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to the Problem of Non-State Sanctioned, Market-Driven
(NSMD) Governance

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(NSMD)Governance¹

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Summary of Argument

There appears to be a strong trend in the initial stages of a certification program for these institutions to distance themselves from their sponsoring organization. The FSC reaches beyond ENGOs to the business agenda; the SFI reaches beyond business to the environmental and social agenda. On some level, all major certification system move from early instrumentalization for pragmatic reasons by a core audience, to a more or less formalized exchange amongst interests informed by quite different social (and indirectly also environmental) systems.

What does this pattern of change mean, and in what direction can it lead? We are strongly aware that certification programs are limited in their capacity to distance themselves from their founding stakeholders, or core audiences. We are deeply committed to developing theory that can account for the apparent open-endedness of subsequent developments. But in order to lay out potential futures in a more systematic way, we propose that one model of the future lies in a specific kind of autonomy in institutional logic, and we develop theoretical specifications whereby such a future could unfold.

¹ This working note is in draft form and is being developed for integration into a theoretical reflection on NSMD Governance and external legitimation. It comes out of a larger research project into regional legitimation patterns in forest certification programs. Not for citation; comments welcome.

The following discussion seeks to make a number of basic points. The theory of “autopoiesis” or self-productive autonomy cuts across the question of NSMD durability, and is not a direct guarantee of the latter. Insofar as a system or organization exhibits autonomy as a system of structured meanings, it relies on internal structures for its own continued production (or durability), rather than on forces primarily external to itself. Therefore, autonomy implies that the workings of *internal* structures rather than *outside* ones will determine the organization’s durability. It is an indicator of durability, therefore, provided the internal forces are functional in self-production, at least relative to the system’s environment.

Drawing on Suchman’s thesis as a parallel theory to Teubner’s is suggestive on one point. Of course, external legitimation is vital for the initial drive to autonomy. But as we read Suchman, the conception of cognitive legitimacy suggests that important and distinctive external requirements continue to be important for such systems’ durability.

For the application of autopoietic theory to NSMD problems, a key supplemental concept in Teubner’s work is the concept of “structural coupling”. This concept becomes necessary because autopoietic systems are not defined by their wider functions. In the theory, even large outside “perturbances” having little *systematic* or *predictable* impact on the internal workings of a given system: the autopoietic system always responds on its own terms. The question logically arises how these systems come to interact with one another in a routine fashion, enjoying “taken for grantedness” as a form of legitimacy from their respective audiences without being inherently structured to serve certain functions in the wider society. “Structural coupling” characterizes institutional mechanisms within autopoietic systems that emerge on an ad hoc or evolutionary basis,

and that serve to recognize and respond to patterned “perturbances” in their social environment arising from the regularized operations of other systems.

Thus, we suggest that NSMD structures can be considered “legal”, insofar as their standards are oriented around the question of what is legal under a given standard and what is not. Normally, national legal systems have formal structural couplings with the national political systems, especially with regard to the legitimate development of law. But certification programs have developed their own internal standards development processes that seek to serve this function themselves. Partly as a result of globalization, NSMD have decoupled from the national political systems, and have inserted themselves in various niches on the global scale, most notably in the international market (Teubner 1997a).

I. Overview of the Theory

The expression “autopoiesis” first emerged in the biological sciences as a break from both “open” and “closed” systems theory.² Living beings are distinguished from other structures, not by their complexity or chemical content, but by their capacity to produce their own components by means of their own components: autopoiesis is etymologically the state of “self-production” (Maturana, qtd in Mingers, p. 15).

Luhmann’s work on social autopoiesis is rooted in modern society’s growing complexity (Beck 1986; Scott 1998). Societal differentiation into systems is explained as a means of managing this growing complexity. For instance, an autopoietic system’s relatively simple distinctions (legal/illegal; having/not having, etc.) organize its image of

² In systems-theoretical terms, this autopoiesis transcends both system “closure” and system “openness”. The former emphasizes the boundaries a system creates towards its environment, but overstates this condition as a state of radical autarky, while the latter an input/output model of systems that has since become a staple of mainstream social sciences. For Teubner’s application of this distinction to late twentieth-century debates about legal structure, see Appendix I.

its complex social environment, and thereby establish a simplified basis for its own operations.³ A more traditional mechanism, hierarchy, plays little part either within the systems or between them.⁴ Systems evolve alongside one another, at most developing “structural couplings” to stabilize patterned interactions.

