens, 1998: 319; see also Espeland, 1998; Buckermann, 2021). Studies of logic endurance via hybridization also surface commensuration, as they spotlight how “multiple modes of valuing” (Espeland & Stevens (1998: 314-315, 332) by actors influence the extent to which logics may amplify or antagonize each other within hybrid organizations (Gümüşay et al., 2020b). Finally, the coherence of logics via adaptation suggests an underlying process of values commensuration involving the selection and retention of values, as observed when thrift organizations aligned with the values of the progressive movement (Haveman & Rao, 1997).

Thus, commensuration processes are in effect whenever multiple evaluative principles are at play and there may be “principled disagreement” about what is of value (Stark, 2009: 17; see also Fisher, Kuratko, Bloodgood, & Hornsby, 2017; Fisher et al., 2016). Although values are a “fundamental feature of social life,” and seemingly core to understanding logic change and stabilization, they nevertheless have remained abstract and intangible across the literature. To develop a values-based theory of logic change and stabilization, the following position from prior literature provides a useful starting point: values reside within and are core to a logic, and

serve as the “foundation stone” of a logic’s ontology (Friedland, 2012: 585; see also Ahrens & Ferry, 2022; Bento da Silva, Quattrone, & Llewellyn, 2022; Friedland, 2013, 2017, 2018, 2021; Gehman, 2021; Lounsbury et al., 2021; Mutch, 2018). Since values anchor logics as stable sets of practices and symbols, actors’ evaluations of alternative values can explain how logics change or remain stable.

## **BASIS OF WORTH: THE REGISTER OF AN INSTITUTIONAL LOGIC’S VALUES**

Building on my literature review, in this section I introduce some conceptual resources which I use to develop and illustrate my process model of values commensuration. First, drawing on convention theory (Boltanski & Thévenot, 2006), I introduce and illustrate the idea of commensuration principles. Second, I argue that actors perform a logic’s values by drawing on commensuration principles to evaluate and justify actions. Using three past studies as instructive examples, I begin by showing the alignments and priorities of their focal logics with six commensuration principles. In doing so, I present a framework that integrates the logics perspective with convention theory. Third, I introduce the basis of worth concept and explain how it drives the values commensuration process and undergirds logic change and stability. Importantly, this metric is open to shifts, which complicates the commensuration of values within the interinstitutional system and preserves the possibility of emergent change, but in theoretically specifiable ways.

### **Commensuration Principles**

Boltanski and Thévenot’s (2006) framework describes six social worlds (i.e., industrial, market, inspired, fame, civic, and domestic) and articulates principles undergirding the value systems governing these worlds. This framework posits that actors use unique principles to evaluate the degree of “goodness” *within* a particular world. However, principles are

incommensurable *across* worlds. Below, I distill three characteristics I collectively refer to as commensuration principles (see Table 2-1), paving the way to integrate this aspect of Boltanski and Thévenot’s theory with longstanding work on institutional logics.

**Table 2-1:** *Commensuration Principles Across the Six Worlds*

<b>World</b>	<b>Conventions of equivalency: Criteria for assessing/equating beings</b>	<b>Proofs of adequacy: What state of being proves that you are worthy in this world?</b>	<b>Proofs of deficiency: What state of being proves that you are unworthy in this world?</b>
Industrial	Efficiency (performance)	Functional, reliable, operational	Unproductive, not optimal, inactive, unsuitable, in a state of breakdown, unreliable, subjective
Market	Competition	Of value, sellable, wealth, winner	Hated, rejected, spurned
Inspired	The outpouring of inspiration	Bizarre, unusual, marvelous, unspeakable, disturbing, exciting, spontaneous, emotional, incalculable	Paralyzed, habitual, imitative, attaches importance to social position and to external signs of success, unoriginal, “educated,” down to earth
Fame	The reality of public opinion (others, the public at large)	Reputed, recognized, visible, successful, distinctive, persuasive, attention-getting	Unknown, hidden, indifferent, banal, forgotten, fuzzy image, deteriorated, faded, lost
Civic	The pre-eminence of collectives	Unitary, legal, rule governed, official, representative, authorized, confirmed, free	Divided, in the minority, particular, isolated, cut off (from the electorate base), self-serving individualistic, deviant, subgroup, irregular, arbitrary, annulled, removed
Domestic	Engenderment according to tradition, generation, hierarchy	Benevolent, well brought up, wise, distinguished, discreet, reserved, trustworthy, honest, faithful	Impolite, makes blunders, loudmouth, gossip, troublemaker, indiscreet, disorderly, vulgar, envious, flatterer, traitor

The first characteristic that I draw attention to is a world’s *convention of equivalency*—the “higher common principle” (Boltanski & Thévenot, 2006: 140) used to evaluate whether actors and their actions are worthy. Each convention of equivalency provides a world-specific

yardstick for evaluation and justification. For instance, in the industrial world, “efficiency” constitutes this yardstick, meaning actors evaluate actions based on criteria such as input-output performance and productivity. In contrast, “competition” is the convention of equivalency in the market world, where worth is assessed based on the outcomes of rivalry between different actors who are competing with each other.

The convention of equivalency brings into relief attributes and actions that designate an actor as qualified or unqualified in a world. In other words, there are discrete *proofs of adequacy* and *proofs of deficiency* within each world (the second and third characteristics delineated in Table 2-1). In the industrial world, for instance, actors are deemed qualified, and hence worthy, if they demonstrate functionality by being efficient and operational—proofs of adequacy in this world. Sub-optimality, on the other hand, is proof of deficiency in the industrial world.

The commensuration principles derived from convention theory articulate a series of guidelines to evaluate the worthiness of disparate attributes and actions. However, as I unfold below, I stop short of embracing Boltanski and Thévenot’s (2006: 147) assumption that beings “can exist in all worlds” and have carte blanche in drawing on any commensuration principle in any situation, as doing so leads to the untenable positing of hypermuscular actors unbounded by institutional constraints (Friedland & Arjaliès, 2017).

### **The Performance of a Logic’s Values: Linking Logics with Commensuration Principles**

Whereas Boltanski and Thévenot (2006) focused on the diversity of values across different contexts, the logics perspective explores the shared systems of values within specific institutional domains (Friedland & Alford, 1991). For a particular logic, values are “shared” in the sense that actors cannot draw on any value to justify their actions, but only those that are anchored to ideas of goodness specific to the logic (Besharov & Smith, 2014; Gümüşay et al.,

2020a; Lee & Lounsbury, 2015; Townley, 2002). In other words, values commensuration is anchored to principles specific to particular logics. Thus, to the extent that actors engage in values commensuration, a logic's extant values are susceptible to change or remain stable. Additionally, although evaluations and justifications are anchored in existing commensuration principles, they are not immutably so. Consistent with recent work in this vein, my understanding of institutional values is decidedly practice-theoretic (Friedland, 2017, 2018, 2021; Gehman, Trevino, & Garud, 2013; Gehman, 2021; Lounsbury et al., 2021; Vaccaro & Palazzo, 2015). From this perspective, logics' values are not abstract givens, but are performed in practice by actors drawing from a finite but extensive universe of commensuration principles.

Friedland (2012: 585) critiqued the "critical omission" of a logic's values from Thornton and colleagues' (2012: 54) formulation of a logic's "building blocks," highlighting "sources of legitimacy" as the "closest the Thorntonian rubric comes to value." The centrality of values is, in fact, a key point differentiating Friedland's conceptualization of institutional logics from that of Thornton and colleagues: "The institutional formation of subjects invested in and by a particular value [is] an essential element in the operation of any institutional logic" (Friedland, Mohr, Roose, & Gardinali, 2014: 337; see also Friedland, 2017, 2018, 2021). Integrating Friedland's understanding of logics' values-laden nature with Thornton et al.'s perspective, I posit that the sources of a logic's legitimacy are indicators of its latent values. Importantly, these "sources," and hence a logic's values, are (a) prior to, (b) different from, and (c) the basis for downstream social evaluations, such as legitimacy considerations, with which they should not be conflated (Hernandez & Haack, 2023; Thornton & Ocasio, 2008). For example, within the corporate logic, a firm can derive legitimacy *from* its market position (Thornton et al., 2012: 73). Thus, a

corporate logic's values are those performed by actors to achieve and maintain a market position. These values could be customer focus, innovation, sustainability, and so forth.

In my next move, I assessed the sources of legitimacy—the values—of focal logics in three past studies explaining logic displacement, hybridization, and adaptation respectively: Thornton's (2001, 2002) studies of the publishing industry, Gümüşay and colleagues' (2020b) study of the first German Islamic Bank, and Rao and colleague's' (2003) study of the French culinary industry. Specifically, I “read” each logic's values and analyzed whether they could be proofs of adequacy and deficiency as outlined in Table 2-1. For example, the academic and social elite values of the professional editorial logic could be a proof of adequacy in the industrial world (by indicating reliability and functionality), the market world (by indicating demand for and desirability of publishing services), the fame world (by indicating public recognition), and the domestic world (by indicating that the firm is distinguished and trustworthy). On the other hand, social elitism can be proof of deficiency in the inspired world (by indicating that the firm is too conventional, unoriginal, or banal). Thus, I assessed the editorial logic as aligned with the industrial, market, fame, and domestic principles, and misaligned with inspired principles. Of these, fame and domestic principles were most highly prioritized in performing editorial values. Said another way, the alignment with public recognition and trustworthiness were most important determinants of performed values.

I read how each of the four focal incumbent logics' values in the three studies I considered were aligned with the six commensuration principles, and how they were prioritized<sup>2</sup>. Table 2-2 presents an integrated theoretical artifact—a framework encapsulating my reading of

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<sup>2</sup> This expansion on the values of the focal logics is based on my reading of the cases as described in the original studies. The framework in Table 2-2 is an analytical tool for understanding the concept of basis of worth. The question of alignments and priorities between values and commensuration principles is an empirical one.

alignments and priorities between the focal values and commensuration principles in six worlds (industrial, market, inspired, fame, civic, and domestic). This theoretical artifact sets up my forthcoming model of values commensuration, where I will explain how the focal logics were recalibrated along three pathways.

**Table 2-2: Integrated World-Logic Framework – a Theoretical Artifact to Assess an Institutional Logic’s Basis of Worth**

World	Institutional Logic (Exemplar studies)			
	Editorial (Thornton, 2001, 2002) <i>Values: Academism and social elitism</i>	Market (Gümüşay et al., 2020b) <i>Values: Share price and profit maximization</i>	Religion (Gümüşay et al., 2020b) <i>Values: Faith and sacredness</i>	Classical Cuisine (Rao et al., 2003, 2005) <i>Values: Precision, tradition, craftsmanship</i>
Industrial	$\oplus^4$	$\oplus^3$	$\oslash^4$	$\oplus^2$
Market	$\oplus^5$	$\oplus^1$	$\ominus^5$	$\oplus^5$
Inspired	$\oslash^2$	$\oslash^4$	$\oplus^1$	$\oslash^4$
Fame	$\oplus^1$	$\oplus^2$	$\ominus^6$	$\oplus^3$
Civic	$\oplus^6$	$\oplus^5$	$\oplus^2$	$\ominus^6$
Domestic	$\oplus^3$	$\oslash^6$	$\oplus^3$	$\oslash^1$

$\oplus$  Aligned;  $\oslash$  Misaligned;  $\ominus$  Neither aligned nor misaligned  
Superscripts (“1”, “2” etc.) indicate priority order

### A Grammar for Explaining Logic Change and Stabilization

I conceptualize a logic’s basis of worth as the set of commensuration principles available to actors as they evaluate and justify organizational actions. Each column in Table 2-2 represents the specific logic’s basis of worth—a “register” providing a common standard against which alternative values are evaluated, thereby bounding a logic’s repertoire of possibilities for change. Importantly, a logic’s basis of worth (i.e., the metric used in values commensuration) is neither universal nor fixed, but can change as actors realign and reprioritize commensuration principles.



Over time, as alignments and priorities are changed, formerly less (more) prioritized principles could feature more (less) prominently in a logic's basis of worth, leaving open possibilities for actors to perform new values in the future. These are a logic's "exaptive" possibilities. Here I borrow from evolutionary biology's concept of "exaptation"—defined as "unselected, but useful character[s] ... evolved for other usages (or for no function at all), and later coopted for their current role" (Gould & Vrba, 1982: 6). Feathers, for example, initially provided insulation for dinosaurs, and subsequently were coopted for flight in modern birds (Garud, Gehman, & Giuliani, 2016, 2018). The consequences arising from exaptive possibilities have been explored in organizational studies. For example, Marquis and Huang (2010) theorized how the exaptation of branch management practices shaped acquisition dynamics in the US banking market. When deregulatory pressures of the late 1970s drove consolidation, banks' historical capabilities to manage dispersed branches were exapted, leading to variation in banks' propensity to engage in acquisitions.

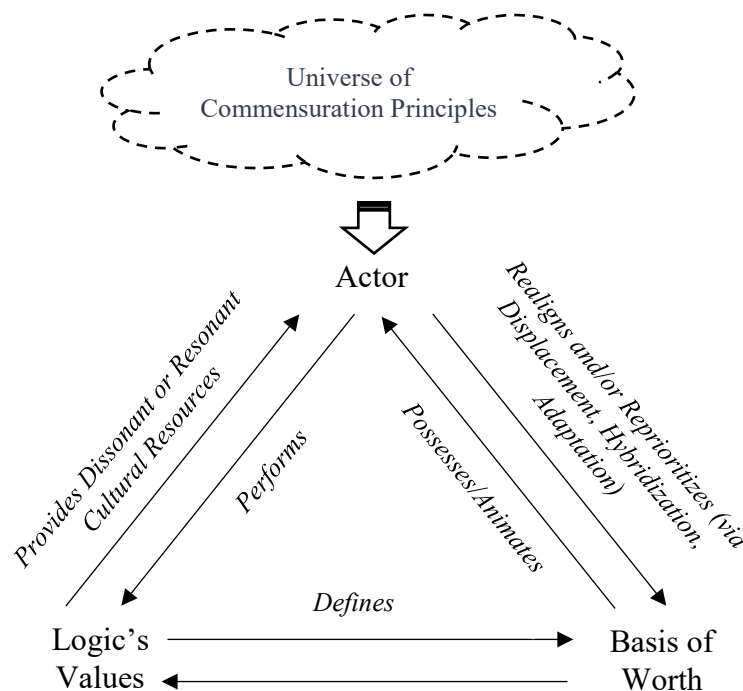
By allowing for the articulation and theoretical specification of the alignment and prioritization of commensuration principles, basis of worth provides a "grammar" for explaining a logic's susceptibility to change and stabilization. Pentland (1995: 542) defined grammar as "a set of patterns in terms of a finite lexicon and a finite set of rules or constraints that specify allowable combinations of the elements in the lexicon." More recently, Cornelissen (2023) distinguished between propositional, processual, and configurational grammars. Consistent with these conceptualizations, and inspired by Lounsbury et al.'s (2021: 268) call to "more intently consider the relationship of values to logics," I articulate how a logic's basis of worth provides a processual grammar and a co-constitutive understanding of values commensuration and its role in shaping a logic's susceptibility to change and stabilization. At the intra-logic level, basis of

worth is reconfigured as actors realign and reprioritize commensuration principles through three pathways, thereby anchoring the possibilities for and constraints on a logic's transformation, endurance, and coherence. At the interinstitutional level, exaptive possibilities expand the bounds of change indicated by current arrangements of commensuration principles. In both cases, the process is endogenous to logics.

## A THEORETICAL MODEL OF VALUES COMMENSURATION

In Figure 2-2, I present a theoretical model of values commensuration.

**Figure 2-2:** *Intra-Logic Process of Values Commensuration*



As I depict in Figure 2-2, values *define*<sup>3</sup> a particular logic's basis of worth by specifying its alignments with heterogeneous commensuration principles and their relative priorities. Logics' values have a *performative* quality in that they structure possibilities for change and

<sup>3</sup> Italicized terms in this section correspond with the labels used in Figure 2-2.

stabilization via an underlying basis of worth that both *possesses* and *animates* the actor (Friedland, 2013). A logic's stabilization in its current form is co-constituted by its existing values, basis of worth, and actors. Collectively, the arrows comprising the inner circuit of Figure 2 provide a values-based explanation for a logic's stabilization.

The arrows comprising the outer circuit of Figure 2-2, on the other hand, explain how a logic changes. This circuit shows the mechanisms undergirding how a logic's basis of worth is open to shifts in the existing alignment and prioritization of commensuration principles, making change possible. Actors draw on the *universe of commensuration principles* (one set of which is outlined in Table 2-1) to evaluate and justify organizational actions. As I illustrate below, institutional dynamics can introduce new commensuration principles to this universe, and render some principles more salient than others. Consequently, actors may evaluate existing values as *providing dissonant or resonant cultural resources* in relation to these transformations within the universe. Actors may then *realign and/or reprioritize* the commensuration principles comprising the logic's basis of worth via one of three modes or pathways, thereby changing the very standard against which the commensuration of alternative values takes place. As the standard of evaluation (basis of worth) changes, a logic's values are *recalibrated*.

Overall, my theoretical model of values commensuration shows how a logic's basis of worth defines the bounds within which actors are able to effect change. These bounds constrain actors by anchoring or limiting change possibilities, but they are not fixed. Each logic's unique basis of worth—the standard used for the commensuration of alternative values—can shift. This amounts to a dynamic and processual view of logic change and stabilization: values-based considerations both constrain and enable agency.

Below, I illustrate my intra-logic model of values commensuration using past studies and contemporary examples. Referring to the resources I introduced in Tables 2-1 and 2-2, I unpack how the realignment and reprioritization of principles constituting a logic's basis of worth occur along three pathways identified from my literature review—displacement, hybridization, and adaptation, respectively.

### **Logic A → Logic B: The Pathway of Displacement**

The first commensuration pathway results in transformation, and entails displacement of Logic A by Logic B (Lounsbury, 2007; Thornton, 2001, 2002). The displacement of the editorial logic (see Table 2-2) in Thornton's (2001, 2002) studies of the publishing industry illustrate this pathway. I apply my theoretical lens to her analyses to provide a values-centric explanation of the industry's transformation from a professional editorial logic to a corporate logic. The "academic and social-elite" values of the professional editorial logic became culturally unsettled as market capitalism supplanted "personal capitalism" (Thornton, 2002: 96). Triggered by these broader cultural changes, which made some commensuration principles more salient in the universe than others, actors in the publishing industry engaged in realignment and reprioritization, thereby recalibrating the editorial logic's values.

A close reading of Thornton's work reveals, for example, how relational networks between publishers and authors, an important feature of the earlier editorial logic aligned with domestic principles (see Table 2-2), were no longer important in the new market logic. CEOs gained authority over founder-editors, and market position supplanted personal reputation. High market returns became an important consideration, marking a shift from the earlier logic (Thornton, 2001).

The editorial logic's basis of worth anchored actors' existing commitments and beliefs regarding how publishing ought to be accomplished, thereby constraining the logic's transformation. At the same time, it enabled transformation by calling these very commitments and beliefs into question. For instance, broader institutional arrangements—such as the development of a publishing specialization in investment banking (Thornton, 2002: 299)—brought market principles to the fore, cementing the industry's transition to a rule-governed market structure under which publishing houses could thrive as corporations. Civic principles, which previously were not aligned with the editorial logic's values (given the importance of publishers' and editors' relational networks), became aligned. The industry's transformation thus enabled the performance of values that actors could deploy as congruent cultural resources. Said differently, even as “book publishing” persisted as a recognizable field of activity from start to finish, actors performed a different set of values as the basis of worth of the corporate logic took root. Overall, my values-centric theorization of logic transformation explains new social evaluations—such as the enhanced legitimacy of CEOs, or the greater emphasis on market returns from publishing—as stemming from changes in the basis of worth.

Although the publishing industry provides an example of “successful” displacement, the logic transformation process can be more fraught when actors attempt to realign or reprioritize a greater number of commensuration principles in the incumbent logic's basis of worth. Consider the withdrawal of US military forces from Afghanistan in 2021 after two decades of largely failed “reconstruction” efforts. A US Congressional report highlights the following “lessons:”

The US government ... clumsily forced Western technocratic models onto Afghan economic institutions; ... imposed formal rule of law on a country that addressed 80 to 90 percent of its disputes through informal means; and often struggled to understand or mitigate the cultural and social barriers to supporting women and girls. (Sopko, 2021: xi)

The basis of worth concept provides a way of explaining these empirical realities in values theoretic terms. First, the “dispute management logic” in Afghanistan was not aligned with civic principles of legality, rule enforcement, and authorization, contrary to the implicit assumptions of US interventions. Second, the Afghan logic regarding the empowerment of women was aligned with and placed a high priority on domestic principles (e.g., an empowered woman is benevolent, reserved, faithful, etc.), but was not aligned with the industrial or civic principles (e.g., being functional, operational, useful to the economy) informing the American logic (McNutt, Anderson, & Dzau, 2022). Thus, stated in terms of my model, the US failed to transform Afghan logics because the commensuration principles imported by actors who developed US interventions were not aligned with those of the logics they were trying to change.

Overall, basis of worth enables and constrains how a logic might be transformed, and values commensuration offers a values-centric theoretical explanation for how actors develop interventions aimed at transforming the status quo (Amis, Brickson, Haack, & Hernandez, 2021: 213). Said differently, potential transformations are bounded by a logic’s basis of worth, thus interventions vary in their likelihood of success. At the same time, my theorization goes beyond the general intuition that constraints exist by theorizing their specific sources and nature. My model allows for the articulation of counterfactual scenarios that would have yielded successful transformation in the Afghan case and led to failure in the publishing case.

### **Logic A + Logic B → Logic AB: The Pathway of Hybridization**

The second pathway in my model explains hybridization within organizations or institutionally complex fields as a specific mode of realigning and reprioritizing commensuration principles. Gümüşay and colleagues’ (2020a) study of Germany’s first Islamic bank, a hybrid organization called KT Bank that combined religious and market logics (see Table 2-2),

illustrates logic endurance via hybridization. When multiple logics are combined, the alignments and priorities of the resultant hybrid's basis of worth come from those of the constituent logics. In this case, when both logics are aligned with a particular principle, this alignment also manifests in the resulting hybrid. However, if one logic is aligned and the other is misaligned with a certain principle, the resulting combination manifests as a “clash” or a fault line along that principle, explaining the “highly contested” nature of certain hybrids such as KT Bank (Gümüşay et al., 2020a: 130).

Viewed in light of my theorization, the endurance of both market and religious logics within KT bank despite contestations can be understood as a function of how the hybrid logic's basis of worth was configured. First, religious compliance was accorded prime importance within the bank's practices. For instance, KT Bank consulted with officials of the largest Muslim organizations in Germany and “emulated Sharia boards” in all key decisions of managerial significance, signaling their compliance with hierarchy and tradition. The inclusion of diverse views and practices indicates the pre-eminence of collectives, a civic principle. Finally, the bank's “focus on profit” was constrained by religion as a “necessary requirement,” indicating a lower priority for industrial and market principles (Gümüşay et al., 2020a: 134).

My theorization explains that actors begin to realign and reprioritize principles when extant values become culturally unsettled. Although Gümüşay and colleagues (2020a: 130) noted that “taken-for-granted banking practices” were combined with Islamic religious principles, they did not directly address the question of *why* the hybridized Islamic banking form was introduced in the first place. My theorization highlights the role of actors in this process. For instance, the infusion of religious principles in banking was likely driven by actors who found the existing banking logic's market values to be dissonant with their cultural views of how finances should

be handled. These actors realigned and reprioritized the commensuration principles underlying the traditional banking logic, thereby configuring a hybrid market-religion banking logic's basis of worth in a particular way.

By emphasizing the criticality of logics' values in enabling different reconfiguration possibilities, my theorization explains how existing values anchor the creation of new hybrid forms, and possibly new values altogether. Said differently, not all combinations of logics can endure and remain stabilized as hybrids. Here again, I go beyond intuition, providing analytic scaffolding for specifying these dynamics. The creation of the hybrid form of microfinance organizations, for example, entailed incorporating social values into banking (Battilana & Dorado, 2010; Battilana & Lee, 2014; Dorado, 2013). In a comparative study of two pioneering microfinance organizations, Battilana and Dorado (2010) found that the key to survival was establishing a hybrid identity by striking a balance between logics. In specifying how different commensuration principles are positioned within a hybrid logic's basis of worth, my theorization analytically specifies what "balance" might look like under different contexts of hybridization.

Over the years, the effectiveness of microfinance organizations, and the sector's overall impact on poverty reduction, have been called into question (Njiraini, 2015). For instance, it has been argued that while microloans can provide short-term relief, they may not address structural factors that contribute to poverty and inequality (Karnani, 2007). Changing collective evaluations, in my theory, emerge from the changing universe of commensuration principles. Insofar as actors draw from a limited set of principles, a hybrid logic's endurance via its basis of worth, quite literally, is driven by this universe of possibilities, which may itself be undergoing expansion or contraction.



### **Logic A → Logic A': The Pathway of Adaptation**

The third pathway of logic adaptation explains coherence as rooted in the prioritization of values. This is triggered by broader societal level cultural shifts (Haveman & Rao, 1997; Kroezen & Huegens, 2019; Rao, Monin, & Durand, 2003), whereby actors realign and reprioritize commensuration principles. I illustrate this particular pathway by referring to Rao et al.'s (2003) study of how the nouvelle cuisine movement that began in the 1970s incited change in the French culinary field. This movement created dissonance between the values of the classical culinary logic (see Table 2-2) and the overarching cultural sentiment in society (as reflected, for example, in other societal spheres such as the arts and theater). To facilitate the transition to nouvelle cuisine, a group of “insurgent” chefs rejected traditional orthodox elements such as blind adherence to Escoffier’s “academism” (Rao et al., 2003: 797-798). Instead of the hierarchical superiority and “power of the restaurateur”, the autonomy of the technically proficient chef came to be venerated. In terms of my theorization, this illustrates the realignment and reprioritization of the domestic world’s commensuration principles, even as the classical professional logic evolved into a nouvelle cuisine logic.

As the logic evolved, French gastronomy transitioned from a site of “convention” into one of “invention” (p. 798). The values of French classical cuisine’s “traditional” professional logic were aligned with domestic principles. However, the insurgent chefs prioritized principles of industry and fame over domestic principles. Under the new “nouvelle” cuisine’s logic, chefs’ efficiency and expertise in terms of “technical autonomy” increased in importance, accredited through honors and qualifications, such as expert ratings from *Guide Michelin* (pp. 804–805). Fame principles were prioritized as there was an increased emphasis on professional accreditations and plaudits. Overall, the incumbent French culinary professional logic cohered

via realignments and reprioritizations of its basis of worth, a process facilitated by broader cultural forces making certain commensuration principles salient.

The Chinese socialist market logic provides a contemporary example of adaptation via values commensuration. Several scholars have shown how China's market logic has cohered in recent decades. This logic emerged in the 1970s as the Chinese economy became "market-like" (Wang, Raynard, & Greenwood, 2021: 1846; see also Marquis & Raynard, 2015; Raynard, Lu, & Jing, 2020). Yet, breaking free from "socialist legacies" entailed "fundamental shifts" in normative understandings and value systems as entrepreneurial actors sought to more closely align the Chinese market with "open" market values (Raynard et al., 2020: 1303). However, these efforts received pushback from the state, as observed by scholars and analysts across various sectors. For instance, the Chinese healthcare sector's marketization was deemed "not appropriate" because it detracted from the profession's "public welfare role" (Wang et al., 2021: 1858). Extant market values were reassessed even as sanctions were imposed by the state on high-tech entrepreneurial ventures, such as billionaire Jack Ma's business entities at the end of 2020 (Calhoun, 2021).

As physicians were criticized for "seeking nothing but money" (Wang et al., 2021: 1855), or China's wealthiest man disdained over his "extraordinary showmanship skills" (Calhoun, 2021), the adequacy/deficiency of fame principles—exhibitions of wealth—in the Chinese market logic was being re-evaluated. Said another way, conspicuous consumption (i.e., seeking recognition via public displays of wealth) became more common and came to be seen as problematic. This phenomenon raises an interesting possibility: the contemporary Chinese market logic's basis of worth may be undergoing a change due to the reprioritization of fame principles. Observing how commensuration principles are realigned and reprioritized as values

evolve provides one way to assess whether the logic will cohere in its current form, or slip back into a more socialistic market logic reminiscent of the 1970s. In allowing for a specification of the alignment and prioritization of commensuration principles, a logic's basis of worth provides a grammar to theorize its coherence via adaptation.

### **Alternative Principles and Multiple Logics**

So far, I have explained how a logic's basis of worth manifests as commensuration principles and anchors the process of values commensuration via three pathways. My examples focus on dynamics among six principles of commensuration (derived from convention theory) and particular logics. In this section, I extend my theorization to the level of the interinstitutional system, wherein actors may draw from multiple institutional logics and associated values. I consider how the availability of multiple logics provides another level of endogenous change—rooted in bases of worth—within the interinstitutional system.

Subsequent to Boltanski and Thévenot's original work, Thévenot, Moody, and Lafaye (2000: 236) articulated a seventh “green” world, wherein sustainability is the principle of commensuration. Subjects or objects which are deemed to have “ecological or ecosystemic” benefits constitute proofs of adequacy in this world, whereas those deemed to be ecologically harmful constitute proofs of deficiency (Thévenot et al., 2000: 243). To the extent that a growing movement advocating for the principle of sustainability disrupts traditional business thinking, operating within markets might entail adopting new values represented by stakeholder capitalism, and embracing metrics, such as greenhouse gas emissions and other stakeholder-oriented measures (Arjaliès & Bansal, 2018). Considering that most forms of governance embedded in the market logic, such as capitalism, are antithetical to ecological benefits, sustainability principles are not intrinsically aligned with the market logic's values. Yet,

principles of commensuration and their constitutive alignments and priorities are ongoing social constructions underpinning the performance of a logic's values. This leaves open the potential for realignment, in this case between the principle of sustainability and the market logic.

