

## Systematic practical knowledge and institutional design

*Paper submitted to WINIR 2019, Lund, Sweden, 19-22 September, 2019*

DRAFT

### Abstract

The designing of institutions is plagued by the knowledge problem. Economics is converging on the agreement that scientific research can detect general design principles but these need to be adapted by ‘local actors’ to their circumstances. Therefore, what is needed is a combination of *scientific* and *dispersed* social knowledge. I argue that this – essentially Hayekian – view misses a key type of knowledge in between the two: *systematic practical* knowledge about the crafting of institutions. This type of knowledge needs to be distinguished from scientific knowledge because it requires a different type of institutional environment in which it can develop. The most developed form of this environment is a practical profession. The institutional differences between an academic science, such as economics, and a practical profession, such as law, can be brought to light by identifying them as two different types of institutionalised ‘intellectual orders’, a concept introduced by Michael Polanyi.

I focus on law as the most developed profession dedicated to designing institutions. I show how its institutional rules enable law to generate *practical* knowledge for institutional design and, by comparison, why the institutions of academic economics are not (directly) suited to this goal. By implication, academic economists’ primary role may be injecting ideas into other intellectual orders that are suited to the practical crafting of institutions.

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### 1. Rediscovering the limits of economics

From time to time, economists must confront the limits of what their science can possibly accomplish. I do not mean the struggle for new scientific results but the limits inherent in the nature of their scientific enterprise. Such a major confrontation was the debate about the possibility of socialist calculation in the 20<sup>th</sup> century. As Mises, Hayek and M. Polanyi showed the idea that a myriad individual decisions of production, trade and consumption could be centrally directed on the basis of scientific calculation was wrong. The main explanation was that economic activities rely mostly on dispersed local knowledge that is largely time and space specific, subjective and often tacit. This realisation was one of the impetuses that eventually led many economists to focus on the institutions or ‘rules of the game’ of economic life rather than allocative decisions within existing rules.

Thus, the analytical focus on institutions implicitly acknowledges the limits of what an economist can possibly know. However, as the study of institutions became a central tenet of economics, another ‘knowledge problem’ arose. As both theories and empirical methods developed, economists became increasingly involved in designing or improving institutions themselves – from auctions and regulated markets in developed countries to fine-tuning policies in Africa. The results were predictably mixed. The many failures of institutional advice in

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European post-communist and ‘third-world’ countries as well as the apparent disregard of ‘good’ institutions in fast-growing East-Asian economies also led an increasing number of scholars to ponder what economists could possibly know about institutions.

Although the positions may not (yet) be as stark as those about socialist planning, we may well be entering the period of an ‘institutional calculation debate’. The knowledge problem has resurfaced on the institutional level. The central question now is ‘How do individuals rationally calculate the institutional context for rational economic calculation itself?’ (Boettke and Candela 2015: 6). At its heart, this is of course not a new issue at all. Students of law and politics clashed long ago about the possibility to design an institution by any one mind, in contrast with the spontaneous evolution of traditions (e.g. see the contrasting views of Hobbes and Bacon vs Coke and Hale). After his critique of central planning, Hayek himself went on to resuscitate and expand the arguments of the Scottish enlightenment and Edmund Burke about the dominance of non-designed, spontaneously evolved rules in any well-functioning society (1960; 1982). What is new is the massive development of the scientific tools of institutional economic analysis in recent decades. This raises the possibility that economic scholars who specialise in institutional analysis are better equipped than before to design or improve institutions. But can they?

I shall argue that, while current economic theory recognises the need to combine scientific and dispersed social knowledge for institutional design, it ignores a crucial body knowledge in between the two: systematic practical knowledge. Just like scientific knowledge, the latter needs its own dedicated institutions. These institutions comprise distinct ‘intellectual orders’, to use a concept suggested by Michael Polanyi. For practical knowledge, professions such as law, accountancy, business management or public administration represent its most developed forms. The intellectual order of economics (as an academic discipline) and the orders of practical professions are institutionalised in distinct ways, reflecting the different character of knowledge sought in them. This implies that economics should acknowledge the preeminent role of practical professions in institutional design and accept that their main *practical* contributions may be injecting ideas into these intellectual orders.

I shall focus on the comparison of economics with law, which is the practical profession most clearly dedicated to institutional design. Since economic analysis tends to ignore or downplay this function of the legal profession, I need to show how lawyers actually engage in designing institutions in numerous ways. I can then turn to a detailed comparison of the intellectual orders of law and economics. While law is very important in its own right, its analysis also sheds light on how other practical professions (less clearly focussed on institutional design) generate institutional knowledge and how they differ in this respect from academic social science.

