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DIMENSIONS OF CONTENTION:

INTEGRATING THE DYNAMICS OF INFLUENCE

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Dimensions of Contention:
Integrating the Dynamics of Influence

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Abstract

In *Dynamics of Contention* Tilly and colleagues proposed using a set of discrete types of mechanisms to represent the relationships between parties engaged in a case process of contentious politics. This path-breaking innovation suffers, though, from paradigmitis-too reified, narrow and rigid, in a word too mechanical, a conception of the relations between contending parties. The present paper improves on this approach by developing a wider framework of potential influence relationships drawn from contrasting paradigms. The new framework measures the relative presence and influence of diverse relational modalities in a dynamic relational matrix. It does so inductively in relations among the engaged parties using data from an ethnographic case study. Coding the data allows the use of network analytical methods to discern the synchronic and diachronic complex influence formations of the whole engagement network. The findings show the whole network to be undergoing constant change in its degree of embeddedness (versus agency) in different types of structural contexts (from material through social to cultural types of influence). The flux pattern offers strategic moments for movement influence that can affect long term outcomes. This presents a new way to model the dynamics of contention from a multi-dimensional causal perspective.

Introduction:

Tilly et al's *Dynamics of Contention* uses a set of discrete types of mechanisms as the struts to model the various kinds of relationships between parties engaged in a particular case process of contentious politics. To be a usable piece of a larger model, a mechanism must "[b]y definition," states Tilly, have a "uniform immediate effect" (Tilly 2001). In explaining contentious politics, the mechanisms include "competition, diffusion, repression and radicalization"(McAdam, Tarrow and Tilly 2001; Tilly and Tarrow 2007) (Hedström and Ylikoski 2010; Tilly 2001). The idea here is to build a model of a dynamic process out of a limited toolkit of relational struts. This enables one to use the same struts in different combinations to model quite different cases of contentious dynamics.

This path-breaking innovation built on Tilly's original conceptual models of relations between authorities and challengers as threat and facilitation. Tilly's work rested on a particular conception of the basic constitution (ontology) of the social world. Tilly unequivocally stated his "dogma" as

"doggedly anti-Durkheimian, resolutely pro-Marxian, but sometimes indulgent to Weber and sometimes reliant on Mill" (Tilly 1978). He rejected "culturalism," defining it as the theory that people act on prompts from symbols and values absorbed into their minds (McAdam, Tarrow and Tilly 2001: 22, 57; Tilly 2002:71). This foundation remained throughout his long career, undergirding his many now classic studies. Tilly eventually came to call his approach *relational realism*. His realism referred to relations of rational instrumentalism, the mutual, purposeful and manipulative application of sanctions to get others to behave as desired, among the engaged parties.

Critics argue, though, that the idea of a mechanism over-simplifies the interactions it describes (Abbott 2007). The mechanism of repression, for instance, may, as Tilly argues, bludgeon a movement into silence. But contrary to Tilly's assumption, repression will not always and uniformly have such an effect. Sometimes, physical repression may fail, as when the British tried applying it to stop Gandhi's non-violent salt-march in India. The same predictive weakness holds for his other posited mechanisms. Thus, under probing scrutiny, explanatory models built of mechanisms are likely to fail.

Ultimately, then, Tilly's relational realism, not surprisingly, boils down to one form of reductionism. Reductionism is an attractive solution in the study of complex social phenomena because it sets up a "unitary frame of reference" based on a foundational axiom about the social world (Emirbayer 1997b). Tilly's relational realism is reductionist because it assumes the universality of a certain type of social ontology; that is, that actors basically relate to each other using rational instrumentalism. This assumption justifies the validity of the preconceived mechanisms of relationships. Tilly's approach constitutes a classic Kuhnian paradigm.

The problem with social science though is that other scholars use other paradigms. A diametrically opposite social ontology would, for instance, be "symbolic realism." As used by Bellah, this refers to the assumption that common symbolic categories and codes, not rational instrumentalism, drive social action. Tilly et al rejected this symbolic approach as a form of subjective "phenomenology." But many scholars support this kind of symbolic approach in political analysis (Alexander 2006; Dobbin 1994)). For instance, Dobbin says

> *"cultural scripts . . . influence policy-making by contributing to collective understandings of social order and instrumental rationality. History has produced distinct ideas about order and rationality in different nations, and modern industrial policies are organized around those ideas."(Dobbin 1994)*

This wonderful work, given its insistence on the priority of symbolic codes driving state behavior, also assumes its own paradigm. Similarly, relational sociology can become a self-consistent paradigm. One of its founders, Emirbayer, for instance, rails against "all too easy acceptance of hybrid models (e.g., juxtapositions of rational-actor with network-analytic approaches)."(Emirbayer 1997b)

These kinds of paradigmatic debates have a long history. Weber long ago raised his basic objection to Marxian material reductionism. Cultural values, Weber argued, have the capacity, like a railroad switchman, to shift the "hurtling juggernaut" of political-economic interests onto a new track going to a new destination. But Weber dodged the paradigmatic bullet. Weber cautioned that he did not want to substitute a "one-sided spiritualism" for a one-sided materialism, but rather to show that both could be at work in the same situation (Weber 1958).

In a similar spirit, another kind of realism, *critical realism*, argues that all concepts are at best approximations of reality and hence should not be relied upon as concrete in the manner of paradigms (Gorski 2013). This philosophical approach to social analysis gives the research much greater freedom to pragmatically mash and mix axiomatic concepts like a painter would primary colors, in order to produce a more satisfying rendering of a reality (whether felt or seen).

Weber and more recent scholars agree that it is possible to distinguish cultural from material causes within the same social phenomena. Social phenomena can have, in other words, more than one causal dimension. Rather than reduce them to distinct paradigms that cannot be used in conjoint explanation, it is better to find some way to combine them. However, this has not been the common practice for the macro and meso-level study of contentious politics.

Reductionism is justifiable if it serves the purpose of explanatory parsimony. But parsimony is a virtue only to the extent that Occam's razor does not lop off important pieces of reality. In this respect, going even beyond a Weberian perspective, the new causal perspectives of chaos and complexity indicate that reductionism in the social sciences remains very premature.

It is the very complexity of large-scale social processes, though, that has always driven many scholars to radical reductionism. They adopt one or the other fundamental analytical category as a foundational and incontrovertible axiom, as Tilly did above. On such an axiomatic rock the social scientist can build a logically-consistent system of explanation, often to doggedly defend throughout a career. Such foundational axioms define and distinguish the social scientific

schools: class, culture, institution, market, rationality, network, etc. Each school rules out by fiat a whole range of other potential factors that might confuse or confound its clear logic of explanation. Other scholars in the same school accept this purification as "judicious parsimony" and stamp the explanation as valid, ushering it into publication. This incestuous approval process produces a diversity of isolated paradigmatic schools, each comfortable within its own silo and incommensurate with the others (Weaver and Gioia 1994). Social science respects a "gentleman's agreement" to allow space for each popular paradigm.

The foundational axioms of a given paradigm establish the parameters or blinders of its research program (Kuhn 1970). Such a program, critics charge, assumes its core axiom as real, and hence rules out as fanciful any criticism of the core axiom (Lakatos 1970; Posner et al. 1982). Such research programs set up hypotheses to validate, but none that might falsify their core axioms. This produces incommensurate paradigms that cannot be reconciled with each other (Morgan 2007:61). The situation is well-expressed in Godel's ironic theorem:

any system built upon a consistent set of axioms will generate theorems that are true but that cannot be proved (Godel, cited in (Bronowski 1979).

This kind of self-validating reductionism actually characterizes much of human thought, scientific or otherwise, limiting its capacity to recognize non-conforming realities.

However, as our recognition of complexity increases, the adequacy of such mutually-isolated, axiom-based, hypothetico-deductive systems of thought has come increasingly under fire in all fields, including the social sciences (Manfredo 2014)). It has become a truism that fruitful theorizing occurs at the borders between two schools, where categories clash. An even better approach would be to start from a pragmatic agnosticism and incorporate any and all foundational axioms as needed into hybrid models.

Dynamic, contentious processes, our focus here, necessarily take shape within complex macro-socio-cultural-historical formations. Moving beyond existing paradigms, the complex "way of being" or ontology of such formations seems best posited as a polymorphous "goo:"

Social organization is like some impacted, mineralized goo, some amazing swirl of local nuclei and long strands of order among disorder (White 1992:127).

This social goo promiscuously flows through and around the brick-like axioms that undergird paradigms; hence the goo escapes their explanatory mechanisms. Positing such polymorphous fluidity in social organization is a good antidote to excessive

faith in reductionist paradigms. But White's concept of social goo suffers limits too. In it, culture is reduced to identity which in turn is reduced to struggles over control. There is no place for collective historically-transmitted cultural symbols or for the creative, reflexive, new idea-generating genius mind (White 2008:17); (Emirbayer 2004:8) as cited in (Pachucki and Breiger 2010).

Starting from the general notion of fluidity, this paper proposes treating the various axioms of the diverse schools as partial hypotheses about or factors potentially affecting complex contentious (or other) processes. This method involves measuring the relative effects of the different factors as potential ingredients of the dynamic and contentious process. In order to bring the ideas closer to the action, the method is to seek for evidence within the (hundreds of) relevant dyadic key inter-organizational relations (KIR) that constitute a dynamic contentious process over time, from mobilization through trajectory to outcome. The KIR represent vectors of influence between the two members of the dyad. Collectively, these vectors embody or manifest the causal factors driving and determining the dynamic process. Somers calls this a relational matrix:

> "*the most significant aspect of a relational setting is that there is no governing entity according to which the whole setting can be categorized; it can only be characterized by deciphering its spatial and network patterns and temporal processes. As such, it is a relational matrix, similar to a social network*" (Somers 1994:72)

The present paper expresses this approach as an actual network.

In the present paper, information on KIRs constituting a contentious process comes from an exhaustive ethnographic field study of environmental contention in Japan. The most comprehensive information about such KIRs can only be gathered through fieldwork by interviewing both parties as well as gathering other's accounts (Emirbayer and Goodwin 1994). The most fraught step in any social scientific study occurs when translating the complexity of real relations into the purportedly correct abstract explanatory categories. This danger is pointed to in anthropology by the distinction between *emic* –the categories of the natives--and *etic*—the categories of the researcher (Berry 1990). Lack of attention to this point can slide serious distortion into any purported explanation by an outsider—if indeed any set of concepts can be adequate. The conceptual engorgement is indeed the basis of the problem with paradigms.

The resolution to the etic/emic dilemma taken in this paper is relational as method, but not relational as axiom. That is

to say, the approach does not rest on the relational paradigm. It is, rather, to explicate what the different paradigmatic axioms mean in terms of dyadic relational content. It is to ask, if the social world ran according to this paradigm, what would the dyadic relations composing that world contain by way of incentives? To do that for many paradigms, and then to see which of those incentives actually appear in real relationships.

This explication exercise across the various paradigms yielded a nine cell table of basic modalities of relationship. The resulting basic table was defined by two dimensions: the malleability and the tangibility of the relational content (defined below). This table, it is here argued, provides the basis for a more comprehensive and empirical rendition of the diverse factors driving a contentious process. It is more comprehensive because it invites diverse paradigmatic axioms into the composition of a combined complex hybrid ontology. It is empirical because it scores the relative presence of each relational mode in a given KIR on the basis of nuanced ethnographic data. This is the key nuanced transition point between the emic and the etic. The method also codes a KIR's degree of impact on the final outcome and other of its qualities. The resulting set of coded KIRs, in this case, runs into hundreds stretching over the time duration of the case. This type of data permits building explanatory models that can be examined in both synchronic and diachronic extensions. That is, the model can be expanded or contracted along its temporal dimension, in this way resembling an accordion.

The present study used ethnographic information from an existing qualitative study of environmental contention in Japan. The coding yielded 251 KIR among 22 organizational types over 27 years. In other words, the project included all the relevant organizations in the entire *field* of action (Martin 2003). Analysis of this data revealed the changing mixture of the nine relational modes over time assessed by their relative causal influence within the dyad and impact on the outcome. The resultant hybrid explanatory model bridges the divides in the balkanized landscape of theory. It provides a more accurate assessment of the multiplexity and complexity of causality, thereby improving the validity of case explanation. At the same time, the hybrid model, constructed of a common set of relational strings, bridges the perennial divide between nomothetic and ideographic approaches to explanation. Furthermore, as an ordering device, the model feeds back into the construction of thick descriptions and grounded theory.

Approaches to Integrative Models

Drawing upon earlier theorists, Talcott Parsons developed the first holistic abstract representation of the various dimensions present in a social system in his AGIL model. This model presented an "attempt to delineate in a systematic manner the degrees of material and ideal focus in any social system" (Alexander 1978: 183). The model distinguished the economy, politics, social integration and value commitments as distinct factors that could merge in various ways to shape actors and action(Parsons 1969). Beginning in the 1960s, critics attacked Parsons' system model for many faults: too abstract, too functionalist, ignoring the vital role of contention and conflict(Mills 1959) and also for positing the existence of a "society" as a unified integral system on the biological analogy,. As Tilly said, society is not "a thing apart" (Tilly 1984). Nevertheless, Parsons' AGIL model, stripped of its functionalist and systems assumptions, suggested the possibility of integrating the diverse causal factors identified by separate theoretical schools into a more holistic understanding and explanation.

