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# Institutional Dynamics: When is Change “Real Change”?

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**Abstract:** To analyze institutional dynamics, it is first necessary to determine when change has occurred, when not, and the nature and magnitude of change. If social institutions are defined in terms of rules, then a change of rules forms the core of institutional change. A number of complications arise from the difference between formal and informal institutions. Rules can remain static, but be interpreted in new ways. Rules can be ‘transplanted’ from one social location to another, and because of the change in context their implementation changes. Or rules may continue but ‘exceptions’ may be granted to them. Drawing on sociological and socio-legal research on rule-change, I discuss how formal/informal differences affect institutional change, and illustrate these with examples drawn from finance, development, and law.

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Institutional change is a topic that has drawn substantial attention from across the social sciences (Mahoney and Thelen 2010, Thelen 1999, Clemens and Cook 1999, Streeck and Thelen 2005). Terms like “punctuated equilibrium” and ideas about “path dependence” have been deployed to help explain institutional dynamics. Some of this scholarly attention was prompted by real world events, like the dramatic social and economic transitions occurring in eastern and central Europe in the 1990s, or the Sisyphean struggle to achieve economic growth in developing countries. Some of it follows from theoretical developments in various disciplines emphasizing the importance of institutions (Williamson 1985, North 1990, March and Olsen 1984, Meyer and Rowan 1977, DiMaggio and Powell 1983, Acemoglu, Johnson and Robinson 2005, Greif and Laitin 2004). Before proceeding to explain institutional change, however, it is necessary to determine that change has indeed occurred. In short, one begins by defining and measuring a dependent variable.

Institutional change is fairly easy to measure when dealing with a highly formalized institution: formal rules are clear-cut, so it is easy to see when they are modified or deleted. American political scientists and historians, for example, view the passage of amendments to the U.S. constitution as moments of institutional change. The formal written document at the core of the American polity is altered as provisions are added or repealed. And when a proposed constitutional amendment fails to pass, then we know that change might have occurred, but did not. More generally, rule change is obvious when it involves a shift from “In situation X, do A” to “In situation X, do B,” or to “In situation Y, do A.” Formality makes it easier to know when institutions change. By contrast, it is harder to know if or when an informal institution has been transformed. Informal institutions tend to be covert, operating in the shadows, so to speak. Their importance confounds the task of measurement.

In this paper, I (re)introduce the distinction between formal and informal into the discussion of institutional change. It is a widely used distinction, as one can speak of formal rules, dinners, economies, dress, manners, organizations, and their informal counterparts as well.<sup>1</sup> Drawing on the sociological and socio-legal literatures, I discuss the difference between formal and informal institutions, the varieties of their interconnection, and the processes that can turn one into the other (e.g., “formalization”). The point of adding this distinction isn’t simply to complicate the discussion of institutions, but to capture an important dimension of change that can be easy to overlook, precisely because it can be so hard to measure.

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<sup>1</sup> Of course, scholars don’t just dichotomize. Feige (1990) distinguishes between the illegal economy (production and distribution of prohibited goods and services), the unreported economy (activities intended to evade tax rules), the unrecorded economy (activities which evade reporting by government statistical agencies), and the informal economy (activities which occur without the costs and benefits of formal laws and administrative rules). See also Portes (2010).

Frequently, formal and informal closely intertwine, and their interdependency affects whether and how change unfolds on both sides. For example, informal institutions often stem from the limits or contradictions of formal institutions, and if the latter changes, so does the former. Or a seemingly static formal institution may in fact be changing because of the informal practices that implement it (as when a formally unchanging rule gets reinterpreted). Alternatively, a formal institution that appears to be changing may in reality not be because adjoining informal institutions continue to operate as before (as when official reforms produce little real change). Analysts can be misled if they overlook the relation between formal and informal and focus only on visible formal features (North 1990: 36, Helmke and Levitsky 2004). Unfortunately, informal institutions are much harder to measure than formal ones.

## Rules and Institutions

As an approximation, I define social institutions in terms of systems of rules (see, e.g., North 1990: 3, Knight 1992: 2-3,54, Hall and Soskice 2001: 9, Ostrom and Basurto 2011: 318). More than one (and usually many) rules are involved in a social, economic or political institution, and they form a coherent system rather than simply an agglomeration. Ostrom (1990: 51-54) proposes that institutional rules are nested in levels, with higher level rules providing the context for lower level rules (i.e., there are rules about rules).<sup>2</sup> If rules are substantive, rules about rules are frequently procedural (e.g., if a lower-level rule is about traffic safety, rules about rules determine how one passes a traffic safety law, or how one integrates traffic rules with other sets of rules).<sup>3</sup> The basic institutional element is the rule. Rules are guides to action (Knight 1992: 67), and the ones that form the basis for social institutions are shared. An example of a rule includes a recipe for cooking – follow the instructions to produce a cake. Examples of social rules include those governing etiquette – follow the rules in order to act in an appropriate manner (e.g., men should remove their hats whilst in church); grammatical rules -- to use an English verb in the past tense, add “ed” to the verb stem; bureaucratic rules – submit certain paperwork in order to perform a particular task; and economic rules – follow a procedure in order, for example, to form a limited liability corporation, or to create a contractual agreement. Rules impose constraints on action (Pettit 1990: 2), but they also enable (Hart 1994: 81). Or, as Searle (1969: 33) put it, there are regulative and constitutive rules. Important social rules also possess a normative quality:

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<sup>2</sup> See also Hart 1994: 94.