## **2. How economists see their own role in institutional design: a brief exposition and a critique**

I review briefly how four leading economists of very different backgrounds addressed the potential of scientific analysis to contribute to institutional design. As we shall see, despite major differences, there are common elements in their reflections. In particular, they share the underlying view that institutions are best designed by combining scientific and dispersed,

context-specific, knowledge. I shall argue that this is a misleading simplification that ignores an important type of knowledge in-between the two: systematic practical knowledge.

## 2.1. Self-reflection by some leading economists

Dani Rodrik (2007) is interested in institutions national governments can influence to support economic growth. He argues that economic science can identify the general institutional prerequisites of prosperous economies but the actual institutions need always be ‘context-specific’. Finding them must utilise ‘local knowledge’ and experimentation rather than abstract blueprints (Rodrik 2007). Accordingly, an economic scholar has two roles, as suggested by the title of his book *One Economics, Many Recipes*, and explained more fully in Rodrik (2015). First, he engages in the ‘science’ of explaining general economic phenomena that include abstract institutions, such as property rights or contract enforcement. Second, he pursues the ‘craft’ of building models that are suitable to specific contexts. Rodrik retains his own role as a global expert but calls for modesty due to an economist’s inevitable lack of local and contextual knowledge. Institution-building should be left primarily to ‘participatory political systems’ that are better at processing and aggregating local knowledge than scientists (2007).

Alvin Roth’s interests are very different but his views on institutional design are surprisingly similar. He is one of the pioneers who applied game theory to the design of regulated markets such as the clearinghouse for entry level doctors in the US or the auctions of radio spectrums. He found that compared to the rules assumed by game-theoretic models, actual market institutions involve much more context-specific detail. Their improvement often relies on historical knowledge of the specific market and ‘tinkering with new designs, based on early experience’ (2002: 1345). This experience led him to make a distinction that is similar to Rodrik’s. Roth distinguishes economic theory from what he calls design economics. While the former seeks to understand the general principles of economic interactions, the latter is ‘to further the design and maintenance of markets and other social institutions’ (2002: 1341). Design economics remains part of the science but calls for different methods (in his view, experiments and computation) and a different approach. While an economic theorist is likened to a physicist, a designer is more like an engineer, who has ‘a responsibility for detail’ and ‘to deal with complications’ (ibid.)

Esther Duflo accepts Roth’s distinction between the economist as a theoretical scientist and as an engineer but moves even further by suggesting a third role as a ‘plumber’ (2017). While a ‘scientist’ provides a general theoretical framework that guides institutional design, an ‘engineer’ applies these principles to a specific situation, paying attention to its specific features. A ‘plumber installs the machine in the real world, carefully watches what happens, and then tinkers as needed... there are many gears and joints, and many parameters of the world that are difficult to anticipate and will only become known once the machine grinds into motion’ (2017: 5). In other words, institutional details and complications are so numerous and idiosyncratic that even careful, context-specific design is insufficient to get them right. Success requires continuous, hands-on involvement. This is the lesson she learnt in field-experiments of poverty-alleviating programmes. Like Rodrik and Roth, she emphasises that ‘every INSTITUTION... is realized, on the ground, through many specific local *institutions*’, whose numerous details and marginal changes matter (2011: 243, emphasis in original).

Elinor Ostrom did not subscribe to the metaphors of society as machinery and of economists as mechanistic fixers of its problems.<sup>2</sup> Nonetheless, her views on institutions share some important features with those of the preceding scholars. Extensive work on the governance of common-pool resources led her to distinguish between underlying design principles that characterise robust common-property institutions and their manifestations in hugely diverse, specific rules (2005: 255-288). She argued that design principles, distilled by theorists, can be used as a practical guide to building or improving institutions (Wilson et al. 2013). However, they provide no blueprints but need to be adapted to local circumstances. The appropriate goal is ‘a more effective blend of scientific information with local knowledge’ (Ostrom 2005: 283).

Ostrom did not seem to think that economists should consciously differentiate between their roles as general theorists and designers. Instead, she forcefully argued that theory should explicitly account for the diversity and context-specific nature of institutions. Theory must acknowledge that (i) affected actors are capable of designing their own institutions, (ii) designing rules is rarely a simple analytical task, and (iii) organisation is often polycentric rather centrally directed (2005: 237-240). A social scientist can make herself useful by developing theories and models that account for these features of institutional design. This theoretical outlook also affects the way science should be done: a scientist ought to become a ‘tinkering craftsman patiently learning from trial and errors and extracting knowledge from local uses’ (Labrousse 2016: 298). As such, he will be able to give advice to local actors about how things may be done better through institutional change (Ostrom 2005: 30-31; see also Ostrom 2013).