Since Parsons, scholars have advanced other integrative models (Archer 1988; Giddens 1983; Weaver and Gioia 1994). However such multi-dimensional inquiries still lack an empirical method to precisely distinguish and assess the relative effects of different dimensions. The method must proceed, as argued by Tilly, through tracing the real relations among actual actors, in this case those engaged in contentious politics (Tilly 1999). But at the same time, the study must be open to the much wider range of causal factors within those relationships than allowed by Tilly's instrumental mechanisms. The first step toward building a more integrative approach to social research is to distinguish the different axiomatic foundations of the diverse paradigms.

Distinguishing Axiomatic Foundations

In their encyclopedic review of theories of politics, Alford and Friedland identify three main theoretical models: pluralist, managerial and class (Alford and Friedland 1985). They state that each theoretical model builds on different axiomatic assumptions about causality. As a result, the authors contend, the theories talk past each other and never engage in creative dialogue. The authors conclude with a call to draw on the insights of all the models to produce integrative theory.

Far from applauding their labors, political scholar Theda Skocpol in a review titled "the Dead End of Metatheory" took

Alford and Friedland severely to task for wasting their time on a useless exercise – the classification of all political theory into three pigeonholes (Skocpol 1987). Instead, Skocpol urges them to conduct *substantive* research.

Skocpol certainly has conducted exemplary substantive studies, her first major work being an explanation of social revolutions in France, Russia and China. But a purely substantive study would be an historical narrative of each revolution unfiltered by theoretical presuppositions. Skocpol includes plenty of substance (narrative and events), but she also presents a distinct theoretical argument. She argues that the three revolutions came about due to the co-presence of the same three structural factors: state collapse, revolutionary elites, and rebellious peasants (Skocpol 1979). Where did these three factors come from-pure induction from the narrative substance, or were they influenced by some prior theoretical framework?

Skocpol says she takes a "non-voluntarist, structural" perspective. This stance certainly sets some theoretical preconditions. By non-voluntarist, Skocpol is ruling out culture and by structural she means collective factors that have coercive, instrumental force to move the situation. This approach is similar to that taken by her mentor, Barrington Moore(Moore 1966), fundamentally a focus on the relative concentration of coercive power in the state versus in civil society building on Weber's sociology of political power(Weber 1978). In other words, Skocpol's analysis is not purely substantive, but has been influenced by an *apriori* theoretical framework that has edited out the potential effect of cultural differences.

Highlighting this lacunae, Sewell challenged Skocpol's analysis of the French Revolution. He gave much heavier weight to ideology *qua* cultural idiom as a causal factor (Sewell 1985; Skocpol 1985). This critique indicates the possibility that Skocpol's initial theoretical framework influenced the factors she considered causally relevant in her explanation of revolutions. In other words, what seemed like "substance" to Skocpol was to Sewell a form of "misplaced concreteness" resulting from prior theoretical blinders.

This debate about the adequacy of axiomatic categories deployed in analysis has continued through the history of macro-political and social analysis. In the most classic example, Marx turned idealist Hegel "on his head," but Weber then upended Marxian historical materialism by examining the effects of culture on the emergence of capitalism (Weber 1958). More recently, Tilly attributed the formation of nation-states in Western Europe to the needs of war-making rulers, who had to

create bureaucracies to collect taxes (Tilly 1992). In contrast to this instrumentalist and materialist explanation, Gorski stressed the causal importance of the ideological infrastructure, here the Protestant Ethic, for the same state-formation process (Gorski 1999). He defined ideological infrastructure as "the ability of symbols and identities through which rulers can mobilize the energies and harness the loyalties of their staffs and subjects" (Gorski 1999:157). In another case, Zhao (Zhao 2004) critiqued Kiser's rational-choice interpretation of state-formation in Qin Dynasty China (Kiser and Cai 2003), setting off rebuttal (Kiser and Cai 2004). Dobbin goes even deeper into symbolic realism to argue that cultural scripts drive the industrial policies of modern states (Dobbin 1994). These cases illustrate how, as Godel's theorem implies, one scholar's substance can be another's misplaced concreteness (Whitehead 1978). Such analytical debates about social causality rarely reach consensus, but lead to the evolution of theoretical positions over time.

Early on, Tilly (1978) made his explanatory "dogma" clear, as noted above. For him, cultural Durkheim was "useless" (Tilly 1981). But after decades of criticism, Tilly became a bit more open to concepts of culture - though he still saw culture as the direct subjective reflection of social categories (Tilly 1998). Less overtly, Skocpol made a fundamental shift in her basic view of the state from substantive actor to institution (Skocpol and Campbell 1995) Similarly, between two editions, Tarrow relaxed the causal effect of political opportunity structure. Still, bringing social and cultural relations into the analysis of power and contention in a systematic empirical manner remains a central challenge to integrated understanding.

These explanatory contradictions and shifts illustrate a basic problem in deductive theory-based explanations of complex macro-social formations and processes. In the service of a vision of science--to provide a succinct and parsimonious explanation of a complex processes--scholars often search for a single underlying driving force or covering law (Calhoun 1998). Unfortunately, though, any central explanatory law making an explanatory claim requires a foundational axiom. But any axiom cuts the world into what it recognizes and what it ignores, and so necessarily leaves out a lot (Bronowski 1979; Mill 1970). To advance a law or explanation, the scholar often builds on fundamental axioms that define away a lot of reality. Any system of thought is based on presuppositional axioms (Emirbayer 1997a) (Calhoun 1998). As Godel shows, that foundational axiom is inherently unprovable within the conceptual system that it supports (Gödel and Brown 1940). Accordingly, any consistent explanation of social reality,

especially complex macro-processes, easily turns into a paradigm -- a self-contained universe of explanation that rules out anomalous data by fiat (Kuhn 1970; Somers 1998). Once this happens, the foundational axioms become assumed and not tested. This is a problem for all scientific endeavors, but it is especially acute in the social sciences. In the world of ideas, concepts and theories, as in social life more generally, "what we define as real is real in its consequences" (Thomas 1966). As in Kuhn's concept of paradigm and as in Godel's theorem cited above, the adoption of a given concept rules in certain possible explanations and rules out certain others. Axiomatic assumptions form the core of paradigms and undergird the explanations deployed by most studies of macro-social politics(Weber 1958).

This problem poses difficulties enough in the physical sciences, but the complexities introduced by culture makes the social sciences even more subject to accepting unquestioned first principles. This dilemma, coupled with other obstacles (the difficulty in manipulating variables to conduct experiments, the small number of macro-cases, for instance nation-states, and the imprecise probabilistic fuzziness in how social stimuli operate) has led to an unbridled proliferation of explanatory concepts and theories operating at different levels of analysis in the social sciences. The social sciences contain many distinct paradigms with their own covering laws and axioms (Somers 1998). These concept-theory packages include class, institution, culture, market, rational choice, network, structure, system, function, agency, dominance, material, ideal paradigms. For instance, a simple Marxist approach posits class exploitation as its basic covering law; from there, it explains the rest of politics, society and culture. Rational-choice theories posit market-like exchanges based on individual preferential choice, constrained by circumstance. Cultural theories take common subjective orientations as basic. Neo-institutionalists take norms as their axiom. In paradigmatic logic, explanation proceeds deductively: derive explanatory hypothesis from first principles (axiomatic covering law), ignore hypotheses from competing paradigms, find supporting evidence, argue for the explanation (Keat and Urry 2011).

Because this paradigmatic reductionism blinds researchers to the wider social realities, some macro-comparative scholars have come to criticize its vacuity (Abbott 2007; Gorski 2004; Lieberson and Lynn 2002). The fuzziness of social scientific concepts and the complexity of real social processes means that attempts to establish laws end up explaining very little.

The search for a better way has gone in two directions: looking for smaller pieces of the puzzle, and the idea that perhaps there is no coherent explanation.

On the latter, non-coherence front, the more we probe we find that even analytical units such as state, civil society and market incorporate such hidden assumptions. The naïve equation of one's analytical schema with truth or social reality will eventually face criticism and lead to dogmatic defensiveness, implicit position-shifting or rueful recantation, as seen for instance in Tarrow (Tarrow 2005).

Aware of these difficulties, scholars like Alford and Friedland (cited above) have not been alone in attempting to define the basic differences between theoretical schools as a first step to a more integrative social science that could better explain complex social realities. A number of scholars have urged the synthesis of different theoretical perspectives. In fact, such synthesis has become recognized as a critical mission for dealing with contemporary social problems, such as global climate change. The question is, how? (Ragin 1987). The more we study the actual dynamics of macro-social processes, the more "messy" they seem (Mann 1986). They exist, not as tightly coupled systems, but as "impacted, mineralized goo, some amazing swirl of local nuclei and long strands of order among disorder" (White 1992). This goo may not conform to any single theoretical logic; it may contain different logics in "sutured spaces" (Laclau and Mouffe 1985).

Seek Pieces not War: Recognizing Diversity

Concerning the former, in the search for smaller pieces, Merton led the way with middle range theory. But Merton also complained that such theories did not add up to much: "our little systems have their day, they have their day and cease to be" (Merton 1968). Without even positing little systems, it might be more useful to look for more precise causal arrows between actors that could be fit together into larger explanatory models (Abbott 1998; Levin et al. 2007; McAdam, Tarrow and Tilly 2001; Miller et al. 2008; Siebenhüner and Heinrichs 2010; Skocpol 1979). As discussed above, one idea for such pieces is the *mechanism* – a social activity that changes the relationship among social units so as to affect longer-term processes and outcomes(Hedström and Ylikoski 2010). A set of mechanisms, its proponents claim, can be put together like Lego blocks to build an explanatory conceptual model of any complex contentious process (Hedström and Ylikoski 2010; Tilly 2001). Mechanisms, like middle range theories, exist midway between grand theory and detailed description (Abbott 2007; Merton 1968).

Moving away entirely from imposing any preformed deductive explanatory schema at all, the other extreme is to go right to

the pure source, the people and activities of a case. To provide substantive working materials, it helps to conduct an open-minded, grounded ethnographic study. The method portrays the world through the eyes of the actors, the *emic,* at least as recorded in voluminous field notes on all aspects of the process of interest. That view is fresh. The researcher tries to accept this freshness without filtering it through previously known theories, covering laws or axioms (the *etic*) (Berry 1990). In sociology, grounded theory takes this approach (Glaser and Strauss 1967). The researcher then tries to assemble an explanation within the materials given by the field. Even at this bare level, explanations rarely jump out whole. As in the Japanese murder mystery Rashomon, indigenous actors will have different stories about the situation. The researcher must therefore still, like a good detective, infer the best "emergent" explanation from the observations (abduction) (Gorski 2009), if explanation is the purpose.

Many social scientists, though, want to go beyond case specific explanations in local emic terms. They hunger for more general explanations of human society. From this tension arises the perennial conundrum of comparative sociology — whether to be satisfied with ideographic (unique) case models or to seek overarching cross-case nomothetic (law-like) explanations of varying range (Ragin 1987; Ragin and Becker 1992; Tilly 1984). But this quest leads quickly back to the weakness of covering laws and paradigms discussed above. The pursuit of an integrative social science requires, to the contrary, from the start the admission that all theoretical schools may have important pieces of the puzzle, of the full explanation.

The Relationship as Basic Social Unit

One way out of this deductive-inductive, nomothetic-ideographic conundrum is to look for even smaller pieces of the puzzle. The smallest, or primitive, relational element of a social organization or process is the relationship between two social units, the dyad A and B (Abbott 2007; Emirbayer 1997a; Simmel and Wolff 1950). A relationship is an interaction between A and B that affects A and/or B in any way. Relational sociology sees the social world, not as preformed social units taking action to engage in relationships, but as sets of relationships that define the existing social patterns and the social existence of the units themselves. In this view, a multitude of relationships link together social units and aggregate them into larger social formations (Elias 1978). In other words, this skein of relationships embodies the manifest, active, living society. Look at society this way moves beyond

the traditional dichotomy between seeing society either as the social action of units and as collective social facts that control members. Rather it follows the relationally manifest and continually generative ontology of interactionism (Blumer 1986). "By the relational view I mean the notion that the meaning of an action is comprehensible only when it is situated in social time and place. A fundamental assumption of the mechanism view as set out here is that the meaning of a certain activity is given in itself." (Abbott 2007).

If we turn the relational approach into relational*ism*, it can become a paradigm with its own dogmatic limits. It can completely subordinate actor motivations in favor of the manifest relationship. Privileging relationships over actors can lead to ignoring important social phenomena. Therefore we need to consider the interaction between motivations and relations, with one or the other possibly dominant or both mixed in complex ways. If we examine the contentious process on the inter-organizational level, as Tilly does, it becomes the foundation of macro-formations. When studying individual motivations and organizational programmes for action, the range of possibilities is very large. But when studying the set of organizations engaged in a contentious political process, the range of motivations and relations is narrowed.