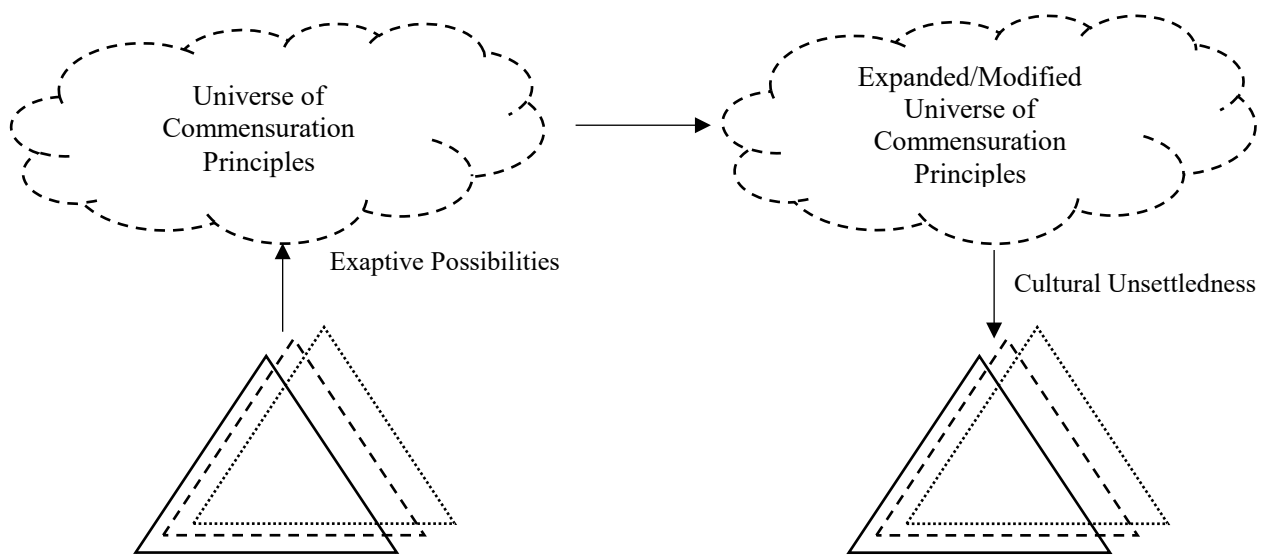
For instance, some evidence (presented in this dissertation document in Chapter 4) suggests such a realignment has been happening in the oil and gas industry since the late 1970s. Historically associated with a market logic that prioritizes unabashed wealth generation, the industry's practices have since come under intense "scrutiny" (Yergin, 2011: xvii). The idea that took root was that economic progress resulting from the industry's extractive activities entails a cost to the environment that must be actively managed and monitored. The assimilation of this idea set in motion practices directed at the management of environmental liabilities, indicating a new form of organizing and a fundamental change in the values associated with the industry's market logic—the sustainability principle had become aligned with it. For example, in a landmark decision in 2019, the Supreme Court of Canada declared that in the event of insolvency, companies were first obligated to satisfy abandonment and reclamation requirements of non-producing oil and gas wells (Alberta Energy Regulator, 2019). Thus, for the first time, the management of environmental liabilities took precedence over secured financial creditors such as banks, signifying a radical values-based recalibration of the industry's market logic. More generally, amidst calls for reducing environmental harm and mitigating climate change, oil and gas companies have been facing unprecedented regulatory and legal pressures that are rooted in changing conceptions of the good (Gelles, 2023). Such developments indicate how values-based changes to the market logic, driven by new principles of commensuration, can be consequential to organizations.

My theoretical model of values commensuration (Figure 2-2) explains how the values of any logic—irrespective of whether it is an “ideal type” (e.g., the market logic or the professional logic) or not (e.g., the thrift logic; Haveman & Rao, 1997)—shape actors’ actions. Yet, actors are typically embedded in multiple logics. The possibilities for change enabled by drawing from multiple principles of commensuration are foreshadowed, for instance, in McPherson and Sauder’s (2013) drug court study. Their analysis reveals that multiple logics were available as “toolkits for action” as incompatible values were effectively harnessed by actors to make contentious decisions. What the authors called the criminal punishment logic invoked values focused solely on “incarceration and formal social control;” conversely, the rehabilitation logic invoked values of “self-reconstitution and the capacity of individuals to change” (McPherson & Sauder, 2013: 172, 174). Indeed, action can be influenced by multiple logics even within a particular institution. For instance, some professionals have been found to be passionately invested in their professions (Lounsbury, 2002; Townley, 2002)—an observation that runs counter to the dispassionate values of the “professional logic” (e.g., personal expertise; see Thornton et al., 2012: 73). My theory reiterates that such professionals are not exclusively embedded in one professional logic, but that their actions are affected by multiple logics.

Taking this perspective further, to the extent that values plurality is a general feature of the interinstitutional system (Kraatz & Block, 2008), we can conceptualize the system as constituted by multiple “actor-values-basis of worth” triads, depicted in Figure 2-3 with multiple triangular shapes. As shown in Figure 2-3, the latent exaptive possibilities that are collectively portended by multiple bases of worth could lead to extant values becoming culturally unsettled. Specifically, extant values can lose cultural resonance (Giorgi, 2017; Soublière & Lockwood, 2022) over time even as these exaptive possibilities generate new commensuration principles, or

make certain principles more salient than others. Overall, Figure 2-3 encapsulates how the plurality of values, via multiple bases of worth, provides for another endogenous route of logic change within the interinstitutional system. By explaining how values plurality constitutes cultural unsettledness in the interinstitutional system, basis of worth accounts for endogenous change emanating from the relations between logics themselves.

**Figure 2-3:** *Interinstitutional Process of Values Commensuration*



## DISCUSSION

This research builds on recent calls to better understand how values bound variations in the change and stabilization of institutional logics, and in doing so, anchor organizational outcomes. In my theorization, I treat logics as complex phenomena undergirded by processes of values commensuration. In so doing, I make three contributions. First, I theorize values commensuration as manifest in a logic's basis of worth, and providing a theoretical grammar for analyzing how underlying values anchor institutional logics as commensuration principles are realigned and reprioritized. Second, I contribute to an understanding of logics' coherence and

endurance by theorizing how they are bounded by values via their bases of worth. In doing so, I offer a values-based explanation for the change and stabilization of institutional logics and associated effects on organizations. Finally, my theorization provides management scholars with resources for exploring how new values come to shape logics—that is, the question of genealogy—by delineating how bases of worth change as actors incorporate different commensuration principles.

### **Theorizing a Grammar of Values Commensuration**

My first contribution centers on the development of basis of worth as a concept. With this concept, I articulate a grammar—a finite lexicon together with a set of rules and constraints (Pentland, 1995)—for explicating the co-constitutive relationship between an institutional logic, its values, and actors. My theorization advances organizational and management scholarship by directing attention back to the “value of values” (Kraatz et al., 2020: 474), highlighting the centrality of values commensuration processes to the interinstitutional systems characterizing modern societies. I have revealed mechanisms whereby underlying commensuration principles manifest in a logic’s values, and have shown how the values commensuration process shapes a logic’s susceptibility to change and stabilization. Organizations enmeshed in particular logics are driven towards outcomes that are anchored in these tendencies. Said differently, a values commensuration process rooted in a logic’s basis of worth provides a unique starting point for understanding phenomena of consequence to organizations such as organizational forms (Battilana & Dorado, 2010; Haveman & Rao, 1997; Thornton, 2001), practice variation (Gümüşay et al., 2020a; Kroezen & Huegens, 2019; Lounsbury, 2007), and professional identity (Lounsbury, 2002; Townley, 2002).

This perspective has promising implications for the study of grand challenges, such as the production and reproduction of inequalities (Amis et al., 2021, Adler et al., 2022; Risi & Marti, 2022), the rise and fall of governance systems like democracy (Lounsbury & Wang, 2020), and consequences—such as stigma—that may arise from social evaluations (Wang et al., 2021; Zhang, Wang, Toubiana, & Greenwood, 2021). Specifically, the basis of worth concept posits that principles of commensuration are yardsticks used by actors to evaluate worthiness. In doing so, actors assess different desirable qualities in terms of a common metric (Espeland & Stevens, 1998: 315). It is through values commensuration that a logic’s rules of rationality are “calibrated” (Friedland & Alford, 1991: 251; see also Espeland & Stevens, 1998: 324). The basis of worth concept thus provides a processual grammar (Cornelissen, 2023) for explaining variation in logics’ susceptibility to change and stabilization. In providing such an explanation, I attend to recent calls for more co-constitutive understandings of institutional logics and their values (Lounsbury et al., 2021; Lounsbury & Wang, 2020).

In future research, scholars can investigate the processes whereby new principles of commensuration affect organizational outcomes. For instance, scholars can examine how incorporating environmental and social criteria into market transactions (such as ESG ratings within major stock exchanges) influences the coherence or transformation of various field level logics. The outcomes produced by these dynamics can be observed longitudinally at the organizational or field level. Such historically generated insights can help explain how incorporating different commensuration principles can transform organizations and management practices via the logics they manifest. For instance, certain disruptions could provoke changes in some bases of worth but not in others. The Covid-19 pandemic disrupted the industrial world by recalibrating means of productivity (e.g., many organizations offered remote work arrangements



for extended periods of time). Thus, logics whose bases of worth are aligned with industrial principles could be transformed to a greater extent by the Covid-19 pandemic.

My theorization also accounts for the “interconnected yet incompatible” arrangements undergirding the interinstitutional system (Seo & Creed, 2002). It does so by offering values commensuration as a lens for examining and explaining the interinstitutional system’s historically grounded “contradictions” (Friedland & Alford, 1991: 232). Commensuration principles provide actors with bases for “political action” embedded in “a historical” structure of institutions (Seo & Creed, 2002: 223). In this sense, basis of worth explains how skilled cultural actors strategically utilize values (Swidler, 1986), and why certain actors may have more or less success in fomenting institutional change. Namely, particular logics may afford actors with what might be termed axiological agency—that is, values-based agentic possibilities.

Historically sustained differences in worldviews and core philosophical positions matter, and my theorization explains the progression of these broader belief systems or values as arising from dynamic processes of commensuration. Further, my theorization suggests that the intensity of these differences can change. The observation that politics in the United States have become more polarized is a case in point (Enke, Polborn, & Wu, 2022). My study invites further research into variations in the intensity of such interinstitutional differences. Put differently, I invite scholars to focus on mechanisms of values commensuration in asking how existing “antipathy” between sets of competing logics (Marquis & Lounsbury, 2007: 806) may be diminished or further accentuated. My theory brings to the fore the centrality of values to the “institutional embeddedness of interest and agency” (Seo & Creed, 2002: 223).

Critical tensions arising from incommensurability can be assuaged by finding a compromise between common objects and features. For instance, although civic and inspired

principles are incommensurable, “in the context of a revolution, civic worth can enter into a compromise with inspiration;” such compromises, despite being precarious or “fragile,” prevent the unraveling of “composite arrangements” due to conflicts between different worlds (Boltanski & Thévenot, 2006: 239, 278). Such critical tensions between commensuration principles become thematic in organizational transformation. Specifically, uniquely bundled sets of commensuration principles—bases of worth—underpin institutional logics and their unique susceptibilities to transform, endure, and cohere across time.

Drawing on Boltanski and Thévenot’s (2006) convention theory, I illustrated how multiple principles underlie the commensuration of logics’ values via their bases of worth (see Table 2-2). In doing so, I have taken an important step forward by integrating the logics perspective with convention theory. Although extant studies have contributed to a more generic integration effort, a focus on values has remained elusive and urgent (Cloutier & Langley, 2013; Friedland & Arjaliès, 2017; Reinecke, van Bommel, & Spicer, 2017; Stark, 2017). This is surprising, because the very crux of Boltanski and Thévenot’s framework (2006: 12)—justifications premised on the attainment of a “common good”—demands a focus on values. For instance, empirical studies have shown that multiple worlds influence organizational outcomes (Demers & Gond, 2020; Stark, 2017). My theorization builds on this line of observation to explain *how*, via axiological agency, the presence of multiple principles renders logics into sites for the commensuration of disparate conceptions of the “good.” Although beyond the scope of this article, the incorporation of values considerations also provokes questions about the role of emotions in managing multiple logics within organizations (Toubiana, Greenwood, & Zietsma, 2017). As Voronov and Weber (2016: 6) noted, an institution’s fundamental ideals or ethos “dictates whether or how logics can coexist” by authorizing institutional actorhood (see also

Voronov & Weber, 2017). Whereas they focused on the source of human actors' emotional attachments to institutions, I have focused on the effects of values-based agency enabled by the logics in which actors are embedded.

### **Unpacking the Values Underlying Logics' Coherence and Endurance**

Although my work provides resources for theorizing the transformation, endurance, and coherence of logics as arising from processes of values commensuration, my second contribution pertains specifically to the latter two outcomes. Logic coherence and endurance have been recognized as areas that “should not be taken for granted” (Lounsbury et al., 2021: 266). In delineating a logic's (abstract) basis of worth as manifest in the alignment and prioritization of particular values, I provide a values-based explanation of how logics can cohere and endure by resisting transformation. Namely, logics' bases of worth afford them with the capacity to cohere by “chronically reproducing themselves” (Lounsbury et al., 2021: 270) as actors realign and reprioritize commensuration principles. Thus, a logic's basis of worth can render it coherent over time. Symmetrically, I explain transformation as resulting from a breakdown in the existing logic's basis of worth. Likewise, it is the combined basis of worth from constituent logics that underlies the capacity of the hybrid form to endure.

The institutional logics perspective is pluralistic in the sense that logics can be applied “outside of their respective orders” (Ocasio & Gai, 2020: 267) to understand social action. However, this flexibility has raised concerns that it becomes difficult to delineate and circumscribe a logic and, at the limit, results in a “distortion and overextension” of the framework (Thornton & Ocasio, 2008: 99; see also Alvesson, Hallett, & Spicer, 2019: 122; Friedland, 2012). I offer the delineation and demarcation of values—via its basis of worth—as one way to define a logic's coherence. In doing so, I contribute to Thornton et al.'s (2012: 73)

rubric of ideal type categories within an institutional logic. In the sense that it is core to logic coherence, I have shown that basis of worth—manifested in a logic’s constitutive values—is among the most important of these categories.

These insights also contribute towards addressing the debate over logic decomposability (Lounsbury et al., 2021)—the extent to which institutional logics’ categorical elements can be strategically segregated and combined (Friedland, 2012). Specifically, my theorization posits that a logic’s basis of worth limits the extent to which it can be decomposed. In other words, a logic coheres only to the extent that its basis of worth coheres. My theorization accommodates a view of logics as decomposable, but insists that they are variably so, and within theoretically bounded parameters derived from their bases of worth. As I explained with the example of the publishing industry’s transformation (Thornton, 2001, 2002), the editorial logic ceased to cohere as its basis of worth transformed. The displacement of the professional logic by a corporate logic involved extensive realignment and reprioritization of commensuration principles. Publishing houses were “busting loose from ... [the] existing orientation” of the editorial logic, and undergoing what Greenwood and Hinings (1996: 1024) called “radical organizational change.”

On the other hand, in Haveman and Rao’s (1997) analysis of the thrift industry, a thrift logic cohered throughout the study period. Although commensuration principles were realigned and reprioritized, these were not as extensive or drastic as the ones in the case of the publishing industry. As a result, thrift organizations only underwent “fine tuning” of the existing logic, resulting in convergent organizational change (Greenwood & Hinings, 1996: 1024). Thus, a logic’s basis of worth is a key motor governing its decomposition and transformation, with cascading implications for organizational change. In future empirical research, scholars could

investigate the nuances associated with the basis of worth transformations—how commensuration principles are realigned or reprioritized—under different contextual conditions.

Another possible research direction is to examine why some logics cohere over longer periods of time than others. My theorization suggests that coherence is rooted in the ease or difficulty of associating (dissociating) principles of commensuration with (from) logics—that is, their adaptability. In future research, scholars can explore conditions that may help or hinder efforts to overcome such difficulties by counteracting or encouraging the realignment and reprioritization of commensuration principles. For instance, in different sectors of Chinese industry, who are the individuals and organizations whose actions might be consequential to the market logic's transformation? In the case of *nouvelle cuisine* (Rao et al., 2003), how did the adjudicators of *Guide Michelin* ratings come to reconfigure their priorities when evaluating French culinary outputs? Such questions suggest fruitful directions of research to better understand the effects of logic transformation and coherence on organizations.

The endurance of logics can pose opportunities as well as challenges within hybrid organizations. Pache and Santos (2013) found, for example, that social enterprises harness opportunities by selectively coupling elements from constituent market and community logics. However, hybridity can also become a liability when it increases the difficulty of reaching agreements. For instance, to gain acceptance, organizations originally embedded in the commercial logic incorporated social welfare elements more strategically than comparable organizations originally embedded in the social welfare logic (Pache & Santos, 2013: 972). Hybridity arising from logics with bases of worth that are “farther away” from each other—that is, those with more mismatches in the alignments and priorities of their commensuration principles—is more problematic. My theorization can be used to investigate the *extent* to which

logics may be similar or different from each other. This can help reveal how hybrid organizations could vary in their ability to take advantage of opportunities arising from hybridity.

My values-based explanation also advances a nuanced theoretical perspective on institutional complexity (Besharov & Smith, 2014; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Jancsary, Meyer, Höllerer, & Barberio, 2017). Extant literature has shown how complexity motivates organizational strategies (Greenwood et al., 2011) and that organizations differentially experience complexity (Gümüşay et al., 2020a), but scholars have only just begun to explore the constituent elements of complexity itself. Besharov and Mitzinneck (2020), for example, theorized that the heterogeneity of hybrid logics emerges along the dimensions of compatibility, centrality, multiplicity, and structure. I have developed a grammar that enables scholars to examine the processes whereby differences might emanate along these dimensions.

For example, compatibility—the extent to which elements are “consistent versus contradictory” (Besharov & Mitzinneck, 2020: 5)—can be explained as arising from constituent logics’ bases of worth, explaining a hybrid’s contested or uncontested nature. The mechanisms that I have explicated provide a way of understanding the extent to which values render constituent logics more or less problematic for hybrid organizations. These mechanisms are foregrounded in contemporary forms of organizing that entail basis of worth combinations involving the market logic. For instance, there has been a surge in organizations leveraging traditional Indian philosophies such as yoga or Ayurveda in new products and services (Frayer & Khan, 2019; Munir, Ansari, & Brown, 2021). Such organizations embody a market-community hybrid logic, and in so doing, incorporate domestic worth—the states of being traditional and distinguished—into their values. The emergence of such market-community hybrids that

combine various forms of worth in novel ways have been linked to waves of nationalism around the world (Friedland & Arjaliès, 2019; Lounsbury & Wang, 2020).

My framework develops a fuller account of how social action is sustained when logics with values otherwise deemed incompatible (Perkmann, Phillips, & Greenwood, 2022) interact within fields and hybridize. This enables new forms of value-rational action resulting from the confluence of competing logics (Besharov & Smith, 2014; Townley, 2002). At the root of these new forms of value-rational action are constituent logics' bases of worth, providing an endogenous explanation for conflict between logics which is conceptually akin to the Weberian concept of a clash of value spheres (Weber, 1946; see also Kalberg, 1980).

### **Towards a Genealogy of Logics' Values**

My final contribution pertains to an explanation of the origin of new values. Although values are core to, and constitutive of, how institutional logics organize action, organizations are also inextricably linked to their external environments. Taken together these premises raise an interesting question: Can a theory of values commensuration explain where new values come from? This question takes seriously the issue of genesis of current forms of rationality in organizing, and how they may be transformed even as newer ones are created. My theorization provides a toolkit for answering this question via the concept of basis of worth. A logic's basis of worth bridges the situational concept of worth with the institutional concepts of appropriateness and goodness. It anchors commensuration principles to a logic's values. The incorporation of new principles, and the realignment and reprioritization of existing ones, pave the way for creating new institutional values.

In other words, the concept of basis of worth provides a means for investigating the genealogy of values, a longstanding concern across disciplines:

Genealogy means both the value of origin and the origin of values. Genealogy is as opposed to absolute values as it is to relative or utilitarian ones. Genealogy signifies the differential element of values from which their value itself derives. Genealogy thus means origin or birth, but also difference or distance in the origin. Genealogy means nobility and baseness, nobility and vulgarity, nobility and decadence in the origin. The noble and the vulgar, the high and the low—this is the truly genealogical and critical element. (Deleuze, 1986: 2)

The basis of worth can shed light on the very nature of values-based differences by asking, for example, why “nobility” might be valued more than “baseness” or “vulgarity.” Thus, it invites us to look beyond *what* symbols and practices are appropriate for particular institutional logics (e.g., what Thornton et al.’s categories might tell us) by probing *why* and *how* these became appropriate. A logic’s basis of worth demystifies these associations by teasing apart the principles of commensuration underlying them. In this sense, the basis of worth articulates the genealogy of a logic’s values—determining “the nobility or baseness of what it invites us to believe, feel and think” (Deleuze, 1986: 55).

As I have theorized, basis of worth preserves the possibility of a logic manifesting different values over time. The multiplicity of bases of worth is a fount of exaptive possibilities (Figure 2-3), even as different commensuration principles may become more salient in the performance of values over time. This constitutes a genealogical explanation for a logic’s values as a result of intra- and inter-logic dynamics at the level of their bases of worth. Failed interventions aimed at transforming the logics of dispute management and the empowerment of women in Afghanistan raise a theoretical possibility: actors in Afghanistan *could* embrace American ideas of dispute management and the empowerment of women in the future (Meyer, Krücken, & Drori, 2009). Bases of worth enable actors to draw from the universe of commensuration principles when existing values become culturally dissonant. In this respect, my theorization extends insights from world society research by highlighting the role of actors and



underlying values commensuration processes in the homogenization of cultural models. At the same time, I highlight the importance of understanding existing institutional logics and their constitutive values from a historical and contextual perspective (Khan, 2019).

Many contemporary values-laden issues require managerial attention. Examples range from the incorporation of environmental and sustainability considerations into business decisions, to ramifications from geopolitical disruptions seeded by the rise of populism and fundamentalism (Lounsbury & Wang, 2020). Consider, for example, the dilemma faced by some multinational corporations about continuing their operations in Russia following its invasion of Ukraine in 2022 (New York Times, 2022). Another example is deliberations over the inclusion of ESG considerations in determining stock prices or financial worth. These issues have deep associations with a specific problem: How should organizations determine the principles to be considered in evaluating business decisions? Put another way, there is an increasingly pressing need to reconsider the desired conceptions of what is good. Deleuze (1986: 1) explained this fundamental relationship between values and evaluation as follows:

On the one hand, values appear or are given as principles and evaluation presupposes values on the basis of which phenomena are appraised. But, on the other hand, and more profoundly, it is values which presuppose evaluations, “perspectives of appraisal,” from which their own value is derived ... Evaluations, in essence, are not values but ways of being, modes of existence of those who judge and evaluate, serving as principles for the values on the basis of which they judge.

A logic’s basis of worth unravels the mechanisms underlying the relationship between values and evaluation by interrogating the heterogeneous commensuration principles—or what Deleuze termed “modes of existence”—that constitute institutional rules of appropriateness, or “perspectives of appraisal,” underlying judgment. By linking commensuration principles (on which evaluations and appraisals are based) with performed values, basis of worth provides a point of departure for studying the source of new values. For instance, basis of worth

combinations are also combinations of contending frameworks of value entailing “productive friction” of multiple evaluative principles (Stark, 2009: 15, 28; see also Fisher et al., 2016, 2017). Such combinations portend uncertainty and constitute sources of innovation. Examining the pace at which such combinations transpire and the contextual factors influencing this pace could be interesting directions for future research. For example, it can be hypothesized that logic hybridization would proceed at a faster or slower pace under different conditions. Combinations may be contingent on which logics are being combined, contextual economic and political influences, and so forth. Overall, insights from my theorization suggest new directions for research on the role played by values and evaluations in creating hybrids from existing logics—an area ripe for further exploration.

My theorization also provides a direction to further explore robust action strategies in the context of grand challenges. For instance, Ferraro, Etzion, and Gehman (2015: 375) explicitly foregrounded the challenges and opportunities provided by different interpretations of strategies for tackling grand challenges, what they called “multivocal inscriptions,” defined as: “discursive and material activity that sustains different interpretations among various audiences with different evaluative criteria, in a manner that promotes coordination without requiring explicit consensus.” Multivocal inscriptions, in this account, can be manifested in practices that allow for disparate interpretations by using multiple evaluative criteria (Fisher et al., 2016, 2017; Stark, 2009). Innovative forms of hybrid organizing can facilitate selective combinations of commensuration principles, creating new bases of worth and hence new values. As Ferraro and colleagues (2015: 381) noted, “grand challenges are likely to generate value in multiple registers” and are therefore particularly difficult to tackle via more traditional strategies.

My work draws attention to the possibility that logic hybridization is a disruptive process whereby cultural taken-for-granted and rules of rationality become unsettled as new forms of value are created. In doing so, I explain value creation (Donaldson, 2021) via a logic's basis of worth, opening up promising avenues for future research in tackling grand challenges (Gümüşay et al., 2020b). It is via their bases of worth that institutional logics both shape and are shaped by unique rules of rationality (Friedland & Alford, 1991: 245). Thus, bases of worth explain the genealogy of logics' values, and in doing so, ground our understanding of the contradictions defining the interinstitutional system.

## **CONCLUSION**

Values are the bedrock of institutional logics. Understanding the values commensuration process is thus the key to understanding change and stabilization both within a logic and across the interinstitutional system. My basis of worth concept provides a theoretical grammar that paves the way for deeper theoretical inquiries into institutional logics' transformation, endurance, and coherence (Lounsbury et al., 2021). The values-based account that I have developed in this paper also opens theoretical conversations between studies of evaluations, values, and rationalities, elucidating these important interconnections and their effects on organizations. Moreover, my work highlights opportunities to address contemporary values-laden issues such as climate change, sustainability, and the rise of populism (Lounsbury & Wang, 2020; Risi & Marti, 2022). In particular, efforts to recalibrate existing social systems towards more equitable outcomes require attending to values conflicts (Amis et al., 2021; Kraatz et al., 2020; Espeland & Stevens, 1998; Friedland & Alford, 1991). My work also paves the way for developing management theories aimed at understanding how newer values can be envisaged

and made real, even as those that no longer serve us are transformed. To each of these questions my theorization invites consideration of a common nexus: *on the basis of worth*.

## **Chapter 3 : The Role of Values in the Coherence of Institutional Logics**

## INTRODUCTION

Institutions ... generate not only that which is valued, but the rules by which it is calibrated and distributed. Institutions set the limits on the very nature of rationality.

-- Friedland and Alford (1991: 251)

In what has become a trailblazing statement in institutional theory, Friedland and Alford (1991: 249) proposed a theory of institutions that accounted for the “unobservable, absolute, transrational referents” animating them. By emphasizing transrationality, they denounced the then prevalent social explanations built on a dichotomy between rational and irrational. Instead, they conceptualized society as composed of multiple contradictory institutional orders (e.g., family, church, state, market)—groupings of interrelated institutions (Ocasio & Gai, 2020: 267)—wherein rationality was “perceived and exercised” in unique ways. Institutional logics are sets of material practices and symbolic constructions which both shape, and are shaped by, rules of rationality unique to each institutional order (Friedland & Alford, 1991: 245). However, although unique to institutional orders, each of these logics are applicable across organizations and institutions. For example, the market logic might co-organize a social enterprise with a community logic (Battilana & Dorado, 2010), or an Islamic bank with a religious logic (Gümüşay, Smets, & Morris, 2020a).

Studies have shown that hybrid organizational forms manage tensions associated with their constituent institutional logics (Battilana & Dorado, 2010; Smith & Besharov, 2019). Yet, these tensions fundamentally manifest at the societal level. The market logic and the institution it organizes, for instance, emphasizes a mode of rationality that is different from the rationalities anchoring other institutions of society such as the family, community, religion, and the state. At the root of these tensions are values—the conceptions of good that these institutions respectively stand for. While the market institution stands for values of wealth generation (share price), the

state epitomizes values of democratic participation (Thornton et al., 2012: 73). A logic's values, a specific concern of this article, are "social facts, intentional social objects, entailed by and entailing social practice" within institutional orders (Friedland, 2017: 2; also see Friedland, 2018). In other words, a particular logic prescribes and proscribes practices that "seek" conceptions of good specific to the institution.

Although logics—and their values—are relatively stable, they may be modified or transformed, entailing consequences for practice. For example, an intensifying cultural movement for sustainable business practices that might address rising inequalities (Amis, Brickson, Haack, & Hernandez, 2021; BlackRock, 2021) could result in environmental, social, and governance (ESG) considerations replacing (or at least supplementing) stock prices as a legitimate basis for valuing transactions within the market logic (Thornton, Ocasio, & Lounsbury, 2012). Thus, the market logic is amenable to processes of transformation. Manifested in a capitalist economic system based on private property and market exchange, it has permeated different—and distant—spheres of institutional life such as religion (Gümüşay et al., 2020a), and the community (Marquis & Lounsbury, 2007). Consequently, in some societies (especially in the West), more and more institutions are beginning to look "market-like" (Munir et al. 2021).

On the other hand, some institutions seem less amenable to transformation, and more prone to fomenting concerns of erosion, i.e. concerns regarding the institution's coherence—the extent to which it is susceptible to being weakened, and thus, undermined (Lounsbury, 2023). A specific example of such a concern, increasingly being raised by organizational scholars, is that the state's democratic values have become precarious with the rise of illiberal forces and autocratic regimes (Adler et al., 2022; Lounsbury & Wang, 2020, Blackwell, 2021). In contrast to the market institution, the values of the democratic state appear less "pliable." An intriguing

theoretical possibility presents itself—that claims or concerns about institutional coherence are rooted in whether or not the institution’s extant values are pliable, i.e. open to being reconfigured or reinforced. In this paper, I explore this idea theoretically. Specifically, I present a framework that takes seriously values-based differences in the constitution of different logics, and shows the importance of these differences in understanding how these logics cohere and with what effects. I ask, *how do logics’ constitutive values affect their coherence, and with what interinstitutional implications?* My arguments take a pragmatic perspective, and are premised on a specific ontological position on institutional logics—that logics are constitutive of core, inviolable values anchoring them as stable sets of practices and symbols (Ahrens & Ferry, 2022; Bento da Silva, Quattrone, & Llewellyn, 2022; Friedland, 2013; 2017; 2018; 2021; Lounsbury, Steele, Wang, & Toubiana, 2021; Mutch, 2018).

My investigation begins by understanding logics as “complex phenomena” (Lounsbury et al., 2021: 263). More specifically, I argue that logics’ extant values moderate—i.e. enable or constrain—the drawing from an available set of evaluative principles by institutional actors, and consequently the coherence of those logics. The moderation by values happens via three alternative pathways—mutation, transposition, and resilience. Mutation refers to changing existing values by incorporating new(er) principles of evaluation. Transposition refers to creating new combinations of values by hybridizing with other logics. Resilience, on the other hand, refers to actors pushing back on new evaluative principles and reactivating extant values, and in doing so, strengthening extant institutions. Taken together, the three pathways—mutation, transposition, and resilience—encapsulate mechanisms that enable the coherence of existing logics within the interinstitutional system.



These values-based mechanisms constitute two outcomes for institutional logics within the interinstitutional system – their *reconfiguration* (via mutation and transposition) or *reinforcement* (via resilience). When reconfigured or reinforced, new evaluative principles may be added to the existing universe, or existing evaluative principles may recede from the universe. Overall, my theoretical model encapsulates these interinstitutional dynamics, and depicts the coherence of institutions as an outcome of these dynamics. To substantiate my arguments, I use two thought experiments based on contemporary concerns—rooted in grand challenges—as exemplars.