<sup>3</sup> My thanks to Gillian Hadfield for prompting this observation.

individuals who subscribe to them typically believe in their legitimacy, and they use such rules as the basis to assess the actions of others (Hart 1994: 57,255). That is, no-one is obliged to follow a kitchen recipe and only a failed cake follows failure to read the cake recipe properly. To transgress a social norm, however, invites more widespread sanctioning because transgression is perceived to be morally objectionable.

Regulative rules operate like functions, transforming inputs into outputs. E.g., if the situation is of type X, then do A. If it is Y, then do B. Otherwise, do C. They map states-of-the-world (X, Y, and other) into actions (A, B, and C) performed by particular actors. States-of-the-world aren't apprehended in microscopic granularity but are clustered together into larger classes. Constitutive rules operate somewhat differently, and according to Searle take the general form, "X counts as Y in context C," (Searle 1969: 35). Constitutive rules enable new forms of behaviour, but at the same time they structure that behaviour. So in a given situation C, an actor who wishes to produce Y must do X. Thus, both regulative and constitutive rules necessarily operate with some degree of abstraction, and implicit in their operation is a categorical schema that organizes the world (Hart 2004: 124, Stinchcombe 2001: 3,13). Furthermore, to guide action, rules must be communicable. People cannot comply with a rule they do not perceive or comprehend (Stinchcombe 2001: 10), although compliance may eventually become habitual (Morgan and Olsen 2011: 429).<sup>4</sup>

Rules are also conditional on whatever goals the rule-follower is pursuing (e.g., different rules are relevant depending on whether one wants to bake a cake, write a contract, or behave appropriately in church). An ideal regulative rule would unambiguously partition both the states-of-the-world and the actions-to-be-performed into sets of mutually exclusive and jointly exhaustive categories, and then link them together with transparent precision. Similarly, an ideal constitutive rule would partition the world into unambiguously discrete contexts wherein specific actions produce specific effects. In reality, things are vastly more complex, with lots of variation in who is to do something, what it is they are supposed to do, who makes the determination, and what rules are applicable in a given situation. Among other things, the difference between the promulgation and application of rules can distinguish between two groups: rule-makers and rule-takers.

Actual rules, as opposed to ideal rules, vary in their level of ambiguity, consistency, complexity, completeness, the degree (and location) of discretion in the interpretation of rules,

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<sup>4</sup> This is one reason why, according to the Weberian definition of bureaucracy, formal rules must be written down. Written rules are easier to communicate across time and space.

and the extent to which they are implicit or explicit, opaque or transparent.<sup>5</sup> Sometimes general rules are created by one body (e.g., Congress passes a law), specified or elaborated by other bodies (e.g., administrative agencies write rules “under” the law), and then implemented by yet someone else. Or general rules are created at the top of an organization, and then have to be specified at lower levels within the same organization. The stages of specification and implementation are often more consequential than rule creators would like.

Rules may be incomplete in the sense that they do not cover all the contingencies that arise (e.g., disaster rules for a California school district that don’t provide for what to do during an earthquake). They may be inconsistent (or even contradictory) if they imply doing A and B if situation type X arises, or, even worse, doing A and not-A. Changing rules to solve the problem of incompleteness, for example by taking into account new and more detailed contingencies, often exacerbates the problem of inconsistency. As rule systems become more complex, it is harder for them to remain perfectly consistent. And the potential for extreme complexity of rules is surely well illustrated by the IRS tax code. A transparent rule is one that is easy for an outsider to determine or know about (perhaps because it is published in print or on a website), but because rules are not self-evident or self-explanatory they always need to be interpreted by someone who necessarily possesses a measure of discretion (Hart 2004: 127). However, that measure of discretion can be great or small.

Rules always co-exist with exceptions to rules. The empirical world is never fully congruent with the image implied by a rule system, for reality is simply too complex and unruly. Exceptions are ways of accommodating situations that don’t exactly “fit” the rules, but without changing the rules themselves, or explicitly violating them. They offer an ad hoc and situationally-grounded way to “suspend” the rule without overtly challenging the rule. Phrases like “stretching” or “bending” the rules connote the granting of an informal exception. The ability to grant such exceptions is an important source of power, as is the right to set a rule in the first place. Those who create rules have official power (the “rule-makers”) that they can exercise over those who follow rules (the “rule-takers”), but implementation (by “rule-applicators”) matters as well. This is one reason why the people who administer a set of rules create exceptions. Overt violations of rules are a more extreme contravention, but unlike with exceptions, the administrator of the rule has decided not to bend the rule. In other words, the difference between exception and violation lies largely in the eyes of the rule administrator.

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<sup>5</sup> Ehrlich and Posner (1974: 268) note the similar problem of overinclusion and underinclusion.