This paper develops a method for probing more deeply into the manifest relationships and their causal sources that drive and comprise the contentious political process among organizations. It concerns the entire field of relationships that comprise a contentious process around an outcome. Whereas Bourdieu presented a field of actors and tastes defined by individual qualities (levels of cultural and economic capital), the ISA approach presents a field of relationships among actors that transform over time. It attempts to address the well-known problem with field theory of the integration of cultural meaning and the structure of relationships (Martin 2003). The field consists of a "dynamic relational field in which the ongoing actions and interests of state actors, allied and counter-movement groups, and the public at large all influence social movement emergence, activity, and outcomes" (Goldstone 2004)

In this situation, motivation is reduced to concern over competitively winning the goal (as in a sports event). In a contentious political process, the engaged organizations are struggling over the outcome of a given political issue. In this process, as in a sports competition, they can use a wide variety of sanctions and strategies to build support and defeat opponents. However, the game of cricket, football (soccer) or chess uses the same rules in any country. But unlike the well-defined rules of a sport, in the political process, especially

when we compare across cultures and civilizations, the interaction process is much less standardized or universal. In any given process, the types of sanctions and strategies and even the composition of the participants is constantly changing to a much greater degree than in sports. In order to perceive these differences at the interactional level, we need a way of categorizing and then tracing the manifest interactions among the active participants in the political process over time. As Giddens said, ``social practices ordered across space and time'' constitute ``the basic domain of study of the social sciences' (Giddens 1984).

The method is named Integrated Structurational Analysis (ISA): *Integrated* because it shows how to combine the causal effect of diverse factors within a single analysis; *Structurational* because among the factors that determine power in these relationships arise from the interaction of preexisting formative patterns and the agency of actors to innovate and change those patterns (Giddens 1983; Giddens 1984); *Analysis* because it breaks down the process into it's smallest *relational* components, analyzes the presence of different relational types within each given dyadic interaction, does this for the full set of interactions composing a case of political process, and then synthesizes the diverse types of these elemental relational components back into new recombinant hybrid models of the process. As used here, the term analysis also implies subsequent synthesis. The abbreviation ISA is a double-entendre because the initials also stand for the International Sociological Association, as it is hoped that this method will help resolve thorny issues in comparative analysis.

Any contentious process going through a complex society involves a multitude of interactions only some of which bear upon the final outcomes. To simplify this complexity, the ISA method requires selecting only the inter-organizational relationships that have some causal effect or impact upon the outcomes of interest. These are called Key Influence Relationships (KIR). Uncertainty about causality has a long philosophical and scientific history (Abbott 2007). Hence the whole method of using many cases of a specific relationship (variables) to establish the degree of concomitant variation, to judge reliability and validity.

Social Formation as Context

The political process, in contrast, is not composed of variables. It is a case composed of a sequence of unique A-B dyadic interactions. In this case, causality arises first of all because of an issue that becomes a matter of controversy.

Some event is dropped into some social formation or figuration (Elias 1994). From there, the dynamics of the whole formation take over to make the event into a contested issue, or to make it sink and disappear. The social formation is extremely complex—a "goo" composed of mixtures of elements and compounds drawn from the full range of factors theorized by social theory and probably many more than have not yet been so theorized. The event becomes an issue through social discussion, debate and argumentation between sides that construe the issue in different lights. This is the process of social construction. As the differences of construal become more clear to many participants, at the level of interactions among movements, groups and organizations, overt forms of contention and struggle emerge. These forms of contention carry the process through its trajectory and, interacting with other exogenous events, powerfully affect its outcome.

To understand what kind of social formation or goo is present in its hybrid mixtures, it is not very feasible to assess this *apriori* as a general formation, before studying the case itself. In part that inability is due to the inherent subtlety, complexity, chaos and indeterminacy of the social formation itself. In part it is because, depending on the event in question, different aspects of social formation will manifest in response. Therefore, it is safest to study the causal factors from the social formation that manifest in the political process itself. And within the political process, to study those manifestations within the many A-B dyadic relationships that can be identified, analyzed and coded. The dyadic modes identified in the Table One represent the presence of their larger bodies of causal theory. Their co-presence, in a single dyadic relationship, or by collation of many dyadic relationships, indicates that both bodies of theory have causal bearing upon the appearance of the dyadic relationship and its effect upon the outcome. In other words, this co-presence indicates the imperative for the hybridization of both relational modes—no matter how much incommensurability their parent bodies claim.

Coding Relational Content

As explained in detail below, the assignment of presence and causality of relational modes relies upon the judgement of the investigator. Examining discrete relationships in thick ethnographic detail can produce considerable certainty that a causal A-B relationship exists. One can for each individual A-B relationship examine other possible contextual factors and rule them out (Emirbayer and Goodwin 1994). In the same way, the

researcher with enormous knowledge of the case can assign probable weight of causality from any single A-B dyad to the ultimate outcome of the political process, perhaps years down the line. This greater certainty can best be attained using thick ethnographic information on a case where one can collect considerable information on each dyadic relationship, often through direct interviews with the participants.[1] This follows the method of thick description advanced by Geertz (Geertz 1973)

First of all, one uses this thick descriptive information to assess which A-B relationships had some appreciable impact on the outcome. These are the Key Influence Relationships (KIR) that one uses as the data. (See Figure 1). For each such A-B relationship, using the thick data, one codes the result of the A-B interaction in terms of its power, both power between the actors (degree of control and types of sanctions exchanged) and power over the outcome (impact, from high to low). With data from many A-B interactions at different times during the process, one can model the changing effect of different types of sanctions upon the outcome. This kind of analysis can help resolve theoretical debates and build new hybrid models.

(Figure 1 about here)

To accomplish this coding of discrete types of sanctions being used, one has to develop a typology of the different modes of relational power. To cast a wide net, one has to assume that power is productive and everywhere, not the sole property of the state, formal politics institutions or any given organization(s) or actor(s) (Nash 2001:). Power ". . . is the name we give to a complex strategic situation" (Foucault 1984:93). The A-B relationships embody the power relations in a contentious process, whether exercised with strategic instrumental rationality or not. By examining many dyadic relations that produce power, we can assess the extent of its distribution and its relative production by different types of relational modalities. The power in an A-B relationship can be generated by a wide range of exchanges and sanctions. Identifying a usable typology of these power modalities is the first task for this approach. Far from relying on a single axiom of a favored paradigm, the ISA approach absorbs into its power relational typology the axioms of many and conflicting schools. The typology posits the range of possible sanctions that could potentially produce power through relationships.

The A-B bond is composed of sanctions extending from A to B and from B to A and between both A and B. Their mixture produces the mode of power in that dyadic relation. Typical

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[1] In a more formal application of this method, one could use multiple coders and measure inter-coder reliability.

network data measures networks as discrete pure types composed of one type of sanction. In reality, though, power relations are messy and complex. The ISA method takes this messiness as fundamental and codes the percentage of each type of sanction within the single A-B bond. Along with its constituent power sanctions, the A-B relationship is also coded for its impact on the outcome.

Consistent with the eclectic openness of critical realism (Steinmetz 1998), the many bearing factors, assessed over many relationships, can be recombined using network techniques to form hybrid explanatory models to see how they co-determine the larger relational pattern, dynamic and outcomes. The best, most sensitive way to obtain information on those relationships is the probing ethnographic study. Such complex combinatorics are anathema to many social scientists (Abbott 1998). For one reason, protagonists of one view reject those of others. Tilly for instance, evidenced dedication to his rational instrumental "relational realism" by his article "Useless Durkheim" (Tilly 1981). However, the critical realist perspective supports a recombinant, hybrid, lumpy approach to causal modeling (Bhaskar 2009; Steinmetz 1998). Over time, many scholars have joined the call to "combine diverse arguments" (McAdam, Tarrow and Tilly 2001; Skocpol 1979) into hybrid theories (DiMaggio 1995). In fact, such an integrative approach is seen as critical to deal with contemporary "wicked" social problems such as global climate change (Levin et al. 2007; Miller et al. 2008; Siebenhüner and Heinrichs 2010). But they differ in how wide a net they wish to cast.

As a method to accomplish this goal, Integrated Structurational Analysis (ISA) was developed to produce complex combinatoric explanations for an ethnographic study of environmental contention in Japan (Broadbent 1998). The ethnographic material was then coded into a dataset of dyadic power interactions. The present author further developed the method and re-analyzed the original field work derived data to produce the analysis in this paper.[2] The findings section presents the results of the data analysis, while the discussion section considers the implications for causal explanation of complex processes.

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[2] Before presenting the method and findings, the paper raises an example from the qualitative field work analysis to shows how it was coded into relational data categories through a delicate dance between *emic* and *etic*.

Relational Modes of Power

As noted above, the dyadic relationship is the primitive thread of the social fabric. It can be the bearer of the full range of possible relational qualities, including subjective factors to the extent they are manifest in a relationship. The living skein of relationships makes manifest a social process, even if it arises from mutually subjective, possibly symbolic, sources. As such, the dyadic relationship provides a universal medium in which to test for the presence of the different constituting factors, such as relational axioms posited by different paradigms (Wrong 1979)

In examining the complex contentious processes, the basic unit is the dyadic relationship between A and B, the KIR. Concerning power, this A-B dyadic relationship exercises power in two ways, between A and B, and from the A-B dyad to the outcome. *Rather then social relations in the classical sense, these A-B relationships are better though of as arrows or vectors of influence that can travel via a diversity of media*. Of course, the A-B dyad will also influence other A-B dyads, but these effects show up within each A-B dyad. The modes of power, compounds of media and exercised within the A-B dyad, result in some degree of impact upon outcome O. The concept of impact here is a simple gross calculation of effect upon O. The cumulative impact of many A-B relations across the span of the contentious process collectively determine the outcome O (see Figure 2 above). Therefore, to explain the distribution of the effectiveness of different modes of power, a key theoretical questions, we have to analyze the types of power exercised in all the A-B dyads.

Analyzing and comparing the full range of different social theories that bear upon the potential causes of power, and couching these in relational terms, three basic dimensions emerge: instrumentality, tangibility and malleability.

Instrumentality defines the degree to which A dominates B, forcing B to comply despite resistance. The instrumentality dimension stretches from highly instrumental (manipulative) to, at the other extreme, highly mutualistic. The typical conception of power used in sociological studies assumes an intrinsic power struggle between A and B. The A-B contention is often thought of in instrumental terms, with A imposing its will upon B despite resistance. This is the traditional Weberian definition of power (*macht*) often called domination. As explored above, it lies at the basis of many political studies (Skocpol 1979; Tilly 1978; Tilly 1992). Instrumental, manipulative control is often associated with coercive force, but it can also operate through culturally-persuasive modes such

as ideological hegemony or charismatic figurehead expression of
mass emotions. However, the impact of an A-B relationship upon
outcome O may not occur through A-B instrumental domination and
control. The A-B relationship might proceed through persuasion
aiming at genuine collective benefits that results in mutual
agreement and cooperation (Knoke 1981). Persuasion can operate
through either bargained negotiation, new information about how
B can better attain their goals, or convincing (rightly or
otherwise) B to change their very goals. Instrumentality of the
power relationship, includes the degree of manipulativeness with
which A treats B. States of instrumentality are illustrated by
Luke's three faces of power: open decision-making, hidden
agenda-setting, and ideological hegemony over the other's mind.
(Lukes 2005)

   Tangibility refers to the materiality of the sanction being
transferred between A and B. With what incentives did A dominate
or persuade B? Relationships depend upon transaction, the
exchange of some sanction (incentive or disincentive) between A
and B. Here we may think of extrinsic, social and intrinsic
sanctions (Blau 1964; Etzioni 1975).
   The incentive can be extrinsic (Etzioni 1975; Wilson 1973),
harsh bodily sanctions like coercion –physical punishment or
imprisonment, and inducement--withholding of necessary economic
means such as a paying job (Weber 1946a). Extrinsic or material
sanctions apply to bodily welfare, like coercion and money. For
such sanctions to generate A-B power assumes a rational
sensitivity around maximizing safety by the recipient actor.
   The incentive can be social, in the specific sense, flowing
through the inclusion in or exclusion from social belonging and
intimacy within institutionalized sets of relations. ". . .
.institutions have a logic because practices, on the one hand,
and purpose and value, on the other, are internally in
alignment." (Pachucki and Breiger 2010). In that case, B may
change plans and goals for the sake of social belonging(Pizzorno
1991).[3] Social sanctions, in contrast, apply to group
inclusion/exclusion triggered by the normative propriety of B's
behavior. These assume a sensitivity to such social pressures
by the recipient actor.
   On the other hand, the incentive can be *intrinsic* (Etzioni
1975), appealing to internalized sets of beliefs or moralities
or ideals (Fine and Kleinman 1983; Latour 2005). Here the
discourse idea of power embedded in language also has traction
(Foucault 2000). To quote Somers, "a political culture is now

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[3] In the Japan data, the relationship of status seduction
    exemplifies such a type.

defined as a configuration of representations and practices that exists as a contentious structural social phenomenon in its own right" (Somers 1995: 134). Intrinsic sanctions refer to the appeal to the embedded assumptions, moral codes and beliefs of the other, and assume the commitment to such codes by the recipient actor. In that case, A will succeed in persuading B due to the symbolic *legitimacy* of A's appeal to B. A can attain this legitimacy by being a recognized representative of some belief-system. Alternately, A's symbols may motivate B by certified expertise, the ability to help B attain a previously determined goal. In another pathway, A may convince B by *referring to* situations that tug at B's sympathies (French and Raven 1959).