By unpacking these mechanisms and proposing a theory of alternative coherence pathways, this study sheds light on how logics can change, create and reactivate values “actually and ongoingly” through “a form of intentionality or orientation towards [the social world]” (Steele, 2021a: 211). The interinstitutional system is a dynamic entity that is constantly in a state of becoming, as existing institutions face transformational cultural forces, and new institutions sometimes appear. Although institutional scholarship recognizes this dynamism, we do not yet have a focused theoretical account for how these contradictions and interdependencies among institutions transpire. The values-based theoretical model I present in this paper contributes to institutional scholarship by helping address this gap. Specifically, I show how institutional logics and their values can explain the coherence of institutions, and relatedly, their susceptibility to concerns such as erosion. My theoretical model also contributes by informing research on grand societal challenges, institutional complexity and hybridity.

## **THEORETICAL MOTIVATION**

Recently, many calls have been made to better understand values and their role within institutional analysis (Kraatz et al., 2020; Lounsbury et al., 2021; Gümüşay et al., 2020a). Over

the years, the institutional literature has grappled with the concept, and there have been points of contention and impasse regarding its understanding and integration within institutional theory. Some attribute this impasse to the field's collective rejection of a structural-functionalist account of values as internalized entities (Parsons, 1980). This account focused on how social systems maintain stability and order through shared values and norms. In this account, institutions strive to achieve specific functional imperatives.

Philip Selznick's (1992: 148) understanding of and work on institutions and values, on the other hand, were anchored in questions of telos. Institutions, on this account, were infused with value beyond the technical or functional requirements at hand (Selznick, 1957). Thus, contra Parsons, a Selznickian view offers a nonfunctionalist understanding of institutions. Said in another way, the old institutionalism—which Selznick's scholarship built and extended—did not view institutions as serving specific functions in a larger social system. Instead, it focused on formal institutions as evolving, values-laden entities shaped by historical processes and cultural practices. The focus and direction of the field changed in the 1980s and 1990s as the new institutionalism developed within institutional scholarship (Meyer & Rowan, 1977; Meyer, Rowan, & Meyer, 1978; Greenwood et al., 2017; Powell & DiMaggio, 1991). Methodological preferences also evolved as qualitative, case-study approaches became less prominent compared to the quantitative and comparative methods favored by some contemporary institutional theorists during this period (Schofer & Meyer, 2005; Meyer et al., 1997). The core argument of the world society research program, a program at the forefront of the new institutional scholarly endeavor at that time, for example, was that the basis of all social change is cultural, and that this “culture” is not simply a reflection of local cultural and economic arrangements, but moves in the direction of highly rationalized and scientized global models.

However, world society institutionalism does not focus as much on the socio-cultural sources of action (Lounsbury & Wang, 2020). There have been calls in the literature for a more “constitutive” analysis of institutional processes that takes seriously the relationship between organizations and society, and hones in on the role that scholarship could (and indeed should) play to address issues of societal relevance such as grand challenges. Particularly, the need for a values-based focus in institutional analyses has resurfaced (Amis et al. 2021, Gümüşay et al., 2020b; Lounsbury & Wang, 2020).

### **A Pragmatic Perspective on Institutional Values**

A pragmatic perspective on values highlights that the importance of values lies in their influence on action and experiences (Joas, 2000; Dewey, 1916, 1939). In other words, such a perspective behooves attention to values not because they are accretions of internalized past experiences, but because they have implications for future action. Although the institutional logics perspective—a pragmatist and practice-based view of institutions—re-seeded values-based conversations into the institutional literature, the terrain of institutional analyses remains, broadly speaking, overly cognitive (Lounsbury et al., 2021). Recently, scholars have addressed this gap by highlighting the role of emotions, e.g., with the concepts of an institution’s “ethos” (Voronov & Weber, 2016), and actors’ “emotional registers” (Toubiana & Zietsma, 2016) within particular logics.

However, emotions and values are separate theoretical entities, and our theoretical arsenal remains bereft of values. This is despite the widely held position that contradictory values lie at the core of the interinstitutional system (Friedland & Alford, 1991; Kraatz & Block, 2008). The logics perspective (Lounsbury et al., 2021) stresses the emergent, dynamic, and performative nature of values—a view that is hard to reconcile with traditional institutional

accounts insisting on the injunction of a bright line between the worlds of social science and morality, of fact and value— “is and ought”—in social action. It problematizes the separation between social science and morality, positing instead that social action is constitutive of social facts (the “is”) and values rationalities (the “ought”). Said differently, a core premise is that motivations driven by the Aristotelian concept of telos or “the natural good” driving the course of moral development also have a bearing upon the science behind social action (Selznick, 1994: 148).

Studies have shown how organizations, as a consequence of being tied to a particular logic, find it difficult to undergo transformations that require them to embrace contradictory values. For example, Townley (2002) highlights the difficulties faced by employees when business plans and performance management are introduced at a Canadian art museum. In this respect, the “stickiness” of logics is well known (Toubiana, 2020), resulting in actors not being able to easily accept changes that require them to abandon their existing logic. Although these observations suggest the key role of teleological motivations, studies with a specific and explicit focus on the question of a logic’s telos or values are few and far between (Gehman, 2021; Friedland, 2018; Mutch, 2018; Toubiana & Zietsma, 2016; Zietsma & Toubiana, 2018; Voronov & Weber, 2016, 2017), as recent expositions of the literature have also echoed (Lounsbury et al., 2021; Friedland, 2021).

While scholars generally agree that values are elemental components enabling “the synchronization and prioritization of logics” (Lee & Lounsbury, 2015: 861; see also Thornton et al., 2012), there is less consensus on the position that values are core to the very ontology of institutional logics (Friedland, 2021; da Silva et al., 2022; Mutch, 2018) and that they are more naturally enduring than the argument of “near decomposability” (Thornton et al., 2012) suggests.

Friedland and his collaborators, for instance, conceptualize logics as subscribing to a transcendental or metaphysical belief:

An institutional logic is grounded in an institutional substance, a groundless ground, a general understanding that points to both an ontology, what something is, and a telos, the nature of its goodness (Friedland, forthcoming; see also Friedland, 2013; Friedland et al., 2014: 334).

When actors are viewed as being committed—with a pseudo-religious fervour—to logics, contradictions between separate logics seem more insurmountable, and the maintenance of multiple institutional values under conditions of institutional complexity (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011) more difficult, although possible via strategies like blending (Battilana & Dorado, 2010; Dalpiaz, Rindova, & Ravasi, 2016; Tracey, Phillips, & Jarvis, 2011), compartmentalizing (Kraatz & Block, 2008; Reay & Hinings, 2009; McPherson & Sauder, 2013; Pache & Santos, 2013), or dynamically engaging (Smith & Besharov, 2019, Gümüşay et al, 2020a) multiple logics. But, the question of what drives organizational members towards consensus around certain actions inevitably beckons towards value judgements and evaluations of worth (Demers & Gond, 2020).

Looking beyond logics scholarship, institutionalists taking a practice-based perspective have highlighted how values deemed as “belonging” to foreign institutions are overthrown by actors, reinstating desired values. In these studies, actors have used values as tools helping hold themselves and each other accountable for “moral imperatives” (Kraatz et al, 2020: 477). For instance, activists used values to successfully challenge the institution of paying protection money to the Italian mafia (Vaccaro & Palazzo, 2015), specialists’ values within a hospital department acted as “a source of conflict and a motive for professional action” (Wright, Zammuto, & Liesch, 2017: 200), and pluralist managers used divergent values as tools to drive

organizational identification (Besharov, 2014). Overall, these studies have suggested the role of narratives and professional practices for the maintenance of desired “macro-level” values.

### **Grand Challenges and Underpinning Evaluative Practices**

There has been a surge of interest among organization theorists on tackling societal issues. In particular, attention has been drawn to how our theories can address “grand challenges”, which is a term used to describe global problems such as climate change, inequalities, and the abuse of natural resources, among many others. Grand Challenges Canada (2011: iv) defined these as “specific critical barrier(s) that, if removed, would help solve an important societal problem with a high likelihood of global impact through widespread implementation.” At the level of policy, the United Nations has formulated multiple Sustainable Development Goals (SDGs) representing a set of ambitious targets to address these global grand challenges. But, how do actors collectively evaluate and come to an agreement on what is and is not a grand challenge, or more generally, a societal issue worthy of policy interventions (Blumer, 1971)? The organizational literature on grand challenges has not specifically engaged with this question, and the implications that arise from it.

The focus of this literature has been on the need for urgent action to address these grand challenges. As such, pragmatic and co-constitutive theories such as the institutional logics perspective lend themselves well to studying grand challenges (Lounsbury & Gehman, forthcoming). Particularly, to understand how prevalent societal concerns graduate onto “becoming” grand challenges, and thereby catch the attention of policymakers, we need a pragmatic explanation of how standards of evaluation evolve as well as transform.

While practices are unquestionably core to logics, so are values. As Gümüşay and colleagues (2020b: 2) assert, the neglect of institutional values and the plurality they engender

“has reinforced certain institutional myths about social reality, making it difficult for us to ‘think differently.’” A deeper investigation of constitutive values could throw light on what drives cognition itself. Said differently, a values-centric perspective promises insights not only on *how* institutions are maintained or transformed but also *why* “institutional arenas are patterned in the way that they are”—pre-dispositioned towards particular forms of rationalities or ways of understanding the world (Friedland & Alford, 1991: 243), hanging together as certain sets of “ideational categories” and not as others (Thornton et al., 2012), and cohering and enduring as configurations of symbols and practices beholden to certain values (Lounsbury et al., 2021).

### **Coherent and Incoherent Institutions**

Institutions are defined as coherent “patterns of social structures and activities at multiple levels of jurisdictions” (Scott, 1995: 33). However, they can be transformed, and even rendered incoherent. Studies have shown how modernity has caused the “destruction and replacement” of traditional arrangements and ways of living (Kroezen & Huegens, 2019: 977)—which become forgotten relics of the past. For example, Weber and colleagues show how the grass-fed beef segment was rendered “inferior” by a new industrial logic of agriculture which lowered the cost and standardized the quality of meat and dairy products (Weber, Heinze, & DeSoucey, 2008). This logic, institutionalized further by regulations and an increasing exposure via educational curricula, resulted in practices turning such products into affordable commodities, and also made their distribution more efficient industrially. However, this industrial logic came to be explicitly associated with values— “cultural codes”—of exploitation (as opposed to the traditional code of sustainability), manipulation (as opposed to authenticity), and artificiality (as opposed to naturality), and “marked negatively” by movement participants who sought to bring the traditional grass-fed beef segment back (Weber et al., 2008: 538).

Another example is offered by Marquis and Lounsbury's (2007) study of the US banking industry, which describes how the earlier logic underlying the community banking system was overthrown by the national banking system instated in the twentieth century for "efficiency" considerations. In both the meat industry and the banking industry, the authors tell a story of reinstating earlier traditional logics. Thematic to both stories is a cycle: the fading away of traditional logics and their replacement by more modern logic, and after a long period of time, the re-emergence of the faded logics.

The starting point of Kroezen and Huegens's (2019: 976) study of Dutch beer breweries offers another instructive example. It depicts the traditional brewing logic as having subsided due to the taking over of modern brewing technologies. Their process model shows how the logic re-emerged as more traditional values were resuscitated in response to "increasing exposure" to a global network of emerging craft brewing practices. Their study exemplifies the phenomenon of "institutional re-emergence"—which suggests that a logic's abatement via replacement, and the corresponding institutional erosion that it may constitute, may not be permanent events. These might, in fact, be picked up and resuscitated in the future.

Overall, these findings motivate my core argument that the enactment of institutional values affect the coherence of institutions within society. Values-based processes constitute the extent to which institutions are at the risk of being eroded, as well as that to which they cohere over time, reflecting their well-known fortitude and resilience.

### **THE ROLE OF VALUES IN INSTITUTIONAL COHERENCE: A CONCEPTUAL MODEL**

In Table 3-1, I lay out the seventeen SDGs identified by the United Nations, and map these to underpinning grand challenges, and specific stipulated "targets."



**Table 3-1:** Sustainable Development Goals (SDGs) and their underpinning Grand Challenges

<b>SDG #</b>	<b>SDG Name</b>	<b>Related Grand Challenge</b>	<b>Example of "Target"<sup>4</sup></b>
<b>1</b>	No poverty	poverty alleviation, income inequality, and economic empowerment	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
<b>2</b>	Zero hunger	food security, agricultural sustainability, and addressing hunger	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
<b>3</b>	Good health and well-being	global health, disease prevention, healthcare access, and medical innovation	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
<b>4</b>	Quality education	education access, quality, and inclusivity, as well as addressing educational disparities	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
<b>5</b>	Gender equality	promoting gender equality, ending discrimination, and ensuring equal opportunities	Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
<b>6</b>	Clean water and sanitation	water resource management, sanitation infrastructure, and access to clean water	Support and strengthen the participation of local communities in improving water and sanitation management
<b>7</b>	Affordable and clean energy	sustainable energy, renewable sources, and energy access for all	By 2030, increase substantially the share of renewable energy in the global energy mix
<b>8</b>	Decent work and economic growth	job creation, fair wages, and inclusive economic growth	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

<sup>4</sup> These examples are handpicked from the “Targets and Indicators” stipulated by the UN under each SDG (<https://sdgs.un.org/goals>)

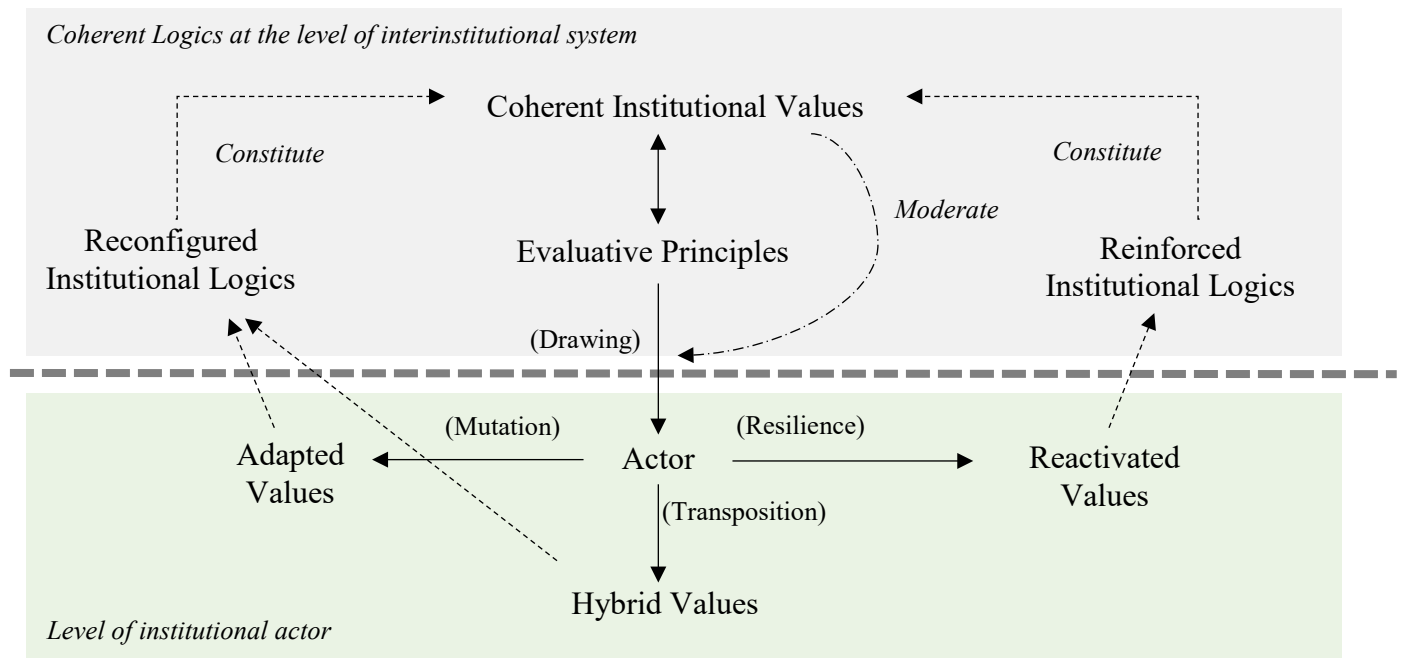
<b>9</b>	Industry, innovation and infrastructure	technological innovation, infrastructure development, and sustainable industrialization	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020
<b>10</b>	Reduced inequalities	reducing income inequality, social inclusion, and addressing disparities	Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
<b>11</b>	Sustainable cities and communities	urban sustainability, smart cities, and inclusive urban development	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
<b>12</b>	Responsible consumption and production	sustainable consumption, waste reduction, and responsible production practices	By 2030, achieve the sustainable management and efficient use of natural resources
<b>13</b>	Climate action	mitigating climate change, adapting to its impacts, and transitioning to a low-carbon economy	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
<b>14</b>	Life below water	ocean conservation, marine biodiversity, and sustainable use of marine resources	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
<b>15</b>	Life on land	biodiversity conservation, sustainable land use, and combating desertification	By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
<b>16</b>	Peace, justice and strong institutions	promoting peace, ensuring justice, and building strong and inclusive institutions	Substantially reduce corruption and bribery in all their forms
<b>17</b>	Partnerships for goals	fostering global partnerships, collaboration, and resource mobilization for sustainable development	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

Concerns about the coherence of cherished institutions are exemplified by worries, fears, or scenarios related to the institution's susceptibility to being weakened, and thus, undermined. These concerns can encompass a range of societal issues including social, political, economic,

environmental, or technological challenges that might lead to negative outcomes. The concern about the continued coherence of democracy as an institution represents such a concern (Adler et al., 2022). In conceptualizing institutional coherence, in the next section of the paper, I use two thought experiments grounded in specific SDGs. First, in Figure 3-1, I present a multi-level model explaining the constitutive role of values in maintaining institutional coherence. As depicted in the model, at the level of the institutional actor (i.e. an actor embedded in particular institutions and their logics), the drawing of evaluative principles to enact values via different pathways is key to the constitution of coherent logics at the level of the interinstitutional system.

At the interinstitutional level, coherent institutions are associated with a set of institutional values or conceptions of the good. The concept of institutional values rejects a mechanistic and functional understanding of values at the societal level. While individual actors can espouse some values over others, the “choice” to do so is not devoid of institutional context. In other words, the institutional logic in which they are embedded matters. My proposed model of the interinstitutional system shows how logics’ values undergird the reconfiguration or reinforcement of different logics. In doing so, they constitute the coherence of institutions even as reconfigured and reinforced logics can potentially add to or subtract from existing evaluative principles within the interinstitutional system. Overall, this amounts to a “universe” of evaluative principles that is in a dynamic, processual, state of flux. As a consequence of this dynamism, institutions remain coherent, or potentially entail concerns of erosion or incoherence. Below, I detail these dynamics, and then turn to illustrating different aspects of the model with the help of two thought experiments.

**Figure 3-1: A Values-Driven Multi-level Conceptual Model of Institutional Coherence**



### Evaluative Principles, Values, and Institutional Logics

Institutional analysis is premised on the core idea that social structures and processes are stable and reproducible patterns not necessarily instrumentally geared towards specialized ends (Glynn & D'Aunno, 2022; Selznick, 1994). From this perspective, an institution subscribes to conceptions of the good that enable and constrain action within it (Selznick, 1957, 1994). Specifically, as actors (individuals or organizations) adopt a different understanding of what is valuable, they change their practices and beliefs to align with new criteria of evaluation used to assess the goodness of their actions (Lamont, 2012; Stark 2009).

A core assumption of my theoretical model is that the institutional logics underpinning society are constitutive of values. Values are neither the product of actioning logics, nor can they be, rather simplistically, reduced to one of the “elemental categories” or building blocks of logics (Thornton et al., 2012: 61). They are the inseparable, inviolable aspect of institutional logics

holding the latter together as sets of symbols and practices (Lounsbury et al., 2021). A logic may not be decomposed beyond its core, constitutive values (Friedland, 2012). This constitutive nature of values and logics, I argue, is a fundamental feature of the institutional logics perspective, and one that has not been theoretically explicated fully yet. In my theoretical model and explanation of the coherence of institutions, I show that evaluative mechanisms underpin this constitutive relationship between values and institutional logics.

Specifically, I argue that institutional actors draw on evaluative principles to effect the coherence of institutions via three pathways that change, combine, or reactivate values (Deleuze, 1986; Demers & Gond, 2020). This enactment of values is rooted in the drawing of evaluative principles, and yet, moderated by the constitutive values of the logic in which the drawing actor is embedded. In other words, while actors may enact particular values in prioritizing certain evaluative principles over others, this enactment is enabled and constrained by the actant logic's values. The enactment of values may be reflexive—that is, constrained by a particular end in mind (Selznick, 1957)—or, it may be pre-reflexive—that is, constrained by self-evident courses of action (DiMaggio, 1988; DiMaggio & Powell, 1991). However, whether reflexive or pre-reflexive, actors are constrained in terms of the evaluative principles they are able to choose from to enact values, because the drawing of principles is moderated by the logics within which the actor is embedded. In enacting values, individuals or organizations effect the coherence of existing institutional logics via three pathways – mutation, transposition, and resilience.

McPherson and Sauder's (2013) study of a drug court—an organizational form designed to provide an alternative judicial process for illegal activities related to drug use—illustrates how actors may switch between logics by prioritizing some evaluative principles over others. The authors show how actors in the drug court strategically choose from among four available logics

and deploy their preferred logic to get work done. They find that actors exercise a great deal of agency in choosing from among multiple logics. When divergent perspectives arose about how motives of the people being evaluated should be interpreted, actors invoked “external” logics, or logics which were different from the “default or master logic of the drug court” (McPherson & Sauder, 2013: 175). In invoking these external logics though—and although the authors do not explicitly specify this—actors demonstrate the role of reflexive and pre-reflexive agency in values-based choices. For instance, when one drug court participant—a drug offender who was released from incarceration prior to being admitted to the court—boasted about his admission being a “ticket out of jail”, the court actors evaluated their motive as being undesirable, and hence the participant themselves being “unworthy” (McPherson & Sauder, 2013: 176) to remain in the program. The prioritization of the criminal punishment logic—which advocated the role of drug courts as institutions for legal and correctional supervision (McPherson & Sauder, 2013: 173)—over the other three available alternative logics entailed reflexive agency on the part of the drug court actors whereby they chose to prioritize the values of conduct, compliance, and adherence to rules over others.

Reflexive and pre-reflexive agency is enabled by the logics within which an actor is enmeshed (Cardinale, 2019; Zilber, 2013). In the drug court example, the actors were able to choose between different values pertinent to the context at hand because these values were familiar owing to the actors’ existing cultural repertoires. For instance, a professional who is not familiar with the context of the drug court, the nature of drug related offenses, and the circumstances pertaining to specific cases in the court, would employ a different cultural repertoire from, say, that of a probation officer or a public defender. Such a professional may, then, prioritize different values, and in doing so invoke different logics altogether. Needless to

say, such a situation would bring chaos to the drug court. Generally speaking, actors prioritize among values of the logics within which they are embedded, using pre-reflexive agency enabled by their respective cultural repertoires. In other words, logics enable and constrain actors in drawing selectively from the universe of evaluative principles available to them.

### **The Pathways of Mutation, Transposition, and Resilience**

Historically, values-based transformations that have occurred across institutions have been described in Friedland and Alford's (1991: 239-240) influential article. They explain, for instance, how the emergence of individualism as a value was constitutive of historically shaped institutions. Said differently, individualism not only stemmed from institutions, but also transformed the contradictions and interdependencies between them. For instance, individualism found expression in a more "personalized" religious system than before, as well as a market "divorced from" earlier notions of wealth accumulation through birthright (Friedland & Alford, 1991: 240). Although the market and religion remained coherent institutions, there were fundamental changes in the values associated with them.

My model, and the three pathways it depicts, shows that such values-based transformations of existing institutional logics are not only common, but also necessary for their coherence (Lounsbury et al., 2021). I argue that the coherence of existing logics is driven by the mutation, transposition, and resilience pathways which respectively result in adapted, hybrid, and reactivated values. While adapted and hybrid values constitute reconfigured institutional logics, reactivated values constitute reinforced logics. These values-based mechanisms sustain the coherence of existing logics within the interinstitutional system.

***Mutation.*** I define mutation as a logic's susceptibility to effect an adaptation of its values in accordance with evaluative principles. Evaluative principles from the universe make multiple

configurations of values possible, and by so doing, provide alternatives “vectors” along which the logic can transform. A highly “mutable” logic accords an actor with the potential to adapt the logic’s values by imbibing new(er) evaluative principles in enacting ~~those~~ modified values. Thus, a highly mutable logic is more susceptible to adapting values, and in turn to reconfigurations, than logics with a low degree of mutability. Thus, in essence, mutability is a measure of a logic’s available modes or vectors of potential transformation via adapted values.

***Transposition.*** I define transposition as the ability of a logic to “take flight,” thereby potentially affecting other logics. A logic with high “transposability” has the potential to “infect” other institutional logics by creating new configurations of values via combinations. In particular, a highly transposable logic can form hybrids (Battilana & Dorado, 2010; Pache & Santos, 2013) with other logics, potentially creating new configurations of value. Thus, transposition imbues logics with agency, or “the capacity to extend schemas to new contexts” (Sewell, 1992:17-18; see also Gehman et al., 2021), enabling change across institutional logics. Put another way, transposition equips logics to affect change in configurations of values.

***Resilience.*** I define resilience as the susceptibility of a logic to “hold on” to its values rather staunchly. Said another way, the logic’s values are not pliable to triggers for change. An actor embedded in a highly “resilient” logic is highly constrained in the act of drawing from alternative evaluative principles. Thereby, the logic is resistant to changes in its values. When faced with the possibility of change on account of new(er) evaluative principles, the extant values of the resilient logic are further reactivated in the sense that they become more salient even as change efforts are resisted. Thus, a highly resilient logic is most susceptible to reactivating its values, and in turn to its reinforcement within the interinstitutional system than logics with a low degree of resilience.



## **Reconfigured and Reinforced Institutional Logics**

Since institutional logics are constitutive of social action, the variations in their susceptibilities to transformation are particularly germane to explaining the rise and fall of different forms of rationality (Kalberg, 1980). Said in another way, to the extent that some logics transform more easily or readily than others, the logics perspective can help explain how ideas of what is rational and what is not change over time. As logics cohere via reconfiguration or reinforcement, so do corresponding notions of rationality. On the other hand, as some notions of rationality fade away corresponding logics may stop being coherent.

My model takes the enactment of values via evaluative mechanisms as a starting point for processes of reconfiguration and reinforcement of institutional logics. According to Friedland & Alford (1991: 235), values are “generated” by respective institutional orders and thus inhere within the logics constituting them, providing a basis for actors to make their social reality meaningful. The meaning of rationality itself is associated with the source of values in a logic, because what is “rational” might vary according to what is valued:

Institutional logics ... hinge on a subjective pursuit of a value that is only knowable and actionable through practical forms involving words, objects, and bodies in which that value is immanent. (Friedland, Mohr, Roose, & Gardinali, 2014: 338)

Thus, a logic’s values and the action within social orders are intertwined, and the prioritization of values is key to the coherence of an institutional logic.

Past studies have described a process via which a logic coheres within an existing institutional field by adapting its values. These studies have described how in doing so, the logic does not lose its core values, but recalibrates them by mutating into a renewed version of itself. Haveman and Rao’s (1997) study of the thrift logic exemplifies this process. The thrift logic, which is a logic of savings, continues to organize organizations in the thrift industry through the

sixty years of the study period. However, although the idea of “thrift” remains what it was originally, its manifestations change across the span of six decades into multiple different organizational forms and logics. Thus, the thrift logic is reconfigured through these years by a process stemming from the prioritization of values. As this process unfolded, values of “bureaucracy and voluntary effort” were gradually prioritized over “mutuality and structured individual effort” to accord with the broader-level cultural changes associated with the progressive movement (Haveman & Rao, 1997: 1644). Rao and colleagues’ study of how the professional logic of French cuisine was reinforced by aligning with a *nouvelle* movement is another example (Rao, Monin, & Durand, 2003).

Logics are also reconfigured by way of a process of hybridization. Combination of multiple logics, for instance, occurs in hybrid organizational forms that have been studied in waste management facilities (Lee & Lounsbury, 2015), social enterprises (Pache & Santos, 2013; Battilana & Lee, 2014; Smith & Besharov, 2019), healthcare organizations (Reay & Hinings, 2009), and religious financial institutions (Gümüşay et al., 2020), constituting a condition of institutional complexity. Recently, Besharov and Mitzinneck (2020) have theorized that “compatibility” is one of the dimensions along which the heterogeneity of hybrid logics emerges. I argue that (in)compatibilities, in the first place, arise from logics’ constituent values, explaining the resulting hybrid’s contested or uncontested nature. Thus, combinations entail the reconfiguration of constituent logics via the resulting hybrid logic.

The pathway of resilience results in the reactivation of extant values, and constitutes the reinforcement of associated logics. Via the process of reinforcement, existing logics resist transformation, and are rendered coherent. Reinforcement via resilience offers a counterfactual to logic transformation—a field-level phenomenon described by past studies as resulting from

the displacement of one logic by another. For example, Thornton (2001, 2002) shows how the publishing industry's incumbent logic transformed from a professional editorial logic to a corporate market logic. The domination of the new corporate logic entailed "market capitalism's" taking over from "personal capitalism" (Thornton, 2001: 295), CEOs gaining authority over founder-editors, and market position supplanting personal reputation. Thornton describes multiple ways in which the prioritization of certain values resulted in this domination of the market logic. As just one example, high market returns became an important consideration and component of publishing values, displacing the earlier values of placing less emphasis on "making money" (Thornton, 2001: 85).

### **Adding to, and Subtracting from, the Set of Available Evaluative Principles**

Since the changing dynamics of the interinstitutional system are co-constituted by institutional logics, the extent to which these logics are competing or contradictory directly affects this co-constitution. Competing logics have been found to be rooted in geographical differences, and broader belief systems or values have been found to importantly shape these differences and the practices they engender (Marquis & Lounsbury, 2007; Lee & Lounsbury, 2015). Values shape how such differences translate into antipathy towards each other—viz. by their prioritization at the level of the actor resulting in the coherence of logics. These dynamics constitute the addition to, and subtraction from, existing evaluative principles within the "universe" of the interinstitutional system. In doing so, they have implications for various institutions, and the contradictions and interdependencies between them.