Despite significant differences in the authors’ approaches, four common points emerge. First, institutions that govern similar social phenomena are comprised of some common general elements or design principles as well as context-specific forms of manifestation and details. Second, scientific knowledge relates primarily to the first component, while dispersed, local knowledge to the second. Third, scientific knowledge can and should be extended to deal with the context-specific features of institutions. There is no agreement about how and to what degree this could be done. The authors appear to agree, however, that an economic scholar’s task is to help design specific institutions by blending scientific and context-bound knowledge and by collaborating with local actors who hold the latter. Fourth, by pursuing this task, a scholar, at least temporarily, becomes a practice-oriented ‘craftsman’ of institutions.

## **2.2. The missing element between scientific and time-and-place knowledge**

The prevailing view about the knowledge requirements of institutional design retains the distinction between scientific and time-and-place knowledge that Hayek initially developed for allocative decisions and applies it to institutional choices (Boettke and Candela 2015). He argued that, on the one hand, ‘so far as scientific knowledge is concerned, a body of suitably chosen experts may be in the best position to command all the best knowledge available’ (Hayek 1945: 521). On the other hand, there is ‘a body of very important but unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules: the knowledge of particular circumstances of time and place’ (ibid.). If we pay close attention to Hayek’s words, we notice that he uses the term ‘scientific’ in a very general sense,

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<sup>2</sup> Labrousse (2016) provides an insightful comparison of Duflo’s and Ostrom’s epistemic views and methodologies.

extending well beyond academic scholarship. The first example he provides as an illustration of the contrast between ‘scientific’ and circumstantial knowledge is the following: ‘We need only to remember only how much we have to learn in any occupation after we have completed our theoretical training, how big part of our working life we spend learning particular jobs, and how valuable an asset in all walks of life is knowledge of people, of local conditions, and special circumstances’ (522). While it is true that the knowledge imparted in vocational training concerns general rules, is organised and best wielded by experts. However, it is very different from pure science that seeks knowledge for its own sake, unconstrained by directly practical considerations. It is practical rather than theoretical in its orientation if by the first term we mean propositions about what to do or how to do something and by the second term we mean propositions that are not about these things (cf. Fantl 2016). Putting all systematic and abstract knowledge under the rubric of ‘scientific’ conflates very different types of knowledge, very different types of processes that generate it and very different types of people who can hold it.

I propose that we ought to distinguish between social scientific knowledge that concerns the design of institutions and systematic practical knowledge about the actual crafting of institutions. The first is an effort to understand what institutions are, how they function, evolve or are changed deliberately. The second provides general guidance as to how institutions of certain kinds can be maintained, changed or created anew in real-life situations. There is nothing obvious about the relevance of the first body of knowledge for the second. As Roth remarks, ‘it was not a foregone conclusion that bridge building would have a scientific component’ (2002: 1343). Similarly, institutional economists may or may not be able to help effectively the practical design of social rules of the game.

By distinguishing scientific and systematic practical knowledge, we can clarify the possibilities and limits of academic economists’ contribution to institutional design. This helps protect scholars from falling into the trap of scientism, i.e. the unfounded belief in the applicability of scientific method to issues beyond their competence. Beyond self-reflection, it draws attention to a neglected point in institutional analysis. The generation and use of systematic practical knowledge requires sustained intellectual reflection, which needs appropriate institutional support. Scholars ought to look for and analyse the institutions of such intellectual reflection so as to better understand how good institutions can be designed for the economy.

Basically, we need to take seriously the notion that real-life institutions are ‘crafted’. Craftsmen in the traditional sense of the word, such as jewellers, mechanics or even plumbers, are not lone combiners of dispersed knowledge but belong to crafts, guilds and trades. They partake in systematic, articulated bodies of knowledge. Similarly, there exist ‘intellectual crafts’ dedicated, mainly or partly, to designing institutions. The most developed such craft is the legal profession. Accountants, business managers and public administrators also come to mind. To some extent, every developed profession generates systematic knowledge that pertains to the design of the institutions used by its members. It is to state the obvious that non-academic professionals are often involved in institutional design. What is overlooked is how difficult it is for them to develop and maintain appropriate institutions that enable the accumulation and use of systematic practical knowledge. How sophisticated and tuned to the very special nature of such knowledge these institutions need to be. By ignoring this, we inadvertently downplay the importance of their knowledge and exaggerate the potential role for scientists.

### 3. The legal profession and institutional design

In what follows, I focus on the role of legal profession in institutional design and the processes and institutions of knowledge generation that support this role. As a first step, I clarify how lawyers are involved in designing legal rules. In most theoretical approaches to law, there is little or no room for such a function of lawyers. I confront these theories and argue that the deliberate and conscious design of rules is a fundamental and irreducible aspect of the complex phenomenon of law. As a second step, I address in more detail the many ways in which lawyers engage in designing rules. This requires a closer look at the nature of social rules, made possible by incorporating ideas from legal scholarship that go well beyond institutional economics. I argue that rule design is about far more than legislation or precedents. It occurs also when lawyers are thought to be merely ‘interpreting’ or ‘applying’ existing rules. Rule design is ubiquitous in law.