Malleability refers to the degree to which actors can change their influence relationships, or their degree of structuration. Some theories assume that some sort of structural force imposes itself upon both units A and B, forcing them like puppets into certain power relations. In direct contrast, other theories assume that A and B act voluntarily and creatively (agentically) to engage each other over the issue. This dichotomy defines the structure-agency dimension of power relations. This ranges from mutual agency through one-sided agency (plastic) to structure imposed upon both (Cook and Rice 2001). Agency means that the actors creatively define the sanctions they uses to exercise power (Emirbayer and Mische 1998). In the agentic view, the field of power becomes an "antagonism of strategies" (Bourdieu). Structure on the other hand means that the actors' choices of sanctions are determined by a "higher order patterning" (Jepperson 1991) or "generative rules" (Abbott 1995; Giddens 1981; Giddens 1983; Stinchcombe 1991). In between the two poles is the more common one-sided agency situation where one actor's freedom is far more constrained than the other's. And yet, due to that closeness, the situation is more plastic or malleable than full structuration. Of course, where the structure is imposed upon both actors within a dyad, it can come from external actors or from systemic forces.

We can treat these three dimensions as forming a cube of power. However, as this gets very complicated, the following figure will portray just two dimensions: tangibility and malleability. Taken together, these two dimensions (three values each) define a nine-cell *Periodic Table: Relational Modes of Power* (Table 1).

(Table 1 about here)

Each cell in this table combines a structural quality with a sanction quality to produce nine ideal-typical relational modes. As ideal-types, they are not expected to be found in

pure form in reality but serve as reference points for empirical research (Kalberg 1994; Weber 1978). The nine relational modes hold the presuppositional axioms that undergird a different paradigmatic school of theory (Emirbayer 2004).

The *extrinsic column* holds hard sanctions. Growing out of the extrinsic-structural cell (upper right), structures impose relationships by force; economic exploitation (Marx's historical materialism) or domination by force (Dahrendorf 1959). The one-sided agency cell indicates limited economic or coercive agency within structures. The extrinsic-agency (lower right) cell, though, contains negotiated patterns such as the classical economic market and the democratic voting system.

In the *social column*, the social-structural cell (upper middle) represents institutionalization in its basic meaning-- conformity by habit, social propriety and the desire for acceptance into the group to expected roles and norms. The source of behavioral stimulation, the institution, has been given many meanings (Stinchcombe 1997) (Clemens and Cook 1999; DiMaggio and Powell 1983; Nee 1998) (Meyer and Jepperson 2000) (Bourdieu 1990). The central one-sided agency (plastic) cell represents a situation where the norms are more open to gradual change. The lower cell, social-agency, holds an innovative response to an institutionalized power relationship, such as the innovation discussed by Merton (Merton 1938).

The *intrinsic column*, finally, in its ideal-typical purity, holds only symbolic interaction about meanings, without coercion or social pressures. Cultural theories range from weak to strong in their estimate of the power of collective symbols to integrate society(Durkheim 1915; Durkheim 1984) into common behavior patterns (Alexander 2003). In the intrinsic-structural cell, a relation occurs because the culture tells both actors what to do; common morality or schemas drive their interaction (Parsons 1968). The one-sided agency cell contains for instance meanings that are intentionally imposed by one actor to exercise hegemony over the other actor (Gramsci 2000). Gamson describes this situation: a "cultural level analysis tells us that our political world is framed, that reported events are pre-organized and do not come to us in raw form. But we are active processors and however encoded our received reality, we may decode it in different ways" (Gamson et al. 1992:384). The intrinsic-agency cell holds reflexivity, where actors question their inherited conditioning, create new values and spread them to others, as is often asserted for social movements (Eyerman and Jamieson 1991).

These nine factors are not exhaustive of all the factors and dimensions that may affect the relational production of power. For instance, the dimension of instrumentality noted

above defines the actor's degree of strategic manipulation of one party by another. And the dimension of *alignment of interests*, the degree to which the actor are pursuing the same or win-win versus zero-sum opposed goals, is also crucial. The present paper will focus on the two dimensions of tangibility and malleability without implying that this is an exhaustive treatment.

Taken as a whole, the table represents the "perspective of multidimensionality . . . at the level of presuppositional logic" (Emirbayer 2004). It spans an important range of the factors that bring about the relational production of power. It represents the attempt "to use a reduced representation to make certain general principles . . . intuitively accessible" (Martin 2003). In so doing, the ISA method provides the possibility of overcoming the narrow and feuding dogmatisms between the different paradigmatic schools, while retaining and using their insights. This eclectic way allows researchers to test the causal weight of different relational modalities in a real case, to thereby empirically verify the types of forces that do actually bring about power, process and outcome.

In the real world, a single effective, impactful relationship may operate through a number of these different types of power sanctions. The larger social figuration built of many of these relations may be filled with discordant mixtures of relational modes, as expected by critical realism (Gorski 2013; Steinmetz 1998). Economic agency may be asserted against normative institutions, as in the economic sanctions against apartheid South Africa. Contradictory structures, as when the capitalist norm of profit clashes with the Christian culture of charity, may impel actors into creative agency (Bell 1976). Building up a model from the many relevant relations will help reveal these complex mixtures and tensions.

Method: Translating Field Materials into Data

The ethnographic field work at the base of this paper was conducted to resolve the clash of paradigms explored above. Field work including in-depth interviews with actors on all sides of an issue is required to gather sufficiently sensitive data (Mützel 2009). The field work sought to test the relative causal effect of different causal factors upon the process and outcome of the particular case of contentious politics. The research investigated contention over economic growth and its negative social and environmental effects. In order to make the effects of value-commitments and social integration more evident, the American researcher chose the non-Western society of Japan. Japanese traditional values contained strong elements of nature-respecting Buddhism and Shintoism. The nature-

mastery values of the Christianity had been held responsible for environmental devastation in the West(White 1967). To the extent that culture matters, hypothetically, nature-respecting values should shift the course of environmental contention in Japan toward more environmentally-protective outcomes (than would be expected in the US, all other things being equal).

During the analysis of the field work data, the need to distinguish the causal effects of culture from that of social integration and political and economic instrumentalism forced the researcher to create a new typology of power relations as discussed above. Power is relational (Bachrach and Baratz 1963; Levy and Scully 2007). To generate action and change, the power of one actor must somehow have effect upon other actors, even if not intentional. The contentious process arises only in so far as actors attempt to oppose other actors' pursuits and goals. Going beyond Tilly's limited repertoire, most typologies of power relations included a wider range of modalities and sanctions.

The lack of fit of theoretical models of power coming from different Western social scientific schools and the actual power relations revealed by the ethnographic information forced the researcher to specify the categories of analysis to a much finer level, so that they could be reconstituted into middle-range categories and models of power that better fit the actuality. While general Western categories such as institution, class, culture and state seem clean, innocent and universal enough, they actually carry heavy Western baggage. If researchers apply concepts derived from these traditional Western categories to analyze non-Western cultures, they distort the representation of the actuality.

This approach builds on the Durkheimian theoretical stream of how local culture and social relations create the very specific operating categories of thought and action of a given group or society. This problem is especially important in the social sciences of complex macro-systems. These social sciences tend to accept as their axioms certain concepts that describe middle to large scale social aggregates such as market, class, state and culture that compound many constituent qualities. These concepts come with considerable ethnocentric or theoretical baggage.

For that reason, the researcher had to develop ways of coding the field work information into categories going beyond grounded theory and representing different relational ways of exercising of power at the micro-relational level. This micro-relational approach captures much more nuance than aggregated forms like institution, class, state and culture. Even at the micro-level, categorization entails reductionism of the

specifics of a real case (the *emic*) into a more general but emptier category (the *etic*). But the micro-category is much closer to the reality and so can better represent the diversity of factors that might mix to compose the process. Because they are more precise, the micro-categories are also more open to the addition of new categories emerging in grounded fashion out of ethnographic observations themselves. In any case, the micro-category still accomplishes the basic objective of positivistic coding, which is to produce categories of "data" that will permit comparison of findings and construction of models comparable across cases. This comparability will permit the inference of more general cross-case explanatory principles if such be present. These micro-categories differ from Tilly's mechanisms in being inductively derived, mixable in hybrid forms, and being sensitive to cultural content.

Concatenation of the micro-categories through various forms of quantitative analysis indicates more closely the real operative social formations in the case. In a non-Western culture, such formations may be quite different, created as they are by specific mixtures of specific contents of culture, social integration, economy and politics. The aggregation of this micro-relational data will permit a more valid comparison of these aggregated configurations across cultures and societies. These comparisons will be in terms of the micro-categories used across different cases. Models of processes built from a common set of micro-categories will be able to show variance in the different micro-categories. Because theory, to have any generality, is necessary expressed using some set of common categories to apply to different cases, the micro-categories will help resolve theoretical disputes with cross-case evidence with the potential to yield nomothetic law-like generalities if such emerge.

At the same time, because the coded micro-categories are still closely tied to the grounded reality, after the model teaches what it can, it can be translated back into the substantive content of the category in the actual case. Therefore the process does not lose its original footing in ideographic reality. To the contrary, the knowledge of the rise and fall of the effect of different micro-categories will allow the substantive, ethnographic analysis to proceed with greater confidence.

The Periodic Table arrays different ideal-types of power relations. To be useful in creating data, it must be articulated with real social relations. Ethnographic field materials can best capture the wide range of relational qualities. The Hourglass of Praxis portrays the articulation

between field materials and the relational modes in the Periodic Table (Figure 2):

(Figure 2 about here)

The top of the Hourglass schema deduces down into the nine relational modes of the Periodic Table. The bottom induces up from the field work materials. The Point of Articulation involves fitting the field work evidence on relationships into the nine relational modes, as well as adding new relational modes made evident by the field work materials. The Point of Articulation, therefore, spans the basic divide between qualitative and quantitative research approaches(Ragin 1987). For instance, at this Point the researcher translates the lived reality of relations into the bloodless abstract categories of theory.

The categories are by themselves empty, incapable as such of producing causal effect in the site. But the translation into abstract categories has some virtues. First of all, the necessity to code the materials into 9 categories forces the researcher to break out of any single reductionist theory.[4] Once coded, the data can be analyzed with quantitative techniques. This analysis can add to our understanding of the interactions among the relational modes in bringing about the process and outcomes. These new perspectives can be re-filled with the field work material to round out the total analysis and causal model using potent local terms. The hope of this ISA method is to facilitate comparison of the causal factors at work in processes and outcomes in different cultures and societies.

As reviewed above, the fundamental unit is the dyadic A-B interaction. In this study, the social units are groups, such as social movements, organizations such as government bureaucracies and companies, or more diffuse collectivities such as prefectural public opinion or the world economy. The dyadic relationship is called the Key Influence Relationship (Figure 2). Each KIR is specific to a point in time and two units.

(Figure 1 about here)

Using the ethnographic materials, the researcher identifies the interactions that exert some *impact* upon the outcome of

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[4] This method thus runs directly contrary to Burawoy's recommendations for ethnographic research, to bring one theory to the field and amend it in light of observations. Burawoy, Michael. 1992. "The Extended Case Method." Pp. 271-87 in *Ethnography Unbound: Power and Resistance in the Modern Metropolis*, edited by Michael Burawoy and et al. Berkeley: University of California Press.

interest. In the Japan case study, the main outcome was the building of a landfill to hold a polluting factory. For each such selected interaction, the KIR coding form requires the coder to assess and enter the values for the following variables (Table 2):

(Table 2 about here)

The KIR form also includes variables about IO and AO motives (value-rational, goal-rational), stance of four sub-issues, and the overall mechanism between IO and AO incorporating the dimension of instrumentality (Ideological hegemony, Non-decisional, Decisional, Representative, Coercion/law sanction, Environmental sanction, Economic or status sanction, Delegitimation, Expertise, Friendship, Supplication, Negotiated, Common purpose, Common values). This paper will confine its analysis to the bulleted variables.

Each coding act is an abductive judgment based on the ethnographic field material in light of the researcher's comprehensive understanding of the whole case. To assist the abductive choice, the coder conducted a Weberian "thought experiment" for each variable. If the Initiating Organization had not deployed its sanctions upon the Affected Organization, would the AO still have changed its behavior? If this KIR itself had not occurred, how much would it have affected the outcome? If this type of sanction had not been present, how much would it have affected the ability of the IO to control the behavior of the AO? In initiating the relationship and in its use of sanctions, to what degree was the IO following a predetermined format (structure) versus creating a new kind of behavior (agency)?