Overall, my model highlights the importance of historically sustained differences of worldviews and core philosophical positions in the constitution of the interinstitutional system. These differences, at any time, shape practices, and, in doing so, buttress some evaluative

principles and weaken others. For example, the Supreme Court of the United States (US)—an institution within the order of the state—has been subjected to the critique of tilting one way or another in terms of political leanings. Let us consider the claim that it is “lurching to the right” (Liptak, 2022). To the extent that we imagine there is merit in this critique, the right-wing leanings, or collective conservative values, of the Supreme Court can be expected to percolate into and alter the “way things are done” in other realms of institutional life. For example, more local businesses are expected to be make business evaluations based on investment principles with a conservative bent, potentially altering existing practices and beliefs in the market to favor these conservative investment principles. Institutions outside the market, such as the family institution, are also expected to undergo transformations in practices and beliefs. For instance, increased prevalence of opposition to abortion, feminism, and same-sex marriage might encourage the favorable evaluation of traditional marriages and associated practices.

Thus, at the core of interinstitutional dynamics are institutional values. My model conceptualizes these dynamics to be driven by the prioritization of values. These values-based processes constitute the motor driving the extent to which institutions reasonably differ from each other, and forming the basis for interdependencies and contradictions between them.

### **Exemplifying the Emergence of Concerns about Institutional Erosion**

I draw on two vignettes, inspired by thought experiments, to shed light on how the prioritization of values by drawing on evaluative principles results in the coherence of associated institutional logics, and triggers concerns about the erosion of certain other institutions and their logics. The vignettes help reveal how institutions resist transformations in the face of the agency that these institutions themselves make possible.

***Thought Experiment 1: Lab-Grown Meats Pushing the Boundaries of Morality in Vegetarianism?*** I consider the imminent commercialization of lab grown meats for human consumption as the first vignette to exemplify the effects of institutional values and their prioritization on the interinstitutional system. Lab grown meats or cultured meats are an agricultural innovation involving their production from cultures of animal cells—meaning, these cells are entirely grown in the laboratory from the cell of a living animal without harming the animal. The motivation to pursue this agricultural innovation is provided by four SDGs—SDG 2, “Zero hunger,” addressing food security issues; SDG 12, “Responsible consumption and production,” addressing sustainable food production practices; SDG 13, “Climate action,” addressing the mitigation of climate change; and SDG 15, “Life on land,” addressing sustainable land use. My thought experiment here concerns how the patterns and practices of consuming such meats might vary across cultures and contexts. In conducting this thought experiment, I rely on a few assumptions. First, I assume that the most common premise behind practicing vegetarianism—abstaining from all meat-based foods and eating only plant-based ones whose sourcing does not involve the death of animals—is the moral wrongness of harming animals for human consumption. Since lab grown meats are made from animal cells, thus not involving the killing of an animal, it is likely that actors practicing vegetarianism on the premise of the moral wrongness of consuming animal-based foods would “convert” and consume these meats. This is a case of actors choosing to prioritize moral values based on, for example, principles of empathy—the wrongness of killing animals for their meat. The availability of lab grown meats as a potential food choice, however, may motivate these actors to consider the newer practice of consuming these meats while conforming to their cherished values, and in doing so, transform existing practices of vegetarianism.

The second common premise for practicing vegetarianism is hinged on cultural—often religious—values. These values are expressed through beliefs and traditions, and not necessarily on principles of empathy towards animals. The introduction of lab grown meats presents an interesting conundrum to actors practicing this type of cultural vegetarianism: since these meats are not “real” embodiments of living and breathing animals, might it be okay to eat them? Thus, whether the commercialization of lab grown meats would convert cultural vegetarians or not poses an interesting empirical question. For those converted, the availability of lab-grown meat redefined bounds of morality because they posited that “it is okay” to eat lab grown meats since it does not “really” come from the animal.

My theoretical model explains social action as undergirded by a mechanism entailing the prioritization of institutional values via the logics in which actors are enmeshed. These values are co-constituted by evaluative principles which are not constant. Rather, these principles may change within the interinstitutional system as existing logics cohere or recede. In making the choice of consuming lab grown meat or not, an actor who currently practices vegetarianism chooses among evaluative principles, and in doing so, prioritizes some values over others. For example, they may choose from one of the principles discussed above: respect for cultural beliefs and tradition, or empathy towards the non-human world. In addition to these, other evaluative principles and their associated values, such as, innovation, frugality, and concern about climate change may also be in the consideration set. In choosing among a plurality of such values, an actor effects the coherence of logics.

For example, a conservative religious logic may be reinforced by persisting with the practice of not consuming meats of any form or origin, including lab grown meats. Alternatively, a reinforcement of the empathy logic may be effected—which happens if our imaginary actor,

despite being also guided by religious values, chooses to support the consumption of lab grown meats on the grounds that animals were not harmed in producing it. In doing so, they further the emergence of a heretofore unknown practice among erstwhile vegetarians—the consumption of meats that are “not really meats.” Continuing with this thought experiment, to the extent that this practice is perpetuated and institutionalized, existing institutions would be affected. In a country like India, for example, where over forty per cent of people are vegetarians, and where the practice of vegetarianism percolates into different institutions such as religion, family, caste, and even education, the effects can be widespread (Chrispal, Bapuji, & Zietsma, 2021). At the limits, the concerns about the erosion of these other institutions might emerge.

***Thought Experiment 2: The Polarization of Left- and Right-wing Politics in the US.***

Observers have opined that US politics is becoming increasingly polarized as left- and right-wing politics are each becoming more radical in nature, meaning that the values of the Democratic and Republican parties—the two parties that have historically dominated the US political landscape—are becoming more contradictory. Specifically, the Democratic party’s values of equality and community seem to have become more staunchly opposed to the Republican party’s values of individual freedoms, rights, and responsibilities, and vice versa. This opposition also became stark during the coronavirus pandemic between the years 2020 and 2022. For instance, on one hand, more and more right-wing groups (Wilson, 2020) protested against masking mandates and state regulations—initiatives directed towards curbing the spread of the virus—due to skepticism about the severity of the virus’ spread, or refusal to give up “individual freedoms” at the behest of the government. On the other hand, many far-left liberal groups exercised support for an extreme vigilance, even going beyond what scientific evidence backs up, and in doing so, allegedly “imposing on other people’s lives” (Green, 2021).

Political polarization can lead to social divisions, hinder effective governance, and contribute to a lack of consensus on key issues. In this sense, it is a significant societal challenge with implications for each SDG listed in Table 3-1. In this next thought experiment, I draw from Enke and colleagues' work in political theory to imagine effects of the US electorate's values-based choices on the coherence of existing institutions in the country (Enke, Polborn, & Wu, 2022). They find that the disproportionately rich begin to subscribe to more universalistic, left-wing leaning values of egalitarianism, prioritizing liberal values in doing so. They begin subscribing to a more morally inclined, liberal logic, which becomes dominant over an erstwhile logic of economic welfare that drove their voting choices. In other words, the rich become more morally liberal and swing Democratic. Over time, such trends result in the strengthening of the values-laden nature of the Democratic party, which observers depict as an increase in the staunchness of the party's liberal values. As the democratic constituency becomes more liberal on average, to make the new constituencies happy, the democratic party moves "further to the left on social issues" (Edsall, 2022).

On the other side of the spectrum, the poor, morally conservative voter begins prioritizing conservative values over their material or economic welfare. However, the extent to which "people place more weight over non-material versus material issues" increases with an increase in income (Wu et al., 2022: 1) – an assumption in political behavior theory in which "values are luxury goods." In other words, the poor are less likely to weigh values over material well-being than are the rich. Nonetheless, as the polarization between Republican and Democratic parties increases, the poor voter prioritizes conservative values and swings Republican. In evaluating electoral candidates, conservative principles thus become more dominant than principles of economic welfare. The reinforcement of a "conservative logic" results in the Republican party



becoming more morally conservative on average. Overall, both institutions—the Republican party and the Democratic party—become more values-laden and more “radical” on average. Polarized by their competing values, the parties appear stauncher in their respective stands on left- or right-wing policies.

Thus, at the root of increasing polarization in US politics is the argument that parties accommodate the changing priorities of the rich, which become more moral in nature as the rich get richer. This dynamic constitutes a counter effect at the other end of the political spectrum, with an increase in moral conservatism, although not quite to the same extent. As parties polarize, the contradictions between other existing institutions are widened, and concerns about institutional erosion become more prevalent. For instance, the existing differences between capitalism and democracy become more salient as these institutions move father away from traditional perception. Specifically, concerns are raised that although democracy traditionally stands for the will and the power of the people, with an increase in private ownership patterns and a capitalistic structure that prioritizes profit motivations, the ability of the individual worker to effect socioeconomic change is reduced. This reality manifests in nation-states across the world in the twenty-first century, fueling concerns that democracy, as an institution, is being eroded (Blackwell, 2021), i.e. may become incoherent over time.

## **DISCUSSION**

In this study, I explained how logics’ constitutive values affect their coherence. I presented a theoretical model premised on values, which also explained the interinstitutional implications ensuing from the coherence and incoherence of institutions. My theoretical model showed how the prioritization of certain institutional values over others anchors interinstitutional dynamics. These processes entail the coherence of existing institutions, and reciprocally, the

emergence of concerns about the erosion of some institutions (Friedland & Alford, 1991).

Overall, my theorization sheds light on the processes whereby teleologically driven motivations underlie social action, providing the motor for cognition itself. Thereby, the aim of this paper was to introduce a values-based perspective on institutional coherence and incoherence, and consequently, on processes sustaining interinstitutional dynamics.

I used two thought experiments to flesh out the theoretical processes in my model. The first thought experiment broached the question of the extent to which the availability of lab grown meats might transform practices of vegetarianism, thereby altering the very bounds of morality, and hence affecting institutions of which vegetarianism forms a core practice. The second experiment draws from recent work in political theory to explain how the prioritization of liberal versus conservative values, and vice versa, is the mechanism undergirding the observed political polarization in the US. This polarization finds expression in the widening of contradictions between other institutions, such as that between democracy and capitalism, and ensuing concerns about the “erosion” of democracy.

### **The Role of Values in Structuring the Interinstitutional System**

This study contributes towards institutional theory scholarship by bringing in a much-needed values-based perspective that focuses on the role of reflexive and pre-reflexive agency in social action. This perspective highlights that actors are not institutional dopes, but can exercise reflexivity based on their interests and values. At the same time, this perspective also underlines that actors’ interests and values are shaped by their cultural repertoires, which are constrained and enabled by institutions. Thus, values provide actors who are embedded in “a historical” structure of institutions with bases for “political action” (Seo & Creed, 2002: 223). In this sense, a skilled actor constructs meanings by prioritizing certain values over others when choosing from

tools in their cultural repertoire (Swidler, 1986). As my theoretical model explains, these meanings translate into the reinforcement or abatement of existing institutional logics, and ultimately constitute the contradictions and interdependencies between institutions.

This aspect of my theoretical model broaches the question of why certain actors may have more or less access to cultural tools, and why certain values, and not others, constitute a skilled actor's repertoire. I argue that actors embedded within particular logics have agency contingent on values-based limitations. This agency emanates from the reflexivity afforded by an institutional logic's inherent, constitutive values. In other words, an actor chooses from the range of values afforded by the logics influencing them (the actor). Thus, a logic's values constrain as well as enable action. In this way, my theoretical model brings to the fore the centrality of values to the "institutional embeddedness of interest and agency" (Seo & Creed, 2002: 223).

My theorization furthers Friedland and Alford's (1991) original ideas on interinstitutional contradictions. I argue that in conceptualizing the interinstitutional system and understanding what animates the contradictions and interdependencies between institutions *necessitates* taking values into consideration. Without values, it is difficult, if not impossible, to explain where motivations would come from. Consequently, explanations of institutional transformations would at best be partial. Referring back one of my thought experiments in this study, the values-based explanation I offered encompasses not only the implications on the interinstitutional system arising from the increasing polarization of the Republican and Democratic parties in the US, but also the source of the polarization.

This also raises questions about what institutional erosion entails, specifically, about what happens to the constitution of the interinstitutional system when an institution's continued coherence is at risk. My theoretical model suggests an interesting possibility in this regard. When

institutions erode, the values that they once stood for may be modified and now expressed via existing institutions, or via new organizational forms that have not been institutionalized yet (but may be in the future). Thus, a values-centric explanation of the erosion and fortification of institutions allows us to see how the ensuing transformation of interinstitutional dynamics might enable the creation of new values and the potential institutionalization of new organizational forms, and perhaps new institutions altogether in the future.

The concern that the institution of marriage may be “dying” offers a classic example. Some claim that the trust in the institution of marriage is eroding, and with it, the institution itself no longer proffers the same meanings that it traditionally used to. Many of the erstwhile values and meanings associated with the institution have indeed changed. My theoretical model offers one explanation for concerns about this erosion of the institution: when actors prioritize the values of individuality and freedom of expression, the earlier notions of traditional male and female responsibilities and obligations change. Contemporary ideas around companionship and procreation are no longer hinged to the requirements of the woman’s subordination and child-rearing duties, or the man’s responsibility to put food on the table. The values associated with the logics of companionship and procreation, thus change.

Thus, the interinstitutional system’s structuring is an ongoing process that can be explained by a process rooted in reflexive and pre-reflexive agency driven by existing institutional values. This raises an interesting question: as institutions transform, how does the magnitude of interdependencies or contradictions between them change? For instance, might the market and community logics get “closer” to each other, or move “farther” away from each other, as capitalism is further strengthened, or democracy further weakened? A theoretical program that is focused on values might help researchers pursue such further directions. Doing

so can inform policy in different domains such as inclusive economic growth and socially responsible business practices. Particularly, such research can help policymakers define the scope and complexity of organizational and other social issues, potential impact on society, and the urgency of finding solutions to these issues. My model draws attention to why prevalent dystopian concerns within the interinstitutional system matter: for instance, these help explain society's collective evaluation of what counts as a grand challenge, and what does not.

### **Theorizing Variations in Institutional Complexity and Hybridity**

My study theorized values-based mechanisms to be at the root of apparent variations in logics' susceptibilities to become reinforced, or abated. I argued that these variations arise because of variations in values constituting institutional logics, and of actors choosing among plural values in organizational settings. Such variations manifest across hybrid organizational forms. Empirically, for example, prior studies have cataloged a variety of market logic hybrids versus relatively few religious logic hybrids (Battilana & Lee, 2014; Gümüşay et al., 2020b; Lee & Lounsbury, 2015; Pache & Santos, 2013; Reay & Hinings, 2009; Smith & Besharov, 2019). In other words, the market logic seems to be more amenable to hybridizing. My theorization suggests that at the root of these variations is the nature of constituent logics' values.

Since a logic's values are unique, the combination of two or more logics manifests in varying levels of precarity and multivocality, for example, in institutionally hybrid and complex forms. Multiple studies have explored implications from this ensuing multivocality (Battilana & Dorado, 2010; Greenwood et al., 2011; Kraatz & Block, 2008; Pache & Santos, 2013). Pache and Santos (2013) found, for example, selective coupling of elements from constituent market and community logics in the social enterprises they studied. My theory provides an explanation of how the "strategic" selection of elements (Pache & Santos, 2013: 995) might have ensued

from the multivocality presented by the unique and disparate values constituting the hybrid logic. “Purposeful enactment” of hybrid strategies (2013: 994) was made possible by the prioritization of values deemed contextually appropriate by the actors. Said in another way, the social enterprise logic studied by Pache and Santos seeks the combination or intends for it, and in so doing, creates new value by “project[ing] appropriateness” (Pache & Santos, 2013: 973) with the hybrid organizational form. Thus, the combination of multiple existing logics enables the creation of values. As associated logics are reinforced, interinstitutional dynamics are reshaped, as existing institutions “shift” in important ways.

This raises an interesting theoretical idea—that innovative forms of hybrid organizing can arise from the thriving and waning of institutions. As my theoretical model explains, the cultural repertoire of actors, shaped by interinstitutional dynamics at any time, in turn shapes (pre)reflexive agency and constitutes variations in logics’ susceptibilities to transform. Overall, my theorization posits that the creation of new and innovative forms of entrepreneuring via the combination of different logics is a function of an underlying process rooted in the prioritization of institutional values (see also Dorado, 2006). It is also a function of the current “state” of the interinstitutional system, and what concerns are considered worthy of actors’ attention. For example, the concerns deemed as grand challenges of the twenty-first century would inspire entrepreneurial solutions and strategies which are quite different from those of the past (Ferraro, Etzion, & Gehman, 2013; Gehman, Etzion, & Ferraro, 2022; Gümüşay, Claus, & Amis, 2020b). Taking a values-based approach to understanding how logics with different values-bases are combined and strategically “deployed” to tackle grand challenges and other pressing concerns opens up promising avenues for future research.

In this regard, my theory could further logics research in the field entrepreneurship, which has not yet taken a values-centric approach to understanding where entrepreneurial ideas come from in the first place. Specifically, what role do institutions play in the genesis of entrepreneurial ideas and the combination of logics? I have argued in this study that combinations occur because there is a fit of associated values among constituent logics. This fit may also be strategically created via storytelling and the crafting of compelling narratives (Lounsbury & Glynn, 2001). A focus on values provides an analytical scaffolding to explain why some hybrid logics end up being more successful cases of combinations than others, and the role of institutional context in this regard (Dorado, 2006; Dorado & Ventresca, 2013). I argue that it would be difficult to assess the “goodness of fit” between—and hence, the success of—a logic and a context if we do not bring values into the picture. Consider the case of the resurgence of Ayurveda in Indian retail (Frayer & Khan, 2019; Munir, Ansari, & Brown, 2021). My theoretical model suggests that Ayurveda’s introduction in Indian retail became successful due to the fit of underlying values of the traditional logic with the existing cultural sentiment.

Although extant studies have shown that logics can transform on account of structural (Haveman & Rao, 1997; Kroezen & Huegens, 2019) and cultural (Lounsbury, 2001; Ocasio, Mauskopf, & Steele, 2016; Rao, Monin, & Durand, 2003) disruptions, surprisingly, they have stopped short of providing a general theoretical explanation for differences in the extent of such transformations. For example, the religious logic, in being more impervious to transformations—as “violating its prescriptions evokes particularly strong emotional reactions, as their carriers reject the relativization of their values and convert all issues into expressions of absolute moral principles” (Gümüşay et al., 2020a: 127)—might constitute hybrids where tensions with the other logic are more flagrant. On the other hand, the market logic has been showed to be

particularly amenable to transformations and combinations into successful and enduring hybrid organizational forms where tensions can be surmounted more easily.

## **CONCLUSION**

Overall, in this study, I described a values-based theoretical account of the interinstitutional system's dynamism that takes the nature and genesis of such contradictions seriously, and relates them to the coherence of institutions. Specifically, coherent institutional values constitute a universe of evaluative principles, and also moderate the drawing of principles by institutional actors. In adapting, hybridizing and reactivating values via the pathways of mutation, transposition, and resilience respectively, actors uphold the coherence of existing institutional logics by reconfiguring and reinforcing them.



## **Chapter 4 : Remaking Worth in Alberta's Oil and Gas Industry**

## INTRODUCTION

*For most of the twentieth century, growing reliance on petroleum was almost universally celebrated as good, a symbol of human progress. But no longer in the twenty-first century. With the rise of the environmental movement, the basic tenets of industrial society are being challenged; and the oil industry in all its dimensions is at the top of the list to be scrutinized, criticized, and opposed ... Oil, so central a feature of the world as we know it, is now accused of fueling environmental degradation; and the oil industry, proud of its technological prowess and its contribution to shaping the modern world, finds itself on the defensive, charged with being a threat to present and future generations (Yergin, 2011, p. xvii).*

In his Pulitzer Prize winning book, Daniel Yergin (2011) opened with a puzzle: How did the petroleum industry go from being a symbol of progress to a threat to present and future generations? My study of Alberta's oil and gas industry provides a processual explanation of the industry's transformation. Notwithstanding changes in understandings of the "good" associated with it, the oil and gas industry remains an important institution: it is seen as a legitimate and essential component of the global economy, and its significance goes beyond its physical infrastructure, encompassing economic, political, and cultural dimensions that shape the social fabric (Berger & Luckmann, 1967). I explain how the extractive institution that is Alberta's oil and gas industry underwent a transformation of values or conceptions of "the good"—that which is "worth having, doing, and being" (Kraatz, Chandler, & Flores, 2021: 478; see also Boltanski & Thévenot, 2011; Friedland, 2018; Friedland & Alford, 1991; Selznick, 1957, 1994).

Institutions are coherent patterns of social structures and activities "at multiple levels of jurisdictions" (Scott, 1995: 33) imbued with "*value* beyond the technical requirements at hand" (Selznick, 1996: 271, emphasis added). These values are maintained (Wright et al., 2017), adapted (Haveman & Rao, 1997), and creatively repurposed (Gümüşay et al., 2020a; Battilana & Dorado, 2010) by organizational and individual actions. Overall, these actions perpetuate the coherence and maintenance of institutions by anchoring them to the values or conceptions of "good" they manifest—that which is worth having, doing, and being. Because they embody

unique and incommensurable values (Friedland & Alford, 1991), institutions create contradictions. For example, the institutions of the market and religion venerate contradictory values of wealth generation and sacredness respectively (Thornton, Ocasio, & Lounsbury, 2012; Gümüşay, Smets & Morris, 2020). These values-based contradictions affect stability and change within and across organizations, and in doing so, become consequential for organizational practices (Lee & Lounsbury, 2015; Lounsbury, 2002), competencies (Durand et al, 2013; Battilana & Dorado, 2010), and beliefs (Adler, 2001; Mohr & Duquenne, 1997).

Values are inherently precarious (Wright et al., 2021: 43), and institutions are not immutable (Reinecke & Lawrence, 2023). Past studies have shown that institutions can transform with the actions of “heroic” or unassuming actors, and targeted social movements. These actions have been described in terms of values transgressions at the sub institutional level—that is, those pertaining to an organization (Townley, 2001), a practice (Adler, 2001; Mohr & Duquenne, 1997, Lounsbury, 2001; Lee & Lounsbury, 2015), a group of stakeholders (Vaccaro & Palazzo, 2015), or a social movement (Leitzinger, King, & Briscoe, 2018). I contend that this constitutes a rather particularistic or “inward” outlook on values. To attend to concerns at the interface of business and society, our understanding of institutional transformation processes needs to account for the role of values at the level of the institution.

Prior accounts show that transformations *within* particular institutional settings entail values-based contradictions. For instance, Lee and Lounsbury (2015: 861) discovered that industrial facilities in politically conservative communities resisted complying with regulations and transforming their polluting practices due to a clash between “amplified” market-oriented values and pro-environmental values (see also Townley, 2001; Marquis & Lounsbury, 2007). Similarly, “opposing” market-oriented values disrupted domains like yoga (Munir, Ansari, &

Brown, 2021: 3), publishing (Thornton 2001), and higher education (Kraatz, Ventresca, & Deng, 2010), triggering transformations within these settings (see also Haveman & Rao, 1997; Rao, Monin, & Durand, 2003; Weber, Heinze, & DeSoucey, 2008).

Values-based contradictions can also provoke changes *across* a system of institutions. More recently, the pervading role of values across institutions has been highlighted by scholarship on grand challenges. These studies have underlined the relevance and importance of deepening our understanding of institutional values. For example, studies have described how a crisis of institutional values underpins grand challenges such as the undermining of democracy (Adler et al., 2022; Amis, Brickson, Haack, & Hernandez, 2021; Lounsbury & Wang, 2020), the problems of capitalism (Adler, 2001, 2019; Lucas, Grimes, & Gehman, 2022), and societal inequalities (Toubiana & Ruebottom, 2022). Accordingly, in addressing these challenges, organizing in general needs to transition towards the incorporation of newer institutional values. For example, business organizations are beginning to account for considerations of sustainability (Amis & Greenwood, 2022; Espeland & Stevens, 1998), while hybrid organizations are using novel combinations of institutional logics that creatively bring together otherwise conflicting values (Gümüşay et al., 2020). Taken together, these insights reiterate the importance of understanding how institutional values transform—the question driving my research in this study.

I ask, *how are institutional values transformed?* To investigate into this question, I conducted an in-depth historical study of Alberta's oil and gas industry between 1938 and 2019. My research setting embodies an important field-level institution, being seen as a legitimate component of the economy with significance that goes beyond physical infrastructure, and encompasses economic, political, and cultural dimensions (Berger & Luckmann, 1967, Hoffman,

2001, Yergin, 2011). From my findings, I induce a process model of how institutional values are transformed, explaining how the energy transition problem (Hoffman, 2001) is fundamentally a problem of values transformation. In doing so, I address how institutions transition towards newer values even as they transform. My findings show that long-term institutional transformation entails not the unfolding of “given” values within particularistic contexts, but a recalibration of values at the level of the institution itself where many actors and their actions unfold.

Using process-theoretic and inductive computational methods (topic modeling), I first uncover how incumbent extractive values were transformed by values of liability management, that is, considerations of the industry’s impacts on broader stakeholders. Then, I show how four processes—dismantling, deifying, fortifying, and trivializing—remake the institution’s “worth” by recalibrating actors’ modes of existence and risk assessments. I conceptualize worth as a register, or measure, infusing “the good” in institutional values. My process model of remaking worth reveals mechanisms undergirding evaluative processes and explains how institutional values are transformed.

My findings present two contributions to institutional theory. First, my theory of remaking worth explains transformations via what I call an axiological motor of worth (Suddaby, 2010; Van de Ven & Poole, 1995). In providing an institutional values-based understanding of transformations, I further “a constitutive approach” to institutional analysis (Lounsbury & Wang, 2020: 1; see also Lounsbury et al., 2021; Lounsbury & Gehman, 2024), advancing a values-centric theory of long-term institutional transformation that goes beyond a particularistic perspective on values. Second, in the context of energy transitions, my findings show how the tension between economic growth and its material consequences (Wright & Nyberg, 2017) spurs

the genesis of new values. These insights shed light on the unfolding of new forms of rationality within institutional settings.

I conclude with suggestions for policy, arguing that a deeper understanding of how institutional values change can inform the development of more effective social and economic policies aimed at reducing disparities arising from institutional structures such as social class (Dacin et al., 2010) and stigma hierarchies (Toubiana & Ruebottom, 2022), and promoting sustainability outcomes (Ferraro, Etzion, & Gehman, 2015).

## **INSTITUTIONS AND VALUES**

Friedland and Alford (1991: 235) advanced the argument that contradictions arise within the “interinstitutional system” because rationality manifests differently across, and results in potentially contradictory ideas of goodness at the core of, different institutions. Said differently, the values of one institution differentiate it from others. Baum and Oliver (1991:193) argued that “society and the general public...evaluate [an organization’s] degree [of alignment] with prevailing institutional values and beliefs.” Thus, evaluations of the good are pivotal to processes of institutional maintenance and transformation which are consequential to organizations (Demers & Gond, 2020). At the same time, existing values serve as evaluative standards (Deleuze, 1986; Latour, 2013; Muniesa, 2012; Nietzsche, 1966; Stark, 2009) and provide criteria by which institutional norms are judged (Williams, 1967). Although this constitutive relationship between values and evaluations is a fundamental aspect of institutional life, it remains an under-researched phenomenon within contemporary institutional scholarship (Kraatz et al., 2020: 475; see also Gehman, 2021; Friedland, 2018; Mutch, 2018).

Overall, social evaluations, in demarcating the good from the bad—and concomitantly, the worthy from the unworthy—set in motion a “sociology of worth,” which is an umbrella term

to designate the study of the creation of justifiable value (Boltanski & Thévenot, 2006; Stark, 2009). These concepts have been used in institutional analysis. For instance, to understand institutions' values-laden nature, attempts have been made to investigate into their “moral microfoundations” by using Boltanski & Thévenot's (2006) framework as a toolkit (Demers & Gond, 2020; Cloutier & Langley, 2013). Premised on the pluralism of social orders, their framework addresses a key question undergirded by teleological motivations: how do actors pragmatically assess and justify their beliefs about the common good in various worlds? Actors use evaluative tools to perform “justification work” (Demers & Gond, 2020: 564) in the making or challenging of compromises that are inevitable when “worlds collide.” The arrival at a consensus, in such situations, marks agreement over which conception of good ought to prevail.

Alternative forms of generality on which to found evaluations also provide opportunities for action (Green, 2004; Harmon, 2015; Harmon et al., 2019; Stark, 2009). Stark, for instance, advocates fostering organizational forms that regularly and recursively produce perplexing situations—principled disagreement about what is worthy—within the organization itself. When multiple evaluation frameworks are accepted as legitimate, novelty can be created every time with unique combinations of evaluative principles, making multiple sources of value available for participants (Ferraro et al., 2015). The concept of worth, from this perspective, is akin to “building blocks” of institutionalized values. Said differently, worth anchors how values are assessed and institutionalized. Taking this perspective seriously, values within the interinstitutional system are continuously in flux, that is, constantly in the process of becoming.

My review of the organizational institutionalism literature revealed two aspects, which I elaborate on below. First, the maintenance and reproduction of institutional values has been a core concern in studies of how institutions cohere over time. And second, the transgression of

values theorized in studies of how institutions transform has remained at the particularistic level. We know less about how institutional values—those at the supra-organizational level—get transformed (Lounsbury et al., 2021; Glynn & D’Aunno, 2023).

### **The Coherence and Maintenance of Institutions**

A core premise of the “old institutionalism” was that motivations driven by the Aristotelian concept of *telos* or “the natural good” driving the course of moral development are pivotal to organizational action (Selznick, 1992: 149). From this perspective, values are an indelible aspect of institutionalization, while organizations are “going concerns” whose “prosaic structures and practices” make their embodied values susceptible to change (Kraatz et al., 2010: 1523). Values were considered secure or precarious to the extent that the associated organizational outcomes respectively preserved or undermined them. In line with this understanding, some studies have focused on how the maintenance of institutional values by actors leads to the institution’s preservation and coherence over time.

For example, practice-based perspectives have highlighted how “desired” institutional values are maintained via, for example, ritualistic practices (Dacin et al., 2010), or reinstated by overthrowing undesired values “belonging” to foreign institutions. Actors use values as tools to hold themselves and each other accountable for “moral imperatives” (Kraatz et al., 2020: 477) commensurate with existing institutional values. In their study of a public hospital’s emergency department as a place of inclusion, Wright and colleagues (2021: 73) highlight the institutional work done to sustain inclusion as a value in the face of scarce resources and the desire for safety, underlining the role of “subjective judgments and moral emotions of local custodians.”

Values, in fact, are core to the institutional orders of society (Thornton et al., 2012; Friedland & Alford, 1991). In maintaining the medical profession, for instance, its macro-level



values of patient welfare were “refracted” to micro levels (Wright et al., 2017) by specialists at the hospital. The “coherence” of field-level institutional logics (Lounsbury et al., 2021) has been shown to entail the adaptation of values. For example, the logic of the thrift organization in the US cohered across decades by adapting its values to the Progressive Movement. Cultural concerns existing at a societal level have also influenced practices in other industries such as culinary professions (Rao, Monin, & Durand, 2003), and recycling (Lounsbury, 2007), that adapted their institutional values to the asks of these concerns.