Luhmann’s approach rests on two critical appropriations. First, Luhmann contests the autopoietic biologists’ strong reservations about applying the concept to social institutions, but agrees that to do so, he must reconceive the social domain. The social (like its political, the legal, the economic subsystems, etc.) is a system composed specifically of communicated meanings.⁵ (Mingers, 141). Second, Luhmann uses the concept of autopoiesis to contest Talcott Parsons’ contention that systems are defined by their functions.⁶ Instead, he argues that system boundaries emerge as the result of fundamental distinctions. These distinctions are system-specific, and if they remain intact, a system’s composition and institutional form can be otherwise highly variable.

For example, Teubner and colleagues (Teubner 1997a) have argued that globalization has induced the development of law in unconventional sites. Examples of such law, including international contract law in business, are often linked directly with economic and other non-governmental processes. They are often devoid of many aspects of nationally based legal systems that have often been considered part of the definition of

³ Hence, justice must be “blind” to issues that go beyond what is legal and illegal; politics, to operate as politics, must be “blind” to petty bribery. As these examples show, there are conditions under which autopoiesis can be compromised, but these conditions of blindness are not so much naïve fictions of modern liberalism as they are concrete conditions for a specific kind of subsystem to operate.

⁴ Luhmann’s early break with Weber’s classic theory of hierarchy as a technique of managing complexity within organizations suggests the significance of this alternative approach to society as a whole.

⁵ This relational foundation also distinguishes the theory from institutional or constitutional theories. Meanings are evidently found in texts, but they are also found in the meaningful actions of those engaged with the system. These may trespass the formal boundaries of institutions, though the latter are also meaningful constructs.

⁶ He does not deny the obvious: social subsystems like law, economy, science, or politics do provide certain outputs that may serve “functions” in a wider social system. But such “structural couplings” are contingent historical developments, and secondary to their fundamental character.

law: enforcement, principles of precedent, and national legislation. Yet because such mechanisms operate on the specific basis of a legal/illegal distinction, they can and should be conceptualized as law.

As a more specific legal example, in a period in which state-sanctioned “interest intermediation” institutions have been thoroughly discredited in many countries, apparently similar institutions, such as for standards-setting, rise on the international scene as “linkage institutions” (Teubner 1997b, p. 14). It is but one possibility for the stabilization of law at the global level. Teubner’s analytical argument is that such institutions serve to translate values from one social system to another.⁷ This pre-political operation is equivalent to the function served by the national political systems for national legal systems:

These are institutions...that create new law directly by transjunctional operations without being translated into political issues. In their ongoing procedures they operate in terms of more than one binary code [e.g., legal/illegal, having/not having, etc.] which they treat with conjunctive and disjunctive operations. They operate – *within one institution but over the boundaries of two or more operationally closed social systems* – with several binary codes and connect them through transjunctional operations.(Teubner 1997b, pp. 14-5, emphasis added)

Three points complete our introductory comments on basic concepts surrounding autopoiesis. First, we differ with Luhmann, who insists that in individual systems, autopoiesis arises abruptly. A system is either autopoietic or “allopoietic” (i.e., produced by outside forces). But this sharp distinction appears untrue to the fluid history of

⁷ Technically, such systems operate on the basis of two different levels of values, oriented as always around distinctions: these are the binary values of the social systems themselves, and the intermediary “acceptance/rejection” value that is involved when actors from other systems must acknowledge or reject the value. It would appear that it is around these values that autonomy may or may not emerge. Such technical complexity may be presented as a means of understanding the complex negotiation of standards in forest management, just as Teubner suggests they be deployed in understanding the simpler negotiation of international technical standards.

NSMD development. Teubner, by contrast, (Teubner 1993) proposes a highly graduated spectrum of autonomy, in which autopoiesis constitutes an emergent and complex property at one extreme.⁸ (See Table II.)

As a second explanatory comment, we note that social autopoiesis is not applicable to grand societal subsystems alone, but also to individual organizations. This makes autopoiesis a phenomenon emerging potentially at at least three nested levels. First, individual NSMD programs can be studied in their own right as increasingly autopoietic institutional mechanisms of international governance. A larger story of autonomy could centre on an emerging constellation of different forest certification programs: here the development of mutual recognition pacts amongst programs, and the development of minimal standards and training content for all certification programs suggest a pattern.⁹ Finally, as we have argued, the emergence of forest certification programs may be the leading edge of emergent NSMD governance mechanisms more globally. First, alongside state, economy, and civil-societal subsystems, one could think of NSMD as a newly emergent kind of subsystem. Alternatively, one could view NSMD governance as a change in the “structural coupling” of the legal system from a primarily political to an increasingly marketized housing.