#### 3.1. Three concepts of law in economics: rules, enforcement and articulation

Much of economic analysis identifies law as a body of rules (Shavell 2005: 397) and asks how certain given rules influence the behaviour of people who are subjected to them. The interest is in the end result of the legal process: what social rules are applied by courts or public authorities and how people respond to these rules as they predict them<sup>3</sup>. The process that leads to predictable legal rules remains a black box.

The box is opened when questions of enforcement are raised. Many take for granted that legal rules are ‘determined and enforced by the state’ (Shavell 2005.) but realise that courts, administrative agencies, organisations of prosecution and policing can play diverse roles more or less efficiently ‘within the state’ in the enforcement of legal rules (Shavell and Polinsky 2000; Pistor and Xu 2002). Still others point to the role of non-state actors in enforcing the law, such as market actors, communities and formal private associations (Brousseau 2006). In this perspective, the law is not seen simply as a body of enforced rules but a special type of enforcement mechanism for social rules. For the ‘law as rules’ approach, the main question is: What are the rules, and what should they be? By contrast, the ‘law as enforcement’ approach asks: How are rules enforced, and how should they be?

However, viewing the law as a mechanism of enforcement hardly grasps the whole or perhaps even greater part of its social reality. It is based on the implicit assumption that *finding and articulating* the appropriate rules for governing people’s behaviour is relatively easy, and the real difficulty lies in their enforcement. However, the application of a sanction may be easier than figuring out what the sanction ought to be. The articulation of rules is in itself a fundamental social function of law. Juridical decisions would play a role in clarifying social rules even if they were unenforced by a special public apparatus. They provide disputing parties with common knowledge about clear classifications of right and wrong conduct (Hadfield and Weingast 2012). At least since the *iurisperiti* and *praetors* of Roman law, a great deal of social effort has been put into the improvement of legal rules (Brundage 2008). The development of

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<sup>3</sup> Cf. Holmes (1997 [1897]: ), „The object of our study, then, is prediction, the prediction of the incidence of the public force through the instrumentality of the courts” (991).

a legal system is as much or perhaps even more about an improved articulation of a system of social rules as it is about the improved enforcement of that system.

### 3.2. Evolution or design of rules?

Even if one takes the view of ‘law as an articulation of rules’ (Hayek 1982; Hadfield – Weingast 2012), as I do here, one need not accept that it involves the deliberate designing of rules. Most of the economics literature that addresses the knowledge problem in law discusses the relative ability of common law versus civil law or judge-made law versus codification to produce more efficient legal rules (e.g. Rubin 1977; Hayek 1982; Posner 1986; Friedman 2001). The most extreme form of argument in favour of judge-made law assumes that judges simply respond to the incentives of legal process without making any conscious effort to improve their decisions. Litigants’ differential efforts push courts to change precedents marginally in efficient directions, as if by an invisible hand (Friedman 2001). In a more realistic approach, judges are assumed to labour on establishing or improving rules but accomplish little with deliberate efforts. The law as a system of rules develops in an evolutionary way, as the product of a myriad marginal decisions. Neither judges, nor anyone else can contribute much to the actual design of rules by their individual intellectual efforts. If they try, they are likely to fail. ‘A system of legal rules is not entirely, perhaps not chiefly, the product of deliberate human design; to a considerable extent it represents the unplanned outcome of a large number of separate decisions, by legislators... or judges’ (Friedman 2001: 4).<sup>4</sup>

Unplanned evolution is certainly a key feature of law and helps us put the conscious designing of legal rules in perspective. However, the importance of evolution does not imply that design is unimportant. Hayek (1982) also stresses the evolutionary nature of law but clarifies that the ‘gradual perfection [of rules of just conduct] will require the deliberate efforts of judges (or others learned in the law) who will improve the existing system by laying down new rules’ (96). Although it is true that a complex system of rules cannot be designed from scratch, *conscious* marginal contributions to the designing process are still important. A closer reading of jurisprudential literature reveals a very broad range of lawyers’ actions that pertain to the designing of legal rules.

### 3.3. The nature of rules and the ubiquity of rule design in law

The main roles of lawyers are judge, advocate and counsellor (Llewelyn 1940). Let’s consider adjudication first. Do judges design legal rules? It seems useful to examine judges where they have the least opportunity to design rules, e.g. in civil law jurisdictions that restrict their function to ‘interpreting’ and ‘applying’ rather than ‘making’ law. To comprehend what judges do, we must have a clear understanding of the nature of social rules.

