

## **Institutional-Political Scenarios for Anthropocene Society**

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## **Institutional-Political Scenarios for Anthropocene Society**

### **Abstract**

Natural scientists have proposed that humankind has entered a new geologic epoch. Termed the “Anthropocene,” this new reality revolves around the central role of human activity in multiple Earth ecosystems. That challenge requires a rethinking of social science explanations of organization and environment relationships. In this article, we discuss the need to politicize institutional theory as a means understanding “Anthropocene Society,” and in turn what that resultant society means for the Anthropocene in the natural environment. We modify the constitutive elements of institutional orders and a set of main change mechanisms to explore three scenarios around which future Anthropocene Societies might be built – Collapsing Systems, Market Rules, and Cultural Re-Enlightenment. Simultaneously, we use observations from the Anthropocene to expose limitations in present institutional theory and propose extensions to remedy them. Overall, this article challenges organizational scholars to consider a new paradigm under which research in environmental sustainability and social sustainability takes place.

### **Keywords**

Institutional Theory, Anthropocene Society, Organizational Fields, Institutional Change, Scenarios, Political Power

*“The Anthropocene represents a new phase in the history of both humankind and of the Earth, when natural forces and human forces became intertwined, so that the fate of one determines the fate of the other. Geologically, this is a remarkable episode in the history of this planet.”* (Zalasiewicz, Williams, Steffen and Crutzen, 2010).

While the “modern” environmental movement, which began in the early 1960s, has animated much of the research on sustainability thus far, the human species is now facing a unique moment in history, one in which our influence on the natural environment has shifted from controlling and damaging a variety of local ecosystems to now shaping several ecosystems on the global scale, sometimes with catastrophic effects (Diamond, 2005). Geoscientists have labeled the new physical reality the “Anthropocene” (Crutzen & Stoermer, 2000), an era in which humans have a long-term, documentable impact, not only on the operation of the planet’s terrestrial ecosystems but also on its hydrosphere, cryosphere, biosphere, lithosphere (Hamilton, 2016) and indeed, its’ very geological strata (Crutzen, 2002; Zalasiewicz, Williams, Steffen & Crutzen, 2010). Researchers have labeled the socio-economic sphere that mirrors this geophysical reality, “Anthropocene Society” (Hoffman & Jennings, 2015, 2018; Pallson et al., 2013; Seidl et al., 2011). Engaged study of this emerging reality represents a new focus that should dominate the focus of studies of organizations and the natural environment going forward, taking Stephen Jay Gould’s (1991) observation to heart: “we have become...the stewards of life's continuity on earth. We did not ask for this role, but we cannot abjure it. We may not be suited to it, but here we are.”

In this article, we respond to Gould’s call by drawing upon a middle ground perspective using institutional theory, which emphasizes both the socially constructed nature of reality while also considering the paths of institutional evolution and change. There are many possible

Anthropocene Societies, each requiring fundamental shifts in the beliefs and social rules concerning our conceptions of humans, the natural environment and their interconnections. Each possible future has implications for particular constituencies – corporations, scientists, politicians, community, the poor, religious members and virtually all segments of society – and institutional theory is uniquely situated for attending to such differentiated and often conflicting interests.

Yet, institutional theory is still somewhat incomplete for our purposes. While it has been more focused on change since the early 2000s (Dacin et al., 2002), it is criticized for being too concerned with isomorphism, the static, the status quo (Westwood & Clegg, 2009) and with social systems to the exclusion of natural systems (Hoffman & Ventresca, 2002). In this article, we argue that political power has received less attention from institutional theorists than is warranted (Greenwood et. al., 2008; Lawrence et al., 2001; Mizruchi & Fein, 1999). Therefore, we seek to further adjust institutional theory by incorporating political power more explicitly within possible scenarios for future Anthropocene Societies and in the consideration of paths for change towards them. We do so by drawing on notions of agency, interests, manipulation, and defiance to conceptualize different scenarios of the Anthropocene and their implications.

This article proceeds as follows. In the first section, we briefly review conceptualizations of the Anthropocene by physical scientists. In the second section, we turn to a more politically focused institutional framework for assessing Anthropocene Society. In the third section, we discuss three scenarios of society in the Anthropocene, each having distinct institutional-political features. In the final section and conclusion, we turn to different ways of building on our institutional-political theory and, more specifically, of researching key elements of Anthropocene Society.

## **The Nature of the Anthropocene**

The Anthropocene is a shift in our physical reality that is marked as a new geological epoch, one in which human activity has become such a significant influence on the operation of environmental systems that the effects are now detectable in the geophysical strata of the planet. In the growing literature on the Anthropocene, three approaches have appeared elaborating this notion. The first is the Anthropocene as the “Great Acceleration” (Crutzen, 2002; Crutzen & Stoermer, 2000; IPCC, 2017; Monastersky, 2015; Steffen, Crutzen & McNeil, 2007; Zalasiewicz et al, 2016). The concept is focused on the past up to the present and on drivers such as rapid increases in population growth, trade volume, urbanization and other dimensions. These drivers have caused a diverse array of negative human impacts on the environment since the beginning of human recorded history (around 2500 B.C.), but with geometric growth since the Industrial Revolution.

The second is the “Planetary Boundary” (PB) perspective, which concentrates on the present up to the near future. PBs are part of system in which each boundary represents key environmental vectors and “thresholds below which humanity can safely operate and beyond which the stability of planetary-scale systems cannot be relied upon” (Rockström et al., 2009). The boundaries today are: (1) climate change, (2) novel entities (notably chemicals), (3) stratospheric ozone depletion, (4) atmospheric aerosol loading (notably particulates), (5) ocean acidification, (6) biogeochemical flows (nitrogen and phosphorous), (7) freshwater use, (8) land-system change (notably deforestation), and (9) biosphere integrity (notably biodiversity loss) (Gillings & Hagan-Lawson, 2014; Rockström et al., 2009; Steffen et al., 2015; Stockholm Resilience Center, 2016). Each boundary can be both crossed into an unsafe zone and then re-

crossed back into safe zones – as is the case with ozone depletion.

The third conceptualization considers the future that may follow and embraces the notion of collapses. It draws on broader research on civilization’s various downfalls (Diamond, 2005, 2012; Ferguson, 2008; Wright & Nyberg, 2016) and on more specific research on specific extinctions (Kolbert, 2014). These collapses in the past include large scale events, such as the crash of the Mayan Civilization, Easter Island, or Viking populations in Greenland as well as industry level failures, such as the collapse of the Atlantic Northwest cod fisheries in the early 1990s due to over-harvesting. In all of these cases, there were evident warnings within and around the affected groups, yet there was an inability to halt the decline in the early stages, leading to rapid decline and lagged responses in latter stages (Diamond, 2012). Many today are warning that we are now seeing such warning signs, notably around what is called the “Sixth Extinction” (Kolbert, 2014).

All three approaches to elaborating the Anthropocene offer different temporal glimpses into the composite whole, as well as slightly different drivers and outcomes. We draw primarily on the second - the systems view of various Planetary Boundaries - with an eye to the other two. Ultimately, to avoid a dystopian future for Anthropocene Society, in our view, we must focus on the science of different ecosystems and the environmental vectors captured by PBs. Not crossing such boundaries requires that we change our social, cultural and institutional environment. To explore that further, we turn to institutional theory, both as it has been applied and as it may be adjusted.