A third explanatory comment concerns Teubner’s understanding of how social subsystems could simultaneously be autopoietic and constitute parts within a larger social system. He argues that every communication within a societal subsystem simultaneously

⁸ This spectrum is not offered as a normative prescription or a necessary prediction. It is instead an ideal-typical account of a system’s traits at a given level of autonomy.

⁹ There is a potential mediating or “midwifery” role here, should they choose to exercise it, for private foundations; certifying organizations like SCS with a role in other programs and certification systems; professional associations; universities; and other individuals whose regular activities criss-cross the boundaries of individual programs.

is a parallel communication within the wider one.¹⁰ This is possible because while they are constituted on the basis of quite different distinctions, societal subsystems share with the wider social system a common essence as systems of meaning. The latter communications may or may not be “functional” to other systems and society as a whole; but they do constitute perturbations to which other social systems respond on their own terms, and thereby coevolve.

Linkages with NSMD Legitimacy Research

If Teubner’s work on international legal pluralism means that the theory of autopoiesis has direct implications for NSMD systems, a second connection links them to autopoietic theory through questions of legitimacy. All autopoietic systems endure because they control the process of their own self-production.¹¹ But in a system of social meaning, self-production has much to do with self-legitimation. From this claim, which we attempt to justify below, it follows that the theory of legitimacy must take account of different levels and states of autonomy.

Suchman’s typology, for instance, assumes that legitimacy proceeds from external audiences, and that assumption rests on the prior existence of a clearly defined

¹⁰ Thus we should understand a legal ruling as having two separate sets of implications: the societal implications of the fining, imprisonment, or release of a given individual for the wider system; and the implications for the self-production of legal system, such as its contributions to legal precedent. Communicative events always “send a message”, but in this way, they actually always send at least two.

¹¹ An autopoietic system’s openness to its environment refers to an active observation of that environment, and to a selective incorporation and adaptation of “elements” from that environment in the process of its own self-production. An autopoietic system can also create some of its own “elements” on its own. But on the other hand, it always selects from the environment, and creates *on its own terms*, and this creates a parallel with simpler forms of system closure: an autopoietic system works from a model of outside reality, but it is a model that it alone has generated; it interprets that reality and the consequences for itself, but always in terms of its own basic distinctions.

The latter point is not to deny that a system is affected by its environment. But its environment may affect it only as an outside “perturbation”, creating at most a “resonance” of internal communications within. If a more direct intervention in the system’s structure of meanings is possible, we are no longer dealing with an autopoietic system.

system/environment boundary. In his discussion of legitimation strategies, Suchman also presupposes that the organization or system in question is already capable of acting as a strategic actor.¹² We suggest, following Teubner, that these characteristics – a clear boundary with the social environment and a capacity for strategic agency -- must be considered emergent qualities of autonomy. On the level of method, then, the level of autonomy affects where we look for sources of strategic activity. In conditions of low autonomy, we look primarily to collective or individual actors in a system's environment – the core audience -- to conduct or to guide legitimation strategy.

Conversely, pragmatic, moral, and cognitive legitimacy (the latter subdivided into understanding and unthinking acceptance) may not be precisely ordered according to levels of durability, as Suchman suggests. Our preliminary evidence certainly raises some questions about this. Instead, this spectrum of legitimacy may correspond more precisely to the degree of autopoietic “insulation” a given system of meaning enjoys from its environment. Only indirectly through the question of autonomy can one proceed from the type of legitimacy to the degree of durability.

¹² The assumption that organizations are already strategic actors at every point in their development speaks to the audience and to the object of study for Suchman's review. Suchman is speaking to the specific experience of organizations, such as firms or government agencies, whose executive and personnel are mandated to act for the organization by relevant laws and customs. In examining the different legitimation strategies that an organization can undertake, it follows that Suchman foresees the solicitation of pragmatic, moral, and cognitive legitimation both in establishing legitimacy and in maintaining it Suchman, M. C. (1995). "Managing Legitimacy: Strategic and Institutional Approaches." Academy of Management Review **20**(3): 571-610.