Social rules in the broadest sense can be thought as ‘instructions’ or ‘prescriptions’ for human behaviour that structure interactions (Ostrom 2005: 3-19). Any social rule matters (or, we can even say, exists) only if it influences people’s behaviour. If it is a ‘rule-in-use’ on which actors in a situation rely to identify potential courses of actions and their outcomes. Using a rule, an actor must be able to reason with some confidence that ‘if I do X, Y will happen’. However, rules rarely prescribe actions and their consequences unambiguously. In fact, the very idea of a

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<sup>4</sup> See also Savigny (1831) and Maine (1861).

rule is that actors replace case-by-case decisions that define precisely what to do in a given situation by appeal to more general principles to which behaviour must conform. This is true not only of norms that do not specify sanctions (e.g. “Do not walk on the lawn!”) but also of seemingly quite specific regulative rules (e.g. ‘You must pay 10 dollars if you walk on the lawn’). (E.g. consider the following ambiguities: What counts as ‘the lawn’: can one trample on the flower beds? Who is ‘you’: are children included? What if someone is running to save a life? Etc.) Unless a rule applies to very few nearly identical situations, it remains ‘indeterminate’ (Hart 1994) or ‘incomplete’ (Pistor and Xu 2002) in the sense that it will not unambiguously predict the outcomes of actions in a particular case. We may not know which rules are relevant to it and how (Cardozo 1928; Wilburg 1950).

Hence, a rule needs to be ‘completed’ by interpreting it for the specific situation. If we adopt the above distinction between a norm and a regulative rule (Ostrom 2005: 137-140), actors in a situation usually need to put more effort into completing the former than the latter. To put it differently, others outside of the situation have already put significant effort into articulating a well-specified rule, while this task largely awaits the actors in the case of a vague norm. For either type of rule, we see its completion as a process, during which a rule takes shape up to the point when it can be applied meaningfully to a given situation. The difference is in the way the tasks of completion are allocated.<sup>5</sup>

For informal social norms, the process of articulation takes place continuously and individual contributions may be impossible to detect. For law, the process is consciously organised at least to some extent. Specialised actors engage in the deliberate ‘crafting’ or design of rules. The formal process may begin with legislative codification, administrative decreeing or judicial judgements serving as precedents. However, these are never really the first steps in the articulation process because they inevitably rely on a broad range of existing rules as articulated more or less clearly before. The usual end-point in the legal part of the rule-articulation process is a judicial or an administrative decision. As Pistor and Xu put it, judicial or regulatory ‘interpretation, even if narrowly construed, involves an element of law-making’ (2002: 947). It always involves deciding if a rule applies to a given situation, which clarifies (or sometimes obscures) the content of a rule. It often involves making a general rule more concrete or detailed, too. One could even argue that a trial will rarely take place unless the legal rules for a given situation are unclear and need elaboration.<sup>6</sup> As a great jurist put it, a judge must accomplish ‘the reconciliation of the irreconcilable, the merger of antitheses, the synthesis of opposites’ (Cardozo 1928). The experience of civil law jurisdictions prove that even if judicial decisions are not accepted as sources of law, the judicial interpretation can transform the legal system of legislated codes (Geny 1919; Wilburg 1950). The actions of legislators, courts and regulators can all be (possibly marginal but still real) instances of designing in a long and never-ending process of rule-articulation.

The advocate’s role is to try to influence the decision of the judge. Hence, he directly contributes to the rule-designing that is involved. A good advocate will place himself imaginatively in the

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<sup>5</sup> Pistor and Xu (2002) discuss how the inherent incompleteness of law leads to varying allocations of law-making and law-enforcement powers. Here, I generalise their argument to all kinds of social rules.

<sup>6</sup> Another reason may be that parties are uncertain or have diverging expectations about the expected judgement. However, these problems are also related to the lack of articulation.

place of the judge and think with his head, as it were (Kronman 1987: 870). Indirectly, a legal counsellor may do the same when advising his client about a contract or some other affair. He will need to consider how a judge would decide the rules applicable to the given case. However, counsellors' role is often much more than preparing for a potential suit. It involves designing working rules for various cooperative efforts, such as contracts, partnerships or corporations. While this may be a purely technical administrative exercise, it is often an imaginative invention of a set of rules that accommodate diverse interests and support common endeavours. In the grand words of a legal scholar: 'Every lawyer who has ever drafted a contract, or created a partnership, has participated in the foundation of a small commonwealth, and the excellences he requires in his work might be described as the excellences, in miniature, of a founding statesman' (Kronman 1987: 867).

Other social roles that lawyers fulfil involve rule design, too. They act as codifiers in all fields of legislation. Throughout history, they have also been involved in designing and handling rules for government organisations and the implementation of public policies (Brundage 2008). It seems that wherever there is a need for a general knowledge and skills of designing rules, the demand for professional lawyers emerges. This is unsurprising once we accept that legislation, interpretation and application are closely connected steps in the articulation process of rules that involves instances of design all along.