### **An Institutional-Political Framework for Conceptualizing Anthropocene Societies**

Institutional theory begins with the premise that all aspects of the Anthropocene, including the

science that been used to identify it, are socially constructed; that is, recognized phenomenologically through language and culture (Hoffman & Jennings, 2015, 2018). That construction represents a “collective rationality” (DiMaggio & Powell, 1983; Scott & Meyer, 1992), a pattern of belief and practice that is widely taken for granted as a type of institution or logic (Friedland & Alford, 1991; Thornton et al., 2012). As such, institutional logics and their manifestations in particular social orders are the basis for understanding whether and how science and technical measures will be incorporated into societal structures. These logics are akin to *orders of worth* (Boltanski & Thévenot, 2006), which rely on different underlying rationales of justification for thought and action in the production of organizational order and change (Jagd, 2011), though logics are both more constitutive of orders and less malleable by individuals (Thornton et al., 2012, p. 78)

Some collective rationalities and social logics are more aligned with, and amenable to, the aforementioned conceptualization of the Anthropocene than others. Therefore, it is important to understand how both the particular logics and social orders that are constructed and negotiated and the relative stability of such logics and orders – whether they can be changed to address Anthropocene issues. In this section, we offer a simplified sketch of this construction and change process, one built upon current institutional theory (Jennings & Hoffman, 2017; Thornton et al., 2012) in consideration of kindred notions like orders of worth. Two moderate – and one large – distinctions are evident in our depiction. The first is that we discuss only what we consider to be the key elements of institutional orders – organizational fields, institutions and logics -- and main change mechanism in the institutional orders – disruptive events and institutional entrepreneurs. The second is that we re-emphasize the role of relational fields relative to logics and of disruptions relative to internal change. The third, and largest, distinction is that we extend these



elements and mechanisms to more completely address the profoundly unique context that the Anthropocene provides. In particular, we examine political power, manipulation and defiance which are emphasized by critical theorists (Clegg, 2010; Forbes & Jermier, 2012; Gladwin, 2012; Khan, Munir & Willmott, 2007; Leca & Naccache, 2006; Levy, 1997; Levy & Lichtenstein, 2012; Munir, 2015) in order to adjust institutional theory towards new and provocative forms. With the help of Table 1, we will discuss each of these institutional elements and mechanisms, as well as the political power-related extensions for each.

--- Insert Table 1 about here ---

### *The Organizational Field.*

Mainstream institutional theory, as displayed in Table 1, views an organizational field as “a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field” (Scott, 1995, p. 56). It may include constituents such as the government, critical exchange partners, sources of funding, professional and trade associations, special interest groups, and the general public — any constituent which imposes a coercive, normative or cognitive influence on the organization (Scott, 1991). Centered around the physical proximity of actors (Warren, 1967), common industry sectors (e.g. SIC codes) or consequential issues (Hoffman, 1999), fields are richly contextualized domains in which collective understandings regarding matters of importance for the field and society emerge.

But a more political reading of fields sees them as relational spaces where multiple and often competing interests engage with other actors who may hold divergent ideas about the

nature of the world around them (McAdam & Boudet, 2012; Wooten & Hoffman, 2008).

Therefore, the definition of field membership becomes consequential as it determines who has voice in defining the problems we face and the available suite of solutions that can be applied to solve them (Lawrence, 1999). The process of engagement resembles an institutional “war” (White, 1992) within “arenas of power relations” (Brint & Karabel, 1991, p. 355) where actors address criticisms or valuations through negotiated processes of justifications and compromise (Boltanski & Thévenot, 2006). As such, an analysis of Anthropocene Society must recognize that there are multiple field constituents that compete in multiple politically inflected fields over the institutions that define what the Anthropocene means for who we are today and who we will become tomorrow (Zietsma & Lawrence, 2010).

Beyond adding a more contested conceptualization of the field, there are two additional limitations to mainstream institutional theory’s conception of the field that must be addressed. One additional limitation is that institutional theory directs all attention to those with “voice” in institutional debates. In other words, it focuses on the elites of society that have the power to project and protect their interests within field level debates by defining the issues and developing the solutions. But the impacts of the Anthropocene will be felt across the social spectrum, with differential impacts on the poor, disenfranchised and disconnected. Elites of rich countries, for example, will be far more able to adapt to the impacts of climate change than those in the low-lying areas of developing countries (e.g. Bangladesh) or poorer cities (e.g. New Orleans). The bias in institutional theory towards these elites creates a blind spot to considering issues of equity, fairness and environmental justice in institutional outcomes (Bullard, 2005; Taylor, 2000), one that is compounded with its inability to recognize the interests of future generations (Lovbrand et al., 2015). Institutional theory will only take notice of such groups when they are

sufficiently aggrieved and able to amass the requisite power to voice their concerns. But certainly, foresight of such environmentally induced aggrievement is important for understanding the emergence of social instability, social movement mobilization and institutional action.

Additionally, the field ignores the “interests” of the natural environment within what is an inherently social construct. Within institutional theory, social actors interpret, assess and represent the interests of the natural environment. “Nature” itself does not have voice. While scientists and environmental NGOs may play a role in articulating the concerns over climate change and other natural environment problems (Hoffman, 2011; Lefsrud & Meyer, 2012), the contested nature of these debates and the willingness of some to discount or outright reject the results of scientific analyses that contradict their worldview leaves the social dimension of Anthropocene Society woefully inadequate. In fact, some speculate that the introduction of nature by giving voice to non-humans and future generations within the development of institutional orders creates challenges for the orders of worth framework (Boltanski & Thévenot, 2006) as it requires which evokes notions of deep ecology (Lafaye & Thévenot, 1993).

Further, the emergence of catastrophic events, such as Hurricane Harvey in Houston, cannot be deemed irrelevant to field level debates, whether social actors articulate their presence or not. Where prior attempts to integrate the natural environment into social analyses (Catton & Dunlap, 1980) had limited success (Hannigan, 1995), the new context of the Anthropocene elevates the natural environment as something that is no longer an “external” constraint or limitation. It is now “internal” to our social structures as humans take charge of ecosystem operation and stability (Nyberg & Wright, 2016). As such, it cannot be ignored in any accurate social modeling.

A second limitation in mainstream institutional is the enduring, underlying view that fields mature, becoming more isomorphic and static (Donaldson, 2001; Westwood & Clegg, 2009). In the work of White (1992), network relations could give rise to structural arrangements that make particular types of fields identifiable and even robust (Padgett & Ansell, 1991; Simmel, 1955). But in Anthropocene Society, the natural environment will intrude on and become part of these fields in fundamental ways, creating an increasingly dynamic nature of a politicized relational field. Periodic, unpredictable events around climate change and the other threshold barriers will increase in frequency and strength. These include more severe storms, rising sea level, droughts, wildfires, species migration and extinction, and the migration of vector-borne diseases. Such events could become triggers for coalescing social constituents into loose networks towards action (Perrow, 1999). But the variability in these events, their slow surge-like nature, and the inability (or unwillingness) of many in society to ascribe these events to the Anthropocene all tend to dampen social mobilization (Hoffman & Jennings, 2011). A fundamental acceptance of the Anthropocene Era would mean the incorporation of notions of shifts, variation, complexity, and the consequent need for adaptation directly into conceptualizations of relational fields and their dynamic structures.