"This article synthesizes the large but diverse literature on organizational legitimacy, highlighting similarities and disparities among the leading strategic and institutional approaches. The analysis identifies three primary forms of legitimacy: pragmatic, based on audience self-interest; moral, based on normative approval; and cognitive, based on comprehensibility and taken-for-grantedness. The article then examines strategies for gaining, maintaining, and repairing legitimacy of each type, suggesting both the promises and pitfalls of such instrumental manipulations".

A third theoretical proposition stems from the fact that there is relatively little in existing autopoietic theory on what an increasingly autopoietic system requires of its environment.¹³ On some level, the answer is simple: by definition, it requires less, at least in foundational social meaning. But this seems unsatisfactory, or at least incomplete. Reflecting primarily on the early years of forest certification programs, we propose that all gradations of autonomy are deeply intertwined with specific challenges of external legitimation. As an empirical matter, Suchman can provide a language for analyzing the sources and gradations of the wider society's toleration for a subsystem of meaning, both initially and as that subsystem comes to be taken for granted.

We hypothesize that at the earliest stages of a system's establishment, or under other circumstances when it is relatively "allopoietic", or dependent on its environment, pragmatic legitimacy would appear to be an entirely typical form to be offered from that environment.¹⁴ Under conditions of increased systemic autonomy, moral and ultimately cognitive legitimacy will be more typical, and indeed most compatible. (See Appendix I)

¹³ One paper critical of Luhmann's theoretical system suggests that the reason for this may lie at a very deep level of theory. Let us recall that Luhmann's theory of social system differs from Parsons because social systems are defined by a process of distinction, the distinction between system and environment. Luhmann draws on Spencer Brown to make this point. However, for Spencer Brown, one of the characteristic features of distinction is that no weight is given to one side or another of the distinction. In Wagner's view, although Luhmann carefully reviews Spencer Brown's theory, he appropriates it in a way that privileges the system over the environment.

¹⁴ A brief note suggests why this might be so. Suchman's theory assesses legitimacy on a subjective basis, in relation to existing norms. These are assumed to be diverse, but little if anything more is assumed about them. In relation to the theory of autopoietic social systems, these norms governing legitimacy could be understood less with respect to the particular agents actually proffering legitimacy, and more with reference to the larger social systems from which these agents originate or where they conduct their primary activities. Hence the legitimacy that a business would sustain in relation to certification could be grounded in the logic of the system in which businesses primarily operate. (In the logic of autopoietic systems theory, this should be distinguished, from the possible legitimation that individual executives might offer the certification system. But one must emphasize that in the theory of social systems offered here, those individual acts of legitimation occur separately from the legitimacy that the business itself can accord.) For Luhmann the economic system arises out of a primary distinction between having and not having, or property.

Theorizing the systemic origins of ENGOS is perhaps more complex. This complexity derives from the fact that ENGOS consider their primary concern to be the smooth operation of the ecosystem,

Thus far, we have encountered forest certification programs that are overwhelmingly preoccupied with pragmatic and moral legitimation problems. Let us turn now to future directions of forest certification and other NSMD mechanisms. One of these is a future of autopoietic NSMD systems, supported by relatively active understanding and relatively passive, unthinking support. The treatment of this far extreme on the spectrum of legitimation dynamics and the parallel spectrum of system autonomy is necessarily speculative. But it is offered in the attempt to stimulate discussion and to establish new directions for future research.

Possible Trends in Certification

a) The Emergence of Cognitive (Unthinking) Legitimacy and Autopoiesis

Teubner and others have made a series of claims about the emerging reality of “legal pluralism” at the global level and the real failure of genuinely legal systems to maintain a consistent and singular hierarchy under state control (Teubner 1997b). While Teubner is principally concerned with the emergence of a new societally-based law linked to market actors, he seeks to break with the more conventional view that law must have a regularized, singular deliberative and enforcement mechanism in order to count as law.

Drawing on historical examples of common law and mercantile law, he asserts that what counts is the societal acceptance of new rule-making bodies as arbiters of the legal/illegal

which is a biological system rather than a system of meaning. As Luhmann argues elsewhere, the thesis of autopoietic closure means that environmental crisis cannot have direct implications for a society, but can only create (often important) perturbations to which the societal system responds, but always on its own terms. ENGOs may have concerns about the ecosystem, but always understand and work these out on the basis of societal meanings. As some have argued, this necessarily couples their operations to the findings of science (a distinct social system based on the distinction “true-false”) to a degree unseen in other political movements (Paehlke). Secondly, despite cynical interpretations of their motives, almost all ENGOs operate on a not-for-profit basis, which gives their organizations a distinctive logic from businesses, even on a purely societal level. In any case, the pragmatic logic of ENGOs’ legitimation for certification programs can be assumed to be different from the pragmatic logic of businesses.

distinction. At the same time, he acknowledges the distinctive intimacy of global law with market and other societal forces, and the irregularity of the arbitration mechanisms.