## Formal and Informal

As noted above, the distinction between formal and informal is widely used, in and outside of social science. Scholarly investigation of the formal/informal distinction was originally prompted by recognition that formal institutional rules, by themselves, were inadequate to explain the behaviour that they ostensibly guided. And the divergence of behaviour from rule wasn't simply random (akin to white noise). In sociology, the difference began to receive sustained attention in early studies of organizations, where ethnographic researchers noted systematic discrepancies between formal organizational features (chains of command, lines of authority and oversight, official procedures, organizational charts, etc) and how people in those organizations actually interacted and conducted their business (e.g., Roy 1954, Dalton 1950, Dalton 1951, Blau 1963).<sup>6</sup> Formal organization seemed a remarkably poor map for actual organizational interactions, even inside bureaucracies. Max Weber's theory of bureaucracy prompted many of these early investigations since impersonality was one of the hallmarks of bureaucratic organization: a superior had formal authority over a subordinate, regardless of who actually occupied those two positions. But as researchers realized, it often mattered which persons were situated where, organizationally speaking, and what sort of informal relations they had to others. A young woman might have a hard time directing her male subordinates, even if she was their official superior. Occupation of a position formally depended on the occupant satisfying specific job criteria (credentials, skills, experience, etc), but in fact promotion decisions were influenced by all kinds of informal factors (features like gender and race, network connections, old-school ties, etc.). Dalton (1951), for example, studied promotions in a U.S. industrial plant and found that criteria like membership in the Masonic Order, not being Roman Catholic, Anglo-Saxon ethnicity, and membership in a local yacht club all enhanced the likelihood of promotion, although these criteria were nowhere explicitly stated or enshrined in formal HR rules. Dalton (1950) also noted how frequently management and the unionized workforce tacitly collaborated outside of the strict terms of their collective bargaining agreement. Formal and informal leadership within organizations need not always converge, and so those with formal power may not have the most influence, and vice versa (Blau 1963: 150,154). The existence and significance of informal relations within organizations continues to be recognized (Cross and Prusak 2002), and the term

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<sup>6</sup> Early studies of crime and deviance also considered informal social institutions. See, e.g., Merton 1938, Cressy 1958.

“decoupling” (Meyer and Rowan 1977) has been commonly used to denote the discrepancy between formal features and informal practices.

The difference between formal and informal is not hard and fast. The two operate more like ends of various continua rather than a simple dichotomy. Some scholars base the distinction on how rules are enforced (Helmke and Levitsky 2004: 727). Rules that are established and enforced by the state, or through law, are considered formal (Feige 1990, Portes 2010: 132-135). Rules enforced in other ways (perhaps rule violators are ostracized or shunned by members of their community) are considered informal. Setting aside strict legality, formal rules are centrally enforced by some organization, while informal rules are enforced in a more dispersed fashion via personal sanctioning, or circulation of a bad reputation (Blau 1963: 194-5). Besides enforcement, the difference between formal and informal rules has been characterized in a number of other ways: formal rules are explicit while informal are implicit; informal rules are more flexible than formal ones; formal rules are precise whereas informal rules are vague; formal rules are written down while informal ones are not, and so on.<sup>7</sup> These differences all make informal rules harder to detect, and pose non-trivial measurement problems. They also mean that although social rules must be communicable, how they are communicated varies between formal and informal. Formal rules are often transmitted in written form, whereas informal rules may become evident only through personal experience or via an informant.

Hart (2006: 30) argues that all rules have an element of informality, and so there are no absolutely formal rules. Even highly formalized rules must be applied, interpreted, and implemented, and this requires a measure of informal judgement on the part of the rule implementer. For example, deciding whether or not to grant an exception to a rule, how an old rule applies to a new situation, or how to reconcile apparent conflicts between different rules, requires judgment. An attempt to completely formalize implementation will simply add another layer of formality (rules about rules), and shift informality to different (and perhaps less accessible) levels, but won't make it disappear. Rules about rules must be interpreted, applied, implemented, etc. with the same discretion as rules.

The formal-informal distinction has value notwithstanding the lack of a hard-and-fast difference and even though institutions involve a mixture of both. In part, this is because of how formal and informal rules are connected. For instance, some scholars argue that formal rules engender informal ones. Streeck and Thelen (2005: 14) claim that formal rules permit

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<sup>7</sup> See also Ehrlich and Posner's (1974) discussion of the difference between rules and standards. My thanks to Barak Richman for calling this to my attention.



informality through the gaps and ambiguities that open up between rules and their enactment. Formal rules may not fully or perfectly map onto the activities they regulate in a mutually exclusive and jointly-exhaustive fashion. They may be silent about some activities (incomplete), or more than one rule may be applicable (inconsistent). Or the import of a rule may be unclear. Additionally, rule-interpretation may be the locus of social conflict, as different groups deliberately exploit ambiguities and press interpretations that favour their interests (Mahoney and Thelen 2010: 11). And even without such disagreement, the implementation of rules almost always produces unintended consequences. Ex post adjustments can help to mitigate unintended consequences that prove to be problematic. Given these various limitations of formal rules, informal practices and rules can function as “filler” by operating where formal rules are incomplete, they may resolve conflicts or inconsistencies between formal rules (as an informal meta-rule about which rule applies, see Sheingate 2010: 183), and they can further specify the meaning of formal rules that are initially ambiguous or which produce unintended consequences.

#### Empirical Studies of Formal and Informal

Early researchers discovered the formal/informal difference in their studies of bureaucratic organizations. But what is the relationship between them? Are formal and informal institutions rivals or substitutes? Do formal institutions crowd out or result in fewer or weaker informal institutions? Are they interdependent and mutually complementary? For example, it may be that informal institutions help formal institutions to function better by “greasing the wheels,” filling the gaps, etc. Research across a variety of political and economic settings helps address these questions.