Coding Field Data

Compared to working within one's own culture, detailed and open-minded ethnographic immersion in a foreign culture can make the causal factors at work more evident. In one's own culture, the language and customs are already embedded in the mind of the researcher. The socio-cultural matrix is easily taken for granted and the overt conflicts stand out. Of course, much of sociology is devoted to the critique of one's own society and culture. But to the extent that the culture is radically foreign and preserves its own integrity, the foreign researcher has to struggle to learn and recognize the language and customs. This struggle, this culture shock, makes the structuring force of the social and cultural factors all the more deeply evident. If the socio-cultural factors do have some autonomous capacity to affect process and outcome, it should be more evident to a researcher in a dramatically foreign society.

The ethnographic study was designed to test Weber's "switchman" hypothesis. The formulation of the experimental design is as follows: Due to the biological similarity of humans, industrial pollution causes material harm (illness) and if know, raises concern among victims everywhere. This is the event dropped into the social formation. But locally-specific social formations prismatically refract common material concerns in directions specific to a society, resulting in different politics around the problem. Max Weber argued that the specifics of a described culture can, like a switchman on a railroad, with a small effort send the hurtling juggernaut of political-economic interests down a new track to an unexpected destination (Weber 1946b).

Japan was a perfect case to test this thesis. As a rapid industrializing nation, Japan faced similar threats of industrial pollution as those of earlier industrializers. By the mid-1960s, the new industries spewed smoke and waste into the surrounding air, water and soil. This set off a wave of pollution protests in villages and cities throughout the society (Huddle, Reich and Stiskin 1975).

But other industrializers, such as the UK, Germany and the US, had been within the sphere of Western culture based in Christianity and affiliated cultures. Japan, to the contrary, was shaped by Eastern cultures based in Shinto, Buddhism and Confucianism, as well as by the hierarchical and coordinated social organization necessary for paddy rice farming. Many contend that Japan's contemporary forms of social organization were soaked in and shaped by its cultural and social traditions(Bellah 1985). For instance, the form of hierarchical leadership forged over hundreds of years in disciplined rice-agricultural villages (*mura*) and patrilineal primogeniture kinship had been elaborated into a national leadership hierarchy (Murakami 1984). The result, said As a result, some scholars, was Japan was a "vertical society" (*tateshakai*) (Nakane 1970) motivated by paramount loyalty to one's immediate supervisor, with the expectation of paternalistic care in return. To fit into this hierarchy, the typical Japanese self or personality or identity, compared to Western ones, was more permeable to surrounding social influences (Markus and Kitayama 1994). If culture were to make a difference, then, this vertical pattern should affect the course of pollution politics evident in Japan.

I conducted this study in rural Oita Prefecture at the southern end of the Inland Sea. This site contained Japan's contemporary pollution tensions in a nutshell. In the late 1950s, eager to provide good jobs for local youth, the governor had recruited heavy industry. By the mid-1960s, their tall, candy-striped smokestacks lined the shore of Oita City. The

jobs results proved disappointing. Despite this, in 1970, the
governor announced a Phase Two expansion of the landfill and
factories down the coast. This time, fearful of pollution and
disruption, some of the local villagers began to protest the
plans. Prominent people in the seacoast villages in the new
area reacted, some with support and some with bitter opposition.
Despite their weakness, after long contention, the protest
movements were able to delay part of the project long enough so
that national big business lost interest. They won a *defacto* if
not *dejure* victory.

From 1978 to 1981, the researcher carried out an
ethnographic study, not just of one organization or village, but
of the entire contentious process from start (1955) to outcome
(1980)(Broadbent 1998) and the organizations it involved from
periphery to center of Japanese society. From 1978 to 1981,
while officially a visiting graduate student at Tokyo
University, I lived with my family in Oita prefecture and
conducted the study. I learned through my extensive
participation in political events (Pollner & Emerson, 1983;
Thorne, 1988) the complexity and messiness of real processes
(Mann, 1986). I used multiple methods of data collection,
including interviews, participant observation, and primary and
secondary documents. Letters of introduction from former
Ambassador Reischauer and other respected figures gave me entrée
to different factions in the conflict. I conducted about 500
interviews and conversations with leaders and members of the
different groups and organizations on all sides of the involved
in the conflict, not just locally, but at all levels: at local,
prefectural, regional and national levels. Each interview
guided the way and opened doors to several more. For instance,
on the pro-growth side at the prefectural level, I interviewed
the two retired governors about the project as well as the
contemporary governor, as well as a number of officials in
charge of the industrial project. On the pro-environment side,
I interviewed leaders and members of eight different movements
throughout the prefecture. I also took notes on casual
conversations that contained important information. In this
manner I took notes on 500 interviews and conversations. At
times, I participated in movement assemblies and in the election
campaigns of local politicians. I also collected newspaper and
magazine clippings and prefectural histories and statistics on
the history of the conflict from 1955 to 1981.

My major orienting vision was Geertz' "web of meaning"
(Geertz 1973) which I extended into a web of relationships
stretching through the history of the conflict. In the
interviews, I probed the respondents' motives and relationships-
-—their goals regarding the industrialization process and

supporting values and beliefs, and their political relationships--the strategies and tactics by which they attempted to control others so as to and attain their goals.

Following grounded theory, the researcher coded the field materials into categories. As the interviews accumulated, they began to sketch out a tangled skein of meaningful and influential relationships that developed over time and constituted the proximate conflict process being acted out in the prefecture and in Japan. The interactions took place not only among powerful persons, institutions and organized groups, but also included more amorphous "actants" such as prefectural public opinion and the world economy(Latour 2005).

Having gathered voluminous information, I then faced the problem—-how could I make sense out of this "blooming, buzzing confusion?" (James 1890). The *etic* concepts the researcher brings into the field are like cookie cutters, taking their own shape out of the living social fabric and leaving the rest. Could I push aside my etic preconceptions and discover the principles of the conflict as lived by the participants? To move in this direction, I conducted a qualitative coding of the mountain of various types ethnographic information listed above. The procedure generated a set of over 800 specific *emic* concepts or instances that bore upon the contentious process, often with multiple instances in the field work material. The researcher then "abducted" the evident causal mechanisms that emerged from the material, keeping the local, *emic* terms.

One of these emergent causal mechanisms was *status seduction*. Elites used status seduction to coopt opposition figures. I then categorized these emic concepts under more general themes. From these themes I abstracted causal explanations of the process.

This induction process followed the principles of Grounded Theory--to let explanatory principles emerge from the field materials (Glaser and Strauss 1967). My coding procedure anticipated exactly the architecture of later qualitative coding software (Nvivo, Atlas TI). Of course, as a trained graduate student, my mind was already contaminated with many *etic* orienting concepts eager to stamp themselves upon the materials(Berry 1990). Resisting this temptation, I listened to the *emic* of the field and drew grounded explanatory principles from them.

Much of the struggle for public support between the pro-industrial growth and pro-environmental protection sides revolved around the symbolic framing of what conditions would make the prefecture "civilized" (modern) as a collective social status. Overcoming the shame of rurality in distinction to bustling Tokyo was a consistent yearning among the Oitans. This

profound reference to the larger collectivity of "We Japanese" pervaded the entire conflict.

For example, elites' means of suppressing the environmental protest movement partook of this collectivity, following very different social channels compared to the US or Europe. The residents of the village base of the movement (the village of Kozaki) were, like residents in all villages and towns in the prefecture, densely enmeshed in social ties that led indirectly to leadership elites in the city. These social ties ran through extended families and branch families in the villages. The elders of these lineages were often linked to the representatives of the conservative political party.

After a few dissidents started the movement and recruited many members from the village members, some of those recruits started to get pressure--dissuasive comments and veiled threats of work disadvantages --from other members of their personal networks, people who had ties to conservative party leaders. The recruits were also invited to parties and drinks with local political leaders, which made them feel important. Through this social mechanism, the elites gradually "gnawed away" at the membership of the movement and weakened it, though they could not destroy it. The local people had a special term for this process, *nashikuzushi*. This term meant literally to break something down by gradual little bites. In a few cases, though, where the networks led to unions in the Socialist Party, this connection promoted the mobilization. The dissuasive pressures suppressed other protest movements in the prefecture, but failed for the strongest movement. The status seduction confirmed the existence of the vertical society as an important causal factor.

This dissuasion process depended heavily on "status seduction." In rural Japanese society in particular, selves and identities do not individuate so strongly as in Western society. Typical identity remains more enmeshed in personal social ties which continue over generations and, given ancestor reverence, effectively beyond death (Markus and Kitayama 1991). This connection makes individuals vulnerable to persuasion from senior members of the networks.

The vertical relationship embeddedness of actors in networks could also work in the movements' favor. At one point, the protest movements crowded into the governor's office and appealed to stop the plans for the polluting industry. After much entreaty that called upon his sense of paternalistic responsibility, the governor finally gave in and agreed to halt the process until more research could take place. In this embeddedness relation, while subordinates are supposed to follow leaders, leaders also have a paternalistic duty to care for the subordinates. By appealing to this duty, the movements were

able to persuade the governor to look more carefully into the disruptive and polluting effects of the planned industrial complex. The crucial moment came when two protest movements converged on the prefectural office buildings and stomped in to the governor's office, demanding that he hear their complaints. The governor said he would, but then got up to leave the room and end the audience. At that point, one brash young fisherman said "Governor, do you have a belly-button?" The surprised Governor replied, "Yes." "Well, I have one too," the fisherman continued, "so that makes us both equal, right?" The Governor agreed. "So," the fisherman argued, "if we're both equal, how come you got a right to kill me?" After that, all the protestors started hurling denunciations and criticisms at the Governor.

Finally, the Governor agreed on the spot to delay the project until he could make a thorough study of its possible negative effects upon the villagers. In this incident, it was not personal networks, but the sense of moral obligation between specific groups that subtly altered the course of events. In this "belly-button encounter," the fisherman used a cultural *jiu-jitsu* around a moral pivot point. This single dyadic interaction between movement and governor contributed strongly to changing the trajectory and outcome of course of the prefectural industrial growth.

The concatenation of such events led to a hybrid model of the whole process, such as presented by many ethnographic studies (Geertz 1980). Such in-depth studies are of paramount importance for valid understanding of the case per se. Much of the battle over movement mobilization played out in this invisible background field of morally-charged inter-personal and inter-group relations. All societies have their own background socio-cultural field. The one in Japan took its flavors from the culturally-specific relation between self and society (Broadbent 1989a; 2003; 2005). This background field closely instantiated Nakane's (1970) model of the vertical society -- except that it injected the element of protest and contention. This particular form of socio-cultural field interacted with what class and market theories would assume to be universal drivers of profit and control, as Max Weber predicted.

The networks existed, not really as institutions, but rather as a diverse latent set of specific potentials open to activation by interested agents, consistent with Giddens' (1983) theory of structuration. The particular social relational and cultural meanings in the situation, such as status seduction and Japanese-style paternalism, interacted with the more material or extrinsic universal drives for profit or protection of health and the environment to produce unforeseen outcomes.

As just illustrated, the grounded analysis revealed many social and cultural effects defined in very locally-specific terms at work in a complex swirl of interactions over time (Broadbent 1998). No one theoretical perspective provided a satisfactory explanatory causal model. A thick description of each phase led to emergent *emic* explanatory principles such as those just sketched, as is typical of qualitative research. However, as social scientists, we also hope to derive lessons that would contribute to building more general theories. We seek for deeper and more universal explanatory principles. Whether, given the complexities of macro-social processes, such nomothetic regularities can be found remains a central but elusive question of comparative sociology (Ragin 1987; Tilly 1984). In order to compare ethnographic studies, one first has to translate their interactions and emergent mechanisms into more universal explanatory terms. Accordingly, the current author coded the field work material into a finely divided set of such categories. This method of Integrated Structurational Analysis was explained above, while its application is illustrated below.

The coded Japan data-set contains 252 Key Influence Relationships. These KIR occurred over a period of 26 years, from 1955 to 1981. The KIR included over 50 discrete organizations or collectivities. These actors fell into 30 organizational types (Table 3). Analyzing the interaction between the types of social units rather than the individual units highlights the main dimensions of the analysis.

(Table 3 about here)

Analysis and Findings

The KIR data as a whole can be portrayed in two basic aspects, static and dynamic. The static compresses all the 252 interactions into a single frame, as if they all occurred at once. The dynamic portrayal shows the sequence of the KIRs and their qualities as they emerge over time (27 years).

Static Analysis

The 252 KIR interactions can be portrayed in a matrix with the Initiating Organizations on the left side and the Affected Organizations across the top (Table 4). The social units are represented by their categorical type. For the sake of clarity, organizational types with very little impact have been excluded from the matrix. The point in this analysis is the efficient impact, not the simple presence, of each interaction. Therefore, the figure in each cell represents the product of the number of interactions times their average impact score on the outcome.

(Table 4 about here)

This table shows that interaction among some types of
social units exerted much more impact than others. This matrix
can be presented as a network image (Figure 3). The thickness
of the line between any two social unit types indicates the
total impact on outcomes exerted by that relationship.

(Figure 3 about here)

The network image presents all the KIR interactions if they took
place simultaneously. The distances among the units represent
social distances; a direct tie will bring two units closer
together.