In complex institutional settings, actors work to maintain multiple institutional logics and their associated values by engaging in practices that either blend (Battilana & Dorado, 2010; Dalpiaz, Rindova, & Ravasi, 2016; Haveman & Rao, 2006; Tracey, Phillips, & Jarvis, 2011), compartmentalize (Kraatz & Block, 2008; Reay & Hinings, 2009; McPherson & Sauder, 2013; Pache & Santos, 2013), or dynamically engage (Smith & Besharov, 2019, Gümüşay et al., 2020) multiple logics. Incumbent institutional values and imperatives that have served as “fundamental structures for power and privilege” are used by powerful actors as tools in the perpetuation of grand challenges such as social inequalities (Adler, 1999: 1). These incumbent values also serve as normative evaluative standards on the basis of which challenges emerging from these existing structures are justified and understood. To address such challenges, organizational forms have been creatively repurposed from different institutional templates and values. Social enterprises (Smith & Besharov, 2019), microfinance institutions (Battilana & Dorado, 2010; Dorado, 2013), and Islamic banks (Gümüşay et al., 2020a) are examples of such organizational forms that bring together disparate and often conflicting values in their organizing templates.

Overall, these studies of institutional maintenance and coherence have suggested the role of evaluations, narratives, and practices in sustaining desired institutional values. But, despite their enduring nature, institutions and their values are susceptible to change.

### **The Transformation of Institutions**

Studies have found that desired values, often brought in by actors as tools to foment change, can disrupt and transform existing institutions. For instance, activists with the movement of “Addiopizzo” used values to successfully challenge the institution of “pizzo” or paying protection money to the Italian mafia (Vaccaro & Palazzo, 2015) by mobilizing actors within the society to resist paying pizzo. Yet, values of dignity, solidarity, community, and security, while “strategically used” to resist pizzo, were particular to the movement fomented by Addiopizzo and antithetical to, and radically diverged from, the values of pizzo itself. In a study of a socially responsible retail company it was found that pluralist managers used divergent values as tools to drive organizational identification (Besharov, 2014).

The social movements literature also offers insights into the mobilization of collective action to “reimagine institutions” according to renewed conceptions of the good (Leitzinger et al. 2018). In this respect, successful transformations have been found to be contingent on the alignment of broader “state-level conditions” (Lounsbury, 2005: 91) with the market. For instance, Lounsbury (2005) found that only during the salience of the technocratic logic—with a focus on profits and efficiency—did advocacy groups become more widespread, and did recycling emerge as a major, for-profit industry. In contrast, during the earlier holistic logic—which was focused on community building—groups-formation occurred in pockets of states which had more active environmental movements, and recycling assumed a non-profit, volunteer form. However, this form was largely considered a “failure” by the end of the 1970s (Lounsbury,

2005: 78). Findings in other industries, such as meat (Weber et al., 2008), also corroborate the “power” of market values in bringing about changes in practices and beliefs. A salient characteristic of these studies is the description of a particular social movement’s values, and their association with the reimagined institution under consideration.

Yet, a focused account of the institutional values-based dynamics undergirding and implicating societal level challenges continues to elude us (Lounsbury et al., 2021). As Gümüşay and colleagues (2020: 2) asserted, the neglect of institutional values and the plurality they engender “has reinforced certain institutional myths about social reality, making it difficult for us to ‘think differently’”—a critical requirement for combating grand challenges (Ferraro et al., 2015). Specifically, since a deeper investigation into values could illuminate the drivers of cognition itself, a values-centric perspective promises insights both on *how* institutions can be transformed and *why* “institutional arenas are patterned in the way that they are”—pre-dispositioned towards particular forms of rationalities or ways of understanding the world (Friedland & Alford, 1991: 243; see also Cardinale, 2019), hanging together as certain sets of “ideational categories” and not as others (Thornton et al., 2012), and cohering and enduring as configurations of symbols and practices beholden to certain values (Lounsbury et al., 2021). Dislodging deep-seated values in structured institutional arenas can be particularly difficult (Maguire, Hardy, & Lawrence, 2004). Actors within stigmatized occupations, for instance, face the consequences of “hierarchies” ascribed by social evaluations contingent on these deep-seated value rationalities (Toubiana & Ruebottom, 2022).

Overall, my review of the literature suggests that, although pivotal to social action, the values of the institution itself—the deep-seated assumptions of good associated with the institution—have not received theoretical focus in transformation studies. Accordingly, in this

study, I investigate into the following critical, but ignored, question: How are institutional values transformed?

## **METHODS**

### **Empirical Context**

The setting for my research was the oil and gas industry in Alberta, Canada. Visuals of oil and gas wells dotting the landscape of rural Alberta are an enduring representation of “the oil province” of Canada. Situated only 26 kilometers southwest of the capital city of Edmonton, the town of Devon bears testament to the legend of the discovery of oil there at Leduc No.1 on Feb 13, 1947 (Hunter, 1997; McIntyre, 2007). Devon is fondly looked back upon as “the little town that could” (McIntyre, 2007), a model town in Canada that was built around oil and gas, and that represented values Albertans have come to associate with the oil industry. One comment about the Imperial Oil Company, which made the momentous Leduc No.1 discovery, captures some of these institutional values:

“Imperial Oil management people were often told that something couldn’t be done, but they did it. They started from scratch and made things work.” (McIntyre, 2007, p. 9)

In the more than seven decades following the discovery of oil at Leduc No.1, the values associated with the institution that is Alberta’s oil industry, implied in the above comment, seem to have undergone a change. The erstwhile focus on “getting things done” has shifted towards an increasing awareness of sustainability issues plaguing the conventional oil and gas wells sector, and towards an urgent need to solve such issues.

### ***The “Oilman” Years***

Petroleum exploration in Alberta dates to at least the 1870s. Over the years, there have been numerous important discoveries. In 1883, seeking water for its transcontinental railway

locomotives, the Canadian Pacific Railroad drilled what became Alberta's first natural gas well (Gulless, 2001). A second well struck gas the following year, and in 1902 oil was struck for the first time in Alberta. For much of this early period of exploration, the industry was driven by a pioneer's mindset of unregulated exploitation and discovery. Alberta was not even incorporated as a province until 1905. Shortly thereafter, in 1914, Alberta's first great oilfield was discovered in Turner Valley with the legendary "Dingman No. 1" oil well (Hussain, 2014).

The oil and gas industry has been intimately associated with Alberta's economy and politics. There are documented accounts of the political contestations between the provincial and federal governments over the control of the province's natural resources, including oil and gas reserves, ever since the province was incorporated. Control of Alberta's natural resources was retained at the federal level until 1930, when the responsibility was transferred to the province through legislation. After acquiring the right to control its oil and gas reserves from the federal government, it was only in 1932 that the Province of Alberta attempted to regulate gas production by reducing wasteful flaring in Turner Valley. The founding of the Turner Valley Gas Conservation Board was a historical moment in the oil exploration era of Alberta, because it represented the first attempt at regulating the production of gas by the provincial government through the creation of an organization. The Board ran into opposition nearly from the beginning, and this culminated into a ruling of the Supreme Court of Canada that although the Turner Valley Conservation Act was within the constitutional power of the provincial government, the conservation measures could not be enforced on an oil and gas company ( *Spooner Oils v The Turner Valley Gas Conservation Board*, 1933) because land and mineral agreements were made with the federal government prior to 1930.

Overall, during this period, some regulatory mandates, as evidenced from the Spooner Oils case, were contentious because the segregation of jurisdiction between the federal and provincial governments was not fully settled yet. Overall, regulation amounted to little more than keeping track of who was drilling where. In recounting the “75 years of Alberta Energy Regulation”, Jaremko (2013) discussed the livelier economic landscape that Albertans “yearned to enter”, emblematic of a “hotbed of high spirits” during the pioneer exploration stages of the early 1900s. The “oil man” rationality is palpable during these stages. The following quote attributed to John Frey from the U.S Department of the Interior (Jaremko, 2013: 10), captures the essence of the oil man rationality:

The oil industry is not a ‘corner grocery’ at all. It is a highly speculative venture. We are dealing with human emotions when we are dealing with the oil man mind. The man or company that is not willing to venture much with the possibility of ultimate profit has not an oil man type of mind. The oil man must believe in himself. He must believe in his judgement. He must be willing to take a chance – a long chance. He must not be discouraged by failures. If he drills eighteen wells in a row that are dry holes, he still has his mind on the nineteenth one that is going to turn out to be a producer. It is that highly speculative nature that puts the oil industry in a category very different from any other type of industrial activity.

### ***Early Regulatory Regime***

In 1938, the year I start the study, the first formalized provincial oil and gas regulatory body was instated in the form of the Petroleum and Natural Gas Conservation Board, which later came to be known as the Oil and Gas Conservation Board. Regulation during these early years was geared towards “conservation,” which at this time had nothing to do with environmental conservation, but rather referred to the conservation of oil and gas resources by insuring every last drop was extracted.

After the end of the second world war in 1945, a modern boom in petroleum exploration and development across Western Canada was launched with the discovery of oil in Leduc in 1947.

However, this momentous event did not come until several years of persisting against the odds. Narratives of oil discovery at Leduc No.1 valorize the oil man rationality and foregrounds its importance in turning around the economic fortunes of Alberta during these early times.

Considering the background history, the odds of finding oil were pretty slim. Twenty-seven years of drilling – 133 dry holes – no oil since Norman Wells! The results of the “last chance” well were critical, not only for the Imperial Oil Company, but for employees who were getting worried about their jobs. Some companies, including Shell Oil, had already pulled out of Alberta. Farm boys on the drilling crews were speculating how long it would be before they would be back milking cows and walking behind a plow ... But they did find oil ... The discovery opened the door to potential treasure beyond anyone’s wildest imagination. The legacy of the Leduc oilfield lives on. (Hunter, 1997)

As excess supply was generated with the petroleum boom brought about by the Leduc discovery, regulations were geared towards controlling production. In 1971, the conservation board’s jurisdiction was expanded to include pipelines, coal, and electricity, and it came to be known as the Energy Resources Conservation Board. Three more restructurings ensued. First, the board merged with the Public Utilities Board to create the Energy Utilities Board in 1995. Next, in 2008, it was reorganized into two bodies—one, to regulate oil and gas, and the other to regulate utilities. Finally, the current provincial regulator, the Alberta Energy Regulator (AER), was created in 2013 following the passage of the Responsible Energy Development Act.

### ***Recent Regulatory Focus***

As of 2019, the year I end the study, at least 600,000 oil and gas wells had been drilled in Alberta, making it one of the most prolific jurisdictions in all of North America. Intriguingly, it was not until the 1970s that the oil and gas industry was required to consider its broader impacts to the natural environment, especially those related to the legacies of its activities. By the 1990s, inactive and orphaned oil and gas well sites became more visible across Alberta, and for the first time some stakeholders began to see these as “liabilities” for the industry to manage. In 2001, the

Orphan Well Association was founded. Since then, the number of orphaned wells—so called because the financially responsible licensees of such wells are no longer solvent—increased from 100 to 3,700 between 2012 and 2018 (Dachis, Shaffer, & Thivierge, 2017).

Remediating orphaned wells, which are considered to be “unfunded” liabilities, is estimated to cost between \$58 billion (Bakx, 2019) and \$260 billion (De Souza et al., 2018), and has been described as “the biggest single issue that has ever faced [Alberta],” “a mess,” and “a ticking time bomb” (Graveland, 2019; Harrison & Cooper, 2019). Separately, from 1999 to 2018, the number of inactive oil wells in Alberta—wells that no longer produce oil and gas—more than doubled to a total of approximately 90,000 wells (D’Aliesio, Lewis, & Wang, 2018). These “zombie” wells are at risk of becoming orphaned—because they no longer generate income, yet the liability for their closure remains unfunded—a matter of grave concern for policy. The scale of these issues is only expected to grow, posing a clear and present grand challenge as it relates to making a just and equitable energy transition.

The narrative around management of liabilities posed by inactive and orphaned wells reflects values of accountability towards broader stakeholders, including the natural environment. However, this has hardly been a historical hallmark for the industry, which has in fact been characterized by a relentless pursuit of efficiencies in extraction and production, and celebrated as a symbol of human progress and technological expertise. These changes have some resonance with observations in the field of accounting by Carruthers and Espeland:

...some dramatic claims have been made about the relationship between accounting and both rationality and capitalism by such prominent social theorists as Weber, Sombart, and Schumpeter. The common thread in these claims has been the idea that the emergence and development of accounting, as a practical technique used in business, is closely linked to the emergence of capitalism and the development of rationality. These are intriguing claims about such a seemingly innocuous activity. (Carruthers & Espeland, 1991: 32)



Carruthers and Espeland's study discusses the fascinating argument that double entry bookkeeping is a form of accounting that did not simply react to economic growth, but instead helped to "construct" it. It explained how double entry bookkeeping became a symbol of rationality whose pervasive institutionalization led to its legitimation despite the fact that it was decoupled from "utilitarian concerns" (p.53). During recent times the popular media discourse in Alberta has brought to light the importance of "proper" abandonment of oil and gas wells and the accounting of unfunded liabilities. Organizational practices directed towards this rationalization of liability management are clearly decoupled from the primary concern of profitmaking characterizing the industry thus far. Against the backdrop of this increasing rationalization of environmental liability management, one can discern a "modernization" in the oil and gas sector that valorizes the ideals of environmental protection and preservation (Drori et al., 2003). Canada's commitment in the international arena to "clean growth" and climate change mitigation (Government of Canada, 2016), via the Pan-Canadian framework on clean growth and climate change is an example of subscription to the liberal world order's scientized values, a manifestation of the world society. Per the framework (Government of Canada, 2016: 9), the industry sector in Canada contributed to 37% of total emissions in 2014, and might be addressed by the following measures:

The approach to the industrial sector will include three main areas of action: (1) regulations to reduce methane and hydrofluorocarbon (HFC) emissions; (2) improving industrial energy efficiency; and (3) investing in new technologies to reduce emissions. Together, these actions will help set the path for long-term clean growth and the transition to a low-carbon economy. (p.20)

Insofar as accounting for liability management practices of oil and gas companies is institutionalized as the modern rationalized way of ensuring that objectives such as emissions reduction are met, it can be expected that measures such as the ones exemplified above will

inevitably affect the future trajectory of management of conventional oil and gas wells in Alberta. The values underlying energy transition policies, which constitute and drive the rationality behind the industry's liability management practices, are culturally and historically constructed. The industry, thus, illustrated an extreme case of transformed values, and offered a rich setting to explore my research question.

## **Research Design**

I selected Alberta because of its long history of oil and gas development and the sheer scale of its impacts. Seeking a contextual understanding and a comprehensive view of the topic, I decided to use a qualitative research design (Creswell, 2007; Langley, 1999). I compiled a rich dataset covering the years from 1938 to 2019, consisting primarily of archival documents, and field notes from interviews and observations that I continued throughout the study. Adopting an inductive historical approach, I analyzed the dynamics between Alberta's oil and gas industry and related stakeholder organizations, iterating between theory and emerging findings. Many characteristics of the study's research design helped me remain close to the spirit of an inductive case study. First, the choice of the oil and gas industry as an example of an extreme case was driven by theory-based sampling (Creswell, 2007). The industry represented stark differences in values between the beginning and the end of the study period, and provided an ideal setting to investigate my research question.

## Data Sources

I selected data sources using a variety of sampling methods. I used purposive sampling to select the regulatory documents, histories, and interview subjects, relying on information that elucidated the industry's practices and beliefs. As I analyzed these documents, my understanding of the historical and cultural situatedness of the research topic continuously evolved, allowing me to fine-tune the guiding questions for the interviews along the way. For the face-to-face interviews and observations, I adopted a snowball and opportunistic sampling technique, allowing me to build on the emerging themes from the analysis, as well as discover more themes as the research progressed. Table 4-1 details the multiple sources of data I used.

**Table 4-1:** *Description of Data Sources*

Category	Coverage	Approx. pages of data
Regulatory documents	1938 – 2019	4707
<ul style="list-style-type: none"> <li>- Directives</li> <li>- Legislations (Turner Valley Gas Conservation Act, Oil and Gas Conservation Act, Surface Rights Act)</li> </ul>		
Secondary publications	Early 1900s - 2019	2000+
<ul style="list-style-type: none"> <li>- Histories and other books</li> <li>- Annual reports of Surface Rights Board, Alberta Energy Regulator, Orphan Wells Association, Property Rights Advocate Office, Farmers' Advocate Office</li> <li>- Selected online sources (e.g. OnePetro)</li> <li>- Selected articles from trade journals (<i>Oilweek</i>, <i>Oil in Canada</i>)</li> </ul>		
Interviews	1938-2019	2989
<ul style="list-style-type: none"> <li>- Transcripts obtained from Petroleum and Natural Gas Oral History Project</li> <li>- Transcripts of face-to-face interviews</li> </ul>		

**Regulatory documents:** At the core of my analysis is a comprehensive, longitudinal set of records issued by different regulatory organizations from 1938 to 2019. I also consulted their three key pieces of enabling legislation – the Turner Valley Gas Conservation Act of 1932, the Oil and Gas Conservation Act enacted in 1938, and the Surface Rights Act of 1971. I consulted these three laws specifically because they repeatedly came up in my study of the regulations, as

well as in the interview data. From such documents regulating oil and gas production, I could learn both the state of the practice of regulations as well as the kind of claims about prevalent beliefs that undergirded them (Carruthers & Espeland, 1991).

**Secondary publications:** I read two histories pertaining to oil and gas regulation in Alberta – the first documenting the features and noteworthy individuals and organizations marking seventy-five years of Alberta energy regulation from 1938 through 2013 (Jaremko, 2013), and the second detailing the distinctly conservationist flair of Alberta’s petroleum industry during the years from the 1930s through the 1950s (Breen, 1993). Additionally, I consulted secondary publications that helped me develop a broad sense of multiple perspectives about Alberta’s oil and gas industry. One book I consulted, for instance, narrated the experiences of oil executives who built the fortunes of the industry (Hunter, 1997). Another told the story of rural Albertans who were upset with the industry (Nikiforuk, 2014). Further, I read annual reports of various stakeholder organizations such as the Surface Rights Board of Alberta, Alberta Energy Regulator, and the Orphan Well Association. In addition, I gathered technical literature on the industry between 1938 and 2019 from the OnePetro online database, as well as selected public reports and articles from trade journals spanning the years 1950-1990.

**Interviews:** My data also included 112 interviews. Of these, I obtained the transcripts of 79 conducted during the 1980s with past executives and employees of the oil and gas industry. These interviews were originally conducted as part of an oral history project sponsored by a provincial historical society. From all the transcripts originally obtained, I selected and focused on those in which the respondent narrated a personal historical account of their experience within Alberta’s conventional oil and gas industry, and wherein their reflections covered the period from 1938 through the late 1980s. I did this because I was interested in complementing the

available archival data with retrospective reflections of actors within the industry. To supplement these archival interviews, I conducted 33 original interviews during 2018 and 2019 with individuals representing different industry and non-industry stakeholder organizations, covering reflections about the period from the 1990s through 2019. Overall, the interviews explored experiences and perspectives on Alberta's oil and gas industry's historical trajectory.

**Observations:** Finally, I participated in two workshops. In recognizing these observation opportunities, I followed the leads from interviews and took advantage of unexpected developments. For example, the first workshop was organized by a contemporary research group whose founders I had interviewed. This 120-minute long workshop provided a rich observational setting, because researchers, public servants, and businesspeople from across Western Canada gathered to address the urgent issue of legacy wells and propose solutions. The second observation opportunity came from an over 3-hour long workshop organized by a North-American industry association with the goal of sharing safe decommissioning experiences with inactive wells. My observations revealed eight major stakeholder groups of Alberta's oil and gas industry, which I lay out in Table 4-2. These groupings helped me sample further sources of data (such as subsequent archival documents and interviews) in the emerging research design.

**Table 4-2: List of Stakeholder Groups (Actors)**

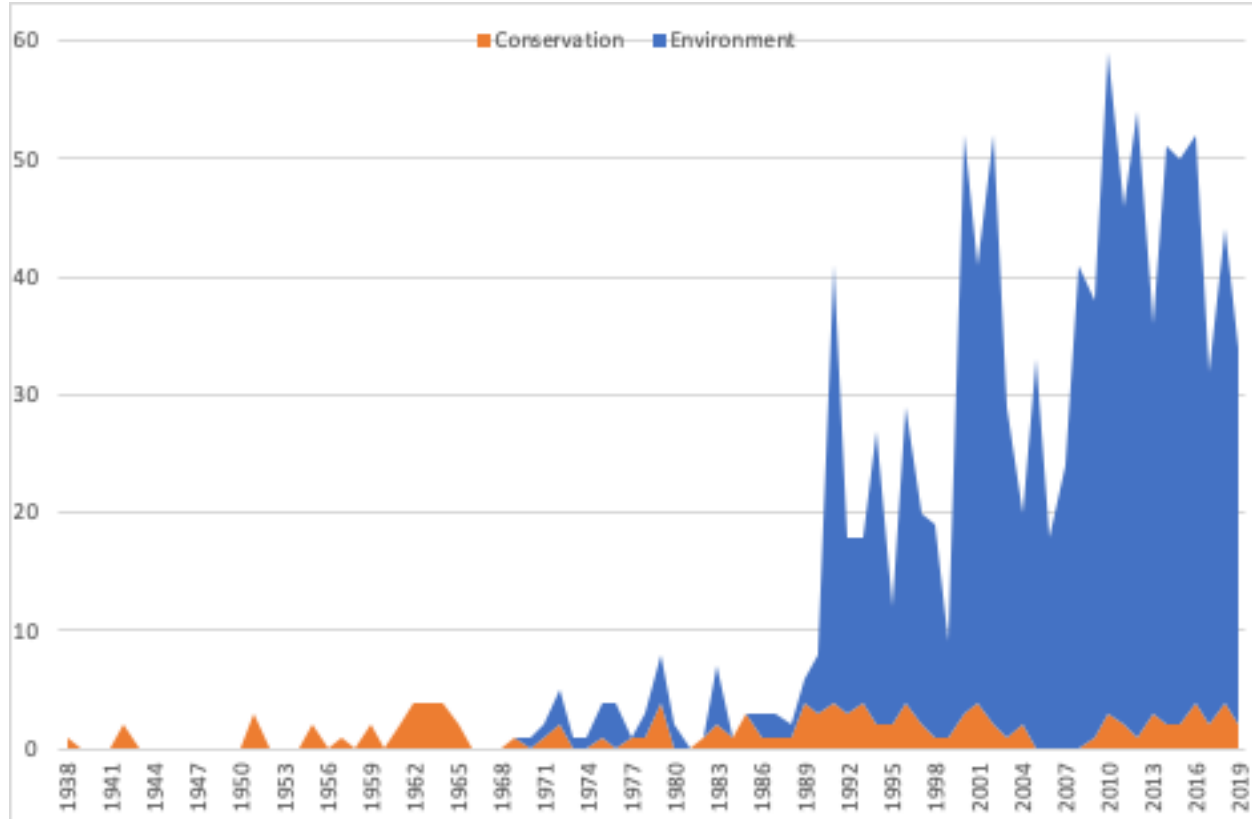
Stakeholder group	Description (Examples)
Surface Rights Owner	For e.g., the landowner who is legally the owner of the property on which the oil well is situated
Oil Company	For e.g., the company who is responsible for operating the oil well
Regulatory Organization	For e.g., the Alberta Energy Regulator, that is responsible for safe and efficient development of oil resources in the province
Mediatory Organization	For e.g., an authorized organization that mediated in the concerns of parties such as landowners and oil companies during conflict, and provided recommendations
Multi-stakeholder Collaborative Organization	For e.g., the Orphan Well Association, that was started as a collaboration between the government, the oil industry, and the provincial regulator to manage environmental risks of oil and gas properties that do not have a legally or financially responsible party that can be held accountable
Activist and Environmentalist	For e.g., an individual or organization whose sole concern is the protection of the natural environment from the effects of the oil industry's activities
Academic Expert – Individual	For e.g., a professor whose research work is concerned with issues related to the oil industry in Alberta and implications from these on society
Independent Research Organization	For e.g., an organization that is has a collective objective of conducting research on issues related to the oil industry of Alberta and implications from these on society

## **Data Analysis**

The data analysis unfolded in a series of iterative steps following established procedures for analyzing qualitative process data (Creswell, 2007). I combined regulatory documents and archival interviews (Raffaelli, 2019) with in-person interviews and observations. In analyzing the data, I juxtaposed two “strategies for sensemaking” described by Langley (1999): a narrative strategy, and a grounded theory strategy. First, because portions of the data (e.g., retrospective interviews and early-period archival regulatory data) had ambiguous temporal boundaries and variable temporal embeddedness, a narrative strategy focused on meanings and the elaboration of mechanisms was appropriate. Second, a grounded theory strategy was a particularly good fit because I was analyzing a single case study in detail. I used a mix of these two strategies as I conducted the analysis across the following analytical stages:

**Stage 1: Detecting patterns – Identifying an institutional transformation.** First, I reviewed more than 5000 pages of archival data including regulatory documents, reports, legislations, and secondary documents sourced from organizations connected to Alberta's oil and gas industry. To complement and triangulate this ongoing archival data analysis, at this point, I conducted 8 pilot interviews with different stakeholder groups and attended two workshops. I consulted the two oil and gas regulation related histories which enhanced my growing understanding of the subject. Based on this analysis, I identified an institutional transformation, a visual of which is presented in Figure 4-1. Here, the counts of conservation-themed and environment-themed articles respectively represent the salience of extractive and liability management concerns with respect to the institution of oil and gas in Alberta. Overall, from the preliminary analysis conducted in this stage, I developed a hunch that liability management values had perturbed earlier extractive values.

**Figure 4-1:** *The Institutional Transformation: Prevalence of Conservation vs Environment themed articles*



*This chart is prepared from the counts of technical literature between 1938 and 2019 published on the OnePetro online database (<https://onepetro.org/>), a resource on the oil and gas exploration and production industry*

## **Stage 2: Discovering Values – Assessing the incorporation of liability management.**

Then, I became interested in assessing the details of liability management’s appearance within regulations., viz., when did it appear and what values specifically were embodied? To this end, since “values are made visible through analysis of formal statements” (Haveman, 2022: 14), I analyzed 150 regulatory directives from 1938 through 2019. My analysis at this stage started with two regulatory directives which were prominently highlighted in the media—“Directive 013” about oil and gas well suspensions, and “Directive 020” about well abandonments. With these directives, I started by first coding the mandated or recommended activities for oil and gas operators that would deem them as having “done” liability management. Next, I coded the rationale or principle provided in the regulation for mandating or recommending a particular



activity. A close reading revealed that the principles used to rationalize activities were backed up by three pieces of legislation—the Surface Rights Act, Oil and Gas Conservation Act, and Turner Valley Gas Conservation Act. I proceeded to jointly read these with the directives to add more rigour to the second level codes.

At the third level, I interpreted what were the specific values—representing abstract conceptions of the good—undergirding the provided principle or rationale for regulation. For example, Directive 020, which is concerned specifically with well abandonment, lays out the activities that oil and gas operators need to perform in order to have “abandoned” or closed their wells according to regulations. One such activity is to confirm the location of cement plugs in order to seal the wellbore—the hole at the opening of a drilled oil well—for safety. The rationale behind this activity, rooted in the Oil and Gas Conservation Act, is the management of environmental impacts from oil and gas operations, and the maintenance of legitimate and rule-based operations. Accordingly, I coded the values undergirding these rationales to be conservation, efficiency, risk avoidance, and accountability.

This three-level coding process was pivotal to my emerging research design. I became interested in knowing what other values were at play within oil and gas activity in Alberta. I expanded my dataset to include directives from the very beginning of documented regulation in Alberta, that is from 1938. I obtained a total of 55 electronic versions of directives spanning the years 1978 to 2019, sourced from the official website of the provincial regulator. Additionally, I accessed 95 physical copies of directives, referred to by different names such as reports, orders, memoranda, and allowables, covering the earlier period from 1938 to 1977. These physical copies were obtained from the provincial archives situated in Edmonton, Alberta.

I first hand coded all 150 regulatory directives following the process described earlier. New values, such as risk avoidance and consideration of the needs of other stakeholders, began to emerge around the late 1970s. These new values, I found, pertained to managing liabilities from oil and gas extraction of the early years. I labelled these values under the category of liability management—one of two aggregated third level codes. The other, earlier, category was that of extractivism. In the regulatory directives between 1970 and 1983, I found the presence of values pertaining to both aggregated categories. Table 4-3 shows my coding structure revealing the incorporation of liability management values within regulations in Alberta across the period of study.