Initially, then, it seems most useful to think about NSMD mechanisms in terms of an emerging pluralism in *law* at the global level. One of the most interesting aspects of the case of forest certification is that this emergent realm of global law arises from the primary intervention of transnational ENGOs rather than business interests in establishing such programs. According to Teubner, this specifically legal systemic quality would depend first on there being a conflict which calls for a decision, and second on a resort to the legal/illegal distinction in making that decision (Teubner 1993, p. 38). This particular form of law has broken its structural couplings with the still largely national political systems, and developed new couplings with the market (Teubner 1997b, p. 14). This has very specific implications. It seems that the prospects for institutional autonomy, at least from the specifically non-state, market-driven milieu of global law, are relatively poor.

On the other hand, one might predict that the certification programs like SFI and the Pan-European system that emerge in specifically national settings have even less prospect of maintaining their autonomy from the *political* and *legal* systems already entrenched at the national level. Insofar as these systems seek to establish their autonomy in this and in other respects, a logical institutional direction would be towards globalization. Indeed, in Maine's SFI system in the US Northeast we already see a structure of reporting certification results to state instances, and a general degree of indifference amongst

mainstream backers of FSC as to whether their goals for multi-stakeholder forest management reform are achieved through the state system or the non-state system.

But as important as these questions of normal institutional autonomy are concerned, they only bear directly on the problem of the autonomy of social meanings as these are expressed in concrete institutional form. The autonomy of the regular legal system as a system of meanings, for instance, is indeed ensured by concrete institutional provisions for the non-political staffing and financing the courts. We would also want to attend to the emergence of an autonomous quasi-legal discourse of precedent and procedure. In Teubner's view, the emergence of truly autopoietic law depends on the emergence of a reciprocal relationship between legal acts and legal norms, without either being grounded in an outside (i.e., non-legal) rationale (Teubner 1993, p. 42).

An autopoietic system must be able to counter delegitimation pressures that centre simply on the fact that it cannot ground its legitimacy on foundations outside itself (for instance, by outside ratification or appeal).¹⁵ The moment it is required to justify its own existence in terms of another system's set of meanings, it admits to its own dependence as a system of meaning. The defense against such delegitimation is always paradoxical: an autopoietic system defends its system of meanings by the outrageous means of the very meanings that it defends! But Teubner emphasizes that there is no logical error here in describing the situation: by deferral or referrals amongst interlinked institutional

¹⁵ For example, one of the most pointed questions to arise at a recent presentation on certification at the Auburn School of Forestry had to do with a senior faculty member's incredulity that FSC rulings could not be appealed to the "normal" legal system. A parallel problem also lies in the legitimation of the production of law, and not only in its arbitration Teubner, G. (1997b). "The King's Many Bodies: The Self-Deconstruction of Law's Hierarchy." *Law & Society Review* 31(4): 763-87.

entities, that is precisely the means by which autopoietic systems like the legal system operate.¹⁶ In such systems, there is always a set of concrete institutional forms that serve both the necessary creation of the paradox, and its skillful concealment through the multiplication of vertically and horizontally organized institutional units.

One example of this that Teubner explores (Teubner 1997b) is the creation of the fictional equivalent to a “national sovereign” in grounding national law. This “sovereign” principle is supposedly grounded in practices that emerge in a quite different system or a prior one, but whose actual connections with the autopoietic system are relatively slight. Customary practices of international business, for instance, may be recognized as “precedent” for law, without themselves ever having been practiced in such terms, and without ever having been voted by a parliament.

But we can see a similar development at work within certain elaborately developed institutions as the FSC, a development which the organization’s problems reveal as much as its solutions. In this regard, documents like the recent FSC-International Commission of Enquiry into the events in the Maritimes (Boetekess, Moore et al. 2000; FSC-International 2000) should not be understood as a purely forensic undertaking. Instead, they should be read and analyzed as quasi-constitutional documents.