### *Institutions and Logics.*

Field level contestation, if stabilized and cohering around a set of beliefs and practices, becomes a form of institution, which in turn provides increased stability and collective meaning to social behavior along three dimensions: the regulative (e.g. regulation), normative (e.g. occupational standards, educational curricula) and cognitive (e.g. taken for granted cultural rules) (Scott, 1995; Zucker, 1988). Taken as a whole, these three “pillars” of an institution form a composite

within a given context. If encompassing at the field level, an institution is termed a “logic” (Thornton, 2001). This logic entails considerations for the issues within the field that are perceived as important, the bases of legitimacy and authority for beliefs and the likely strategies, norms and control mechanisms for guiding action (Thornton et al., 2012, p. 56). Indeed, there are some generic logics that seem to be observable in various broad areas of social life around which collective belief and action tend to cohere. These include our collective conceptions of the nature of the State, the market, corporation, profession, family and religion (Friedland & Alford, 1991; Thornton et al., 2012).

Similarly, when focusing on orders of worth, Boltanski and Thévenot (2006) have identified six that underpin social structure: “the market (in which ‘worthy’ objects are considered in terms of profit maximization and competition); the industrial (emphasizing science, productivity and instrumental relationships); the domestic (which values attachment, hierarchy and honesty); the civic (emphasizing civic solidarity, the collective and delegation); the inspired (emphasizing charisma, creation and uniqueness) and an order based on fame (reputation, public opinion and success)” (Finch, Geiger & Harkness, 2017, p. 75). To these six orders, Thévenot, Moody and Lavaye (2000) have added a seventh “green” order which emphasizes sustainability, the ecosystem and future generations.

Within any specific relational field, two or more specific variants of these logics or orders are likely to co-exist or compete as filters for perception and frames for action (Pache & Santos, 2010). As the tensions around this competition increase, these logics or orders can be reconciled through three different types of agreement: “*clarification in one – dominating – world* only at the expense of the other competing worlds; the *local arrangement* aimed at a temporary and local agreement around specific decisions; and the *compromise* aimed at a more durable agreement

constructed on the basis of different worlds. The compromise is consolidated by specific constructions (*dispositifs*) that present a common justification based on different worlds” (Jagd, 2011, p. 347). As such, our perceptions of the nature of the Anthropocene, its threats, opportunities, realities and illusions will be shaped by the institutions, logics and orders of worth that prevail within a relational field.

In our political reading of institutional theory, every logic within a field also ensconces power relations and solidifies inequalities (Clegg, 2010; Munir, 2015) through which agency, types of control, and methods of contestation are either defined or shaped by the dominant logic(s). For example, if the predominant logic is based around the capitalist market logic or order of worth, it will be anchored on the notion of individual competition in free (mostly unregulated) markets, where “financial risk” and “economic impact” would become the most immediate translations of the natural world into social facts. The pursuit of this self-interest by privileged individual agents (such as corporations, banks, and stock exchanges), even if it leads to inequities in outcomes, will be considered morally just (Friedman, 1970; Rand, 1957). This is linked to Boltanski and Thevenot’s notion of “principles of justification,” which are associated with different orders of worth (2006). Yet, these justifications, like claims to legitimacy, are ultimately more instrumental and self-interested in this political reading of institutions. In other words, taking up our prior example, the responsibilities of business, and business managers is viewed to be to themselves and their shareholders, with little to no regard for concerns like social responsibility and collective concern. As such, social structures and institutions would be biased towards the benefit of certain constituencies (e.g. those with financial resources) more than others (Piketty, 2014).

Alternatively, if the predominant logic were structured around a particular religion or

order of worth centered on the inspiration or civic worlds, the social facts regarding the Anthropocene would be expressed around scripture, God, and virtues (e.g. love, charity and hope), such as those expressed in religious texts such as the Bible, Torah or Quran. So, while the market logic may result in clean technology innovations, like electric vehicles, LED lightbulbs or “clean coal” sequestration that direct financial benefits to the developer, the religious logic or inspiration order may highlight the “new paradigms and forms of power derived from technology” and the poor’s lack of “financial activities or resources which can enable them to adapt to climate change or to face natural disasters” (Pope Francis, 2015, p. 14). In short, the religious logic highlights that the poor have full voice in their sense of the field, but have no voice in a field dominated by a market logic.

#### *Institutional Change Mechanisms.*

Change in the field is often precipitated by “cultural anomalies” (Hoffman & Jennings, 2015) which create contradictions within the social environment (Seo & Creed, 2002) and force organizations to reanalyze their surroundings (Kuhn, 1962) and seek to either dominate or compromise towards a durable agreement (or “settlement”) constructed on the basis of multiple orders (Schildt & Perkmann, 2017). These disruptive events can take many specific forms: hostile takeovers (Davis, 1991), regulatory changes (Edelman, 1992), environmental catastrophes (Hoffman & Ocasio, 2001), rituals (Anand & Watson, 2004), or terrorism (Bail 2012) and help push fields into what Kuhn (1962) refers to as “revolutionary science,” a period in which the exploration of alternatives to taken-for-granted assumptions takes place to make sense of the anomalous event (Pride, 1995). While the field and institution-specific dynamics that result from these shocks are less focused, planned and agentic than some suggest (Hoffman

& Ocasio, 2001; Thornton et al., 2012), they are cultural challenges which are perceived and acted upon through social filters and resolved through complex political dynamics and conflict.

A challenge within the Anthropocene is that no single event is likely to create complete disruptions of the interlocked, complex institutional orders in society (Perrow, 2010; Stockholm Resilience Center, 2016). Paradoxically, because the Anthropocene is marked by a constellation of disruptions, one response has been to accept these cumulating events as the “new normal.” Therefore, theorizing the ways in which such complex event ecologies can precipitate revolutionary change within Anthropocene Society is needed to expand institutional theory in new and novel directions.

From a more political perspective on institutional processes, institutional entrepreneurs look to periods of flux as opportunities for strategic action in which they seek to solidify their position by either reproducing the status quo or by acting as brokers for new forms of relations (DiMaggio, 1988; Fligstein, 1997; Jennings et al., 2014; Lawrence, 1999; McAdam, 2012). Such actors craft strategic responses and tactics that allow them to shape the discourse, norms and structures that guide organizational action and beliefs (Maguire, Hardy & Lawrence, 2004; Oliver, 1991). But these institutional entrepreneurs do not act alone or in isolation. Individual agents form political networks and coalitions to act as “important motors of institution-building, deinstitutionalization, and re-institutionalization in organizational fields” (Rao, Monin & Durand, 2003, p. 796). Organizational change agents became parts of these collective movements, using shared and accumulated resources and power to “overcome historical inertia, undermine the entrenched power structures in the field or triumph over alternative projects of change” (Guillen, 2006, p. 43) in opposition to others in similarly configured collective movements (Meyer & Staggenborg, 1996; Zald & Useem, 1987).



In Anthropocene Society, it will be particularly important for institutional entrepreneurs to leverage field level instability and shocks through a recognition of the key institutional elements of the event, and the use of evocative messaging or strategic framing (Dutton, Ashford, O'Neill & Lawrence, 2001) that is delivered by powerful actors to reach critical audiences (Lefsrud & Meyer, 2012; Molotch, 1970). Such framing, however, would need to be coordinated over time and place, and have access to communication channels and powerful change agents to precipitate action (Nyberg & Wright, 2016). Not all actors possess the political power to access such cultural resources. By implication, the work of institutional entrepreneurs must become one of defining Anthropocene events in terms and language that can re-frame and re-direct interests and actors in fields to re-theorize elements of logics. The linkage of actors would need to include not just the educated or allied, but also those who are uneducated and opposed to the mission of change or see little benefit in it (Thaler & Sunstein, 2012).