#### **4. Law and economics as intellectual orders**

What kind of knowledge do lawyers use when they engage in designing rules and how does this knowledge develop? Judges, advocates and counsellors must become knowledgeable of the specific circumstances of the conflictual or cooperative situations with which they deal. Codifiers must also obtain knowledge of many aspects of the practical situation in which legislation takes place. That is, lawyers rely on the dispersed, time-and-place knowledge of social actors. Indeed, a crucial professional skill that is expected of lawyers is the ability to deal with facts and evidence and grasp quickly the full context of an event or a dispute (Schauer 2009). In addition, they rely on systematic practical knowledge that abstracts from any given case. They need to know how to interpret, apply and design rules in diverse situations. This requires much more than factual knowledge of a set of legal principles and rules: the know-how of *legal reasoning* (Schauer 2009). A lawyer must be able to formulate and put forward arguments about rules and be able to defend them against (potential) objections. A lawyer does not simply use an existing body of systematic knowledge but, by formulating his own arguments in concrete situations, he also contributes (if only marginally) to it. In effect, he participates in an ongoing intellectual debate that links past, present and future cases. By doing so, he moves within and makes advances to an existing system of thought (cf. Hayek 1982: 112-3).

##### **4.1. An institutional theory of intellectual orders**

Since any living intellectual system is maintained by the actions of its contributors, it needs its own 'rules of the game' that govern these actions. An analysis of these social rules is crucial for understanding how legal knowledge develops. To carry out such an analysis, we need an institutional theory of sustained intellectual reflection and debate. As I argue elsewhere (Mike

2017), Michael Polanyi's concept of 'intellectual order' offers an appropriate theory framework (Polanyi 1998 [1951]; Polanyi and Prosch 1976). Its great advantage is that it applies to all kinds of organised intellectual life. This generality enables the comparison of knowledge generation in law with science, which is an important goal of this article.

Polanyi (1998 [1951]) argues that science, law, literature, the various arts and professions and 'many other branches of human culture' are organised as spontaneous orders in the same sense as the catallactic (i.e. exchange-based) order of the market economy is one: 'order is achieved among human beings by allowing them to interact with each other on their initiative – subject only to laws which uniformly apply to all of them' (195).

Although it is customary to speak of 'markets for ideas', this is misleading because there is a crucial difference between a catallaxy and an intellectual order: the central interaction of the former is exchange, while that of the latter is intellectual debate (Mike 2017). These are two distinct forms of human cooperation.<sup>7</sup> In an economic exchange, each party offers a service or a good to assist another person in pursuing his subjective goals and expects the same in return. Interaction is based on the premise that each participant makes his own intellectual judgement about what goals to pursue and by what means. By contrast, each party in a debate puts forward an argument (i.e. a reasoning) to contribute to advancing towards a common intellectual judgement of what is or what ought to be. That is, the aim of cooperation is something that is clearly *not* the purpose of an economic exchange: to bring intellectual judgment into the common or intersubjective realm. A debate is deemed successful if it has helped the participants form an improved common intellectual judgement of reality.

While the coordinating process of an exchange-based order is competition, intellectual debates are supported by three processes: consultation, competition and persuasion (Polanyi 1998 [1951]). First, debaters must be able to consult an intellectual heritage, which provides them with a means of mutual understanding, an already existing body of knowledge as well as methods for moving beyond it. For example, 'a scientist, wrestling with a problem, accepts as his premise a great mass of previously established knowledge and submits to the guidance of scientific standards'; or a judge refers 'to precedent and statute and interpret[s] them in the light of contemporary thought', while he sticks to standards of legal reasoning (1998 [1951]: 201). Second, debaters must be able to compete in the sense that they must be free to pursue their conjectures and lines of reasoning and should be rewarded for their contributions. Third, those who advance competing arguments must persuade the participants of a debate. Their lines of reasoning must be pitted against one another in a sincere and fair controversy, which compels participants to adjust their 'arguments to what has been said before and thus all divergent and mutually exclusive aspects of a case are in turn revealed' (1998 [1951]: 202).

How are the processes of consultation, competition and persuasion institutionalised in an intellectual order? They take the form of 'associations of free, self-governing persons' committed to the pursuit of certain intellectual ends (Polanyi and Prosch 1976: 211). These associations build up 'disciplining traditions' that provide standards for acceptable arguments. They may develop formal collective bodies, such as in modern science, jurisprudence and some

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<sup>7</sup> The rest of this subchapter draws, in some parts *verbatim*, on Mike (2017)

professions, or remain informal communities as we often see in the arts and among public intellectuals.

While economists tend to view professions as organisations providing self-regulation to mitigate contracting problems or provide collective goods (Matthews 1981; Shaked and Sutton 1981; Ogus 2000), these are arguably secondary to their more fundamental role of providing an intellectual order which makes such collective actions meaningful in the first place.