The table and the figure show that the central interaction
was between the Town citizen Movement (TCM) and the Prefectural
Government (PG). Each of these two central units has in turn
its own set of direct relations to other units. For instance,
as might be expected, the TCM has direct ties to four other
town-based units. It also has direct ties to National Business
(NB), in that case relations of conflict in its struggle to stop
the realization of factory location plans. The Prefectural
Government, in comparison, has direct ties to, among others,
National Business and Prefectural Business in its efforts to
support their plans for industrial growth. Both the Prefectural
Government and the TCM have ties to the Town Legislature,
indicating their efforts to sway that body one way or the other.
The Prefectural conservative party, the Liberal Democratic
Party, is part of that fray too, in its ties to the Town
Government, meaning the mayor.

Attributing impact to the initiating organization allows
figuring the impact of different organizational types (Figure
4).

(Figure 4 about here)

Most power was exercised by Prefectural Government, National
Government, the Local Citizens' Movement and National Business.
This figure might inform studies that attribute power as a
static property of an actor. It seems to provide an answers to
the essential concern of political studies--who rules (Dahl
1961; Domhoff 2006)? But precisely because it attributes power
to the actor, plus using gross and static concepts of power, the
answers are faulty.

The effective power existed in the relationships between
the social units, embodied in the different sanctions. Looked
at from this relational perspective, the six relational
sanctions exercised different proportions of total impact (Table
5). A pie chart clarifies this distribution (Figure 5).

(Table 5 about here)
(Figure 5 about here)

The sanction pie-chart shows that the use of extrinsic, political-economic sanctions comprised exactly half of the total sanctions employed during the contentious process. As Weber would have predicted, the intrinsic sanction of legitimacy was also important. Expert opinion was also important, as to be expected in a modern industrial project, but the expertise was contested from different sides. Persuasion and reference power also played some role in the outcome.

The degree of agency, indicator of the Malleability dimension, also differed by social unit, sanction and time period. Combining the agency and sanction scores calculates the impact exercised by each of the 9 relational modes of the Periodic Table (Table 6) in this case.

(Table 6 about here)

The far right column shows the relative impact of the three malleability modes: Structure (54.07%), One-Way (Plastic) (23.46%) and Agency (22.47%). The relative impact of the three Tangibility sanctions was: Extrinsic (49.78%), Social (17.39%) and Intrinsic (32.82%). Turning to individual cells in Table 5, the Extrinsic Structure cell (in grey) accounted for 31.25% of total impact, by far the strongest mode. Within that, economic inducement was the strongest. Extrinsic power extended into the plastic zone as well (10.58%), signifying a turgid, slow moving change process. In the entire table, the other strong one was the Intrinsic Structure cell (grey with dots) accounting for 15.98% of the total impact. However, structural modes did not entirely dominate. The Intrinsic Agency cell, where most of the agency was exercised, totaled 10.54% of total impact.

The preceding static images present an explanatory paradox. In the long run, the protest movement won the conflict by delaying the project so long that it was no longer economically feasible. But, since protest movements have little reward or legal-coercive power, and in any case had less power than their pro-growth adversaries (central and prefectural government, big business), *how could this outcome have come about?* For an answer, we must turn to dynamic analysis.

Dynamic Analysis

Finding the answer requires moving from a static to a dynamic analysis. The dynamic analysis is closer to the fluidity of reality. What Somers says about ideas holds also for relationships: "what appear to be autonomous categories defined by their attributes are reconceived more accurately as historically shifting sets of relationships that are contingently stabilized" (Somers 1995, p. 136). This follows

what Emirbayer calls a transactional approach: "What is distinct about the transactional approach is that it sees relations between terms or units as preeminently dynamic in nature, as unfolding, ongoing processes rather than as static ties among inert substances" (Emirbayer 1997b).

The methods for the dynamic analysis of networks, still in their early developmental stage, usually compare changes in the actors and their relations in networks at different points in time (Snijders 2005). The ISA method, in contrast, is based on the continuous appearance of the KIRs across time. They can be summarized at points in time, as here. To this, the ISA method adds looking at the change in types of relationships over time, and eliciting their theoretical implications.

Scholars have increasingly stressed the importance of temporal or historical process analysis (Abbott 1988; Abbott 1992; Aminzade 1992). Events unfold over time, as many theorists have noted (Bourdieu and Passeron 1990; Emirbayer and Goodwin 1994; Stark 1994). This approach "transcends" the portrayal of reality encouraged by regression analysis which often assumes the simultaneity of variables. The point is the path dependence of change—-that processes happen as sequences of events over time. Each event can shift the direction of the process. The "belly-button encounter" in the Japan case, where the fisherman used paternalism for cultural *jiu-jitsu*, shifted the course of prefectural industrial growth. The shift could not be erased or overcome by more powerful actors because the whole context of events had moved on.

Dividing the process into three-year temporal stages permits examination of the dynamics. An historical narrative will fill in the substantive story. In its initial stages, time periods 1 and 2 (1955-7 and 1958-60), the Oita Prefectural Government conceived of and executed the first set of landfills, in hopes of attracting new industry that would bring good jobs for the youth of the prefecture. During this time, as indicated in Figure 6, the Prefectural Government exercised predominant impact. In periods 3 and 4 (1961-3, 1964-6), however, the locus of control changed. The National Government, in conjunction with National Business and National Advisory Councils, took control over the prefecturally-initiated project. At first the national purposes were relatively congruent with those of the prefecture, to move industry to the hinterland in order to disperse industrial jobs. However the national government also wanted to disperse industrial pollution away from the cities. By time periods 5 and 6 (1967-9, 1970-2), though, Japanese big business took the reins and defined the national plans in their own terms. Big business wanted to locate its more polluting industries away from the big cities to the hinterland areas in

order to escape increasingly restrictive urban regulations. It
so happened, though, that these highly polluting industries were
not the job-creating manufacturing industries initially aimed at
by the Prefectural Government. To big business, it turned out,
the Oita landfill industrial sites were just a production
platform for its dirtier industries like aluminum refining,
petro-chemical refining and synthetic fabrics. These industries
would bring lots of pollution, but few local jobs. As these
dismal prospects became increasingly apparent, local villagers
that would be saddled with these polluting industries started a
protest movement that gradually escalated in response to
government dismissal of their complaints. During the sixth and
seventh time periods (1970-2, 1973-5) the protest movements came
to exercise the preponderant impact upon the path of the
industrial project. During this period, the movement succeeded
in getting the governor to delay the new landfill project until
thoroughly investigating its possible pollution and other ill
effects upon locals. This delay pushed the plans beyond their
optimal window of opportunity with respect to the global
economy. Aware that the project had become economically
impractical, both big business and the national government lost
interest. This turn passed the momentum back to the prefectural
government, which during the eighth and ninth periods (1976-8,
1979-82) once again became the main booster for the industrial
growth plan. But by this time, though, faced with little real
prospect of attracting industry, the boosterism was half-hearted
-- more of an effort to save prefectural governmental face than
to really build more factories. As noted above, this story has
been related in ethnographic detail (Broadbent 1989b).

This story of environmental contention in Japan is told in
order to provide the context for the data analysis. The story
and the analysis reveal some support for the thesis of path
dependency, but also show the contrary, *path reversibility*.
During its time of high impact, a given organizational type
could turn the path of change in a favored direction, but this
was not always *ir*reversible. For instance, the prefecture set
the area on a course for job-intensive development, but this was
reversed by big business. Later, big business slated the later
landfill areas for heavily-polluting, basic resource refineries,
but this did not come to pass either. However, the delay in
plans caused by the protest movement did determine a path that
determined *de facto* if not *de jure* change. The governor finally
issued a decree stating the conditions met and the way open for
the industries. But the big businesses had lost interest by
then and were moving their polluting factories to south-east
Asia. This gave the movement its *de facto* victory.

For instance, the protest movement reached a peak of impact in Time Period 6 (1970-2), when its impact was more than any other type of actor. During this period, the movement was able to extract from the governor a promise to delay implementing the plan for Industrial Landfill No. 8, on the village coast, until three conditions of thorough inspection were met. This condition sufficiently delayed the plan to make it ultimately unfeasible.

(Figure 6 about here)

The mixture of sanctions used between A and B to gain Control and exert Impact also changed over time. If we examine just the three tangibility types, extrinsic, social and intrinsic, the first and last varied greatly over time, while the social one stayed fairly constant (Figure 7). Looking in more detail at this dynamic, the 6 sanction types varied even more extensively (Figure 8).

(Figure 7 about here)

(Figure 8 about here)

In the initial period, the Prefectural Government was working for the good of the prefecture, enjoyed a great deal of popular legitimacy and was able to persuade many groups to support the growth goals. By the sixth time period, though, the protest movement took over the mantle of legitimacy about the project. Many people throughout the prefecture had come to believe the movement's assertions of harm from the industrial project. The general movement in sanction usage was toward increasing use of legal-coercive and economic reward sanctions. This occurred as legitimacy and persuasion leached out of the relationships, rendering the contention more in terms of hard sanctions such as arrests by the police and legal suits and factory blockades by the movement.

Figure 9 shows the amount of impact exercised by Structure, Plastic (one-way) and Agentic states of interaction. It shows that the impactful relations in the contentious process became more structured as it progressed.

(Figure 9 about here)

Table 5, discussed above, shows the static or cumulative impact of the 9 relational modes. Now we want to examine their changing or dynamic impact over time. If we further specify the impactful relations, we can observe the changing relevance of the 9 relational modes of the Periodic Table as the process proceeds through time (Figure 10).

(Figure 10 about here)

The figure shows that the sanction of legitimacy had very high impact-agency at the start of the process. In this instance,

the Prefectural Government invented many rationales to convince the prefectural citizens to accept the new industrial project. Legitimacy spiked again in Period 6, as the citizens' movements launched their anti-industry rhetoric as succeed in drawing a lot of support. Overall, the most creative agency of the process was exerted through the two sides inventing new frames to legitimize or delegitimize the project in the public eye. Due to the pervasive use of legitimacy early on, the authorities did not need to use coercion. Actually, the Period 4 spike in coercive sanctions reflects the movement's use of sit-ins and demonstrations that blocked normal functions of companies and governments.

Discussion

The findings show the possibility of more differentiated forms of empirically-based causal explanation than hitherto available. Using this method, in the Japan case, it became clear that power operated in many different modalities, and that their relative causal importance rose and fell over time. "This kind of fluctuating balance of power is a structural characteristic of the flow of every figuration"(Elias 1978:131).

This finding in itself shows the "dead end" of reductionist substantive theory. Other cases would differ greatly in their mixtures and transformations of causal factors. In the Japan case, the presence of a wide variety of causal sanctions provided strong support for the Weberian switchman thesis that culture can shift the direction of political and economic change. Vertical social relations and group-oriented culture interacted with more universal political and economic sanctions and interests to produce hybrid formations. At the same time, the shifts in agency and structure across the different sanctions further revealed the complexity of the process.

The different causal factors identified by the ISA approach do not form sensitively attuned and integrated social systems. Nor do they conform to the expectations of reductionist theoretical models. The "goo" of their actual state responds to intense impulses from actors, but only in partial and unpredictable ways. For a given issue, through intense analysis the research can discern the larger causal factors at work. The accumulation of knowledge about hybrid formations may still end in a set of ideographic combinations of universal sub-types of power relations. Or it may lead to new hybrid law-like principles of the pan-cultural basic principles of social change. The possibilities are open.

What does the ISA framework imply about causality? The identification of a causal regularity is not the same as the underlying causal principles. Newton identified the mechanism

of gravity, the inverse square law of mass over distance. It took Einstein to discern the reasons why this law held: essentially the relativity of space and time. The law of gravitation operates due to warps in the space-time field. Similarly, the flow of power through multiple inactions among actors describes the mechanism but does not identify the underlying cause. Coding the interaction of a process along the lines of the Periodic Table brings us a step closer to the identification of the kinds of underlying fields at work. These interacting fields tilt the actors through manifold "angles" into some exercises of power and not others, and drive the process toward some outcomes and not others.

The analysis in this paper illustrates some of the core strengths of the ISA approach to causal analysis. From this point, many new directions lead forward. One step will be to analyze the KIR data to examine more closely the relational modes between different types of actors. Which actors use what kind of agency? Under what circumstances? Such analyses will probe the "goo" more deeply to show us more of what factors move its inner composition and transformation.

Conclusion

This method and modeling capacity makes several contributions. The method creates a new typology of power relations that integrates a wide range of theory to represent the full ontology of the social. It extends the application of network analysis to use this typology in empirical research. It enables modeling the contentious process as a space-time field composed of many dyadic interactions. It portrays this social space-time field in both its static cross-sectional aspect(s) as well as its dynamic temporal unfolding aspect. The resultant hybrid explanatory model assesses the composition of the causal mixture at turning points and outcomes, correcting over-reductionism. The model shows that the chance for an actor to realize its aims is contingent upon the composition of the social ontology at the moment of interaction. As the modes represent universal categories, models so derived can be compared across cases, supporting the inference of wider structural and systemic principles. Yet, the model does not destroy ethnographic sensitivity. To the contrary, because it identifies the relative impact points of different causal factors, the model helps the ethnographer, who translates it back into local terms, to produce a more valid grounded explanation. In this way, the method moves toward bridging the nomothetic/ideographic divide. The present paper uses information from an existing ethnographic study of environmental contention in Japan.