From the standpoint of autopoietic analysis, certain points in the report stand out. Among other things, it mentions the need for improved communication capacities at the national and regional levels, and establishing an important precedent in the determination

¹⁶ For instance, a legal case may be appealed all the way to a country’s supreme court, only to be referred back to lower courts for further rulings. While this circular deferral and lack of ultimate finality is often viewed as an annoying quality of the legal system, it is relatively well-accepted that appeals beyond the legal system would be an unwelcome alternative: in this, legal autopoiesis is well developed.

of the consensus standards that regional and national procedures have to meet in a “federal” FSC structure such as the US or Canadian examples. The calls to have such institutional expansion and increased sophistication are of course in themselves part of the normal process of increased autonomy that any emerging institution encounters. But the emergence of such documents, and more importantly the degree to which future decisions rest on their findings, will be another important indicator of the emerging autonomy of these NSMD systems.

Another indicator of emerging autonomy will be the capacity of the certification process itself to generate precedents, in a way that can overcome the issues of disclosure that the certifying firms may raise. Only on the basis of some equivalent to the stare decisis rule, it seems, could one reasonably expect a coherent set of rules to emerge on the ground – only then can law “lead a life of its own” (Watson in Teubner 1993, p. 40). Without rules to “produce” other rules through individual judgements, there is little basis for real legal autopoiesis to emerge. In the case of national legal systems, Court documents serve as precedent-setting documents, and ensure the autonomy of legal reasoning, in part because they are public documents, available at least to those insiders schooled in legal reasoning. This problem exists in existing programs on two levels: one, expert panels for the initial and subsequent audits in a single certification process necessarily use their judgement to decide whether certain forestlands meet FSC or SFI requirements, and regardless of the objective state of the forest and the certifying firm, there is no guarantee that the same judgements will be used from the first inspection to the second; two, expert panels for one certification process encounter situations that may be of value in other settings. The current requirement for a sharp difference between

public reports and private, more technical ones creates a barrier in making these early judgements available as precedent within the forest certification system. As we will see shortly, the social system informing the insiders who make and review these decisions is a matter of some importance

b) Trends Opposing Cognitive (Unthinking) Legitimacy and Autopoiesis in NSMD Systems

With respect to such an autopoietic development in forest certification, key interests would have to accept significant losses in aspects of the programs that currently seem especially attractive. Hard decisions would have to be made in the politics of standards development (among other things) to build specific performance requirements directly into the internal logic of the standards themselves.

With respect to the losses that key stakeholders would have to accept, more than the initial instrumental advantages of sponsoring a certification programs are at stake. By virtue of the fact that the two groups are uniquely preoccupied with the interpretation of the needs of the forest resource – itself a necessarily cognitive process – we will consider here the only the costs of an emergent autonomy to ENGOs and scientific experts. The significance of this choice will emergence in the course of the following discussion.

ENGOs would not necessarily have to abandon the conviction that FSC standards, or certification more generally, have a generally beneficial impact on forest management. Indeed, if they were to abandon this conviction, they would also abandon the cognitive

legitimacy they would otherwise lend to a tendentially autopoietic system. But this beneficial effect would cease to be the overriding logic of certification decisions, for instance to decide whether to certify an individual firm or not.. Beneficial effects for the forest (or for any social stakeholder) would have to be built directly into the standards without direct reference to that positive outcome. It would cease to be an adequate objection to a given certification that a given forest was being degraded environmentally, if indeed the firm met the existing standards.

On one level this is an obvious requirement, but Suchman's framework draws our attention to the precarious position that any simple closure to the natural or social environment would be for a certification program. For the only conditions under which such closure could be accomplished, are that there be sufficient responsiveness to outside concerns like the state of the forest, and an adequate reflection of a programs's social and ecological environment in its standards and other meaningful components. The conditions for internal autopoiesis and external "taken-for-grantedness" are therefore intimately intertwined. At its most extreme, the cost of unresponsiveness would be the kind of large-scale delegitimation campaigns at the level of Tier II audiences that in many certification regions launched the initial interest in forest certification.

Nor are the social results of autopoietic closure confined to the closure to the most obvious ENGO interentions in industrial practice. Scientific expertise would also have to be decentred from the inner *logic* of certification, without sacrificing the responsiveness of certification systems to scientific findings. This may appear to be an alarming

conclusion for several stakeholder groups, particularly in the face of the vital importance ENGOs often place on environmental science in grounding their own politics (Paehlke 1989); the contrary emphasis that industrial actors currently place on forestry science as a means by which forest certification can *depoliticize* forest management decisions; and the sense of independent and academic forest experts currently express about their own sense of empowerment in the course of early standards development.