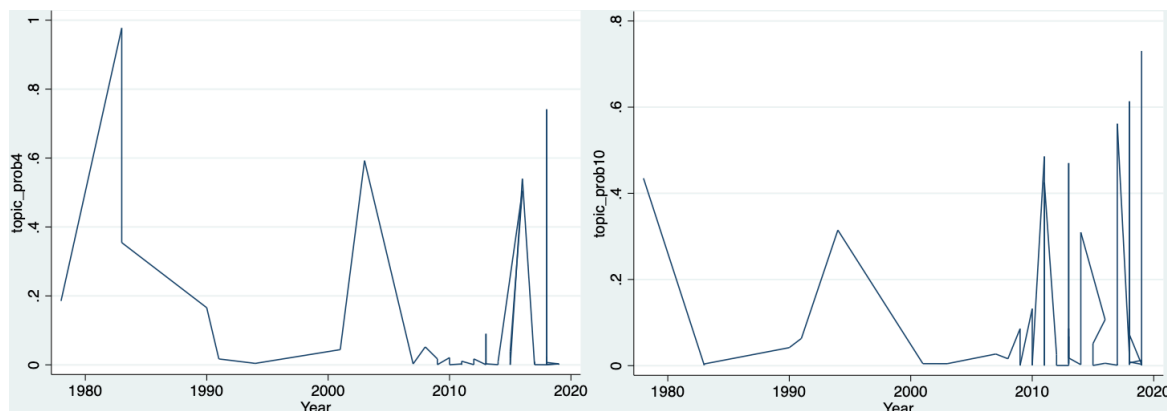
**Table 4-3: *The Incorporation of Liability Management Values within Regulations***

<b>Year</b>	<b>Regulation rationale (principle)</b>	<b>Exemplar activity</b>	<b>Undergirding Values: Conceptions of good</b>	<b>Aggregated category</b>
<b>1938</b>	Minimize wastage	Dept of Land & Mines sending memos to regulator, and responses being made, on an adhoc basis	Conservation, efficiency	Extractivism
<b>1944</b>	Don't produce over/under	Document cumulative production for each producing well	Conservation, efficiency	Extractivism
<b>1955</b>	Need more legislation favoring drilling	Showing capacity of production and consumption	Relentless pursuit of profits, a pioneering spirit of discovery	Extractivism
<b>1961</b>	Minimize wastage	Tabulation of pressures used in calculation of oil well allowables	Conservation, efficiency	Extractivism
<b>1978</b>	Improved recording and testing will improve efficiency	Calculating subsurface pressures	Conservation, efficiency, risk avoidance	Extractivism, Liability Management
<b>1979</b>	Improved recording and testing will improve efficiency	Gas well testing	Conservation, efficiency, risk avoidance	Extractivism, Liability Management
<b>1983</b>	Improved application processing will improve efficiency	The industry voluntarily shares contract volumes, and does not involve the Board to save on timelines	Accountability for action, Independence	Extractivism, Liability Management
<b>2001</b>	Improved storage practices will safeguard against	Compliant storage practices of materials in upstream petroleum	Accountability for action,	Liability Management

	environmental contamination		Consideration of other stakeholders	
<b>2007</b>	More rigor in documentation will ensure efficiency, accuracy, and safeguard against environmental hazards	Regular servicing of oil and gas wells per guidelines	Efficiency, risk avoidance, consideration of other stakeholders	Liability Management
<b>2008</b>	Wells that no longer produce must be retired safely to safeguard against environmental contamination	Abandonment of inactive and defunct wells per guidelines	Accountability for action, Efficiency, risk avoidance, consideration of other stakeholders	Liability Management
<b>2009</b>	If polluter cannot pay, a contingency plan needs to be in place	The financing of inactive-well abandonment through orphan fund levy	Accountability for action, Efficiency, risk avoidance, consideration of other stakeholders	Liability Management
<b>2012</b>	Accurate costs of suspending, abandoning, or reclaiming a site must be available for optimal risk mitigation	Licensees with LLR value of less than 1 conduct voluntary site-specific liability assessments	Accountability for action, Efficiency, risk avoidance, consideration of other stakeholders	Liability Management
<b>2014</b>	Improved operational practices will safeguard against environmental contamination	Pool depletion practices considering Reservoir engg and geological science factors	Conservation, efficiency, risk avoidance, consideration of other stakeholders	Liability Management
<b>2017</b>	Acquiring and holding a licence or approval for energy development in Alberta is a privilege, not a right.	Applying for and obtaining a BA code through Petrinex as a prerequisite for AER license applications	Accountability for action, Efficiency, risk avoidance	Liability Management
<b>2018</b>	Evaluation of potential impact to surroundings is important	Licensee completes initial suspension and reporting requirements for all inactive wells within 12 months from the Directive 013 inactive status date	Accountability for action, Efficiency, risk avoidance, consideration of other stakeholders	Liability Management
<b>2018</b>	Evaluation of potential impact to surroundings is important	Conducting drilling rig inspection	Conservation, efficiency, risk avoidance, consideration of other stakeholders	Liability Management

I became curious to understand how the “encroachment” of liability management values was transforming the composition of values in oil and gas activity since the 1970s. To do so, I topic modeled the 55 directives from 1978 to 2019. The topic modeling algorithm<sup>5</sup> clustered the activities from the directives (first level codes in the hand coding process), and provided as outputs topics from which I interpreted the principles or rationales (second level codes in the hand coding process) for those activities. The topic models helped me discern the shift in values even as the institutional transformation was occurring—visualized in Figures 4-2 and 4-3—which I became interested in studying further.

**Figure 4-2:** *Topic Probabilities’ Trend of Induced Themes Showing Dominance of Profitmaking and Efficiency Conservation*

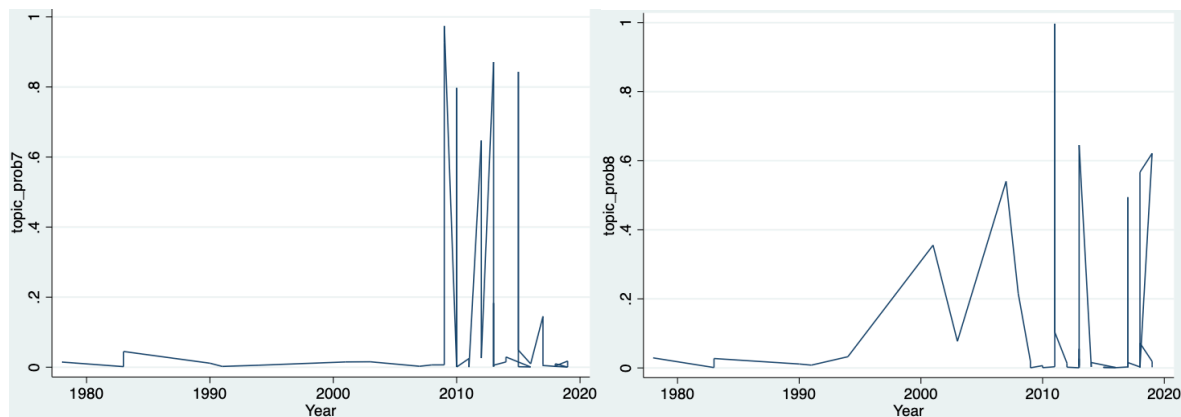


Theme: Make application for energy production faster and more efficient

Theme: Reduce wastefulness; related to economics of production

<sup>5</sup> I used the Stata module “ldagibbs” to generate topics. I include a description of the process used to generate the topics in the appendix

**Figure 4-3:** *Topic Probabilities' Trend of Induced Themes Showing Dominance of Accountability and Liability Management*



Theme: Make available technical guidelines for well abandonment, reclamation, and liability management

Theme: Ensure public safety & environmental protection from effects of upstream petroleum

**Stage 3: Theorizing Worth – Discovering the role of events and actors in performing values.** Next, I wanted to identify and investigate into the performance of this institutional transformation, that is, I became interested in assessing the factors that might have triggered the incorporation of newer values. I approached this investigation via two interrelated steps, for both of which I relied on continuing secondary research and analyzed my interview data. First, I constructed a timeline of global and local (Alberta-wide) events thematic to the progression of the industry over the years. Next, triangulating this emerging list with respondents' recollections of events consequential to their work experiences, I conducted a narrative analysis of episodes, drawing connections between emerging patterns. The narrative themes from the interviews helped me interpret what respondents were “evaluatively drawn” to (Joas, 2000: 182). Table 4-4 shows the list of events, and Table 4-5 is an excerpt from this illustrative narrative analysis.

**Table 4-4: List of Events**

<b>Year</b>	<b>Event</b>
1883	The first natural gas discovery in Alberta by Canadian Pacific Railways
1902	The first oil well is drilled in Alberta
1905	Alberta enters confederation
1914	Turner Valley oilfield boom begins with Dingman No.1
1920	Alberta Geological Survey is created and reports favorably on Alberta's mineral potential
1929	The Great Depression begins
1930	The transfer of natural resources from federal jurisdiction to Alberta is formalized
1932	The Turner Valley Gas Conservation Board is instituted to reduce wasteful flaring
1938	Petroleum and Natural Gas Conservation Board is established (PNGCB)
1945	The Second World War ends, and conservationist sentiment is tempered
1947	Leduc No.1 discovery sparks an oil boom
1948	Blowout of the Atlantic No.3 oil well belonging to Atlantic Oil Company. It signaled Alberta's status as global leader in oil reserves
1949	Dinning Commission recommends that no out-of-province gas sales be made
1952	Right of Entry Arbitration Board is created
1953	Discovery of Pembina field and first use of fracking in Alberta
1957	The PNGCB is renamed Oil and Gas Conservation Board (OGCB)
1959	National Energy Board is created
1960	OPEC is created, as world supply glut drives markets down globally
1962	First commercial oil sands development in Alberta
1970	The Western Canadian Spill Services Ltd is formed – a nonprofit network of cleanup equipment for the industry
1971	The OGCB is renamed the Energy Resources Conservation Board (ERCB)
1973	The OPEC oil crisis and oil embargo bring in economic recession
1973	The Farmers' Advocate Office is formed as a resource for Alberta farmers and ranchers
1979	Alberta Surface Rights Board is founded
1980	National Energy Program (NEP) is enacted, which is considered unfavorable for Alberta
1982	ERCB conducts enquiry into sour gas blowout at Lodgepole
1985	Western Accord is signed, eliminating price controls and federal taxes instituted by NEP and encouraging foreign investment
1986	Global oil price crash
1991	ERCB starts carbon dioxide forecasting requirement, as environmental concerns regarding greenhouse gas emissions escalate
1991	The Supreme Court, in the Northern Badger (oil company) case, granted priority to the costs of remedying environmental conditions over claims of secured creditors.
1994	ERCB institutes an industry levy to clean up orphan wells
1995	The Public Utilities Board and ERCB are merged into the Alberta Energy Utilities Board (EUB)
1998	EUB launches a dispute resolution program between companies and landowners
1999	Freehold Owners Association was organized
2001	Orphan Well Association was formed
2008	Financial crisis causes wild fluctuation of oil prices and affects investments
2012	Property Rights Advocate Office was created
2013	The ERCB was dissolved and the Alberta Energy Regulator (AER) was formed
2019	The Supreme Court delivers verdict on Redwater (oil company) case, granting priority to the costs of remedying environmental conditions over claims of secured creditors.

**Table 4-5: Illustrative Narrative Analysis**

Episodes from the case	Emergent patterns	Theoretical process
<p><i>Oil discoveries</i> led to Turner Valley (1919) and Leduc (1947) boomtowns, spurring support for more extractivism; betting on uncertainties (unabashed entrepreneurialism)</p> <p><i>Canadian representation</i> began to be advocated by petroleum associations, especially after a conservative government came into power in 1957. In 1975 the Alberta Energy Company was formed, signaling a commitment to domestic control and ownership of the energy sector</p> <p><i>Incentivising exploration</i> entailed varying fiscal regimes through Alberta's regulatory history. Specifically, after the 1970s, when oil discoveries became less frequent, tax benefits were introduced to incentivize exploration. In 2002, the Alberta Royalty Tax Credit encouraged new oil and gas wells by reducing royalty rates</p> <p><i>Other episodes include the practice of land portfolio management that started during the 1930s, and the highly centralized organization of oil and gas corporations since the 1970s to facilitate fast decisions</i></p>	<p>Venerating pioneerism as a mode of existence</p> <p>Acknowledging risks towards efficient extraction</p> <p>An emphasis on values of being efficient and wealthy, and proud advocates of the oil and gas industry</p>	<p>Fortifying Extractive Worth</p>
<p><i>The Turner Valley Conservation Act</i> in 1932 set limits on production, after a transfer of oil and gas ownership from federal to provincial regulatory control. As a regulatory ethos took root, unabashed entrepreneurialism was checked (e.g. charges began to be levied against companies being anti-competitive). The Surface Rights Board Act in 1932 brought landowner rights to the fore</p> <p><i>The strengthening of landowner rights</i> happened with the establishment of the Surface Rights Board in 1969</p> <p><i>A spotlight on liability management</i> was thrown by the problem of rampant bankruptcies, and abandoning of infrastructure on farmers' lands, in 1986 with the oil price crash. Economic downturns further down the line, for e.g. in 2009-2010, renewed this focus on liabilities</p> <p><i>Other episodes include the Atlantic No. 3 well blowout of 1948, and the Santa Barbara oil spill incident of 1969</i></p>	<p>Interrogating pioneerism as the only worthy mode of existence</p> <p>Acknowledging risks from extraction towards other stakeholders</p> <p>An emphasis on values of accountability</p>	<p>Dismantling Extractive Worth</p>
<p><i>Regulatory mandates</i> formalized liability management. For example, The National Energy Board was established in 1959. This federal body implemented regulations and standards to promote environmental protection and safety in energy operations, constituting new organizing principles for regulating the oil and gas industry</p> <p><i>Certain legal decisions</i> formalized the understanding that companies were first accountable for cleaning up their own mess, and second to their creditors. For example, The Supreme Court decision of Northern Badger in 1991 (and later the Redwater decision of 2019) built the worth of liability management.</p> <p><i>Other episodes include the professionalization of geologists in 1960, and the inclusion of diverse stakeholder perspectives in regulatory decisions since 2013</i></p>	<p>Venerating liability management as a worthy mode of existence</p> <p>Formalizing risks from extraction</p> <p>An emphasis on values of accountability and risk management</p>	<p>Deifying Liability Management's Worth</p>

*Sour gas was flared* during the 1960s by using “stacks” as a means of disposal. This practice reduced safety concerns to broader stakeholders from exposure to the corrosive and toxic sour gas. Some oil executives called these stacks “monuments of stupidity”, since they also caused wastage of marketable gas. In this way, the liability management efforts in burning stacks were trivialized.

*There were structural concerns* about how the regulator enforced liability management practices. The establishment of the Orphan Well Association in 2001 caused a setback to the “polluter pays” understanding, to the extent that this levy was a “fallback option” for cleanup. In 2013, the provincial regulator became 100% industry funded (it was earlier partly government funded). This raised concerns that liability management will likely “remain a hogwash” since regulatory control lies with the industry.

*Other episodes include various efforts from academics and activists to calculate the actual cost of liabilities in Alberta’s oil and gas since 2010, emphasizing that liability management efforts lacked credible baseline estimates*

Denigrating liability  
management as a  
mode of existence  
Ceremonially complying  
with risk management  
practices  
Highlighting values of  
superficiality, or  
empty promises

Trivializing  
Liability  
Management’s  
Worth



**Stage 4: Theorizing Values’ Transformation – Constructing a theoretical model.** In a final analytical step, I brought all my findings from previous stages together into a process model of remaking worth explaining how Alberta’s oil and gas industry’s incumbent extractive institutional values were transformed. Next, I describe the case study in detail, and then present the model, explaining how it was induced from the findings.

### **THE INCORPORATION OF LIABILITY MANAGEMENT**

Turner Valley spawned all the drilling people, tool pushers, petroleum engineers, well completion people, geologists etc. ... and the final big boom if you will, was spawned by Leduc ... these were the guys that in effect, from a working standpoint, really built the Alberta oil industry. They were all spawned in Turner Valley. [AInt#57]<sup>6</sup>

The above appraisal narrates how Alberta’s economic fortunes were turned by a massive oil discovery in 1914 at Turner Valley. Heroes of exceptional success stories, Albertan “oilmen” from those times—individuals working in the oil and gas industry—were heralded as the “pioneers of the Alberta oil and gas business who kept the bits turning and the dreams burning” (Lunan, 2007: 5; see also Breen, 1993). A “unique spirit”—associated with being relentless, enterprising, and pioneering—was one of the characterizations of worth, or conceptions of good:

There is a unique spirit here in Alberta, a combination of Texas’ oil patch ‘bigger than life’ belief that anything can be achieved, and prairie settler ingenuity – a great legacy, and one that needs to be understood and expanded upon by future generations of Albertans (Cook, 2007: 35).

This understanding prevailed well into the middle of the twentieth century in Alberta. Other oil discoveries followed, of which most notable was one in Leduc in 1947.

My study of the industry through the years following these discoveries in Alberta, though, revealed a turn in the narrative. By the 1990s, the oil and gas industry had come to be viewed as a threat to public health safety and the natural environment. The conceptions of good

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<sup>6</sup> I use the following notations to indicate the source of the quotes: [AInt#] refers to a quote from an archival interview, [Int#] to one from an in-person interview, and [Obs#] to one from an observation (workshop)

associated with Alberta's oil and gas industry seemed to have, as it were, turned on their head. In 2019, for example, multiple stakeholder organizations and individuals participated in a workshop. I found that self-serving behavior and unabashed profit-seeking practices—which were venerated during the earlier times—were now considered unworthy. In fact, the stakes had risen—in terms of the number of organizations and individuals, as well as the growing concerns around non-producing oil and gas wells. There was now consensus that “narrow self-interests” needed to be discarded, and liabilities managed.

It is worth keeping in mind that we must look beyond our own narrow self-interests when we discuss how we are trying to extract ourselves from this current mess around unfunded oil field liabilities. [Obs#1]

The focus during early years of regulation was on minimizing wastages and maximizing production—a conservation focus that I discerned from the results of my topic modeling and analysis of regulatory documents. Thereafter, there is a marked increase in topics showing a focus on environmental conservation, and a simultaneous decrease in topics with an exclusive focus on efficiencies of extraction (as shown by the trends of topic-probabilities in Figures 4-1 and 4-2). Overall, ideas about what constituted worth underwent a transformation between the two time periods delineated by extractive and liability management values respectively.

### **Dimensions of Worth**

The episodes from the case revealed that throughout the study, an emphasis on specific values manifested in prevalent practices and beliefs, and their evaluation entailed different dimensions of worth. For example, when an oil executive made the following observation about being “rewarded” for taking chances in the industry, they expressed a belief that “seeking as much as you can” (in this case, by acquiring land) can bring economic prosperity:

The one thing that I've learned from this oil business has been, to have an excellent land portfolio, it must be picked up with a modicum of intelligence, but really and truly, so long

as you're in an oil area you should get yourself large tracts, as much land as you possibly can in consonance with your financing and your cash flow. Because eventually it's going to turn up trumps. It's a remarkable fact. [AInt#14]

Values, thus, are the rationales provided for practices. In the above case, the practice of acquiring as much land as possible was founded in past experiences of oilmen. I also found espoused values to be based on future deliberations. For instance, many interview participants expressed the belief that stakeholder collaboration was a value that was crucial to the industry's well cleanup efforts. This led to practices such as the involvement of landowners, environmental groups, and academic practitioners in liability management efforts. An organized coalition of different stakeholders, for example, was instituted in Alberta in 2018 with a mission of "pushing for accurate and transparent government-level data pertaining to Alberta's oil and gas liabilities, and solutions to Alberta's growing liabilities crisis." [Obs#1]

Overall, the industry's practices and beliefs coalesced around narratives of goodness or "oughtness" (Boltanski & Thévenot, 2006). I identified two recurring patterns—dimensions of worth—undergirding these narratives, which I briefly summarize below.

**Modes of existence.** The first pattern I recognized pertained to actors' "modes of existence"—a term that I borrow from Deleuze (1986: 1, 37, 38) who uses it to describe "principles for the values on the basis of which evaluations are made." For instance, he uses the term to comment on the distinction between Nietzsche's philosophy and Pascal's wager—which is a philosophical argument for belief in God. The wager does not put into question the existence of God, but expounds two modes of existence of humans—those who believe in God's existence and those who don't. In contrast to the wager, Nietzsche asserts the emergence of a different mode of existence, exemplified by the "Overman," which transcends the previously mentioned modes and represents a shift altogether from otherworldly religious (Christian) values.

I use modes of existence to describe desired ways of being that prevailed during discussions and debates at different points in my study. For example, in the context of land portfolio acquisition, the relevant modes of existence were being indomitable, persisting in the face of adversity, and exhibiting a never-say-die attitude. The pioneering oilmen of Alberta had “insatiable” ambition, acquiring “as much land as [one] possibly can land” [AInt#14]. This pioneering spirit represented a unique style of life where a risk-taking attitude was venerated and sought after.

My respondents’ acknowledgement of subject or actor positions helped decipher relevant modes of existence. Earlier, for instance, the actor landscape was sparse, consisting of the pioneer oilman in a central position. But, in the transformed institutional landscape, new subject positions regularly emerged. Apart from this changed actor-density, the roles of the subjects in relation to one another also changed. For example, earlier, the oilman assumed a major role while the regulator only supported the management of production to reduce wastages. Later on, however, the regulator’s role transformed to function in other capacities as well. Here, I interpreted new modes of existence—such as, that of being detail-oriented and scientific. A specific example where I observed this mode was in the naming of geographical formations during geological explorations—a practice which became widely prevalent after the 1960s.

**Risk Assessments.** The second pattern I observed pertained to assessments and formulations of risk. In the case of the land portfolio management practice, risks were assessed in terms of missed opportunities. People sought to understand, for instance, what stood to be gained or lost from too much or too little exploitation of “acquired tracts of land.” Risks were also assessed in terms of potential wastefulness of existing oil well operation technologies.

Overall, underlying these risk assessments was a concern with profitability—whether enough was being done to extract as much oil and gas as possible, or not.

As subject positions proliferated with time, the nature of risk assessments changed. Instead of risks *towards* extraction, the focus shifted on risks *from* extraction. For instance, the importance of maintaining equity was highlighted, by including extended stakeholders of the industry in evaluations of liability management. These instances of risk assessments, from which I discerned the construction of worth of the practices and beliefs in question, constituted the second dimension of worth. Next, I describe how evaluations of the aforementioned two dimensions constituted the “remaking” of worth in Alberta’s oil and gas industry.

### REMAKING WORTH IN ALBERTA’S OIL AND GAS INDUSTRY

The narrative analysis (Table 4-5) revealed patterns across three different time panels within the data. In Table 4-6 I summarize the prevalence of these processes within the findings at different periods of time—what I refer to as “time panels” within the data.

**Table 4-6:** *Theoretical Processes Across Different Times*

	Time Panel 1	Time Panel 2	Time Panel 3
<b><i>Theoretical Processes</i></b>	<b>1938-1958 – A Strong Extractive Institution</b>	<b>1959-2001 – The Genesis of LM Values</b>	<b>2001-2019 – Institutionalizing LM</b>
<i>Fortifying Extractive Worth</i>	Strongly present	Present	Weakly present
<i>Dismantling Extractive Worth</i>	Weakly present	Present	Strongly Present
<i>Deifying Liability Management’s Worth</i>	Absent	Present	Strongly present
<i>Trivializing Liability Management’s Worth</i>	Absent	Weakly present	Present

## **A Strong Extractive Institution (1938 – 1945)**

A strong extractive institution prevailed within the oil and gas industry during the time panel constituted by the earliest years of my study—starting from the institution of the first provincial regulator, and ending the year before the National Energy Board was instituted. I identified strong themes of fortifying the extractive institution’s worth throughout respondents’ recollections of these years, as well as through the archival data pertaining to these years. Additionally, I also found weak themes of dismantling extractive worth starting to appear towards the end of this time period.

**(Strongly) Fortifying Extractive Worth.** One of the earliest themes of fortification pertained to the rationalization of extractive practices by observing their urgency for economic progress and justifying the means necessary to thereby preserve them. The consolidation of the industry—banding together of smaller, more local oil and gas companies—in order to economize production was one such practice being justified. At this time, skilled oil and gas workers were migrating to Alberta from the US and Europe, and there was a more “international” representation in the governance of Alberta’s oil matters. I found that these trends elicited comparisons between “a Canadian view” and “an international view” in matters of governance and regulation:

...there were a whole group of us that felt there should be representation from the independents in governance [of the industry] quite separate and distinct from the international oil companies. The reason being that they spoke with an international voice. And with the kind of expertise they had they would present a position to the authorities which reflected their views of how Canada should be run. And their views were very often quite at odds with the views of a Canadian. [AInt#6]

In making the case for more Canadian representation, actors evoked a nationalistic, self-governed mode of existence. This mode fortified the worth of extractivism because it augured a

sense of pride in utilizing natural resources for Alberta's economic progress. Such community stakes fortified the existing understanding that extractive values were desirable and good.

During this time, the rewards that came with "taking chances" were highlighted, valorizing the oilman's appetite for risk. The role of wider institutions in sustaining this appetite was noted. For example, it was observed that portfolios of land were "easier to manage" in North America than in other parts of the world. In Alberta, specifically, the political climate was deemed "perfect" for the oil business. Land titles were easier to deal with, making Alberta an attractive business destination. Said in another way, a "free and fun" enterprise associated with more "open" institutional infrastructure was a valorized mode of existence:

The oil patch is a free and easy fun enterprise...Anybody that has missed the oil business has missed a life in my opinion. It's hard to think of any other business that's as fascinating and exciting. [AInt#23.]

With the discovery at Leduc in 1947, Alberta was firmly placed on the global map as one of the leading potential sources of conventional oil and gas. This set off a "golden" era of oil and gas exploration. For a considerable period of time in the beginning of this era, the valorized oilman, or, the oil and gas executive, assumed a major position in the actor landscape. The second world war generated global artificial demand for oil and gas. Thus, when the war ended, the risks from demand constraints became more apparent for the industry. To manage this risk, the extractive practice of acquiring land portfolios became popular. Further fortifying the justification for extractive practices were rising oil discovery rates through the 1950s. A direct consequence of increasing reserves was the question of whether or not Alberta should export its surplus gas. Probing into this, the Dinning Commission in 1949 recommended retaining fifty years' worth of supply before exporting. Decisions such as these constituted a protectionist sentiment—the idea that resources be used first for Alberta's progress.

At this time, the centrality of the industry to Alberta's economy became more pronounced. Valorizing this centrality, respondents stressed the importance of upholding it by, for example, discarding Canada's "tendency to be too socialistic", and, compared to the US, "fear of making millionaires." In so much as they contributed towards a narrative valorising the centrality of the industry to the economy, these comparisons served to fortify the worth of extractivism.

These factors led to a belief that oil and gas regulation should not be solely under the government's control. This fortified the industry's claim to a stake in regulations-setting. Improvements in extractive efficiencies through technological breakthroughs, such as the changeover from cable tools to rotary tools between 1936 to 1942 in Turner Valley, further strengthened these convictions. The discovery of more and more oil reserves in the succeeding period, would further strengthen these themes of fortifying extractive worth.

**(Weakly) Dismantling Extractive Worth.** I found a handful of themes weakly dismantling the incumbent extractive institution. First, while a high-risk appetite was considered core to the industry's success, on the flipside, "pioneer activity" was also beginning to be problematized for the limitations associated with its inherently "speculative" nature. As one respondent observed, during this time, "words like 'egomaniac' were used to describe pioneers and wildcatters." Instances of criminal conspiracy charges against companies betting on uncertainties were also not uncommon. The limited marketability of produced gas (a by-product of the oil production process), and the wastages entailed, were issues being raised: "The efforts to recover this gas were just not sustainable, so they ended up wasting it" [AInt#58].

Respondents pointed out that not many safety measures related to the handling of oil and gas equipment were in place during this era of exploration. Although blowout preventers—a



piece of equipment installed as a safety measure during drilling operations—were mandated by the conservation board, safety as a feature of regulations would only appear in the later years. Such observations critiquing a lack of appropriate safety measures also constituted a weak dismantling effect on the worth of extractivism during this period.

### **The Genesis of Liability Management Values (1959 – 2001)**

The second time panel that I considered starts in 1959 with the institution of the National Energy Board, and continues until the inception of the Orphan Well Association in 2001. During this panel, themes of liability management started appearing. Overall, throughout respondents' recollections of these years, as well as through the archival data pertaining to these years, I found that the dismantling of extractive worth co-occurred with themes of deifying liability management's worth. Additionally, the fortifying of extractive worth co-occurred with themes of trivializing liability management's worth.

**Dismantling Extractive Worth and Deifying Liability Management's Worth.** The dismantling of the pioneer mode of existence, that I started observing in the previous time panel, was further hastened by increasing professionalization within the industry. Specialized professions, such as geologists and earth scientists, were emerging and becoming more mainstream. As these changes were happening, acquiring field experiences, for example, which was a commonplace practice during the early years, were becoming unnecessary because it made more sense to professionalize people instead:

...Subsequently we decided that we had better things to do with our people than leave them out in the field and technology was developing to the point where a field interpretation was no longer viable. People were not willing to go out there and endure the hardships of field work, new people out of school. They didn't have to, there was a demand for them so we had some difficulty in keeping professional people in the field and moreover the technology developed so that computers were necessary and that eliminated the ability to make an interpretation in the field so today there are very few technical people out in the field. [AInt#59]

As professionalization found its way into the industry, the importance of accounting for the natural environment in decisions was brought into relief. This problematized the worth of extractive practices, as the need for stricter production norms became more pronounced. There was a focus on regulating how much oil and gas companies were allowed to produce. In 1964, as a result, a system was instituted by the OGCB to “prorate” the production of oil on the basis of generated market demand in Alberta. Down the line, another system called “maximum permissible rate” was developed on a “more technical rather than demand-generated basis” to regulate excessive rates of withdrawal that risked generation of underground waste. These ways of regulating production showed that the conception of “drill as much as you can”—a keystone principle of extractivism—was now perceived as highly risky, and not valued as before. As entire supply chains were rocked by these new principles of proration, it was difficult for companies to remain “purely” extractivist.

Extractive practices began to be increasingly questioned. In the early years, technical equipment for exploration and extraction were used well beyond stipulated pressure ratings—a practice which came to be now shunned. “Gas lifts”—installations used to increase oil field production substantially were abandoned as the associated risks were understood and highlighted. Such instances of discarding outdated extractive practices exemplified the dismantling of extractive worth. Some of the respondents believed that regulatory decisions were manifestations of the industry’s immense “power,” which they resented. This sense of resentment also contributed to building the worth of liability management issues.

Exports were severely regulated between the 1950s and the 1980s, and this fomented debates and led to a policy agreement known as the Western Accord in 1985 which effectively marked the onset of energy deregulation (Hollingsworth & Snider, 1985; Priddle, 1999). In 1987,

a landmark decision was made by the National Energy Board to mandate a national “market-based procedure” which effectively transferred the responsibility of export policing from Alberta’s regulatory body to the markets themselves. In so far as the “market” was now more empowered than a separate regulatory body to police the activities of the oil and gas industry, it created space for different stakeholders to have more say and exert more control. This move, in thus empowering different stakeholders who were earlier “outside” of the regulator, contributed to the deification of liability management’s worth.

**Fortifying Extractive Worth and (weakly) Trivializing Liability Management’s Worth.** During this period, I found that although the regulator’s “power” was resented by some, its role was also valorized for its effectiveness in not only matters of conservation, but also of equitable distribution to “other” subject positions such as lease-owners and farmers. Valorizing arguments were bringing to the fore the emerging role of the regulator in ensuring equity among stakeholders. In fact, the data was beginning to indicate how new subject positions were being created as the industry’s operations progressed over the years in Alberta. For example, the skills acquired from roughnecking were valued and used in other industries as well. The oil industry produced people and professions, and in doing so, had a tremendous impact on the community:

A lot of the roughnecks went working for the drill stem testing companies and the cement companies ... because they’d had experience around rigs. So the community started to grow and there was a great need for roughnecks. A lot of them were just off farms you know and a lot of them had come up from Turner Valley. Then there were these U.S. people who also had great impact overall. [AInt#61]

As reserves increased, the urgency of making technological breakthroughs in downstream activities increased as well. Technological advancements during the late 1950s through the 1970s greatly helped mitigate risks to efficiencies in oil and gas production. For example, the change from cable tools to rotary tools for drilling, and the introduction of new measurement tools vastly

improved industry performance and further fortified the worth of extractivism. Such advancements also facilitated the introduction of innovative practices such as turnkey drilling, where one could drill wells on a turnkey basis with their own personnel, thus bypassing the risk of being slowed down by bureaucratic steps associated with a more formalized arrangement.

Augmenting these fortifying themes were themes of trivializing an emerging concern towards other stakeholders such as the natural environment, that is, belittling the newly appearing idea of liability management. For instance, one respondent, recalling their days in the industry during this period, argued that operations such as oil blowouts might come with a cost to the environment, but those costs can be justified from their economic benefits:

The restoration of land is much easier than a lot of people think it is. Environmental problems are not as great in most places. They are greater when certain other geographical factors are also present.