The search for causal principles in the study of macro-social formations and their processes and changes has remained an elusive enterprise. The causal principles we seek for in the messy "goo" of real society tend, at the last moment, to slip out of our hands. The great frustration with this inchoate state of explanation impels us to impose some order on our thoughts and get on with it, to say *something*. As a result, macro-social science seems to cycle through different waves of explanatory paradigms, dragging up old arguments in new guise, and never making much progress. The ISA method aims to help solve this impasse in causal explanation by providing a method of translation from ethnographic thick description to a sensitively pixelated tracing of different causal currents in terms of general abstract categories. Analysis of these categories provides a new perspective on the thick description; the two can work together to produce new hybrid explanatory models and eventually new hybrid theories.

This paper showed how the pigeon-holing of the different theoretical schools into a typology of relational modes, an effort so critiqued by substantivist researchers, could be very helpful in identifying the diverse channels of causality that can operate in complex society and in producing hybrid models of that complexity. In generating explanatory principles, the ISA method employs both inductive and deductive approaches to elucidating causal principles, bringing them together in an examined way at the crucial point of articulation. Using the grounded field material to identify meso-level relationships between two organizational actors important to an outcome of interest, the entire set of such relationships constitutes the effective power at work in the situation that brings about the outcome. The data so produced permits both static and dynamic network analyses of the relative weight of different relational modes of power. This analytical procedure opens the door to a closer study of the actual combinations of power relations that drive events and outcomes in complex societies.

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Tables

Table 1: Periodic Table: Relational Modes of Power

		Tangibility of Exchange Medium		
		Extrinsic	Social	Intrinsic
Malleability of Relationship	*Formation:* Influence relationship determined by external factors	*Existing extrinsic sanctions* **impose** *relationship*	*Relationship fully* **embedded** *in existing institutionalized social role/norm pattern (habitus)*	*Existing* **common** *internalized morality (Doxa) motivates relationship*
	Domination: One member agentically imposes conditions on other	*Struggle between Imposed and Agentic use of sanctions*	*Struggle between Embedded and Agentic Construction of Relation*	*Struggle between Received Morality and Reflexivity in Construction of Relation*
	Interaction: both members agentically contest, negotiate, exchange.	*Egalitarian Bargaining/ Strategizing over what extrinsic sanctions to use to bring about other's compliance*	*Egalitarian Negotiation over use of social sanctions for compliance*	*Reflexive Creativity leads to re-negotiation of ethical codes for compliance*

Table 2: Variables on KIR Data Entry Form (selected)

• Date of interaction
• Name of Initiating Organization (IO)
• Name of Affected Organization (AO).
• Degree of arbitrary control (*macht*) IO exercises over AO (0 to 9)
• Impact of KIR on outcome of interest (1 to 10)
• Contribution of coercion sanction in producing degree of control (0 to 9)
• Contribution of reward sanction in producing degree of control (0 to 9)
• Contribution of expertise sanction in producing degree of control (0 to 9)
• Contribution of social persuasion sanction in producing degree of control (0 to 9)
• Contribution of legitimacy sanction in producing degree of control (0 to 9)
• Contribution of reference sanction in producing degree of control (0 to 9)
• Degree of agency exercised in the KIR to produce the control score (0 to 9)
• Degree of Interest Alignment (Compatibility of Goals)
• Degree of strategic manipulation (without other's awareness)

Table 3: Organizational Types

IG	International Government
NG	National Government
PG	Prefectural Government
TG	Town Government
VL	Village Leader
NL	National Legislature
PL	Prefectural Legislature
TL	Town Legislature
VC	Village Council
PJ	Prefectural Judiciary
NLDP	National Liberal Democratic Party
PLDP	Prefectural Liberal Democratic Party
TLDP	Town Liberal Democratic Party
NOP	National Opposition Party
POP	Prefectural Opposition Party
IB	International Business
NB	National Business
PB	Prefectural and Local Business
News	Regional Newspaper
NA	Advisors/Advisory Council to National Government
PA	Advisors/Advisory Council to Prefectural Govt
NM	National Movement
PM	Prefectural Movement
LM	Local Movement
PPO	Prefectural Public Opinion
TPO	Town Public Opinion
VPO	Village Public Opinion
NU	National Union
PU	Prefectural Union
TU	Town Union

Table 4: Total Impact of Inter-Organizational Relations

	Name	PG	NB	PPO	NG	TU	TCM	TPO	TG	PB	TL	∑	%
	PG	4	23	33	13	9	6	5	4	8	6	123	(.23)
	NG	75	7	0	9	0	2	0	0	0	0	100	(.19)
	TCM	41	10	5	9	4	3	2	3	0	3	86	(.16)
	NB	61	0	6	10	1	2	5	0	3	0	72	(.14)
	PB	5	1	7	0	0	0	0	0	0	0	15	(.03)
	IB	0	12	0	0	0	0	0	0	0	0	12	(.02)
	NAC	14	0	0	1	0	0	0	0	0	0	15	(.03)
	TU	5	0	0	0	2	0	0	2	0	1	14	(.03)
	PLDP	0	0	0	2	4	0	0	2	0	0	13	(.02)
	POP	6	1	0	0	0	0	0	0	0	0	7	(.01)
	NLDP	0	0	0	14	0	0	0	0	0	0	20	(.04)
	∑	228	60	59	58	22	25	15	11	11	10	533	(.90)
	%	.43	.11	.11	.11	.04	.05	.03	.02	.02	.02	.94	

Affected Organizational Type (column group); *Initiating Organizational Type* (row group)

```
Key: NG    National Government
     PG    Prefectural Government
     TG    Town Government
     TL    Town Legislature
     NLDP  National Liberal Democratic Party
     PLDP  Prefectural Liberal Democratic Party
     POP   Prefectural Opposition Party
     IB    International Business
     NB    National Business
     PB    Prefectural Business
     PPO   Prefectural Public Opinion
     TCM   Town Citizen Movement
     TPO   Town Public Opinion
     TU    Town Union
```

Table 5: Total Sanction Presence

Sanction	Average Strength	No. of Usages	Total Impact	Percent of Total
Legitimate	0.85	173	148	0.28
Legal-Coercive	1.10	123	136	0.26
Reward	1.42	93	132	0.25
Expert	0.59	121	71	0.13
Referent	0.40	73	29	0.05
Persuasion	0.57	30	17	0.03
Total		613	533	1.00

Table 6: Periodic Table with Data from Japan Case

|		Tangibility						
		Extrinsic		Social		Intrinsic		
		Coercion Impact	Reward Impact	Expertise Impact	Persuasion Impact	Legitimacy Impact	Reference Impact	Total
Malleability	High Structure	6.02%	1.16%	2.23%	0.03%	2.74%	0.24%	12.41%
	Structure	7.39%	16.68%	3.57%	1.03%	10.76%	2.24%	41.66%
	Plastic	7.70%	2.88%	5.88%	0.69%	5.48%	0.82%	23.46%
	Agency	5.22%	1.16%	1.53%	2.04%	7.31%	1.39%	18.66%
	High Agency	0.88%	0.70%	0.31%	0.08%	1.19%	0.65%	3.81%
	Total	27.20%	22.58%	13.52%	3.87%	27.49%	5.33%	100.00%

Figures

Figure 2: The Hourglass of Translation
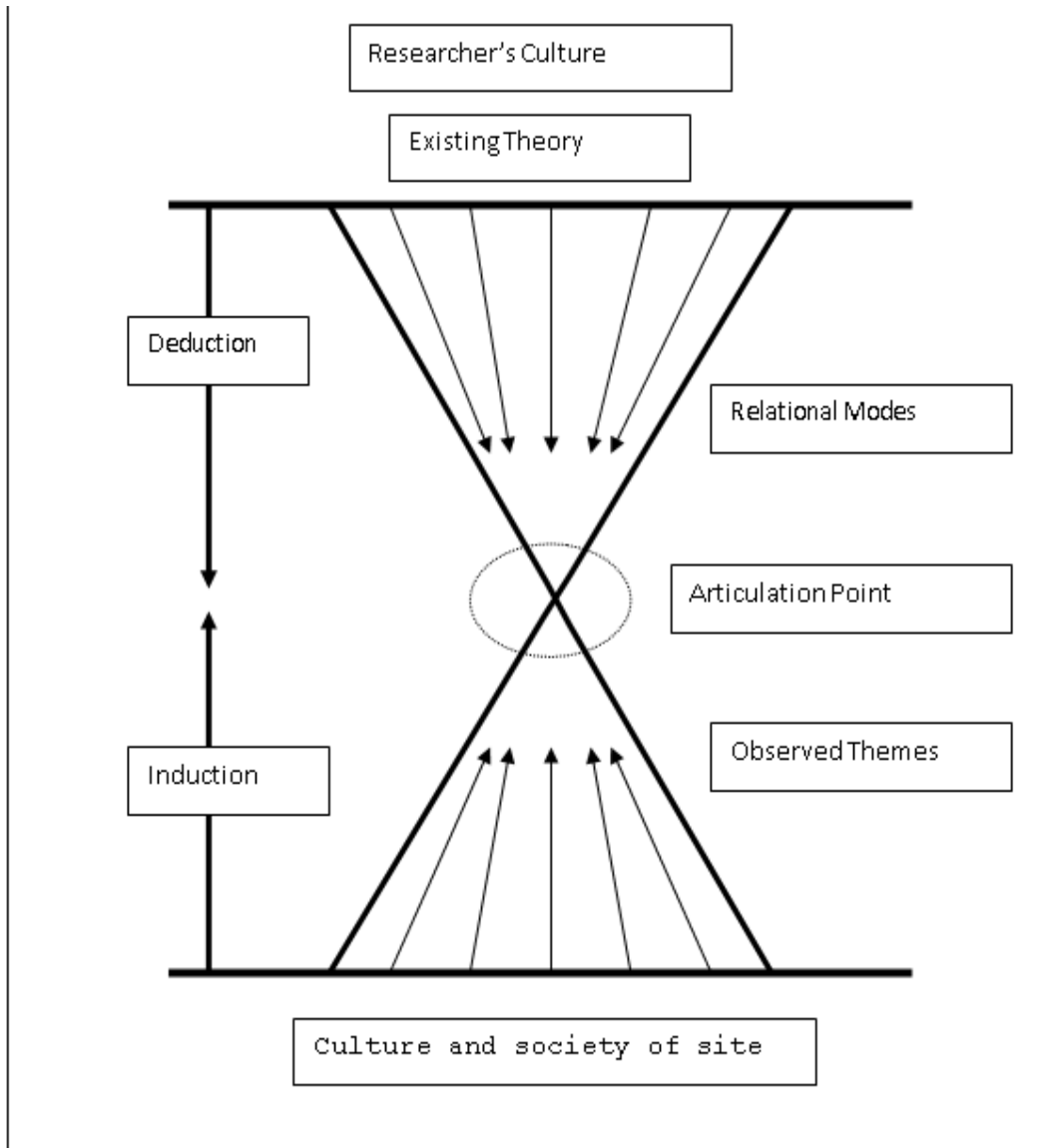
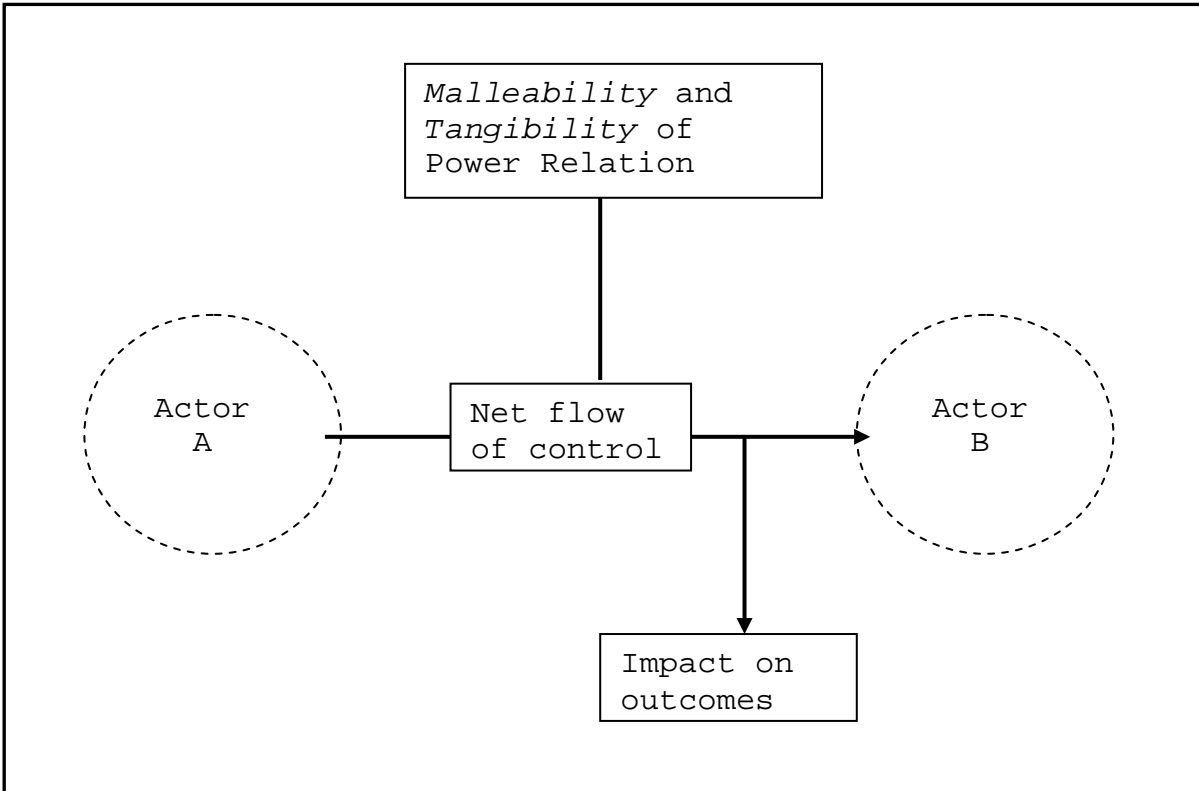**Figure 1: Key Influence Relationship (KIR)**
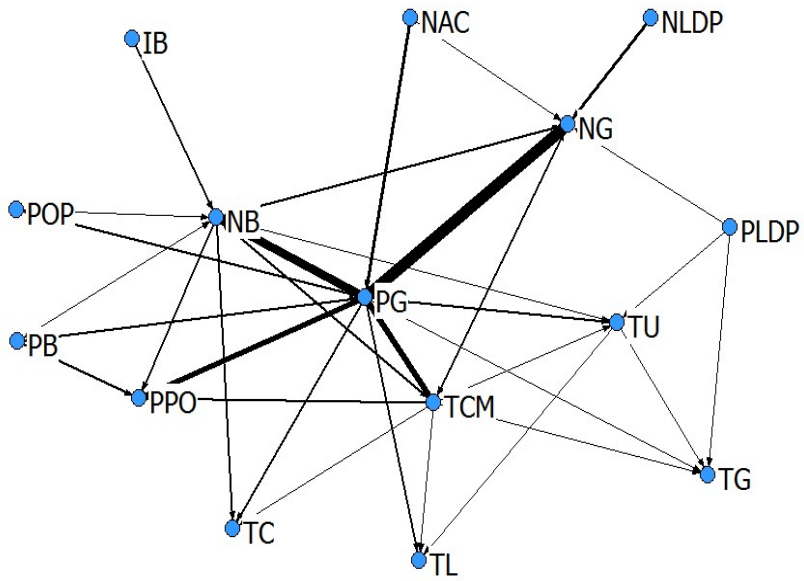
Figure 3: Total Impact of Main KIR