Studies of the Soviet command economy revealed a thriving informal sector. The formalized economy was centrally planned, but around and through the plan ran a vital informal economy. Grossman (1990) argues that the informal economy in the USSR was useful in that it delivered a quantity and quality of goods that the formal economy could not. In a variety of ways, informal arrangements compensated for deficient formal ones. Ledeneva’s (1998) study of *blat* is particularly instructive. The term refers to a widespread practice in which personal networks and informal contacts were used to secure scarce goods and services, in a manner that evaded formal procedures (Ledeneva 1998: 1). In general, *blat* was an individual strategy that helped to counterbalance the deficiencies of the formal economy, but it was also sufficiently commonplace as to become a veritable social institution.

It involved the exchange of personal favors, culturally framed as “friendship,” “helping” or “sharing” (pp.35,37). The efficacy of *blat* depended on the shortcomings of the planned economy, and so it was not just a rival system. *Blat* was embedded in both formal and informal institutions. After the economic transition launched in the early 1990s, the old system of *blat* was deprived of access to the centrally planned economy, since the latter simply shrank. Nevertheless, for various reasons (including deficiencies in the new legal system) informal networks and favors continue to be very important in conducting business in Russia (Ledeneva 1998: 211, Ledeneva 2006: 1-3).

Other post-socialist transitions underscore the importance and durability of informal institutions. Privatization of land in Romania during the 1990s is one such case (Verdery 2003). Under the pre-transition socialist regime, with property that was nominally publicly-owned, there was considerable divergence between formal rules and informal practices (Verdery 2003: 49): in a shortage economy, official plans were implemented by elites who operated via patronage networks. With privatization came a dramatic and ostensibly unambiguous change in formal rules: land shifted from public to private ownership. But the divergence between formal and informal continued, translated now into a world with different formal rules. Elites continued to operate via the exchange of favors through networks (Verdery 2003: 157).

These examples show that formal change can exaggerate the extent of real change. They also suggest that formal and informal institutions can make competing claims over the same set of resources. In the USSR, scarce goods could either be allocated in conformity with the plan, or diverted through informal patronage networks to sustain *blat*. Yet whether such diversion is good or bad for the overall system will certainly depend on the scale of activity. A boss who uses petty cash to fund occasional social events (e.g., staff birthday parties, lunches, holiday events) can improve morale and bolster performance, but systematic looting by the boss would clearly be detrimental.

Tsai (2006) examines contemporary China and finds that, as with Russia and Romania, many informal practices developed as “workarounds” to cope with, or adapt to, the problems created by formal institutions.<sup>8</sup> In some cases, these informal practices spread and become sufficiently common that political elites eventually formalized them, enabling formal institutions to catch up with practice. For example, in the 1990s Chinese capitalists established many private enterprises, but registered them as collective enterprises (“wearing a

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<sup>8</sup> Naughton (2007: 478) notes both the size of China’s informal financial sector and the fact that it is little studied.

red hat”) because private firms weren’t yet legal. In this process, informal practices created “facts on the ground” and formal rules are subsequently and selectively revised to catch up to what was already going on. In this sense, informal practices first compensated for the imperfections of formal rules, and then created a political constituency who favoured change of formal rules in order to formalize the informal.<sup>9</sup>

The issue of formal and informal has also arisen in discussions of the relationship between law and capitalism. What sort of institutional framework does a market economy require? Milhaupt and Pistor (2008) and Pistor and Wellons (1998) stress the availability and efficacy of informal non-legal institutions that can serve some of the functions of law, and effectively support economic development. In fact, when informal institutions operate well, they can reduce the demand for formal legal institutions. In their argument, informal institutions can roughly substitute for formal ones, but they also suggest that formal institutions are more transparent (Milhaupt and Pistor 2008: 105). Elsewhere, Pistor and her colleagues (Berkowitz, Pistor and Richard 2003) note that policy makers often overestimate the portability and stability of formal legal rules, failing to recognize that although written rules can easily be copied across great geographic and political distances, they do not work the same in different contexts. This problem arose in the case of the transition economies. For example, suppose the Czech Republic sought American-style corporate governance, and decided simply to adopt Delaware corporation law. Because the operation of law depends on many things outside of legal texts, Delaware law won’t work in the Czech Republic as if it were still in Delaware. The two jurisdictions may have exactly the same formal rules, but in practice the difference in context produces different outcomes. How laws operate depends on other laws, the legal profession, the capacity and competence of the judiciary, the local political landscape, and the overall legal culture. Like words, rules are indexical: their real meaning depends on their context.

Further evidence outside of transition economies reflects a complex relation between formal and informal institutions. Penningroth (2003) documents the strength that informal economic institutions can sometimes possess. In the context of the ante-bellum American South, he shows how slaves devised and enforced a system of informal property rights,

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<sup>9</sup> Knight (1992: 171) makes a similar point: formal institutions may be devised to “stabilize” prior informal institutions. Elsewhere, Tsai (2000) considers uneven involvement with informal institutions, and why it was that Chinese women were much more likely to be involved in rotating credit associations (an informal credit institution) than were men.

despite themselves being a form of property and therefore not possessing a legal right of ownership. After the Civil War, former slaves sought compensation for the destruction of their property by the Union Army, and some were able to document their informal claims of ownership to the satisfaction of the Southern Claims Commission. The ante-bellum property rights of slaves were informal and deeply embedded in social networks, but through the work of the Commission, some of those rights were recognized and formalized. In a similar historical context, incoming U.S. officials judged the pre-existing Spanish legal system in the Louisiana Purchase territory not to be a proper legal system (Banner 1996). They mistook an effective informal legal institution for no institution at all. In fact, according to Banner (1996: 38), the largely unwritten and localized Spanish legal system effectively served the needs of the population, although its efficacy was invisible to the officials who replaced it with regular American courts and law.