In thus dismissing perceptions of risks arising from sour gas concerns, oil blowout operations, and environmental spillages, the worth of liability management was being trivialized.

Some risk mitigation steps taken during this period were also trivialized. For instance, during the late 1960s, the industry took notice of a sour gas problem—the production of toxic hydrogen sulphide gas as a by-product of natural gas—and installed huge physical stacks to burn it, thereby converting it into sulfur dioxide, a non-toxic gas which could be safely dispersed into the atmosphere. Oil executives called these stacks "monuments of stupidity [AInt#58]", insinuating that risk mitigation from sour gas was not required because it was an added cost and the hazards were "not really real." I also found a similar argument associated with environmental violations such as oil spillages—that although these may be the consequences of the oil industry's activities, the natural environment "takes care" of the oil dissipated into the atmosphere without significantly harming public health:

We get very emotional about a little oil on the beach. I can remember growing up in Vancouver and we'd go down to the beach and there'd be oil on the beach and we'd say, oh, there's been a tanker in and he's pumped out his tanks. That was in the 1930's and we wouldn't accept that kind of situation today. But going back to that time again, the next day you would go back down to the beach and the oil would be gone off the beach. And I think if you can think of the tremendous amount of oil that has been dissipated into the atmosphere from deposits through natural causes, and we concern ourselves about a tanker which may break up on the rocks and we get all emotional about it for a month or two but then that disappears too. So, I think the oil is of marine origin and if it's in the sea it is marine degradable too by natural courses. [AInt#59]

### **Institutionalizing Liability Management (2001 – 2019)**

The final time panel emerging from my findings starts in 2001 with the institution of the Orphan Well Association. As with the preceding panel, the worth of liability management values during this time panel was constructed as a constitutive effect of deifying—which was getting stronger with time—and trivializing, which seemed to be getting weaker. The dismantling of extractive worth co-occurred with deifying liability management's worth, and fortifying extractive worth co-occurred with trivializing liability management's worth.

#### **(Strongly) Dismantling Extractivism and (Strongly) Deifying Liability Management.**

In discussions of managing industry-created liabilities, extractive worth was being questioned on the basis of new modes of existence made possible by emerging subject positions. For instance, several respondents talked about how the lease terms in Alberta evolved through the years. Although the company owning the subsurface lease procures the mineral rights, they must be mindful of infringing on the farmer's rights to work the surface of the land. By thus introducing and justifying landowner rights as being opposed to the lease-owner's "right of way" to access the subsurface minerals, the worth of extractive practices is dismantled:

If a pipeline were to go across a cropped field, the farmer was compensated fairly in the estimate of the company for any damage that was created in crossing that field. There's a right of way taken and damage is paid for that portion of ground. [AInt#33]

I found that people invoking past work experiences, or experiences of having being impacted by the industry's operations, when arguing for liability management-focused practices. In doing so, they expressed a pride in being an Albertan and assuming responsibility—a mode of existence that deified the worth of managing liabilities by accounting for them appropriately.

The reason that I have spent literally thousands of hours working on these issues, studying them, researching them, documenting them is because of the importance to the province. I am a stakeholder to this problem simply as an Albertan ... the public is the environmental creditor, to the industry, the environmental legacy of this development, and the taxpayers are the ultimate backstop to that, and because of my understanding of how inadequate the regulatory programs are, I've come to realize the scale and urgency of this problem and the threat it poses to the public finances of the province. And so, I guess, as an alert citizen and a taxpayer, this concerns me more than anything else happening today. [Int#4]

Respondents also considered how liability management practices, if systematized at the institutional level, could have unintended and additional advantages for the economy in areas outside of the direct purview of regulation. For example, cleaning up and reclaiming sites was also a way of bolstering dwindling employment opportunities in the industry through reclamation efforts. The argument, stated in another way, is that the industry's current problems have arisen because of "past greed and disregard for wider stakeholders", which the cautious and resourceful liability manager—a new mode of existence—could help remedy:

We had 40,000, unemployed riggers in Alberta after the downturn in oil prices. And it just seemed like a common-sense approach or back to work project that if we started cleaning up wells, we could put a lot of those people back to work. [Int#10]

The effects of wider global phenomena, such as the decline in oil prices, also triggered evaluations deifying the worth of liability management. For example, it was pointed out that as companies scampered to manage operational costs arising from decreasing oil prices, clean-up obligations took a backseat. To attend to liability considerations in the face of financial

pressures, the regulator introduced innovative programs. For example, the regulator initiated a program in 2019 with an aim to optimize costs by helping companies club sites together.

**(Weakly) Fortifying Extractivism and Trivializing Liability Management.** The lack of clarity about accountability created an opportunity for companies to “pass on” liabilities to smaller companies that eventually became bankrupt, in turn passing on the liabilities to the orphan fund levy. In a sense, the establishment of the orphan fund levy enabled companies to pass on liabilities further down the road. One respondent [Int#31] called liability management “a sham”—a detraction from proactive liability management. Formalized court cases highlighted an unclear understanding of who was accountable for liabilities:

[The] Redwater case shot into fame because the issue of "who is accountable when wells have been transferred" was brought to the fore. The answer to this was never quite clear. [Int#12]

Some respondents complained that despite precedents from court cases (such as the Redwater case of 2019) and legislations—which were critical local concerns for Albertans—energy regulation in the province remained “reactive”, and there was “little knowledge of technical matters related to liability management” [Int#5] among stakeholders. It was argued that landowners, for example, “do not understand the liabilities on their lands well” and also do not have the resources or the inclination to “fight” oil companies. In highlighting this “passive cog in the system” mode of existence—liability management is trivialized:

Landowners are at the mercy of corporations. They cannot contribute to liability management because they have no control over the condition of their own land ... if you really ask me, AER is running fraud programs under the name of directives which has increased the well liability problem [Int#31].

I found that certain clauses in the regulation directives triggered the aforementioned impression that liability management under the regulator’s policies was merely “ceremonial.” For example, under Directive 013, regulations technically allowed companies to keep wells in a

suspended state forever—a clause that has remained unchanged since the past decade. An underlying challenge inherent to the concept of liability management was that it was “a subjective concern” [Int#21] fomenting a “lack of alignment” between different stakeholders. The total costs of unfunded oil and gas well sites were frequently contested and questioned, thereby trivializing the worth of liability management.

Another issue surfaced was that of developing technology and how it lured the industry into unsustainable business models. For example, hydraulic fracturing was described as a technology that “leads to proven reserves and hence debt collateral and more money into an unsustainable model” [Int#22]. The argument made was that companies could use technologies to “game the system,” greenwashing and continuing to pursue extractive practices. One respondent, from their consulting experience, recounted small companies’ practices:

Such companies do not care much about the eventualities of performing accounting tricks to fudge their liability numbers so as to ceremonially conform to regulator's liability requirements. [Int#5]

Some respondents critiqued the “very premise” of liability management by questioning its intent and practical feasibility. Liability management was, as one respondent stated, “an added hurdle to the already harsh economic challenges” [Int#29] faced by the industry.

With the institution of the AER in 2013 as a fully funded “corporation” constituted by the industry, further meanings were ascribed to the regulator’s role. As there were now an increased number of “other stakeholders” (other subject positions) when compared with the earlier years, the regulator was now seen to be assuming the role of an intermediary or interceptor between these other stakeholders and the industry. I found the prevalence of beliefs such as “the industry’s influence and power stopped reforms considered very early from ever happening” [Int#4], and “the regulator is just a puppet in the hands of the industry” [Int#9], which indicated



that during the later period of the study, the regulator was sometimes viewed as being “on the same side” as the industry, and as adversarial to the other stakeholders.

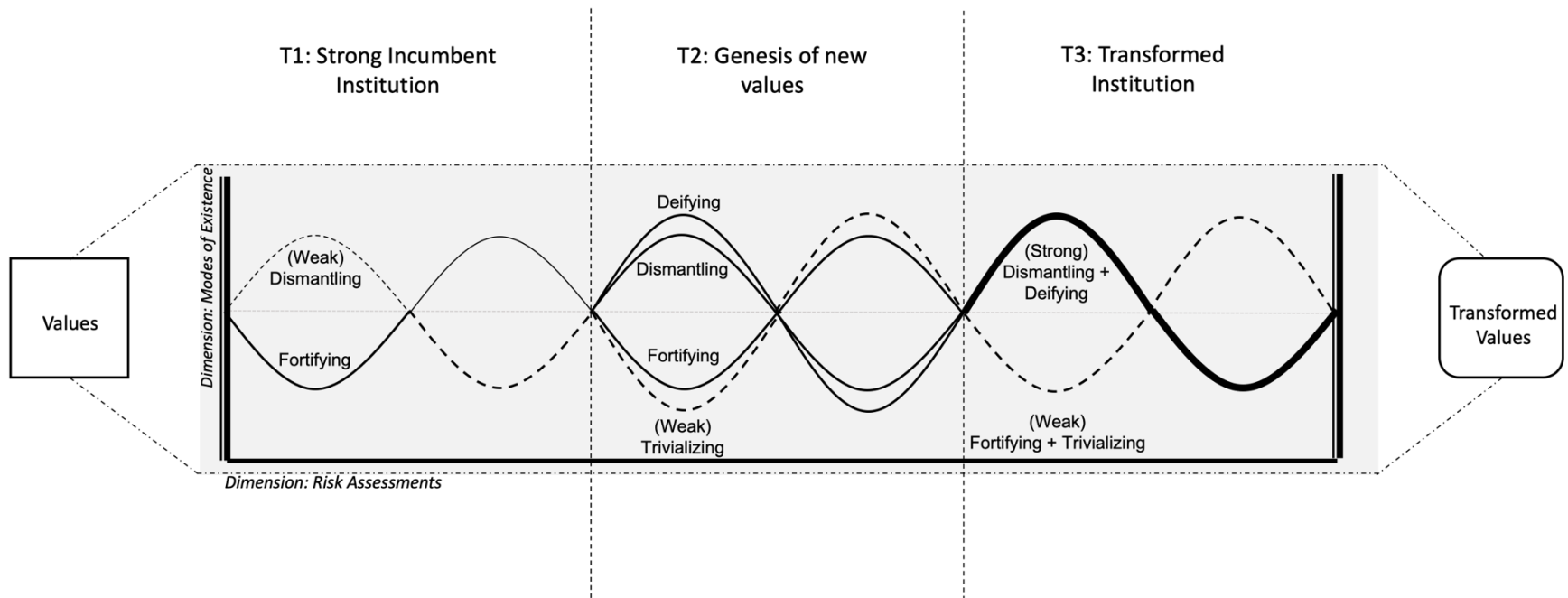
These other stakeholders, including the farmers, landowners, activists and so forth (listed and described in Table 4-2) advocated most vociferously for stricter enforcement of liability management. In doing so, they expressed the necessity of the industry and the regulator “being accountable” for their actions in order to work towards reducing issues arising from oil well liabilities. Some also expressed the importance of “working together” and sharing the responsibility in the spirit of “the community” of societal stakeholders to the problem. This democratic ideal was also found in some new practices related to the province’s energy regulation—for instance, in the regulator’s new initiative with a “multi-stakeholder advisory committee” [Int#21] to disseminate information about new policy decisions. Groups, such as surface rights organizations and landowners, were now no longer passive recipients of the “fruits of the toil of the pioneering oilmen”, but were very much societal stakeholders actively engaged in and constitutive of the oil and gas sector’s collective progress.

At the same time, though, I also found interrogations into these new stakeholder positions trivializing the worth of liability management. By putting landowners into the spotlight in order to highlight how liability management practices in the past had only disadvantaged them, it was argued that liability management, by design, is unable to address concerns of these subject positions. Further, such practices, it was also argued, might actually be counterproductive for landowners and municipalities, by impeding on receipts of rents, advantages from fringe benefits such as improved infrastructure in rural lands due to oil activities, tax benefits etc.

## **Theorizing Worth**

My findings revealed that institutional transformation entailed a transformation of values. I theorize these constitutive processes as comprising a “motor” of institutions which “drives” or directs the transformation of extant conceptions of the good. I label this phenomenon as “remaking worth,” retaining consonance with the existing body of work on the sociology of worth, as well as differentiating it from values themselves. Namely, as theorized from my findings, worth is an abstract concept referring to the very origin or source of values. To theorize about institutional transformation via remaking worth, I now revisit four key processes, viz. dismantling and fortifying the extant institution’s worth, and deifying and trivializing new worth being instituted. Figure 4-4 presents my theoretical model.

**Figure 4-4:** *A Theoretical Model of Values Transformation via an Axiological Motor*



**Dismantling and Fortifying the Extractive Institution's Worth.** The first two processes relate the simultaneous and oppositional weakening—“dismantling”—and strengthening—“fortifying”—of the incumbent extractive institution's worth. These processes “worked on” the two dimensions of worth undergirding the values of this strong extractive institution (these values are the “input” to the process model on Figure 4-4). The first, modes of existence, is depicted on the left of Figure 4-4, along the vertical axis. During the first, and earliest, time panel in the data (I visualize three separate time panels trifurcated by dashed vertical lines in Figure 4-4), the desired modes of existence were represented in the ways of being of the oilman, and the early conservation board. The second dimension, risk assessments, is depicted along the horizontal axis.

When the incumbent institution was strong, the fortifying process was more intense than the dismantling process, and thus had a stronger effect on the worth of the institution. In Alberta, new resource discoveries during this phase fostered cultural concerns that influenced a favorable collective evaluation of extractive practices. For example, when the Leduc discovery was made, the new town of Devon was constructed to accommodate the prosperity, and associated population growth, from the oil industry. In other words, it immediately became a “boomtown,” bringing about big investments by oil and gas companies, and also a sense of pride and achievement that percolated across the province. Taken together, such concerns, and the favorable evaluations they influenced, constituted an overall stronger fortifying than dismantling

effect on the worth of the institution. I denote the opposing dynamic between dismantling and fortifying by using waves in opposite “phases” in the process model<sup>7</sup>.

**Deifying and Trivializing the Liability Management Institution’s Worth.** During the second time panel, formalized mandates, such as court decisions, and other regulatory decrees, were increasing. There was also an increased salience of ecological and geopolitical events. Effectively, the evaluations of the incumbent extractive institution became less favorable than they were earlier. For instance, a mandate by the Supreme Court of Canada (Thompson, 1992) in 1991 formalized the understanding that oil and gas companies were first accountable for cleaning up their own mess, and second to their creditors. This created a favorable evaluation for the newly forming values of liability management within the industry. Collectively, evaluations reinforced further cultural concerns within the landscape. Liability management became a political issue. For instance, the idea of the orphan fund levy—which was seeded in 1993—was also questioned, since the existence of an industry-funded levy to take care of clean-up obligations seemed to undercut the “polluter pays” principle.

Thus, the constitutive effects of cultural concerns and worth evaluation resulted in the appearance of “deifying” and “trivializing” processes, respectively strengthening and weakening the worth of the new liability management values. I depict these processes with a second set of waves overlaying the existing dismantling and fortifying processes. Overall, while dismantling reduces the worth of the incumbent institution, deifying builds new worth. Therefore, deification and dismantling are processes that “work together” towards the end of transforming the incumbent institution. On the other hand, fortifying the incumbent institution’s worth, and

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<sup>7</sup> The “wave” visualization of the processes is inspired from theories of physics related to the phenomenon of formation of ocean waves in two dimensions. I explain some of the analogies drawn among the processes and these theories throughout the remainder of this section.

trivializing new worth, are processes that resist and subvert potential transformation, thus working together in this sense. Overall, I observed that deifying and dismantling processes were stronger than fortifying and trivializing, and that they collectively constitute the genesis of new values. The second panel in Figure 4-4 depicts these dynamics.

As these processes transpire, there is an increasing number of new subject positions that are created around the newly forming ideas of liability management. The values of liability management also create a renewed conception of risks within the landscape—viz., rather than towards extractive practices, assessed risks now pertained to those emerging from extractive practices. For example, the creation of the Orphan Well Association in 2001 embodied efforts to mitigate these renewed conceptions of risk, while also influencing the appearance of other actors such as landowners, environmental activists, mediatory organizations etc.

As we move into the third and final time panel, dismantling and deification intensify, while the fortifying process becomes weaker. Thereby, the superimposed dismantling-deifying waves are “more intense” (I visualize this in Figure 4-4 with the thicker wave in the third panel)—and thus, more impactful on the becoming of resultant institutional values—than the opposing superimposed fortifying-trivializing waves (indicated by a dashed wave in the third panel). This culminates in a transformation of the dimensions of worth—modes of existence and risk assessments—and hence, in a transformation of the institution itself, via the four processes.

**An Axiological Motor of Values.** I depict the kernel of the process model, consisting of the four wave-like processes that remake worth, as an “axiological motor of values.” By this I mean that this motor drives institutional values by remaking worth. Specifically, this motor transforms the institutional values that are “input” to the process (to the left of the figure). The model visualizes dismantling, fortifying, deifying, and trivializing as waves in action within the

“medium” of institutional values. These four processes—in being produced and sustained, as it were, within this medium—remake the worth that undergirds and concretizes these institutional values. Institutional values, thus, may be transformed when the two dimensions constituting worth—viz., modes of existence and risk assessments—are remade via these waves. In this sense, the concept of worth as it relates to values is comparable to that of water molecules as they relate to the composition of water. According to the theory of wave propagation in water, the motion of water particles or molecules has both vertical and horizontal components. So also, the four wave-like processes I described transpire along the two theorized dimensions.

These findings around the centrality of worth in the extractive institution’s transformation reveal a novel axiological motor—a key theoretical contribution from this study. I find that the processes comprising the axiological motor were brought into effect by the constitutive and combined effects of cultural concerns and evaluative mechanisms. My theorization highlights the long, arduous process of remaking worth constituted by these effects.

## **DISCUSSION**

I began this research by surfacing the importance of understanding how values-based contradictions can provoke or prevent institutional transformations. Accordingly, I asked the following question: How are institutional values transformed? My analysis showed that the values transformation was constitutive of a larger institutional transformation in Alberta’s oil and gas industry across a span of eight decades. This transformation transpired via an axiological motor consisting of two sets of opposing processes: fortifying and dismantling the incumbent extractive institution’s worth; and deifying and trivializing the new liability management institution’s worth. These processes remake worth across two of its constitutive dimensions—

modes of existence and risk assessments. The axiological motor itself is constituted by cultural concerns, and ongoing evaluations by actors.

### **Implications for Scholarship on Institutional Transformations**

Previous values-based insights on institutional transformations have been primarily focused on individual and organizational values. While the important role played by institutional values in transformation processes have been hinted at, this role has not been explicitly theorized. My theory of remaking worth unearths a values-based axiological motor that explains transformations as fundamentally constituted by dynamics at the level of institutional values. I adopt a constitutive approach to institutional analysis and show how evaluations of actors, and cultural dynamics, constitute a process of values transformation. My theory extends existing teleological explanations of institutional change (Van de Ven & Poole, 1995). Specifically, it elaborates on how Alberta's oil and gas industry's fundamental purpose or goal shifted from its focus on driving economic growth via extractive activities even as values of liability management became infused into the industry's teleology, transforming the extractive institution the industry embodied.

By revealing an axiological motor driving transformation, my study throws light on how and why institutions motivate action. Existing explanations of teleological motivations have remained at the level of the organization. The institutional logics perspective has been used to analyse implications arising from the embeddedness of actors within multiple values. At the "ground" level, actors may strategically, and reflectively, deploy logics "foreign" to the context to get work done (McPherson & Sauder, 2013). However, at the field-level, converting from one institutional logic to another involves, as Haveman and Rao (1997: 1635) put it, "[actors] repudiating strongly held norms ... akin to [a] religious conversion or a scientific paradigm



shift”—complex considerations whose underlying processes were not explored yet. My study contributes in this respect by demonstrating that actors are not passive recipients of “field frames” (Lounsbury, Ventresca, & Hirsch, 2003), as they engage in “worth work” entailing mechanisms of evaluation anchored on the institution’s worth. Thus, the elaboration of an axiological motor driving transformations helps us see why not all logics are susceptible to transform to the same extent.

Market values have pervaded organizations and institutions. For example, the market logic might co-organize a social enterprise with a community logic (Battilana & Dorado, 2010), or an Islamic bank with a religious logic (Gümüşay et al., 2020a). Scholarship on social movements has revealed important insights about the salience of market values in cases of “successful” institutional transformations. Namely, this literature has found that change is harder when the thrust of the movement is antithetical to market values—those associated with share price (Thornton et al., 2012). Lounsbury (2005: 78), for instance, found that recycling was “a mechanism for transforming societal consumption patterns” that largely succeeded only under the tutelage of market values, during the period marked by a “technocratic” logic.

Adding credence to these observations, I also find that the incorporation of incentives for companies to take care of their liability related obligations—such as instituting liability management scores as a symbol flagging oil and gas companies as responsible, and hence worthy of receiving further drilling licenses—created a sense of urgency and spurred forms of activism around liability management. Thus, incorporation of certain market-centric incentives helped interrogate the values emblematic of “institutionalized incumbent systems” (Weber et al., 2008: 542) and motivated activism. However, the question of *why* certain values become more

thematic at certain times, affecting cultural codes and the subsequent success of movements geared towards the fulfilment of those values has remained open.

My findings throw new light on these questions. I find that the formalization of mandates and the salience of events affected the formation of new values in the oil and gas industry such as accountability and the consideration of broader stakeholders. At the same time, these cultural concerns influence the evaluation of worth by actors. Overall, the axiological motor constituted by these processes undergirds the production of institutional values. In referring to the kernel of my process model as an axiological motor, I take quite literally the original Greek meanings of the terms *axios*, meaning worthy, and *logos*, meaning science. An axiological motor both drives what is of worth or value and explicates how this occurs.

For instance, Weber and colleagues (2008: 533) found that the emergence of a new grass-fed meat market segment was partly driven by sustainability considerations via a grassroots coalition movement premised on “sustainable agriculture, rural community development, health, and alternative consumption.” Yet, the climate change movement—also driven around sustainability issues—has only evinced defensive strategies so far from the industry (Fassler, 2023). This may not be surprising because one of the “biggest” solutions advocated by this movement is for consumers to avoid meat and dairy (Carrington, 2019; Poore & Nemecek, 2019)—a solution that is incommensurate with market values and threatening to the existence of the industry. In the parlance of my theory, the resource intensive beef industry can be considered as the incumbent institution upon which dismantling and fortifying processes are acting. My theorization raises an interesting question: should climate change incentives be “marketized”—that is, made commensurate with market values—in order for deification processes to align with

dismantling? Overall, investigating into the axiological motor driving transformations under different contexts enriches our understanding of the drivers of teleology.

Previous studies have found that attempts to reinforce an institution by reaffirming its taken-for-granted assumptions create uncertainty (Harmon, 2019). Yet, studies have also found that interrogations, for example, via social movements, can lead to deinstitutionalization (Hiatt, Sine, & Tolbert, 2009). Since much of the scholarship on institutional change has remained confined to changes over shorter spans of time, our ability to discern the sustained effects of interrogations and reaffirmations of institutional assumptions has remained limited. My study's findings throw light on these dynamics. I find that while some actors challenge existing assumptions and beliefs about "the way things ought to be done," others justify those same assumptions and beliefs. At the same time, actors also rationalize and interrogate the assumptions of new, culturally consonant, practices and beliefs. Moreover, the kinds of actors within an institutional sphere proliferate and diversify over time, further complicating the dynamics of these cycles of rationalizations and interrogations. My historical research design enables us to discern these dynamics, and thus contribute to existing understanding of institutionalization and deinstitutionalization. Specifically, my findings around the coupled effects of dismantling and deification (and, fortification and trivialization) show that institutional transformation entails not only the creation of uncertainty around an existing institution and its values, but also the heralding of a new institution and its values.

### **Implications for Scholarship and Policy on Grand Challenges**

The institutional transformation of the extractive oil and gas industry also stands for the broader energy transition conversation. My theory of remaking worth sheds light on this transition's complexity. Historically, extractive values and practices ensconced the industry's

unprecedented position at the helm of global economic and geopolitical affairs (Yergin, 2011). Since the 1970s, though, the unsustainability of such practices started getting highlighted and their calamitous precipitating effects on future generations began to be outlined. Values of intergenerational equity and accountability, especially with regards to humanity's treatment of the natural world, were ushered in, dimensionalizing the transition from fossil fuels to emission free sources as one of the grand challenges of the twenty-first century— “a critical barrier(s) that, if removed, would help solve an important societal problem with a high likelihood of global impact through widespread implementation” (Grand Challenges Canada, 2011).

In this regard, even as economic and technical dimensions to the problem have largely been addressed, the grand challenge of energy transitions poses some bigger questions that remain unanswered. For example, to what extent has the deep institutional chasm between extractivism and environmental accountability been bridged? How does this bridging affect other spheres of social activity? My study sheds light on such questions by explicating the dynamics of the remaking worth process. For example, remaking worth across different institutions can alter, via their respective axiological motors, conceptions of good across them, effectively also altering their interdependencies and contradictions (Gümüşay, Marti, Trittin-Ulbrich, & Wickert, 2022). As particular institutions “come closer” to, or “move farther away” from each other, significant implications might arise. A case in point is the observation that some of society's cherished institutions, such as democracy (Adler et al., 2022; Lounsbury & Wang, 2020; Blackwell, 2021), appear to be eroding, while some others—such as the institution of the market—appears to be more robust and unyielding to transformations. Although institutional scholarship recognizes this dynamism within the interinstitutional system, we do not yet have a focused theoretical account

for how these contradictions and interdependencies among institutions transpire—a gap that my theory of remaking worth helps address.

Particularly, by theorizing a process that explains how institutional values are transformed, my research invites conversations around values' role in the social construction of grand challenges. Although socially constructed, grand challenges have objective realities and consequences, as my case exemplifies. I show how the tension between economic growth and these material consequences from it (Wright & Nyberg, 2017) spurs the genesis of new values within an institutional setting. My findings regarding the constitutive role of evaluations in transforming incumbent values extend Ferraro and colleagues' (Ferraro et al., 2015: 366) observations about being “evaluative” as one of the analytical facets of grand challenges, that is, the multiple evaluative criteria associated with multiple meanings and assessments of these challenges. I shed light on the dynamics between cultural concerns and evaluative mechanisms, explaining how these multiple evaluative criteria develop—viz. through the two dimensions of worth I theorized. These dimensions provide an analytic scaffolding to our understanding of norms. Institutional values are less abstract and personal than individual values, and also less susceptible to easy mutation. In explaining how institutional values transform, my study also addresses the question of how norms of evaluation transform.

My findings show how cultural concerns constitute actors' abilities to transform existing institutional values towards newer conceptions of good. This has indirect implications for scholarship on the perpetuation of grand challenges—such as inequality—through social evaluations like stigma. Specifically, I show how evaluative processes and salient cultural concerns co-constitute institutional structures. These could potentially accord (dis)advantages variably across groups. My findings highlight that evaluative processes do not occur in silos, but

are culturally constituted. Cultural concerns emerged from visible relics of consequences from extractive practices, such as the proliferation of economically promising boomtowns during the early years, or that of inactive oil and gas well sites later on.

Such concerns in Alberta emerged from global cultural regimes—cultural codes that were dominant at a global level. Events transpiring at the global level, such as the second world war, affected these codes because they posed consequences for the regulation of oil and gas in Alberta. My findings extend our understanding of how institutions are affected by agency “exercised in local contexts” (Dacin et al., 2010: 1394), and the influence of global cultural regimes on the constitution of this agency. Namely, I show that evaluations of worth are constitutive of diverse concerns emanating in the wider context. For example, these concerns range from geopolitical events such as wars and economic recessions, environmental disasters such as the oil spill in Santa Barbara in the US, to local legal mandates such as the decisions of Northern Badger in 1991 and Redwater in 2019. In examining how spatially and temporally divergent events coalesce and influence the process of transformation, my study advances the field’s understanding of how events holistically matter (Nigam & Ocasio, 2010; Haveman & Rao, 1997; Rao et al., 2003), specifically as it relates to the genesis of values.

## **CONCLUSION**

Past studies have suggested that contradictions in values impact institutional transformations by resisting or triggering change within and across institutions. Yet, they take a particularistic and inward perspective on values. My inductive historical study showed how a transformation of values occurred in Alberta’s oil and gas industry between 1938 and 2019, and theorized an axiological motor of remaking worth undergirding this transformation. In doing so, it contributes by furthering a constitutive approach to institutional analysis, advancing a values-

centric theory of long-term institutional transformation that goes beyond a particularistic perspective on values. Second, it shows how new values emerge within an institutional setting, and in doing so, sheds light on the unfolding of new forms of rationality. Additionally, I highlight the connection between values and grand challenges, showing how they anchor outcomes and influence evaluative processes.

## **Chapter 5 : Concluding Remarks**



## INTRODUCTION

The central purpose of my thesis has been to more fully understand what institutional values are, and how they are consequential to institutional processes. Specifically, in the three studies described, I explored their theoretical role in institutional transformation and stability. Even as an analytical focus on values is the single thread running through all, the three studies collectively advance research on institutional transformation processes, institutional complexity and hybrid organizations, and posit practical implications for policy around grand challenges.

In the first study, I introduced the concept of an institutional logic's basis of worth, and explained how it makes three pathways of values commensuration available to actors. In doing so, basis of worth explains how logics are variably susceptible to transformation—via displacement by other logics, endurance—via hybridization with other logics, or coherence—via adaptation over time. This study contributes to our understanding of how values anchor institutional logics, and thus, their effects on organizations. The basis of worth concept provides a theoretical grammar—a finite lexicon together with a set of rules and constraints (Pentland, 1995)—for delineating the (particular) values of a logic. It provides analytical scaffolding to endogenously explain change and stabilization within the interinstitutional system.

Building on insights generated from the first, the second study expands on the role of values in sustaining institutions as coherent patterns of social structures and activity, or in fostering concerns about institutional erosion or incoherence. This study explains how interinstitutional contradictions are constituted by enacted values, and may vary over time. Specifically, in this study, I built on a pragmatic perspective on values to analyze the coherence and incoherence of institutions. Drawing on the institutional logics perspective, this study contributes towards institutional theory scholarship by elaborating on values-based mechanisms

structuring the interinstitutional system. I present a conceptual model that provides insights on how actors collectively evaluate and come to an agreement on what is and is not a societal issue worthy of policy interventions.

In the third and final study, I examined an institutional transformation in Alberta's oil and gas industry. Using a historical and inductive research design I showed how a process of remaking worth undergirded the transformation. In doing so, I find that values were recalibrated even as liability management practices were institutionalized and the urgency of making a just and equitable energy transition was foregrounded. This study contributes towards an understanding of how change processes may entail not only the maintenance or violation of values, but also their recalibration at the level of the institution. My findings show how institutional transformation entails the genesis of new values within an existing setting.