This brings us back to considerations for environmental justice (Bullard, 2005; Taylor, 2000) that permeate each institutional element of our analysis of Anthropocene Society. As the environment becomes a collective good that is threatened on the global, not just local, levels, one in which damage by one is felt by the entirety of humanity, the maintenance-focused nature of mainstream institutional theory fails to capture the moral and ethical considerations that accompany this new reality. When considering Anthropocene Society, the cool detachment of many institutionalists in their analysis of society must give way to a consideration of whether these fields, institutions and logics help to create an environment that is inhospitable to human life, particularly in communities without a voice in extant field-level discourse. Some studies have already begun to predict that certain regions of the world (such as southwest Asia) may be unfit for human habitation within the predictable future (Pal, Elfatih & Eltahir, 2016; Siam,

Elfatih & Eltahir, 2017). But we rarely hear that concern voiced in mainstream institutional analysis. Perhaps one way to begin a correction is to imagine simple caricatures of Anthropocene Societies towards which we might work collectively or fall into unwittingly.

### **Conceptualizing Three Possible Scenarios of Anthropocene Society**

In this section, we present three scenarios of future Anthropocene Society, along with the processes by which these scenarios might emerge. Scenario analysis is more commonly used in the natural sciences and planning, but has seen increasing use in the social sciences (Bishop, Hines & Collins, 2008; Garb, Pulver & VanDeveer, 2008). Scenarios refer to inferred future states, where these states may be descriptive or prescriptive in nature and also rely to varying degree on past information and analysis (e.g., some may be near future and analytically derived and others more distant and prescriptive or visionary). In institutional theory, particularly in its classic works, scenarios would be considered variations of *ideal types* - pure analytical forms - manifest in specific evolving social orders, such as capitalism in the new world after the infusion of the Protestant Ethic (Weber, 1905). As such, these scenarios represent later social orders derived analytically and with descriptive information from prior social orders. Scenarios of social orders are also akin to archetypes found in fields (Greenwood & Hinings, 1993; Hoffman & Jennings, 2018), as archetypes represent analytic forms composed of design and structural elements, but also entail underlying values or interpretive schemes.

Put more plainly, social scenarios as we use them here are analytical frameworks based on current information about social orders and the near future possibilities for those orders. More specifically, based on the adjusted central elements and change mechanisms described above (fields, institutions and logics, disruptive events, and institutional entrepreneurship) as well as

observations from the organization and natural environment literature (Bansal & Hoffman, 2012; Georg & Hoffman, 2013; Lawrence et al., 2001; Levy & Spicer, 2013; Perrow, 2011; Wright & Nyberg, 2016), we argue that there are at least three scenarios evident in the near future for Anthropocene Society: Collapsing Systems, Market Rules, and Cultural Re-Enlightenment scenarios (Jennings & Hoffman, 2018). We organize these scenarios in Table 2, presenting each scenario's institutional elements from which is analytically inferred and the likely effects on the natural environment in the last row labelled "Anthropocene Dimensional Changes." This allows our adjusted reading of the institutional view to include the natural environment as a key domain.

--- Insert Table 2 about there ---

Before proceeding, note that, as implied by the table, the first and last scenarios represent book-ended opposites in our spectrum. The first, Collapsing Systems, is highly dystopian, representing highly fragmented organizational fields leading to a divergence of multiple and competing institutional logics or orders around recognition of the Anthropocene, and leading to little consideration for solutions. The third, Cultural Re-Enlightenment, is more of a distant future than the others and is more utopian, representing a compromise and convergence among multiple institutional fields, logics and orders that both accept the reality of the Anthropocene and change our conceptions of what it means to be human, how the natural environment is understood and, most importantly, how the relationship between the two can be reconfigured. In between, we offer a mid-range scenario – Market Rules - in which the field level logic and order of the market and economic exchange takes precedence. This scenario is based on the clarification of one dominating social order at the expense of the other competing orders.

Though other immediate future (mid-spectrum) scenarios might be inferred, such as the military logic mixed with the authoritarian state as the dominant social order, we focus on Market Rules given that it is one of the most commonly drawn upon in contemporary society (Finch, Geiger & Harkness, 2017) and therefore high likelihood of emerging in a future Anthropocene Society. If we had more space, we would focus also on a second high-likelihood mid-range scenario in which the technology logic or industrial order predominate (Boltanski & Thevenot, 2006). In this scenario, Anthropocene Society would prioritize scientific research around climate and biodiversity issues (Steffen, Crutzen & McNeil, 2007) with the prevailing logic that good science followed by good engineering (e.g. geo-engineering) should be sufficient to address the challenges of the Anthropocene (Hoffman & Jennings, 2018).

#### *The Collapsing Systems Scenario.*

As shown in Table 2, this emerging Anthropocene scenario is marked by increasing complexity and chaos within the institutional environment, which proceeds towards dysfunction and likely collapse in multiple social and environmental domains. Several past collapses have been documented in Diamond (2005) and Kolbert (2014), and some future possible collapses have been alluded to in Perrow (2010) and Wright and Nyberg (2017).

In this scenario, the clarity of social relations breaks down as no one actor or movement emerges that is able to define the problems or solutions that address them. This results in a breakdown of social order that cascades into ecological domains, causing further breakdowns in the ecosystem. These breakdowns begin with isolated collapses, but through linked systems, begin to have greater consequences for more distant parts of the economy, world community and global natural systems. The speed of change increases as does the lack of control. For those who

seek a stable social, economic and environmental future, this is the most dangerous and dystopian of all scenarios. For those who wish to preserve their position within the field and continue behavior and thought as before (at least for the short term), this allows maintenance of the status quo, but only temporarily as collapses in social and environmental systems make the status quo untenable. Yet, conflicted and contested debate continue and confused inertia blocks any action. Such arrangements can be maintained as long as those obstructing agreement or action maintain their political power.

In the Collapsing Systems Scenario, the *organizational field* is a constellation of multiple fields, each increasingly independent and complex, linking multiple actors in less predictable ways, thereby causing increasing uncertainty (Greenwood, Jennings & Hinings, 2015). The fields include actors focused on the production and distribution of goods, but also state actors, corporate actors, scientific agencies, religion and NGOs, along with virtual fields of information. As such, there are key mega-institutions that stand within some fields, such as the United Nations, World Bank and the International Monetary Fund which seek to present a view of the emergent reality based on existing institutional structures, but their voices, most notably those from scientific institutions, are unable to deliver knowledge with certainty or authority (Hulme, 2012) and are blunted by actors offering contrary assessments, such as the fossil-fuel and electric utility industries (Oreskes & Conway, 2012) or ideological and libertarian interests. We can see elements of this confused social order in today's debate over climate change as a "climate change counter movement" seeks to sow doubt about the reality of climate change and challenge the legitimacy and integrity of scientific institutions and analyses (Brulle, 2014). Amplifying this confusion and distorting the debate are social media channels such as Google, Facebook, and Twitter that further destabilize field level discourse by introducing an increasingly diverse range

of viewpoints and “facts” of varying legitimacy. Again, we can see elements of this influence today through the labeling of inconvenient truths and uncomfortable realities as "fake news", the de-legitimizing of expertise by equating it to mere opinions, the decimation of evidence-based reasoning and analyses that are so critical for making thoughtful and objective-as-possible decisions, and the hyper polarization of perspectives and worldviews that have made any kind of meaningful dialogue or debate fruitless, if not impossible. And finally, many impacted constituents will be left out of the debate, causing social protest and disruption of mega-institutional discussion, which further destabilizes the field.