The difference between formal and informal is not just an historical oddity. Fauchert and von Hippel (2008) describe a system of informal rights that govern claims over intellectual property among contemporary French chefs. Recipes are the signature product for *haute cuisine* chefs, but law-based intellectual property rules do a poor job protecting them. Instead, an informal system has emerged, built around three norms, which effectively sanction those chefs who violate the rules. In this instance, an informal institution performs better than its formal counterpart. Their findings echo Macaulay's classic article (1963) on the willingness of businesses to forgo modern contract law. When actors have long-term relations with each other and are embedded in stable and densely-connected communities, they shift from formal to informal governance of their transactions (see also Bernstein 1992). For a number of reasons, formality is to be avoided.

Tripp (1997) examines the operation of the informal economy in Tanzania, noting how it thrived even as the formal economy stagnated and contracted. The informal economy functioned as a kind of "cushion" or safety-net for people, compensating for the inadequacies of the formal economy (pp.3-4). It could also function as a "weapon of the weak," a way for people covertly to resist formal authority. In Tanzania, substantial formal change (in particular, imposition of a neo-liberal austerity program) was made possible by the existence of the informal economy, and its ability to compensate for the consequences of formal change (p.79). Her case illustrates how much the informal economy can enjoy popular political support, largely because it provides a lot of employment for citizens.

Even on the leading edge of the modern "knowledge economy," discussions of knowledge production, retention and transfer also mark the difference between formal and

informal (Foray 2004, Kogut and Zander 1993, Argote et al. 2003). Informal knowledge, known as “tacit knowledge” is know-how that has not (or cannot) be codified and rendered explicitly into words, diagrams, or formulae (Collins 2001: 72). It is knowledge that reposes, for example, in the hands and sub-consciousness of a master craftsman, in someone’s ability to speak perfect sentences without explicit knowledge of the rules of grammar, or in an organization’s ability to execute the same manufacturing blueprint more efficiently over time. Because it isn’t embodied in a set of formal instructions, tacit knowledge can only be passed along through something like an apprenticeship arrangement involving close personal contact, emulation and learning-by-doing (Argote and Epple 1990, Horning 2004). Mokyr underscores the importance of tacit knowledge throughout the industrial revolution, even as formal science was increasingly deployed to accelerate the process of technological innovation (Mokyr 2002: 10,115,145-6,161). Even highly formalized areas of knowledge can contain significant pockets of tacit knowledge. For example, the study of gravitational waves in physics uses sophisticated mathematics, but considerable tacit knowledge is still needed to make a lab experiment work, and to achieve reproducible results (Collins 2001). The same is true of nuclear weapons design (MacKenzie and Spinardi 1995). Thus, to consider only the formal knowledge that reposes in organizations is to underestimate their full range of competencies and expertise.

What these empirical studies reveal is that, in many situations, formal and informal institutions co-exist and interact. And it is not the case that informal institutions simply accomplish in haphazard fashion what formal institutions do well: informal institutions are not just inferior versions of formal institutions. Frequently, informal arrangements compensate for or redress the considerable deficiencies of formal institutions, and in some situations informal arrangements simply perform better. Informal arrangements emerge in the interstices of formal systems, and operate according to principles of patronage, loyalty, reciprocity and personal trust (Lomnitz 1988). But informal arrangements can be as strict as formal ones (i.e., the unwritten rules of patronage may be unambiguously clear to those who participate).

Helmke and Levitsky (2004) argue that informal institutions affect the performance of formal institutions in complicated ways, and can both undermine or support formal institutions. To account for these diverse effects, they offer a typology (pp.728-9) that varies along two dimensions: whether formal institutions are effective or not, and whether formal and informal institutions produce convergent or divergent outcomes. Convergence with effective formal institutions entails complementary informal institutions (e.g., they “fill in

gaps”), while convergence with ineffective formal institutions means substitutive informal institutions (they help to accomplish what formal institutions fail to do). Divergence with effective formal institutions means informal institutions act in an accommodating fashion (they alter the spirit but not letter of formal rules), and divergence with ineffective formal institutions means that informal institutions compete with and undermine formal arrangements (e.g., corruption, patrimonialism, clientelism).

Informal institutions can develop for a number of reasons. When formal institutions are substantially incomplete or problematic, informal institutions fill in the gaps, reduce transaction costs, or add flexibility and speed. Their effect is to bolster formal institutions. Informal institutions can also be used to challenge formal institutions, by people who deem the latter illegitimate or unfair. In such cases, the goal isn’t to remediate formal institutions but to transform or even eliminate them. Informal rule application also has a temporal dimension that creates opportunities for resistance to formal imperatives (Bourdieu 1977: 7-9). “Foot dragging” or delayed implementation means that rules are being complied with, but very slowly (Sheingate 2010: 184-5). In effect, slow compliance can mean non-compliance. Informal manipulation of the temporality of rule enactment offers a basis to combine formal compliance with underground resistance.