Nonetheless, it follows directly from the meaning of autopoiesis that this autonomy from the scientific process should occur. This is by no means a one-sided loss to science: the integrity of the scientific social system, which Teubner relates to the distinction between truth and untruth, can be compromised in being mobilized for the purposes of what are essentially legal decisions. (Similar observations could be made about the costs to the profits of economic interests, and so on.)

An autopoietic future for forest certification would involve building the logic informing the knowledge and interests of all these stakeholder groups directly into the standards themselves. That would result in the first instance in the stage of building autonomy in which different stakeholder groups saw their own social logics reflected in the system, and assigned cognitive legitimacy on the basis of understanding. But ultimately, to be fully autopoietic, such a system would have to move beyond this moment to a point of becoming opaque to outside observation and understanding assessment. And this stage requires an unthinking legitimacy from its environment, the product of a long established

relationship of trust or familiarity, and a stability that permits the construction of elaborate structural couplings with other social systems.

In an autopoietic future for forest certification, even forest scientists would have eventually to cede centre stage within programs to certification “lawyers”, “auditors”, or their equivalent. Indeed, even in the early stages of standards development, pressures are evident in this direction. In the crisis-ridden development of the regional FSC standards for the Canadian Maritimes for example, a critical moment occurred in the debate over biocides that ultimately led to the failure of the standard as a whole. In an effort to overcome entrenched differences between regional ENGO and industrial representatives on the issue, a draft standard was proposed that would refer exceptional instances of biocide use to an expert panel. The solution to the local politics on this point was ultimately vetoed by higher instances in the FSC. Most importantly in terms of the present discussion, a specific performance standard was demanded instead.

Of course such panels in highly charged settings raise the immediate problem of representation and politicization. It may indeed have been the case that such political referral of decisions about appropriate biocide use may have been necessary in order to advance the institutional development of the FSC at the time. But even if their scientific neutrality and good faith were assumed at face value, and even if there was a misjudgement about the timing of this challenge, the problem of the autonomy of the critical element of decision about what is permitted would remain.

c) A “Pre-Modern” Accommodation with Craft

In the current reality of certification politics, any number of objections could of course be raised to the path that the foregoing remarks describe, and objections could come from many quarters. Insofar as these objections flow from the pragmatic and moral calculus of stakeholders currently weighing their role in legitimating or delegitimizing certification programs, the answer to them properly lies in the social systemic logics that inform such choices, and in the political process surrounding certification itself. The direction of certification programs is not, properly speaking, a social-scientific question.

But in the specific case of forest management the question of autonomy from forest science is perhaps a more difficult problem. Recall first that the choice here is not between ignoring and attending to forest science, but appears to be between building legal standards on good science (on one hand) and on making individual certifications specifically *scientific* rather than legal decisions.

Ultimately, the question of the direction of certification institutions may depend less on the successful “depoliticization” of forest policy than it might at first appear. In addition, an autopoietic direction for certification may rest as much on the capacity for effective and reliable “ structural couplings” to emergence between the scientific community and the individual programs.

But secondly, there is a more fundamental basis for skepticism, a skepticism that draws attention to the fact that not all of social life is or can be organized into social systems.

Certainly, forest ecosystems, and the various social systems that affect them through forest management, are inherently and irreducibly complex (Scott 1998). This complexity often leads forest managers to stress the particularistic, experiential and craft-like character of their work. Within the forestry profession, the long-term manager of a given forest earns the respect of his colleagues, alongside the cutting-edge researcher. The craft-like characteristics of forest management, in which intuition and personal experience play such an important role, may not even be something that we could describe in terms of the highly structured social subsystems of science, law, or politics. The “linkage” characteristic of a certification program would only multiply the scientific imponderables. The consequence of this for the present paper is that any autopoietic system of standardized rules may face irreducible problems in developing structural couplings with the less organized and less systematized realm of social practice which in the case of forest management might be described as the forester’s “lifeworld” (Mingers 1995). A truly autopoietic forest certification program may be technically impossible, at least insofar as it could elicit the kind of cognitive acceptance we have been discussing amongst ENGOs and forest experts.

If this is true, certification programs should tendentially be constrained to develop somewhat different characteristics than a classic autopoietic system. Just as it is recognized today on an informal basis within the profession of forestry, the role of foresters’ personal judgement and taste would have to be accommodated and recognized alongside the more formally stated rules. And such a system, as a necessary requirement

dependent on the “rule of individuals” as much as on the “rule of law”, would be vulnerable to distinctive forms of dysfunction and spontaneous change.