The *institutions and logics* of the field will not solidify around denial of the Anthropocene. Instead, they become increasingly fragmented and diverse, creating confusion and discord that obstructs the emergence of any institution that can take hold as collectively accepted. The clarity between the center and the periphery of the field becomes harder to decipher, both institutionally and geographically. Institutionally, incumbent power brokers (such as academic and scientific bodies) find their positioning diffused as previously fringe actors find opportunity to move more centrally into fragmented fields, reaching some populations of constituents and excluding others. Geographically, regions of the world become contested as their resources become impacted by Anthropocene events. Those places that are not central to material, virtual or cultural debates will be disadvantaged and marginalized.

The main *disruptive events* in the Collapsing Systems Scenario are around systems perceived as key to social life and social order. These include energy, food and water, which are linked to natural (material) features of the Anthropocene environment. Examples may include the threat of complete water loss in cities like Cape Town, Bogata and Sao Paulo. These threatened system can also include virtual ones, such as the internet and access to (and control

of) information. Crashes, hacks, bottlenecks, and firewalls are all part of a systems collapse that can cascade into other systems areas. Increasing anarchy of access and attention are also forms of systems failure as the rapid switching of subjects for political, corporate, and community attention become disruptive for planning, budgeting and executing.

*Institutional entrepreneurs* under Collapsing Systems are abundant, both in number and type. Where twenty years ago, those who started new firms were deemed to be entrepreneurs, in this scenario anyone who creates a material, social, or virtual service is an entrepreneur, particularly if it goes “viral.” Where institutional entrepreneurs are traditionally those who are able to challenge or change current institutions using their entrepreneurial activity (Maguire and Hardy, 2009), our political variant of institutional theory treats entrepreneurs as inherently motivated by self-interest and use politically-grounded action, yet embrace new modes of control (most notably, social media). As such, anyone with a significant and influential following on social media embodies a new form of institutional entrepreneur. This may include those with strong presence in Twitter, Facebook, Linked-in or through the creation of blogs or other on-line content. The Drudge Report, for example, was able to supplant major media outlets as a source of information to broad audiences that sought its specific type of content.

*Dimensional changes* in the Collapsing Systems Scenario can be described only in temporary terms given the highly unpredictable and increasingly chaotic impacts of the various systems interactions. For that reason, this scenario is unstable by definition as the disproportionate impacts of environmental disruption become clearer and field structures shift with the creation and dissolution of movement constituents. Indeed, the great differentials between north and south, polar and equatorial, oceanic and terrestrial, developed and developing will exacerbate field level fragmentation. In general terms, key naturally-linked systems (such as

power grids, food supply, and water availability) in different parts of the world will likely fail at an increasing rate, as has been predicted by international agencies such as the IPCC (2017).

Various social systems linked via the Web are likely to be disrupted by impinging larger social worlds (variants of Facebook, Snapchat, or other social media influences), further drawing the attention of societal members away from the natural world as they spend time trying to make sense of an overwhelming assault of information from the virtual world.

### *The Market Rules Scenario.*

In this scenario, which is probably among the most likely, the institutions and values of economic and business predominate and environmental redress will only be taken for monetary reasons. As a “green” order or logic challenges specific market interests, a compromised outcome will lead to the treatment of the environment as an economic asset, valuable for the resources it provides to humankind, or as an area where cost reduction and limiting externalities are important. Motivations for action would be based on the extent to which they create jobs, increase market activity or satisfy other logics of business strategy. The overarching goal of continuous economic growth would remain sacrosanct with the environment seen as merely an economic input, one levered with innovation and technology, to create growth. Impositions that restrict human development would be limited. Conflict and social contest around the emergence of Market Rules would take place among pro- and anti-market forces. For those who are suspicious of corporate power and particular economic rationales for action, this scenario provokes great apprehension (Munir, 2015; Stiglitz, 2012). For those who want to pursue a solution to the Anthropocene challenge using presently dominant logics, this Scenario will appear to be the most expedient way forward. But, social orders based on market logics are



typically of short duration and quite flexible as consumer interests shift and evolve (Thévenot, Moody & Lavaye, 2000).

At the *organizational field* level, we would see increased power for multi-national corporations in defining the reality of society's impact on planetary boundaries (Bansal & Clelland, 2004) but only insofar as they impact wealth for the winners in the market domain. Though we can expect certain environmental NGOs to maintain voice in institutional debates by introducing green values or orders, they will do so in ways that appeal to specific market interests, logics and orders. As such, we will begin to see some cleavage between incumbent firms based on old technologies and new entrants based on new technologies, as can be seen today as the fossil-fuel and internal combustion drivetrain sectors face market competition from sectors in renewable energy, electric drivetrains and alternative forms of mobility (which are themselves supported in various ways by environmental actors and NGOs). As such, consumers and market demand would be critical drivers of the direction that this scenario takes. National and transnational trade agreements would also become a critical instrument for normalizing our collective environmental impact based on a continued belief that market success defines society and benefits all. The role of government regulation within Market Rules would lean towards libertarian ideals that hesitate to regulate a market externality because of an overarching view that we, as humans, cannot design a structure that will appropriately take us in the proper direction of human social destiny (Vargish, 1980).

The *institutions and logics* of Market Rules are a mere expansion of prior institutionalized concepts of corporate environmental concern including pollution control, waste minimization, environmental management and corporate sustainability (Greenwood, Jennings & Hinings, 2015; Soderstrom & Weber, 2011; World Commission on Environment and

Development, 1987; Young & Dhanda, 2013). An attendant belief is that the market always yield socially positive outcomes (Cox, 2016) and market success would eventually lead to environmental remediation and technologies that reduce our impact on the environment (Simon, 1981) or even create some environmental benefit (King & Lenox, 2001; Porter & Van der Linde, 1995). Unfortunately, many metrics of the market agenda, such as Gross Domestic Product (GDP), Return on Investment and discount rates, do not capture the full scope of environmental impact and act as limited guideposts for solving the problems we face (Ehrenfeld & Hoffman, 2013; Hamilton, 2016).

*Disruptive events* in Market Rules would not be of an environmental nature, but would be those around which the economy is impacted: market collapses, commodity crashes, price spikes, and firm failures. Some of these collapses would be due to Anthropocene threshold events, such as droughts, storms, floods and fires, but these events will only be engaged in terms of short term monetary horizons (Slawinski, Pinske, Busch & Banerjee, 2017). As such, the interests of actors with low or no voice in market oriented fields (such as disadvantaged urban communities and developing countries with limited economic base) will be minimized. Only those voices whose market interests are threatened would enjoy legitimate voice (such as consumers, merchants and sellers).

The *entrepreneurs* who would be more influential in defining these events will be those who can articulate their monetary and strategic importance; and in particular, to those segments of society whose financial interests are threatened by Anthropocene impacts or those who can profit from them by serving specific and legitimate markets, such as those providing grass-fed beef (Weber et al., 2008) or organic wines (Delmas & Grant, 2014) today. Companies providing new climate saving products such as electric cars (e.g. Tesla) and rooftop solar arrays (e.g. Solar

City) will enjoy greater success as they know how to use market rules (or manipulate them) in order to produce these goods and serving those consumers who desire them. As such, Market Rules is a scenario that engages the economic elites to the exclusion of vast segments of the global population. Insurance firms and management consultants, in particular, would help this business framing to emerge, monetizing Anthropocene events as business opportunities or risks (Kim et al., 2013).