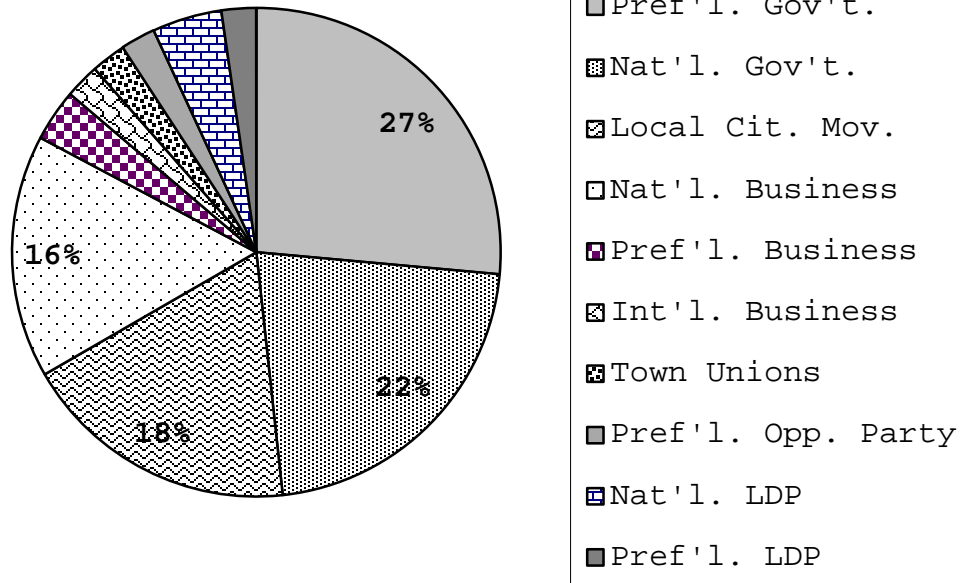**Figure 4: Total Impact of Organizational Types**

Pie chart with legend:
- Pref'l. Gov't.
- Nat'l. Gov't.
- Local Cit. Mov.
- Nat'l. Business
- Pref'l. Business
- Int'l. Business
- Town Unions
- Pref'l. Opp. Party
- Nat'l. LDP
- Pref'l. LDP

Pie chart values: 27%, 22%, 18%, 16%

Figure 5: Total Impact of Sanction Types
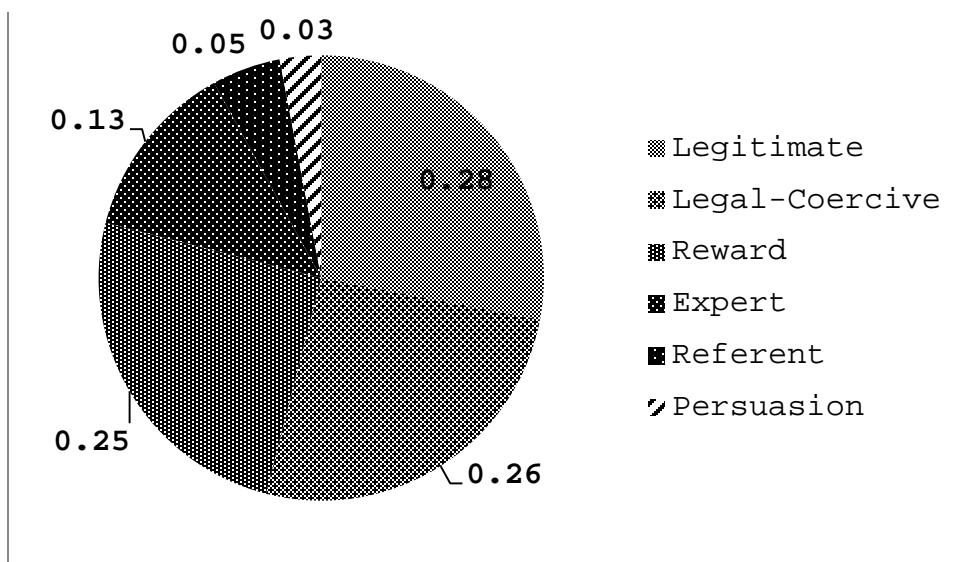
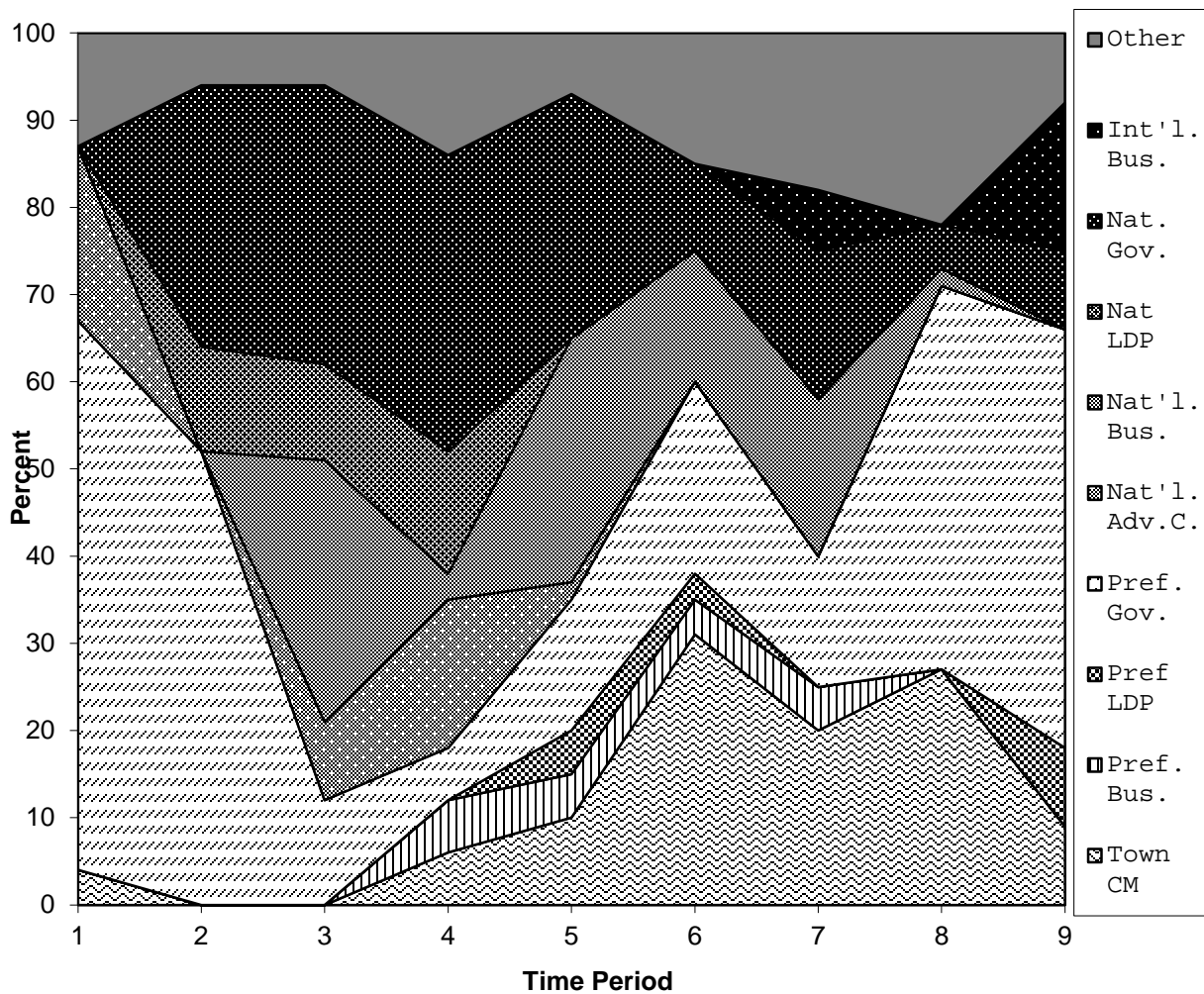**Figure 6: Changing Impact-Organizational Types over Time**
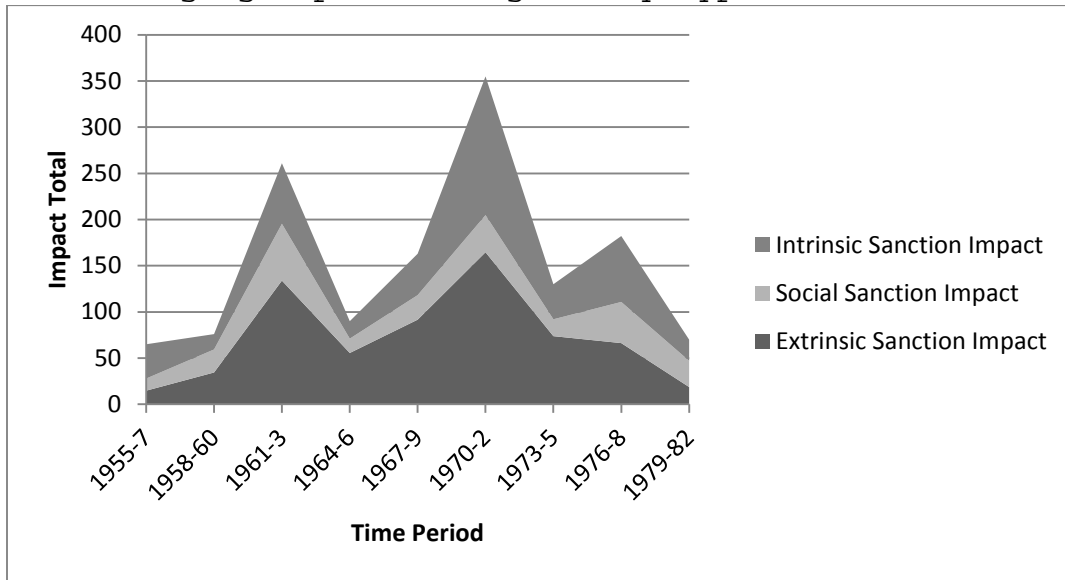
Figure 7: Changing Impact-3 Tangibility Types over Time

Figure 8: Changing Impact-6 Sanction Types over Time

Figure 9: Changing Impact-5 Malleability States over Time

Figure 10: Changing Impact-9 Relational Modes over Time