The rules of an association must support all three processes of the intellectual order. The three sets of rules are interrelated and must be consistent. They reflect *shared intellectual convictions* about the subject matter of the debate and the nature of knowledge to be discovered. The institutional differences between intellectual orders reflect differences in these underlying convictions. To understand how the intellectual order of law differs from the order of academic social science, we need to identify their respective convictions and how they manifest themselves in their rules. Polanyi (1998 [1951]) made a foray into the analysis of common law but more as an illustration of his general concept than an exhaustive examination. Here, I draw on legal scholarship on jurisprudence to provide a more general and thorough analysis. While there are many similarities between law and science, my emphasis is on their differences.

## 4.2. A comparison of the intellectual orders of law and economics as a social science

As a first step, the basic intellectual convictions of science and law must be distinguished. One may immediately retort that law is also an academic discipline and jurisprudence (i.e. the knowledge of law) can be considered as a branch of science (as in German *Rechtswissenschaft*). This is a valid objection so I need to be more precise. ‘Legal science’ is of two distinct types. Jurisprudence in a narrower sense, as a taught subject, looks at law ‘from inside’, i.e. from the practical perspective of lawyers and provides concepts and theories that help the lawyer in carrying out his tasks (Szabó 2005). It is a discipline that grew out of and directly serves legal practice. Legal scholars are often practitioners and play advisory roles in legal practice. Therefore, I consider academic jurisprudence as an integral part of the intellectual order of law. By contrast, disciplines like legal sociology, legal history or the economic analysis of law look at law ‘from outside’. Their goal is to understand general patterns of social, historical or economic phenomena and consider law as an element of these. Their origin is academic research rather than legal practice. I include these in category of ‘social science’ as it is usually understood.

While law can be the subject matter of both jurisprudence and social science, the nature of knowledge these two strive to generate is different. Jurisprudence seeks practical knowledge with a goal to aid better decision-making in concrete situations (Mastronardi 2001; Jakab 2005). Social science is non-practical in this sense and aims at a better understanding of social phenomena. As a corollary, the former’s truth-statements are *participative* in the sense that they are made from the position of one of the actors involved (e.g. legislator, judge or advocate). It is even considered a basic error of legal reasoning to confuse from which position an argument is made (Twining and Miers 2010). By contrast, a social scientist formulates truth-statements from the *observing* position of an outside spectator. The rules of consultation, competition and persuasion reflect these fundamental epistemic differences.

The central forum of persuasion in law is a legal dispute, i.e. an instance of practical decision-making where the goal is to arrive at a decisive judgement about what to do. In social science, the central forum takes the form of publications in which detached reflection aims to provide interim judgements subject to corrections about what is true as a general pattern. In law, social actors affected by rule design are involved in the debate and provide feedback about arguments. By contrast, social scientists use affected actors as sources of information, at most. A third difference is in the focus of inquiry. While lawyers must typically consider the full context and all details of a concrete situation and weigh them according to salience for affected parties, social scientist usually select just one or a few aspects of similar situations and weigh them according to the salience of theoretical interest rather than significance for actors.

The primary process of consultation bridges sequences of disputes in law and sequences of publications in social science. In the first case, consultation communicates knowledge about prudential judgements guiding action and fits new pieces of knowledge into an internal view of a system of rules. The outcome is one consistent<sup>8</sup> set of sophisticated concepts and doctrines that express practical wisdom. In social science, the communicated knowledge takes the form of hypotheses and proofs. It must be fit into external views about systems of rules or developed into new such perspectives. The outcome is an articulation of theories and methods as expressions of truth according to (purportedly) objective standards of validity.

Competition is supported by professional autonomy in both orders. However, lawyers must deal with problems as they come by and have relatively little freedom in selecting which to pursue. In social science, the basic rule is that of freedom of inquiry, i.e. problems can be selected according to their capacity to contribute to advancing theoretical knowledge as the scientist sees fit. What drives competition? In science, the dominant mechanism is reputation among peers (McQuade and Butos 2003). This appears in law, too – especially among jurisprudential scholars. However, the more direct mechanism is market reputation among social actors whose problems they ought to solve, as with advocates and counsellors, and careers related to success in solving such problems, as with judges and attorneys.

Table 1 summarises the differences between the two intellectual orders, both in terms of the nature of knowledge sought and the institutional details. As we see, these differences are manifold and significant. Both orders are institutionalised in highly sophisticated ways that reflect the type of knowledge sought (practical and participative versus non-practical and observational). While there is no direct way of proving it, it seems unlikely that one order can be successful in producing the type of knowledge to which the other order is dedicated.

**Table 1. Institutional comparison of law and economics**

	Law (Jurisprudence)	Economics as a social science
Nature of knowledge	– practical (aimed at better decision-making in concrete situations)	– non-practical (aimed at better understanding of social phenomena)

<sup>8</sup> Or, more precisely, striving greatly for consistency.