The *dimensional changes* in this scenario will be a reversed trajectory of some specific aspects of planetary boundaries as measured by economic indicators (e.g. GDP). But the broader reversals where no economic, or “business case” is viable will be overlooked. The overall import and urgency of Anthropocene issues on a planetary scale would be diminished as merely the same as problems that corporations have faced in the past (Wright & Nyberg, 2015; 2016). Under Market Rules, the velocity at which society is heading towards systems collapse may diminish, but the direction and inevitability of that collapse will not be averted (Ehrenfeld & Hoffman, 2013).

#### *The Cultural Re-Enlightenment Scenario.*

This scenario is, in many ways, the opposite of Collapsing Systems. In the Re-Enlightenment scenario, the foundational elements of our institutional order are reexamined, compelling change deep within the structures of our collective understanding of the world around us (Hoffman & Ehrenfeld, 2013). This would involve a cultural transition of perspective akin to the Enlightenment of the 17th and 18th centuries (Hoffman & Jennings, 2011) which was built on a shift from perceiving nature as subsuming the human endeavor, to one in which humankind embarked on the “conquest of nature” (Mirzoeff, 2014). But the Anthropocene Era is an

acknowledgement that the scientific method that was essential to the Enlightenment is no longer fully adequate to understand the natural world and our impact upon it. Instead, we would come to recognize that: “The Anthropocene is not a problem for which there can be a solution. Rather, it ... signals a profound shift in the human relation to the planet that questions the very foundations of these frameworks themselves” (Rowan, 2014, p. 9). The exact form of this variant of Anthropocene Society is more winding, its directions are more difficult to anticipate, and its timescale is much longer than the other three scenarios. But it emphasizes the premise that changes to societal beliefs and practice are necessary for a full adjustment to the Anthropocene era. As such, the Cultural Re-Enlightenment scenario is meant to depict a broader culture shift that represents some sort of multiplicative variant of Market Rules that emerges over a long time period. It does not represent the dominance of environmental values or a green order per se. Rather it represents a broad cultural shift based on compromise for a more durable agreement among all domains of social activity where each conforms and compromises with the interests and logics of the other.

The *organizational field* of Cultural Re-Enlightenment will include a constellation of actors who are more varied, diverse and vertically structured than in the other scenarios. There would be a hierarchical arrangement among organizational groups, with science education, ethical action, religion and community responsibility organizations at the apex (Karlsson, 2013) and economic growth or technocratic engineering being directed by their focus. In some ways, we might expect the operation of state-level institutions and critiques of the market (Piketty, 2014; Sachs, 2008; Weber, Davis & Lounsbury, 2009) to lead to a renewed focus on the consideration of nation-state legitimacy and global integration. Further, we might expect many voices emerging from new and distinct domains that include less prominent voices using means

and channels that lie outside the contemporary mainstream. Other presently marginalized groups will similarly enter field level discourse, many using new forums and channels such as the internet (Howard et al, 2011; Stepanova, 2011).

The *institutions and logics* of Cultural Re-Enlightenment will be marked by new institutions and social arrangements for coordination (Galaz et al., 2012; Johnson and Morehouse, 2014), predicated on the idea that the market and technology are merely the proximate cause of our dominating influence on the environment. Ultimately it is our social beliefs and values that define their purpose, role, form and impact (Bazerman & Hoffman, 1999). This path emphasizes that changes in social structures are required to lead to a better human future through better governance (Biermann et al., 2012), values and beliefs (Alcaraz et al., 2016) and a variety of new or amended societal institutions (Hoffman & Jennings, 2015; Hulme, 2009). Over the longer-term, this trajectory of Anthropocene Society will bring contemporary considerations for sustainability into a new orientation, one that requires, not an adjustment of social systems to the limits set by the biosphere, but recognition of the planetary boundaries beyond which social systems should not go but already have, leading to new forms of moral reasoning (Ellis & Trachtenberg, 2013) and “a shared view of human and Earth histories [that] calls for a renewed engagement with ethics” (Schmidt, Brown & Orr, 2016), most notably within the domains of religious values (Pope Francis, 2015) and personal ethics (Jonas, 1973).

In fact, we may be seeing early signs of the emergence of such changes through documents such as Pope Francis’s encyclical letter *Laudato Si* (2015), which seeks to bring ecological considerations into Catholic social teaching. In that document, the pope acknowledged that our “way of understanding human life and activity has gone awry, to the serious detriment of the world around us” and that “a new way of thinking about human beings,

life, society and our relationship with nature” is necessary to protect our “common home.” The values projected in this document were subsequently echoed by Jewish, Muslim, Hindu and Buddhist leaders that offered similar messages in their faith traditions.

Global environmental governance will move towards supporting, coordinating and regulating “the introduction of novel technologies, management practices, organizational structures and institutional solutions that profoundly change the system in which they arise” (Galaz et al., 2012, p. 84). Possible normative responses would involve a greater awareness and understanding of human and natural systems and the modelling and monitoring of dynamics within and across them (Galaz et al. 2012) such as a move towards carbon neutrality and then towards carbon negativity. More pointedly, Cultural Re-Enlightenment may signal “the limits of the neoliberal market for adequately and sustainably dealing with the major environmental threats we face” (Palsson et al., 2013, p. 9), with more attention to unprecedented levels of global cooperation based on a new sense of global ethics around collective responsibility and social equity.

*Disruptive events* within the Cultural Re-Enlightenment Scenario will be viewed and interpreted as “cultural anomalies” that will compel action to question taken for granted assumptions about our relation to nature (Hoffman & Jennings, 2011). Events like hurricanes, the breakup of ice sheets, the opening of the Northwest Passage, or California’s multi-year drought will emphasize broad scale systems failures and will compel the mobilization of resources and action over meaning construction. The constituencies that engage in the debate around the definition of these events will be re-ordered from past configurations that created uncertainty and confusion towards trusted expertise in interpreting their meaning.

The main *entrepreneurs* for establishing these new Anthropocene institutions and

practices will be more localized with social experiments emerging to find new ways of thinking and living that challenge outmoded and historic ways of knowing the world around us. These entrepreneurs would be focused on behavioral education, value appeals and regional policy implementation. They would likely lead to somewhat vociferous social movements, which would vie with those advocating for more individual freedom (e.g. libertarian groups). In the process, capitalism would be transformed and new forms of “market” exchange would be developed that involve broad scale systemic change (Ehrenfeld & Hoffman, 2013; Schnaiberg & Gould, 2000).

*Dimensional changes* within Cultural Re-Enlightenment would include a shift in the trajectory of our approach to planetary boundaries, which would be addressed at a more foundational level than in the other scenarios, but not in such an immediate, targeted and rationalized fashion. It is an approach that moves well beyond the goals of the Brundtland Commission definition of sustainable development that continues on the same path of economic development and approaches. Instead it moves towards what Ehrenfeld (2009) refers to as *Flourishing*, “meaning not only to grow, but to grow well, to prosper, to thrive, to live to the fullest. It is a dynamic word, representing change and striving, not the static sentiment that is projected by the word sustainable, but a constant reaching for what it truly means to be a human being living in an interconnected and complex world. It is a future built not just on technological and material development, but also on cultural, psychological, and spiritual growth.” Interestingly, given the normative and constantly evolving nature of this archetypal Anthropocene future, those experiencing Cultural Re-Enlightenment will continually debate and redefine acceptable planetary boundaries to reflect a less instrumental determination.