In some instances, formal institutions may simply not exist at all, leaving informal institutions to operate on their own. Or in the absence of a preferred formal institution, an informal one serves as a second-best solution. Since they have less salience than their formal counterparts, informal institutions also allow for the pursuit of goals that are not entirely legitimate or publicly acceptable: they add a convenient measure of “plausible deniability.” And where formal and informal institutions are contiguous but disconnected (i.e., highly “decoupled”), formal arrangements can be used as convenient symbols or signals, garnering legitimacy but without impinging on informal arrangements (Meyer and Rowan 1977).

## Institutional Change

These complicated relations between formal and informal bear on the study of institutional change. Let us start with the simplest question, about whether or not change has occurred. Suppose that a formal institution doesn’t function without the help of informal institutions that augment and support its operations. In this situation, it would be mistaken to conclude, looking only at the formal side, that change was not occurring, because the apparent stability of formal institutions may only be possible given the adaptations and active

responses of collateral informal institutions. Those informal institutions may be absorbing environmental shocks, and buffering a formal institutional core so that it appears static. A related complication arises when formal rules that appear to be stable are really changing because informal interpretations or implementations of those rules are themselves being altered. In the case of legal institutions, for instance, “law on the books” may be static while “law in action” is dynamic. Again, the apparent stability of formal rules conceals dynamic informal rules. Yet another possibility occurs when informal institutions are highly decoupled from formal ones, but they (and not the formal rules) shape substantive outcomes. In this familiar combination of formally new window-dressing plus informal business-as-usual, measuring change by tracking formal institutions would be highly misleading. Indeed, it is frequently easier to signal change by altering formal institutions, and leaving informal ones alone, than by attempting something more substantially transformational (Scott 1998: 255). Halliday and Carruthers (2009) track the IMF-induced reform of Indonesian bankruptcy laws, in the wake of the Asian Financial Crisis, and find that big changes in formal law were not accompanied by similar changes in practice because of considerable problems with implementation. The informal *status quo* in Indonesian courtrooms was little affected by dramatic formal change at the top. However, change in formal law was highly visible, and could be used as a public signal that “things were different.”

Once these complications have been addressed, and one is sure that institutional change has occurred, then the next issue concerns the nature of the change. One obvious type of change consists of movement between formal and informal, in one direction or the other. Informal institutions are often formalized and codified on the grounds that this increases transparency and predictability. Arguments supporting the formalization of economic rules often suggest that informal rules are cheap and function well enough for low levels of economic development, but that only formalization provides the certainty that higher levels of investment and development require. Formalization reduces the discretion that characterizes informality. So, for example, informal mineral rights might suffice for surface mining but formal-legal rights would be necessary if someone contemplated sinking a deep mine shaft or making a major capital investment (Libecap 1989). Similarly, consider De Soto’s (2000) claim that formalization of informal property rights will expand credit and bring about economic development for poor people in places like contemporary Peru. Formal rights are superior to informal ones, by this argument, and so formalization becomes a development strategy (Guha-Khasnobis, Kanbur and Ostrom 2006: 2).

Arguments favouring institutional change that increases formalization certainly seem plausible. But privileging formality can lead scholars and policymakers to underestimate the efficacy and value of informal institutions. This problem is exacerbated by the fact that informal institutions tend to be easily overlooked (Guha-Khasnobis, Kanbur and Ostrom 2006: 5). People also fail to appreciate how much formalization can entail “trans-formalization.” To formalize isn’t just to make manifest what was latent, or to render explicit the implicit: it can quite substantially alter the substance of informal rules, and produce clear winners and losers (Scott 1998: 29,33,35-6). This is one reason why formalization and codification can be such a contentious process.<sup>10</sup>

A further limitation of formalization, and its purported effects on discretion, is revealed by the example of the “economic criterion test,” an amendment to Korean bankruptcy laws (Halliday and Carruthers 2009: 226-7, 376-7). This measure was passed in 1998 as part of a larger set of post-Asian-Financial-Crisis reforms pushed by the IMF, and attempted to make bankruptcy proceedings more predictable by instituting a formal rule to determine whether an insolvent firm would be liquidated or reorganized. Previously, this key decision was subject to judicial discretion, but henceforth judges were to apply a simple accounting test and compare the estimated liquidation value of the firm with its estimated going-concern value. If the former were greater, then the firm had to be liquidated. This new formal rule produced some unexpected and unwelcome outcomes (e.g., the Dong Ah liquidation) but in addition it did not so much remove discretion as shift it to a less visible location (depending on which accounting firm was hired by the court, its valuation methods, and its informal relationship to the court).

Change can go in the opposite direction, of course, as when overly formalized rules are “relaxed” and made more informal. Often, such a shift is motivated by the fact that literal and exacting application of formal rules can produce undesirable outcomes, or be procedurally cumbersome. This is why strict conformity with formal rules can serve a form of resistance (as when unionized workers impose work-to-rule as a form of protest), and illustrates one of the challenges of highly formalized rules – they are very hard to write in a way that makes them perfectly consistent, complete, and unambiguous. Hence, informalization may be seen as the solution to overly complex, intrusive, inflexible or rigid rules.

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<sup>10</sup> An extreme example is the enclosure of the English commons, which formalized ownership of land by articulating and specifying rights in official Parliamentary Acts, but which also transformed property by extinguishing common rights. See Neeson 1993: 15,44-45.