### **INSTITUTIONAL TRANSFORMATION PROCESSES**

In highlighting the importance of values in understanding institutional transformation processes, my thesis adds to a burgeoning stream of literature that takes values and valuation seriously in explaining organizational dynamics (Kraatz et al., 2020; Lounsbury et al., 2021; Gümüşay et al., 2020a; Stark, 2009; Boltanski & Thévenot, 2006). Across the three studies of this thesis, I pull together different strands from this literature to advance an explanation that positions institutional values as a central construct in a broader argument: that transformations are contingent on values-based mechanisms within the interinstitutional system.

The institutional logics perspective has explained transformation processes but has not “intently consider[ed] the relationship of values to logics” (Lounsbury et al., 2021: 268). Therefore, for logics scholars in particular, the role of values in transformation processes has remained puzzling. This theoretical puzzle intrigued me when I began working on this thesis. My

interest in this puzzle was further piqued when I found my interview and archival data on Alberta's oil and gas industry, my empirical site, to be laden with values. Broadly speaking, the three studies contribute towards the effort to "bring values back in" in institutional scholarship (Kraatz et al., 2020), and show how doing so contributes to understanding institutional transformations more deeply. More specifically, the three studies collectively explain how values bound the change and stabilization of institutions.

One key contribution of my work is in surfacing the role of values-based processes in long-term transformations such as energy transitions. In introducing a values-based axiological motor behind transformations, my theory of remaking worth explains transformations as fundamentally constituted by dynamics at the level of institutional values. In doing so, it provides an alternative explanation for the long and arduous nature of energy transitions (Smil, 2018). These insights are important because in merely looking at the economic causes and consequences of the energy transition problem, we could overlook the institutional dimensions of transition which are core to explaining how and why stakeholders of the industry come to collectively value liability management as an organizing template. Methodologically, my work uses archival data, specifically, regulatory and legislative documents, to decipher the values or conceptions of good undergirding oil and gas regulatory directives through the years. This constitutes a demonstration of the use of formal statements to make values visible (Haveman, 2022).

The idea of axiological agency also contributes by elaborating on the "construction of actorhood" argument of John Meyer and colleagues' world society research. This argument pertains to "an ongoing relocation into society of agency originally located in transcendental authority or in natural forces environing the social system" (Meyer, Krücken, & Drori, 2009: 111).

By this rationale, the theory's concept of the expanded and empowered individual invokes imageries of strong human actors who subsume the agency of existing institutions, and in doing so, exert "individual" agency in the creation of the new world society. While the argument that individual agency is constrained and empowered by institutions is established beyond doubt in the literature, the idea of axiological agency further corroborates this argument. Specifically, axiological agency helps advance the literature on world society. The universe of commensuration principles, for example, explains how the newly empowered actor evaluates emerging phenomena of interest to world society theory, such as human rights (Meyer et al., 1997).

Another primary contribution of my work is to bring a more nuanced understanding to the contextual character of institutional logics. More specifically, the basis of worth concept I introduced with this work explains the susceptibilities of logics to transform or not. Past studies have suggested that whether actors are more or less "attached" to the logic in which they are embedded influences the extent to which they embrace changes (Lee & Lounsbury, 2015; Thornton, 2001; Townley, 2002). My process model of values commensuration explains *how* actors embedded in different logics may be variably susceptible to embracing changes.

In the context of institutions transforming, my work also contributes by highlighting the implications of institutional transformations on the interinstitutional system overall. Specifically, I show how transformations, which are rooted in values-based mechanisms constituting the reinforcement and abatement of logics, are consequential to the dynamic contradictions and interdependencies between different institutions and lead to the emergence of concerns about institutional erosion. Such concerns about institutions matter, because these represent collective societal evaluations, and may be a precursor to assessments of what counts as a grand challenge,

and what does not. My work contributes by showing how such concerns emerge as a function of the transformation of institutions.

## **INSTITUTIONAL COMPLEXITY AND HYBRID ORGANIZATIONS**

My thesis makes a number of contributions to scholarship on institutional complexity and hybrid organizations. More specifically, my research contributes to ongoing efforts to explore the dimensions along which complexity may manifest (Besharov & Mitzinneck, 2020; Besharov & Smith, 2014; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Jancsary, Meyer, Höllerer, & Barberio, 2017), and provides a values-based explanation for institutional complexity that takes axiological agency seriously.

In the first study, I contribute to ongoing efforts to explain how logics cohere over time, or endure in hybrid forms (Lounsbury et al., 2021; Ocasio & Gai, 2020). The basis of worth concept, and the process of values commensuration that it enables, provides analytical scaffolding to explain how multiple logics can endure in a hybrid form despite values-based contestations. Specifically, it helps explain how logics can be more or less similar to each other, and hence more or less likely to endure in a hybrid organization, or to take advantage of opportunities arising from hybridity. Basis of worth also explains how a logic remains coherent as it undergoes changes in the alignments and priorities of commensuration principles. Said differently, my first study contributes by providing a values-based explanation for the decomposability of a logic, and in doing so, addresses a long-standing debate in institutional logics scholarship. By teasing apart the difference between the transformation and the coherence of a logic, and delineating the theoretical processes via which these outcomes are effected (*viz.* displacement and adaptation respectively), I provide a nuanced perspective on how institutional

complexity may be sustained, or disrupted. More specifically, the extent to which incumbent logics transform or cohere have effects on the overall complexity of institutional environments.

In particular, my work addresses how some logics combine more or less readily with other logics, and by extension, are more or less susceptible to enduring in hybrid organizations. The first study furthers an integration of convention theory with the institutional logics perspective, and in doing so, helps address gaps in the logics literature that arise from a neglect of the role of values in interfacing logics with organizations (Lounsbury et al., 2013; Cloutier & Langley, 2013). Although Boltanski and Thévenot's convention theory, and its framework, are premised on making justifications that rationalize the attainment of a "common good" or specific values (2006: 12), and help explain how multiple worlds influence organizational outcomes (Demers & Gond, 2020; Stark, 2017), prior integration efforts with institutional logics did not focus on values. My theorization explains *how* an integrative understanding of logics as sites for the commensuration of disparate conceptions of the "good" unravels the presence of multiple principles of commensuration in institutional life. At the same time, my work also helps overcome convention theory's lack of an account for the constraining and enabling role played by institutions even as actors make evaluations and justifications. The theoretical artifact (Table 2-2) I present in the first study presents a way of embedding the convention theory framework "within" the interinstitutional system. The integrated framework so obtained considers justifications to be contingent on institutions and their logics. Put differently, in integrating the frameworks, I imagine multiple justifications as cutting across institutional logics, providing actors with alternative principles for (dis)agreeing about what is of worth.

Exploring this idea further in my second study, I show how the susceptibility of logics to exist in hybrid organizational forms manifests in variations of interinstitutional contradictions

over time. Since a logic's values are unique, hybrid and institutionally complex settings can entail varying levels of precarity and multivocality which actors in hybrid settings could leverage to purposefully enact strategies (Pache & Santos, 2013). In doing so, actors may create new values and reinforce associated logics. As contradictions and interdependencies between institutions are reshaped, some institutions can thus become more or less salient within the interinstitutional system. Overall, the theoretical model I presented in the second study contributes towards understanding new and innovative hybrid organizational forms—often used as organizing templates by more “entrepreneurial” firms—as rooted in an underlying process entailing the prioritization of institutional values, as well as in what concerns are considered worthy of actors' attention. In doing so, my model may further logics research in the field of entrepreneurship by broaching the role of institutional logics in the genesis of entrepreneurial organizing templates.

### **THE GENESIS OF NEW VALUES IN ORGANIZING**

Finally, my thesis advances an understanding of the genesis of new values in organizing. In doing so, it contributes to a growing body of work that emphasises the relationship between management and society (Adler et al., 2022; Amis et al., 2021; Gümüşay et al., 2020a), and calls for societally relevant and important research such as addressing grand challenges (Ferraro et al., 2015; George et al., 2016).

The first study provides a toolkit for understanding the genesis of current forms of rationality in organizing, and how they may be transformed even as newer ones are created. More specifically, the theory of values commensuration from the first study provides an endogenous explanation for the emergence of new values by unraveling the mechanisms underlying the relationship between values and evaluation. The basis of worth concept explains

how actors are able to draw from a universe of commensuration principles when existing values become culturally dissonant. This contributes to institutional theory research by highlighting the role of actors and underlying values commensuration processes in the homogenization of cultural models (Meyer, Krücken, & Drori, 2009). This study also contributes to the emerging stream of thought in institutional logics scholarship underscoring the importance of moving away from the idea that the interinstitutional system consists of reified “ideal typical” logics, and instead, taking a historical and contextual perspective in understanding existing institutional logics and their associated values (Lounsbury et al., 2021).

In foregrounding new values and innovative forms of organizing made possible by the transformative potential of bases of worth, the first study also provides a direction to further explore robust action strategies in the context of grand challenges. It explains how the unsettling of cultural taken-for-grantedness can pave the way for new forms of value, and recalibrate existing dependencies and contradictions between institutions. This line of reflection is advanced by the second study, which contributes by highlighting how institutions enable as well as constrain actors in exercising reflexivity based on their interests and values. In explaining how concerns about institutional erosion could emerge from a threat of imminent reconfiguration and reinforcement of associated logics—which in turn are constituted by actors’ prioritization of values—the second study draws a connection between values and grand challenges. While the extant literature on grand challenges calls for the need for urgent action to address these challenges, my second study addressed the process whereby grand challenges come to be deemed as such in the first place. It does so by offering a pragmatic explanation of how standards of evaluation evolve as well as transform.



The phenomenon of Alberta's oil and gas industry's transformation, addressed by my third study, stood for the broader energy transition conversation – a grand challenge of our times. My findings show that arduous work undergirds the recalibration of values of the existing extractive institution, accounting for the transition's complexity. In doing so, I contribute by explaining how the process of remaking worth is one way in which values contradictions—e.g. being predominantly extractive, as opposed to being focused on managing liabilities—may become more or less pronounced. For example, even as liability management became incorporated in the oil industry, erstwhile purely extractive practices and liability management practices became demarcated. This demarcation has implications at a broader societal level, as I theorize in my second study. Specifically, the oil and gas industry remains an important global institution whose significance and influence extends to and shapes markets, indeed institutions, beyond itself. Although whether liability management “truly” addresses the grand challenge of energy transitions has been debated (e.g. Riley, 2018), the engenderment of new values has wide-reaching societal implications.

In particular, the evaluative processes and cultural concerns underpinning the process of remaking worth could shed light on how grand challenges are perceived and constructed, i.e. how grand challenges come to be deemed as such. This process puts into perspective the coalescence of a collective assessment of what counts as an issue worthy of policy interventions. The activities of the oil and gas industry, for example, have been shown to directly contribute to the grand challenge of climate change, eliciting some rhetoric from oil and gas executives about how “the people generating those emissions,” i.e. the general public, are also responsible for climate failures. My theorization underlines how actors make the "choice" to act by evaluating alternatives in terms of values whose premises “are not yet (and never will be) fully determined”

(March & Olsen, 1995: 75). Put in another way, the genesis of new values from an expansive universe of possible commensuration principles enables and, in a sense, “empowers” actors to question and rationalize existing measures of “the good.”

## **CONCLUSION**

With this dissertation research, I examined institutional values and their role in enabling or constraining the widely examined phenomenon of transformations. Adopting an institutional logics perspective, the first two studies presented nuanced conceptual frameworks to better understand what institutional values are and what their role is in enabling and constraining transformations within organizations, and more broadly within the interinstitutional system. The third study was motivated by an empirical puzzle: being entrenched in extractivism (an organizing template that was undergirded by the rationale of unabashed, and continuously improving, oil and gas drilling activities by minimizing wastage for the sake of efficiency) for several decades, how did Alberta’s oil and gas industry transform to encompass broader considerations of the environment via the rationale of liability management? I used a longitudinal and inductive research design to investigate into this transformation of Alberta’s oil and gas industry—an institution in itself. I found that a recalibration of institutional values constituted this transformation, and theorized a process of remaking worth undergirding it.

Overall, the three studies presented in this thesis foregrounded a constitutive approach to institutional analysis. Each study tackled themes pertaining to stability and transformation within institutions, and within the interinstitutional system, with an analytical focus on institutional values. Taken together, the three studies advance research on institutional transformation processes, institutional complexity and hybrid organizations, and posit practical implications for policy around grand challenges. The first two studies, in particular, advance research on the

relationship between values and institutional logics, and the implications of this relationship for our understanding of organizations—recognized as a significant gap in the current literature (Friedland, 2018; Gümüşay et al., 2020b; Lounsbury et al., 2021). These two studies showed how values anchor institutions, and thus, their effects on organizations and on the interinstitutional system. The third study presented an empirically induced theory of remaking worth using an inductive research design that combined process theoretic methods with interpretive topic modeling. My theory explained transformations as fundamentally constituted by dynamics at the level of institutional values. In doing so, it extended existing teleological explanations of institutional change (Van de Ven & Poole, 1995) by unearthing a values-based axiological motor of change. Overall, this study explained how Alberta's oil and gas industry's fundamental goal shifted from a longstanding focus on driving economic growth via extractive activities, even as values of liability management became infused into the industry's teleology, transforming the extractive institution the industry embodied.

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## APPENDIX

### Using Stata to Create Topics Models from Alberta's Regulatory Directives (1971-2019)

To computationally induce topics from the text in Alberta regulatory directives (1971-2019), I used the Stata module “ldagibbs” (Schwarz, 2018). This module implements “Latent Dirichlet Allocation” (Hannigan et al., 2019) in Stata:

Latent Dirichlet allocation is the most popular machine-learning topic model. Topic models automatically cluster text documents into a user-chosen number of topics. Latent Dirichlet allocation represents each document as a probability distribution over topics and represents each topic as a probability distribution over words. Therefore, latent Dirichlet allocation provides a way to analyze the content of large unclassified text data and an alternative to predefined document classifications. (Schwarz, 2018: 101)

I created a Stata “do-file” that lists all the steps, in Stata code, used to do this. The following points describe the high-level steps in the code:

1. The text from 56 directives issued during the timeframe 1971-2019 by the Alberta Energy Regulator was pasted on a Microsoft Excel file
2. Using the ldagibbs command, I instructed Stata to generate ten topics from the corpus of documentary text (step 1).
3. The first output of the command was a “document-topic matrix” representing the distribution of the ten topics across the collection of 56 directives. In other words, this is a 56 x 10 matrix where each cell (i, j) represents the probability of topic j occurring in Directive i
4. The second output was a “word-topic matrix” representing the distribution of words across the ten topics. Each cell contains the probability of a particular word being generated from a specific topic.
5. Next, I generated graphs using Stata commands to cluster of 10 most common words in each topic. I combined this with a focused reading of the directives, whereby I went

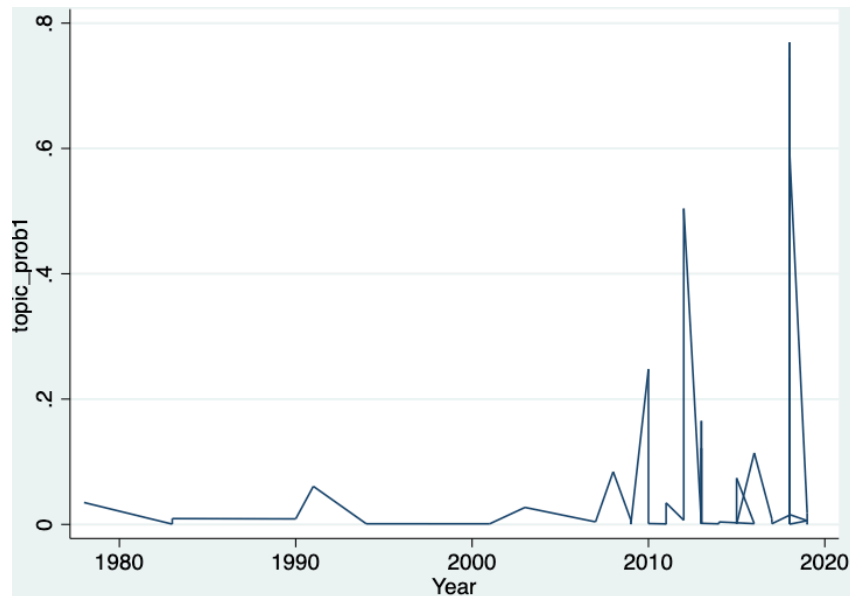
through the directives where these words occurred most frequently. This process allowed me to label the topics.

Overall, the ten topics induced from the exercise above are summarized in Table 6-1 below, and then described with graphs in the remainder of this section.

**Table 6-1 :** Topics induced from Oil and Gas Directives using Stata module “ldagibbs”

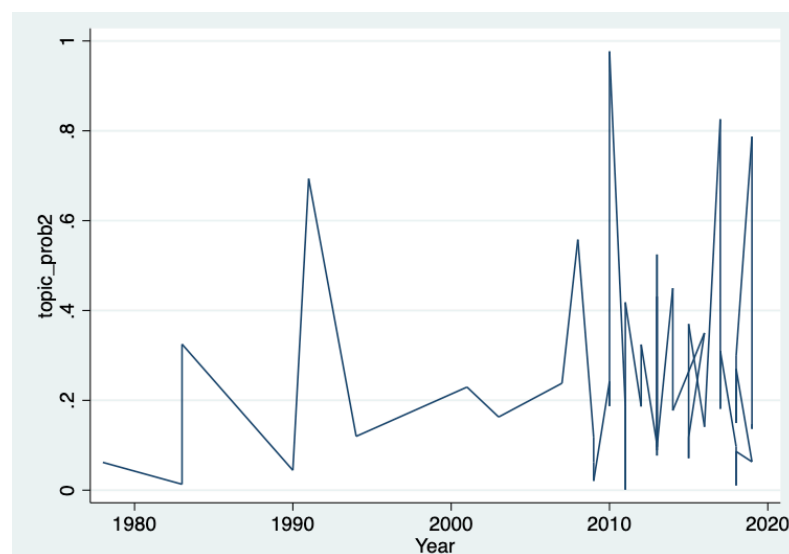
Topic #	Topic Description	Top 10 words
1	Conservation of oil/gas resource, with consideration for air quality management	control, license, solution, operator, conservation, benzene, emissions, venting, section, flaring
2	Guidelines for seeking approval for energy projects	information, application development, other, within, required, approval, energy, additional, applicant
3	Ensuring integrity of technical systems associated with the oil/gas well, so that groundwater is protected	wells, casing, license, surface, abandoned, abandonment, cement, testing, information, accordance
4	Guidelines for energy production applications, with an intent of making the application process faster, more efficient, and more amenable to fair competition	measurement production, application, section, appendix, common, guide, proration, conservation, overproduction
5	Reporting and other requirements of waste management facilities in compliance with province level environmental regulations	facility, waste, reporting, approval, status, oilfield, holder, management, report, petrinex
6	Treatment of drilling waste by considering environmental compliance, resource conservation (during earlier directives), groundwater safety etc.	drilling, waste, treatment, disposal, biodegradation, licensees, system, methods, introduction, storage
7	Well abandonment, reclamation, and liability management	liability, security, licensee, reclamation, assessment, facility, deemed, deposit
8	Ensuring public safety and environmental protection from hazard potential of wells arising from aspects of upstream petroleum industry such as storage, production etc.	storage, drilling, hydraulic, section, licensees, operation, fracturing, liner, emergency, inspection
9	<i>(This topic was fuzzy, i.e. a coherent topic was not generated)</i>	tailings, fluid, management, environmental, performance, design, effects, volume, including, criteria
10	Related to economics of production, for example, subsurface pressure measurement, so that wastefulness is reduced	water, pressure, testing, scheme, disposal, reservoir, production, steam, produced, section

**Topic #1: Conservation of oil/gas resource, with consideration for air quality management**  
(Top 10 words: *control, license, solution, operator, conservation, benzene, emissions, venting, section, flaring*)



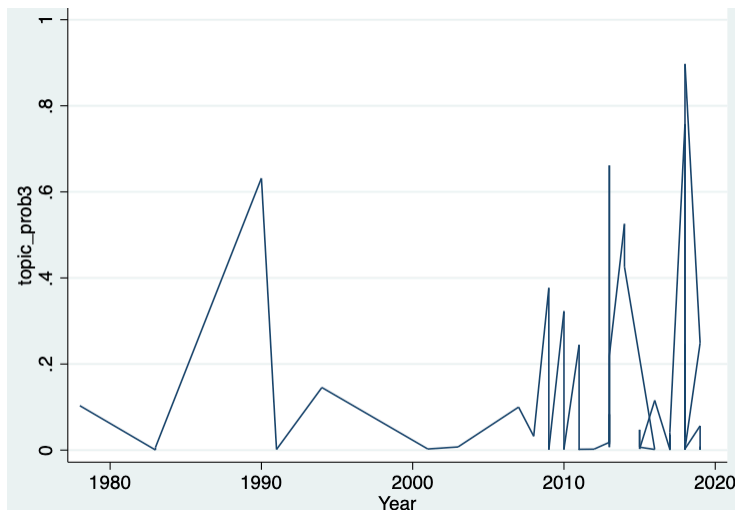
**Topic # 2: Guidelines for seeking approval for energy projects**

(Top 10 words: *information, application development, other, within, required, approval, energy, additional, applicant*)



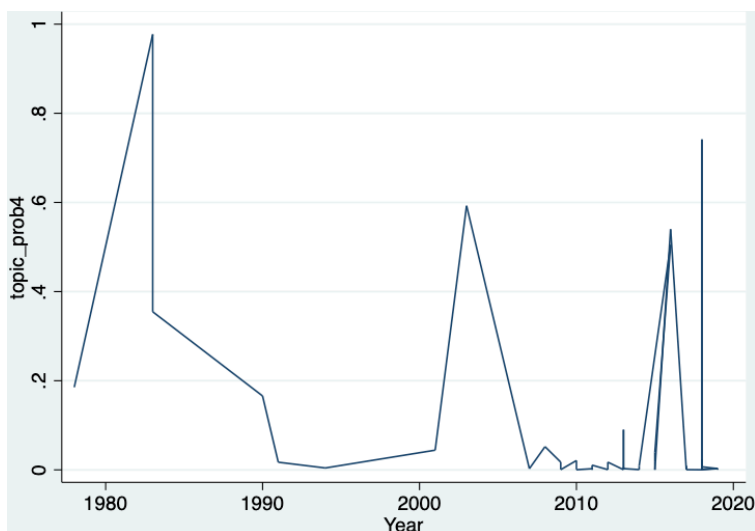
**Topic # 3: Ensuring integrity of technical systems associated with the oil/gas well, so that groundwater is protected**

(Top 10 words: *wells, casing, license, surface, abandoned, abandonment, cement, testing, information, accordance*)



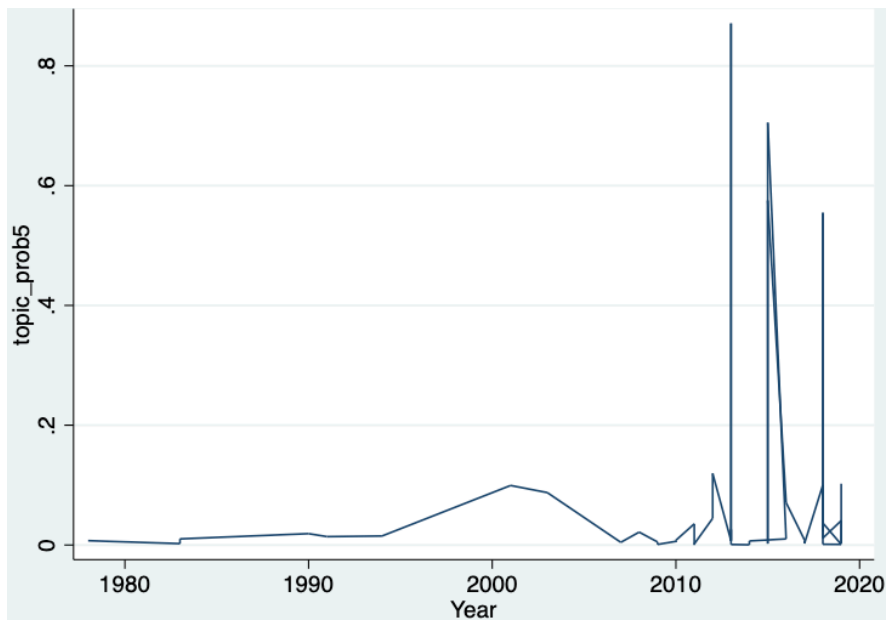
**Topic # 4: Guidelines for energy production applications, with an intent of making the application process faster, more efficient, and more amenable to fair competition**

(Top 10 words: *measurement production, application, section, appendix, common, guide, proration, conservation, overproduction*)



**Topic # 5: Reporting and other requirements of waste management facilities<sup>8</sup> in compliance with province level environmental regulations**

(Top 10 words: *facility, waste, reporting, approval, status, oilfield, holder, management, report, petrinex*)

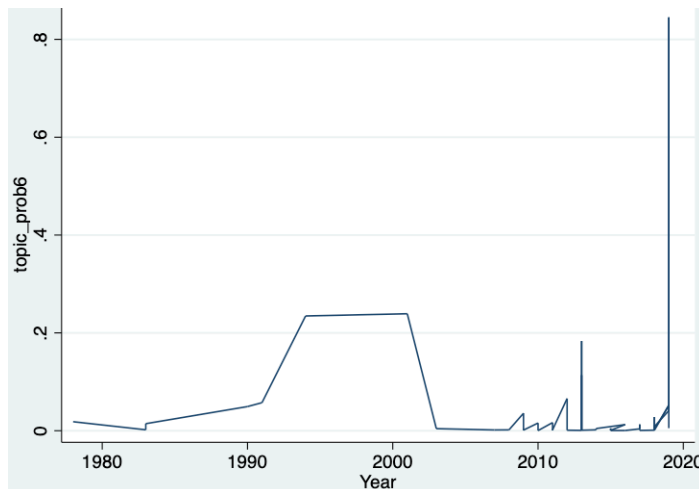


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<sup>8</sup> Requirements for waste management facilities first came up with Directive 047 issued in Feb 2009, in accordance with Oil and Gas conservation act 39(1)(g) for storage, processing and disposal of oilfield waste

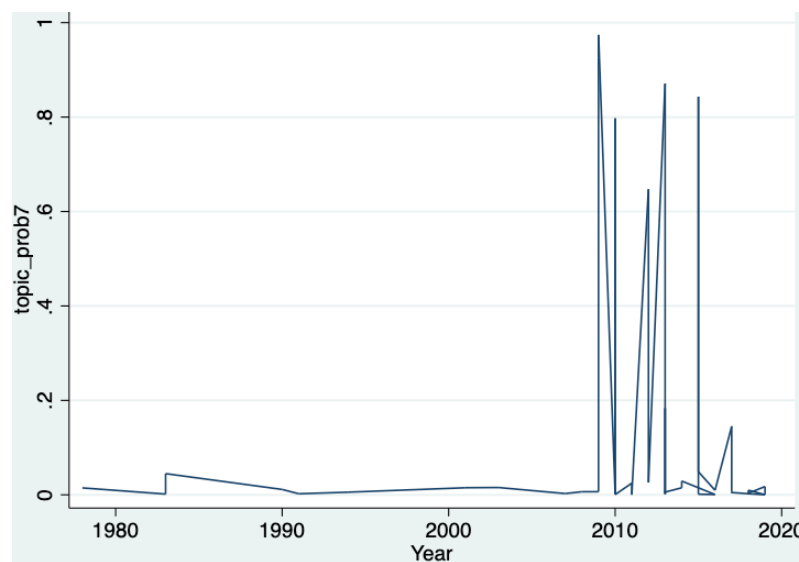
**Topic # 6: Treatment of drilling waste by considering environmental compliance, resource conservation (during earlier directives), groundwater safety etc.<sup>9</sup>**

(Top 10 words: *drilling, waste, treatment, disposal, biodegradation, licensees, system, methods, introduction, storage*)



**Topic # 7: Well abandonment, reclamation, and liability management**

(Top 10 words: *liability, security, licensee, reclamation, assessment, facility, deemed, deposit*)

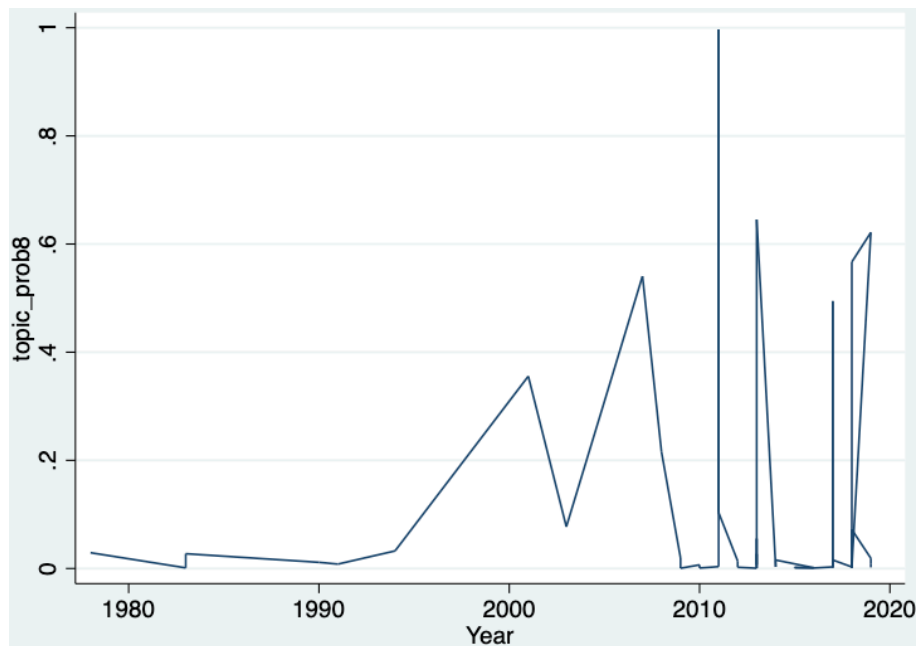


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<sup>9</sup> e.g., one directive cites the example of considerations such as disposal for agronomic benefits versus recycling

**Topic # 8: Ensuring public safety and environmental protection from hazard potential of wells arising from aspects of upstream petroleum industry such as storage, production etc.**

(Top 10 words: *storage, drilling, hydraulic, section, licensees, operation, fracturing, liner, emergency, inspection*)



*Topic # 9: This topic was fuzzy, i.e. a coherent topic was not generated*

(Top 10 words: *tailings, fluid, management, environmental, performance, design, effects, volume, including, criteria*)

**Topic # 10: Related to economics of production, for example, subsurface pressure measurement, so that wastefulness is reduced**

(Top 10 words: *water, pressure, testing, scheme, disposal, reservoir, production, steam, produced, section*)