## **Discussion**

We have presented our political variant of institutional theory, focusing on a specific set of institutional dimensions, and we have applied this political variant to Anthropocene Society to generate three scenarios, each with implications for both human and natural systems. Our theoretical framework has implications for research and practice. We offer four below – further study of the mix of scenarios, disruptive events, resistance to change and pace of change.

### *The Mix of Scenarios.*

A first area for theorizing, empirical study, and practitioner consideration is the three scenarios, which anchor our contribution to thinking about Anthropocene Society and need further theoretical formulation and investigation. While derived from extant work and social observation, the scenarios are theoretically diverse. Like logics and orders, each scenario is encompassing of more than one specific field and spills over into other social domains. Yet like social orders, each scenario entails types of beliefs, related social structures, and actions.

Furthermore, they are part of a domain that is under-theorized in institutional theory as a generic logic or order: the environment (Jennings & Hoffman, 2017) or green order (Thévenot, Moody & Lavaye, 2000). So, each scenario may be a unique domain or it may encompass other domains, such as the market, community or religion. If the latter is true, then each scenario itself would appear to rely on a dominant logic, but one that is complemented by others, including one based on environmental values. If the former is true, some key empirical questions for investigation become evident around what type of scenario predominates in today's Anthropocene Society, and what might we envision for the future. Answering such questions requires the recognition that some scenarios represent archetypes, which are pure forms based on the dominance of one set of logics or orders and the submission of other, less powerful logics or orders. So, any



assessment of the present or future requires the recognition that we may have a mix of forms and will be built on a bricolage of prior scenarios and archetypes that constitute, not a single social order, but an interweaving of multiple orders that emerge through political contest (Boltanski & Thévenot, 2006).

An examination of their multiple forms in the present would require measuring the different logics and orders using survey data of course measures of the dimensions answered by a large number of respondents in different countries. We would expect large regional and demographic variations in the types of logics and orders held. It would also be intriguing to know whether individuals and groups held more than one logic or order, under what conditions and how (and why) they change over time. An examination of possible futures also requires additional empirical investigation into the evolving structures just discussed. Key elements, such as who has voice and how disruptive events might change that field level structure can guide the imagining of several possible scenarios. Future realities will be sewn together into a partially sensible pattern, moving beyond a high degree of rationalism found in original expressions of institutional theory (Parsons, 1937; Weber, 1919), and towards more flexible, paradoxical and bounded rationalities (March & Olsen, 1989). This treatment will also allow for hybrid practices and forms, which twenty years ago would have been considered a flawed outcome of a partially failed institutional process. The tracking of relative levels of confusion and stress associated with various terms and their clusters (Lefsrud, Graves & Phillips, 2014) will be more important than the tracking of any rational discourse around these themes.

#### *Disruptive Events.*

A second area for consideration is around disruptive events. In our political variant of

institutional theory, disruptive events play a large role at the interface of the field and specific institutions within it. This is even more true where the Anthropocene is concerned, for the events are more frequent and linked in moving constellations. Theoretically, it would be intriguing to explore whether such constellations will continue to be seen as increasingly disruptive events, or more normalized occurrences (e.g. the “new normal”), and hence require more frequency or amplitude to capture attention. In part, this depends on the theory of organizational and individual attention used, for some versions of institutional analysis argue that bounded rationality leads to saturation and sequential attention, while others argue that learning leads to reconfiguration of events so that they can be apprehended (March & Olsen, 1989; Ocasio, 1996).

For instance, climate change is linked to temperature rises, ice melting, sea-level rise, flooding, droughts, and peak storm events. But these weather anomalies are often disputed by segments of society as being the result of normal weather variation and not a human induced shift in the biosphere. So, what will be the perceived constellation? In fact, when it comes to disruptive events, the framing and called-for actions of institutional entrepreneurs are likely to play a particularly large role in how such events work within any particular scenario, for the threats may only be seen once they are framed as problems. So, it may be that the spawning rates of new ENGOs and the diversity of their domains, will become a practical indicator for the direction being taken by Anthropocene Society.

### *Resistance to Change.*

A third area for consideration is cultural resistance to change, particularly to those efforts by institutional entrepreneurs. In each scenario, there are those who gain and those who lose political, ideological or economic status and resources and will therefore be resistant to the

emergence of the norms, values and beliefs of that scenario. In our theoretical framework, we did not specify these sources of resistance explicitly, but noted that every scenario involved interest and agency, and therefore inequities. Theoretically, this becomes a bit problematic, as varying forces of resistance would prevent the move away from any particular scenario and into Cultural Re-Enlightenment, depending on whose interests are served or stressed. We might expect, for example, that general critics, business executives and scientists would be the source of resistance to improvements in the Collapsing Systems and Market Rules Scenarios respectively as efforts seek the move towards the Cultural Re-Enlightenment scenario. So, there is a theoretical opportunity for specifying how resistance works in each scenario.

#### *Pace of Change.*

A fourth area for study is temporality or the pace of change. The Anthropocene, as noted in the introduction, is based on conceptualizations that look deep into our past, present, and near future. The Planetary Boundary perspective to which we subscribe uses notions of exponential change and thresholds, which raises the issue of time more dramatically. So, the time scale, temporal knock-on effects, and threshold points of change are all important to specify in future research studies. One difficulty in doing so is that we do not have good global level theory for linked systems like weather, water, and food (Stafford- Smith et al., 2016), making thresholds and peak events only observable post hoc (Kolbert, 2014; Rockstrom et al., 2009). In the bigger picture, temporality would also require different possible conceptions of time that are more in keeping with each scenario (Lawrence et al, 2002). In each case, temporal scales and modes vary and boundaries are marked by clear milestone indicators. The Collapsing Systems Scenario is inherently based on non-linear, accelerating thresholds across linked dimensions; whereas the

Market Rules Scenario may use temporal scales based on business cycles and, Cultural Re-Enlightenment Scenario may be based on a circular, longwave scale (Bansal & DesJardine, 2014).

Finally, we might expect each scenario to be more or less durable and open to change. Market Rules, for example, may be the most unstable as it rests on economic dominance and will shift with the whims and desires of the market. Collapsing Systems will be maintained as long as disruptive forces and actors hold power and resources to continue obstructing collaboration and compromise. Cultural Re-enlightenment may be the most durable but the most difficult to attain as it rests on compromise among multiple interests and orders of society.

## **Conclusion**

The predominant focus of organizational research on organizations and the natural environment has treated natural systems as distinct from social systems (Ehrenfeld, 2009). As such, it has been approached as an external constraint where corrective efforts seek to merge environmental concerns with anthropocentric considerations for human interests, most notably by exploring how companies can protect the environment by pursuing the goal of gaining market advantage (Russo & Minto, 2012; Shrivastava 1995). Much of this research has been normative in focus, focusing on improving “eco-efficiency” and understanding and predicting why and how corporations "can take steps forward toward [being] environmentally more sustainable" (Starik & Marcus, 2000, p. 542).