In explaining institutions and institutional change, Knight (1992) stressed the primacy of the distributional consequences of institutions, as opposed to their effects on efficiency. He challenged arguments proposing that institutional competition and change generally lead to more efficient or better-performing institutions. Reforms that enhance efficiency may fail if they threaten the interests of powerful institutional stakeholders. Distributional struggles pit groups against each other, and outcomes are shaped by stakeholders' relative power, access to resources, and occupation of strategic sites. As an example, consider the enclosure of the English commons, a conflicted process in which valuable economic rights were redistributed in favour of groups with political power in Parliament (Neeson 1993: 243).

The importance of informal rules, in addition to formal ones, complicates the distributional conflicts that shape institutional change. Informal rules and expectations also benefit particular stakeholders, and the latter are likely to oppose changes that threaten their position. Even strict enforcement of existing rules (in ways that, for example, reduce organizational slack) can provoke a response from informal claimants. Political bargaining to engineer institutional change frequently overlooks informal stakeholders, and so their opposition is often an unwelcome and unexpected barrier.

Given that distributional consequences matter, it becomes critical to recognize that the distributional logic of informal institutions often differs from that of collateral formal institutions. For example, Lomnitz (1988) noted that informal institutions are governed by personal loyalty, trust and norms of reciprocity. Distributionally-viable reforms of formal institutions may violate informal rules and understandings, and thus encounter unanticipated opposition. What appears at the formal level to be viable change faces informal resistance and foot-dragging, especially if change is encoded as a type of "disloyalty." Unhappy institutional members can wreak havoc by deliberately and slowly conforming to the exact letter of the formal rules. At the very least, groups who possess informal power can sharply differ from those with formal power and so affect the trajectory of institutional change.

A different set of distributional concerns arise in the administration and reform of technically complex institutions (such as legal institutions). Since no set of rules is completely self-evident or self-explanatory, experts are often needed for interpretation and implementation (who else can make sense of the IRS tax code?). The performance of such work can be extremely lucrative, which is why expert professionals make jurisdictional claims over it. That is, they attempt to establish exclusive, or at least exclusionary, claims to interpret and apply a particular corpus of rules. They seek to be the rule-applicators. Formal institutional reform often threatens to reshape formal and informal jurisdictional claims over

valuable work, and when it does reform activates two sets of stakeholders: those with an interest in institutional outcomes, and those with an interest in performing institutional work (interpreting and applying rules).<sup>11</sup> What is preferable for one group may not be for the other (witness conflicts between corporate creditors and attorneys over the issue of professional fees in corporate insolvency).

In addition to their distributional consequences, informal institutions can directly affect patterns of change. Scholars have studied how formal innovations diffuse through formal and informal networks (e.g., Gulati and Westphal 1999, Davis and Greve 1997). Davis (1991), for example, showed how adoption of the “poison pill,” a legal device that defended against hostile takeovers, spread throughout the U.S. corporate network during the 1980s. A firm was more likely to adopt this measure if it was directly linked to another firm that had already adopted the measure. Similarly, individual innovation is often heavily influenced by social networks (e.g., people are more likely to adopt a new technology if their friends have already done so). Thus, informal networks can offer important channels of influence through which institutional innovations can diffuse.

Informal institutions influence change by providing templates and paradigms for formal institutions. As discussed above, Chinese authorities have tolerated considerable informal experimentation by entrepreneurs pursuing new types of business activity and organization. Creating a market economy out of a command economy, without causing too much social unrest, is a daunting task. “Successful” informal experiments can be used to craft new formal rules for commerce and industry and failures also provide useful lessons. The informal status of these institutional experiments and innovations makes it easier to disavow and shut down the failures.

Institutional change possesses both direction and magnitude. A number of discussions of change have addressed the latter issue. Some theories of change adopted the imagery of “punctuated equilibria,” in which long periods of relative stability are separated by short, critical junctures containing dramatic shocks that shift institutions from one equilibrium to another (Clemens and Cook 1999: 447). Large changes are uncommon, but when they do occur they necessarily come from without. Others stress path-dependent processes, in which small initial changes can get “locked in” through positive-feedback loops or increasing returns to scale, and thereby produce large outcomes (Pierson 2004). Informal knowledge-

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<sup>11</sup> For an illustration, see Carruthers and Halliday’s (1998) discussion of how U.S. and U.K. corporate bankruptcy law reforms were influenced by the jurisdictional interests of professionals: lawyers, accountants, judges, and insolvency practitioners.

accumulation, or learning-by-doing, can play an important role in driving these positive feedbacks (Argote and Epple 1990, Cowan and Gunby 1996).