Appendix I

Teubner showed in the 1980s (Teubner 1983; Teubner 1984; Teubner 1986) that this distinction between autopoiesis and either openness or closure (e.g., legal formalism) enables us to grapple with, and to transcend, problems that are commonly identified in the legal design of the welfare state. Both this legal system and the society it sought to transform were reconceived as tendentially autopoietic systems. This insight helps us when we consider the problem of certification programs.

Teubner (Teubner 1986) wrote that direct interventions of one system in the workings of another posed three distinct risks, a situation he called the “regulatory trilemma”: first, the outside intervention could disrupt the inner workings of the regulated system in unforeseen ways; second, such intervention meant incorporating extensive references to the inner workings of that system, which risked disrupting the inner workings of the regulating system; third, the regulation could fail to engage the regulated system at all, leaving both systems unchanged.

On the other hand, reflexive law, which he later reconceived as autopoietic law, would always work from an understanding of the logical bounds of both systems, which the legal system would interiorize on its own terms. Such a legal strategy would not require specific outcomes from the system it regulated. Instead it would require that the system it regulated incorporate procedures that worked within the logic of the regulated system. These might tend to the same ends as instrumental law, but would not directly require them.

Appendix I

First, why would pragmatic legitimacy tend to be offered in preference to other forms of legitimacy when a system is emergent and relatively dependent? We propose that the emergent systems are more likely to have an instrumental relationship to an external audience that in turn will give them legitimacy that is specifically pragmatic: by definition, an audience giving pragmatic legitimacy believes that certain of its goals are served by the subsystem being studied, or that these goals will be so served. It is an open system rather than a closed or autopoietic one that is most amenable to conducting such a relationship of “profitable” exchange with its environment. It also seems probable that the goals these entities would seek to realize through an emergent system would still be oriented primarily to another, better established system of meaning. In the environment of any emergent social subsystem in a modern society, other social subsystems already exist.

Moreover, pragmatic legitimacy involves benefits that are relatively narrowly defined. This would appear to make the work of analysis easier, at least in linking this legitimacy to particular environmental systems. By contrast, the “pro-social” character of moral legitimacy complicates the linkage of such legitimacy to a specific external social system (Suchman 1995, p. 579).

We suggest that these two forms of legitimacy are the most plausible ones at early stages of an organization’s development, or during periods of relatively high dependence on its environment. In our view, summarized above, this is fairly obvious in pragmatic legitimacy. But the first kind of moral legitimacy derives directly from its impact on its environment (the legitimacy that flows most clearly from direct interventions into that

environment); two other subtypes of moral legitimacy (principally procedural and structural) also rely primarily on an organization's direct or metaphorical resemblance to other systems in its environment; and the fourth relies on respected individuals linked to the system.

The two distinct forms of cognitive legitimacy, by contrast, we relate to the other extreme of the spectrum of system autonomy, at the far extreme of which are autopoietic systems. In other settings, Cashore has been asked about a specific problem in Suchman. How can apparently rational legitimation (embodied in "understanding" cognition) and irrational legitimation (embodied in "unthinking" cognition) could be embraced in a single concept? We agree that these two qualities should be handled as distinct. But the problem is abated if these kinds of legitimation themselves are understood in relation to the problem of increased system autonomy.

On the one hand, cognitive understanding may be understood as a shift in the audiences implicit focus from external logics to the internal logic of the system. These audiences are able to appreciate its rationale, and are prepared to accept it on that basis. On the other hand, unthinking cognition – the taken for grantedness of a system – represents a moment when the environment withdraws from attempting to understand the logic of the system, and instead accepts it as an inevitable part of the societal institutional landscape. We can see this distinction in two different moments of American legal history. On one hand, the enduring popularity of police and courtroom dramas during the postwar has served to habituate North American audiences to the mores and procedures of American "blind justice", in a manner which in general serves to legitimate the institution. On the other hand, another discourse about the law, and particularly lawyers,

emphasizes the impenetrability of legal discourse, and its distance from normal speech. Recent developments in television “reality-based” programming feature televised “cases” of ordinary people in a quasi-courtroom setting, which in no way correspond to normal legal proceedings. However, both of these trends represent the unthinking cognition that gives the American legal system legitimacy. On the one hand, the complaints about the impenetrability of the discourse have in no way impaired American recourse to the justice system. On the other, the televised reproduction of the legal/illegal distinction, far from bringing normal justice into disrepute, emphasize its inevitability in modern American society.

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