And yet, for all these efforts, researchers within the natural and physical sciences have made it clear that we are pursuing the wrong goals. Continuing efforts at eco-efficiency without consideration for the systemic aspects of the causes of our environmental problems will not yield

solutions (Ehrenfeld & Hoffman, 2013). The environmental problems will only get worse. As such, the shift to the Anthropocene renders prior research objectives to be misguided and inadequate for addressing the magnitude of the challenge before us. As a correction, we hope to contribute to the long-term need to combine *Naturewissenschaften* with *Kulturrewissenschaften*, a central concern in Weber's work (Weber, 1949), and to use theory and research to inform reflexive practice and policy. In this way, a linkage of natural and physical science theories of the Anthropocene must, by definition, change the paradigm under which current research in environmental and social sustainability takes place. But this paradigm shift comes with particular challenges for the scholar, one that many have begun to undertake through both research (Dickens, 2001) and action (e.g. Economics for the Anthropocene: Re-grounding the Human/Earth Relationship, a partnership between McGill, the University of Vermont, and York University).

*The Conflicted Role of the Scholar in the Anthropocene.*

In closing out our assessment, we wish to acknowledge that we might be accused of being rather cold and overly analytic for studying an issue that threatens to irreparably damage our physical and social worlds. We concur, acknowledging that the reality of the Anthropocene is highly emotive in nature and that the grand challenge is an overwhelming burden at many levels of social life. While institutional theory often strives for normative detachment from the empirical domains which it studies, this issue requires a more attached approach. As such, we wish to move away from the benign neutrality of most institutional analyses to argue that there are better and worse Anthropocene Societies to which we should aspire.

Regardless of which Anthropocene future emerges, deteriorating natural systems, at least

for the immediate term, are likely a given, leading to an assessment that a “good Anthropocene” may no longer be possible (Hamilton, 2014; Revkin, 2014). Ultimately, while some may temporarily gain in a future in which the effects of the Anthropocene manifest themselves (e.g. some northern latitudes may temporarily enjoy increased plant growth and crop land), the majority of the world’s human and non-human inhabitants will lose in any Anthropocene Society where natural systems deteriorate. Similarly, responses to such global change will also create an asymmetry of interests and values in Anthropocene Society. As a result, the conceptualization of both the era and society will be politically contested and continually open to exploitation (Zalasiewicz, Williams, Steffen & Crutzen, 2010).

But as both scholars and human beings, we would be incomplete in our analysis if we did not take a normative stance on the desirability of Cultural Re-Enlightenment over Collapsing Systems, and a careful critique of Market Rules as a long term solution to the Anthropocene issues we face. While the Market Rules Scenario is somewhat positive, the impact on nature is uneven and still leaves us teetering periodically on the edge of Collapsing Systems, and with large inequities across segments of society. So, it would seem that some aspect of the Cultural Re-Enlightenment scenario would be important to have a flourishing, constructive Anthropocene Society, a world where we have at least some success in wrestling with social and environmental breakdowns and inequities that are evident today.

Such a normative stand leaves the scholar of Anthropocene Society in a bit of a bind (Hoffman & Jennings, 2015). The urgency and magnitude of the Anthropocene puts the scholar’s professional and personal interests at odds. We need to both fit the phenomena within existing theory in order to contribute to the field (and maintain legitimacy within the academy through publication, promotion and tenure) and step outside the domains of existing theory to fully

capture the magnitude and scope of the problem. The first is to begin to mitigate the impact we are having on the environment. It is polite, acceptable and unchallenging to the systems of practice and the academy. The second is to re-energize and re-radicalize the field (Gladwin, 2012; Starik & Kanashiro, 2013) by moving outside of mainstream scholarship and practice by criticizing and challenging the underlying institutions of the field. The Anthropocene Era calls for scholars to do that again, to enter the realm of creative destruction, to question taken-for-granted metrics and concepts, to be impolite and to challenge existing power structures in both society and academia. Rather than merely fitting scholarship within existing management theories and models, this new work in institutional theory must explore the ways in which the fundamental systems of thinking and beliefs must adapt to the present-day realities of the Anthropocene. The goal today for forward-looking scholars is to do both and in so doing, advance theory and address the societal implications of the shift to the Anthropocene era.

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**Table 1:  
Adjustments to Institutional Theory in Light of the Anthropocene**

<b>Institutional Elements</b>	<b>Mainstream Institutional Theory</b>	<b>Political-Institutional Variant</b>
<i>Organizational Fields</i>	A community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field. Fields tend towards isomorphism, the static, and the status quo.	A relational space where multiple and often competing interests engage with other actors who may hold divergent ideas about the nature of the world around them. Those without voice (such as the disempowered, the environment, and future generations) must be included, bringing environmental justice to the fore. Fields tend towards dynamic domains of instability and flux.
<i>Institutions and Logics</i>	Patterns of belief and practice that are taken for granted, including specific rules, norms, or logics. A logic exists within different generic social domains, such as the market, the State, and the family. Institutions determine what issues within the field are perceived as important and what actions are appropriate.	Taken for granted sets of beliefs and practices that inherently reflect interest and agency. Every logic within a field enconces power relations and solidifies inequalities. Interest, agency, types of control, and methods of contestation are either defined by the dominant logic(s) or shaped by them.
<i>Disruptive Events</i>	Shocks or triggers that create contradictions within the social environment and force organizations to re-theorize their surroundings.	Shocks or triggers that increase in frequency and interdependency, becoming constellations. Incumbent power interests attempt to smooth them over if they challenge their legitimacy and have them accepted as (the new) normal.
<i>Institutional Entrepreneurs</i>	Social agents who challenge and/or change current institutions, including overarching logics.	Social agents who define and leverage disruptive events and the interests of actors. They overcome resistance in order to change field dynamics and specific institutions.
<i>Anthropocene Dimensional Changes</i>	Ignored in general theory, though many specific studies examine Anthropocene events, such as climate change.	Changes within and across the planetary boundaries, with implications for the advantaged and disadvantaged groups affected.



**Table 2:  
Three Scenarios for Anthropocene Societies**

<b>Institutional Elements</b>	<b>Scenarios</b>		
	<b>Collapsing Systems</b>	<b>Market Rules</b>	<b>Cultural Re-Enlightenment</b>
<i>Organizational Fields</i>	Fields are increasingly interdependent and organized around power.	Fields are market-oriented, and often divided by new vs. old economy.	Hierarchical field around science education, ethical action, religion and community responsibility.
<i>Institutions and Logics</i>	Competing mega-institutions at the core with overlap of different fields, vying to coordinate them.	Strong new national and transnational trade institutions that link market success to environmental remediation and adaptation.	Powerful new local, national and transnational norms for behavior; recognized national and international sources or outlets for Anthropocene information
<i>Disruptive Events</i>	Distribution problems of key societal inputs, including people, food, water, and housing are an issue. Cultural fabric is increasingly shredded by violence and disrepair.	Events are framed as market issues based on economic implications, such as commodity use, energy prices and production yield.	Events are framed as social failures, requiring a reassessment of the disconnect between our historic norms of action and emergent values around environmental stewardship. Human impacts are perceived in moral terms.
<i>Institutional Entrepreneurs</i>	Different forms of systems entrepreneurs try to promote their interests within specific institutions by taking advantage of systems failures.	Market entrepreneurs who embrace environmental entrepreneurship.	Education, social and policy entrepreneurs leading to strong social movements.
<i>Anthropocene Dimensional Changes</i>	Collapse of key naturally-linked systems (power grids, food, water) in different parts of the world, at an increasing rate, with accelerating unpredictability. Concurrent breakdown in social institutions.	Reversed trajectory of specific aspects of planetary boundaries as measured by economic indicators (e.g. GDP). Broader reversals where no economic, or “business case” is viable are overlooked.	Progress in most dimensions, ordered normatively, with remediation leading society into safe zone dimensions of planetary boundaries.