Mahoney and Thelen (2010) offer a perspective that examines how smaller *internal* shifts can cumulate into substantial institutional change (see also Streeck and Thelen 2005: 9). Developing Knight's emphasis on distributional outcomes, and congruent with the focus on rules, they catalogue four types of gradual change (Mahoney and Thelen 2010: 15-17): *displacement* (where existing rules are simply replaced by new rules), *layering* (where new rules are added to old ones, and both co-exist), *drift* (rules stay the same, but their import changes because the environment changes) and *conversion* (rules stay the same, but are enacted or interpreted differently, or applied to new purposes).<sup>12</sup>

Their analysis can be extended by including the distinction between formal and informal rules. For instance, the addition of informal rules to pre-existing formal rules operates as a form of "layering from below," in which the new covert elements are added to the overt old ones. Layering via informal rules can reduce the likelihood of opposition from supporters of the incumbent formal rules because of the lower salience that informal rules characteristically possess. The formal-informal distinction also affects the process of displacement. Attempts at outright displacement often fail if reformers focus only on formal rules and fail to recognize the significance of informal ones: they may successfully displace formal rules but unless they also address informal rules their reform efforts can amount to little but window-dressing. The process of conversion becomes harder to measure when it involves change in the informal interpretations given to static formal rules. Formal reinterpretations, by contrast, possess greater salience and so are easier to measure. And informal institutions are often the mechanism through which drift occurs: import changes even though formal rules don't because their import is enacted through the collateral informal rules that accompany the formal ones.

Deliberate, well-intentioned institutional change can run afoul of entanglements between formal and informal institutions. Guha-Khasnobis, Kanbur and Ostrom (2006: 12-13) caution development agencies that it is unwise to attempt outright displacement of informal rules by formal ones because this can backfire, especially if the incumbent informal rules are well-understood and operating effectively. All too often, development agencies overlook what informal institutions are really doing. Convergent layering is a more effective intervention.

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<sup>12</sup> Streeck and Thelen (2005: 29) add a fifth, which they term "exhaustion." By their definition, it involves institutional breakdown rather than change.

That is, adding a new formal institution that reinforces what the informal institution is already doing makes for better policy and more effective interventions.

Finally, informal institutions can help explain the failure (or success) of institutional transplants, a widespread form of institutional change involving deliberate mimesis (Berkowitz, Pistor and Richard 2003). It is understandably tempting to emulate a successful formal institution by transplanting it to a new location. Indeed, many public and private organizations try to adopt “global best practices,” but mistakenly treat them as if they were “stand alone” features. Without the appropriate collateral informal institutions, however, what succeeded in one place may fail in another. Guinnane (1994) examines the failure of rural Irish credit cooperatives in the early 20<sup>th</sup> century. These were explicitly copied from the German originals (Raiffeisen credit cooperatives), which had proven highly successful in providing credit to rural populations. Despite the need for rural credit in Ireland, credit cooperatives as institutions did not flourish. In explaining their failure, Guinnane (1994: 57) stressed some of the distinctive informal norms in rural Irish society which undermined monitoring and enforcement on the part of the cooperatives. More generally, institutional transplant strategies have to recognize that successful formal institutional performance often depends on an overlooked informal institutional context.

## Conclusion

To explain institutional change, it is first necessary to measure it. And for that, it is also necessary to track the difference between formal and informal institutions. The latter are hard to study, but they cannot be dismissed as “random noise,” as an inferior mode of governance, or as something with little relevance to formal institutions. Formal similitude can mask informal heterogeneity, while formal differences can hide functional similarity. Formal and informal institutions co-exist, and in some situations are markedly interdependent. Without fully appreciating the role of informal institutions, it is easy to overestimate the efficacy of institutional transplants, the ease of engineering institutional change, or the robustness of formal institutions. Informal institutions provide hidden channels of influence, and models for change. Frequently, formal institutions simply don’t function well without an informal partner to resolve inconsistencies, grant exceptions, “grease wheels” and “fill in gaps.” Furthermore, to formalize informal institutions can mean the loss of features that under some circumstances are highly valuable: flexibility, adaptability, discretion, speed, low salience, and the ability to exploit fine-grained information.

In ignoring informal arrangements, one can also fail to perceive important constituencies that can either increase or diminish the likelihood of successful institutional change. Informal power broadens the set of institutional stakeholders, makes it more heterogeneous, and so complicates the task of building a coalition in favour of change. Formal rule change is really only the beginning of a more extensive and recursive process that continues through interpretation, elaboration, and implementation. This process involves rule-makers, rule-takers, and rule-applicators, who can radically transform or even subvert the overt goals of formal change. Informal institutions operate according to distinctive distributional logics, eschewing strict allocational rules and embracing vaguer but still powerful norms of reciprocity, friendship, loyalty, and personal trust. Like invisible sinews on a visible skeleton, informal institutions animate social structures through both resistance and power, and can surprise with unexpected degrees of freedom.

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Under what circumstances is institutional change best viewed as a spontaneous, evolutionary process, and when is it the outcome of a deliberate design? What leads to intended and unintended effects? Institutional economics comprises a variety of theoretical approaches to explain institutional change. 5. water disposal in Germany (RÄHRING et al.). Unintended effects occur when under-utilisation of supply and treatment infrastructure systems occurs in shrinking regions (particularly in Eastern Germany). This may threaten the functionality of the systems and the adherence to quality standards. Like KINGSTON and CABALLERO (2009), we admit that in real-world settings both unintentional, evolutionary processes and intentional processes of design are at work. Institutional Dynamics: When Is Change Real Change? Bruce Carruthers Discussant: Eva Meyersson Milgrom, Stanford University. Confronting Oppressive Customs: Reformism versus Radicalism Jean-Philippe Platteau Discussant: Alexander Wolitzky, Massachusetts Institute of Technology. The Democratic Legacy of Anti-Colonial Customs Leonard Wantchekon Discussant: Jean Ensminger, California Institute of Technology. Culture, Institutions And The Wealth Of Nations Gerard Roland Discussant: David Laitin, Stanford University. Saturday, December 4, 2010.