	<ul style="list-style-type: none"> <li>– participative (perspective of decision-maker)</li> </ul>	<ul style="list-style-type: none"> <li>– observational (perspective of spectator)</li> </ul>
Rules of persuasion	<ul style="list-style-type: none"> <li>– central forum: dispute (practical decision-making)</li> <li>– goal: arrive at a final judgement about what to do</li> <li>– involvement of affected social actors: yes, actively involved in debate and feedback</li> <li>– focus of inquiry: full context, all details of situation, weighing what is important for actors</li> </ul>	<ul style="list-style-type: none"> <li>– central forum: publications (detached reflection)</li> <li>– goal: arrive at an interim judgement about what is true as a general pattern</li> <li>– involvement of affected social actors: no, as source of information at most</li> <li>– focus of inquiry: one aspect singled out in similar situations, weighing not necessarily related to salience for actors</li> </ul>
Rules of consultation	<ul style="list-style-type: none"> <li>– sequence of disputes: judgements guiding action (what to do?)</li> <li>– fitting new knowledge into a consistent internal view of a system of rules</li> <li>– leading to articulation of sophisticated concepts and doctrines as expressions of practical wisdom</li> </ul>	<ul style="list-style-type: none"> <li>– sequence of publications: hypotheses and proofs (what is?)</li> <li>– fitting new knowledge into external views or creating new views about systems of rules</li> <li>– leading to articulation of theories and methods as expressions of objective truth according to standards of validity</li> </ul>
Rules of competition	<ul style="list-style-type: none"> <li>– restricted freedom in selecting problems (cases assigned or paid by parties)</li> <li>– feedback through references to precedents, arguments, concepts</li> <li>– reward according to reputation among social actors (or, for scholars, indirectly: according to ability to help them)</li> </ul>	<ul style="list-style-type: none"> <li>– freedom of inquiry</li> <li>– feedback through citations</li> <li>– reward according to reputation among peer scientists</li> </ul>

In 1960, Hayek wrote that ‘economists have on the whole contributed little to the solution of [problems associated with particular rules], there are some good reasons for this. General speculation about the character of a social order cannot produce much more than equally general statements of the principles that the legal order must follow. The application in detail of these general principles must be left largely to experience and gradual evolution. It

presupposes concern with concrete cases, which is more the province of the lawyer than of the economist' (1960: 229-230). Since then economists have made great progress in the analysis of the details of the legal order. However, the nature of the knowledge produced still differs from that of lawyers. 'Concern with concrete cases' can be of two types as I tried to argue. It can be that of a participating actor from inside the legal order or that of an outside observer. The first seeks practical knowledge, while the latter seeks non-practical understanding. The generation of each type of knowledge presupposes its own distinct intellectual order, as I highlighted, each with its specific sophisticated institutions. One type of knowledge cannot be expected to emerge in the other type of order.

## 5. Other professions producing systematic practical knowledge

Lawyers are generalists of rule design and rule handling. As an introductory textbook to legal thinking says in its title, it will teach students 'how to do things with rules' (Twining and Miers 2010). Many social rules are specific to certain economic sectors, fields of activities, smaller groups and organisations. Other professions are also involved in designing such rules. As Mike (2017) explains and illustrates with historical examples, specialisation and innovation in an exchange economy calls for sustained intellectual reflection to support similar lines of activities. Intellectual debates are institutionalised in the intellectual orders of various professional communities, such as accountants, corporate managers, engineers and their ever proliferating subgroups. Each provides an institutional framework to debate both technology and specialised rules – contracts, governance structures, and market regulations – that support exchange relationships.

The institutional character of an intellectual order corresponds to the nature of knowledge it pursues so we should expect similarities between law and other practical professions. An important difference is that the latter tend to be less focussed on formal dispute resolution and even social rules. Moreover, much of the attention is devoted to operating decisions (of management or technology) *within* rules. Nonetheless, the generation of knowledge is tied to actual decision-making situations (if not disputes). The focal points in the process of consultation are the arguments put forward by participants of such situations and arguments by others that aim to help their judgements that pertain to their problems.

Although the forums of persuasion are more diverse and diffuse than in law, in all developed practical professions they include professional conferences, vocational journals as well as supporting teaching and research organisations that provide similar intellectual support than law schools to jurisprudence. Consultation develops an internal view of social rules, too, and new knowledge must be fitted from within. Competition is, again, driven primarily by reputation among fellow participants in the practice that reflect success as judged by affected social actors.

Professions are highly sophisticated social achievements. We must also recognise sets of social rules that are developed by non-professionals. For example, many of Ostrom's examples of common-pool governance involve local groups without much education. Even such groups need to develop at least rudimentary intellectual orders about foresting, irrigation and the like. If they engage in any form of institutional experimentation or innovation, it presupposes some

processes of consultation, competition and persuasion. In more rudimentary forms, we can expect them to follow the same institutional logic that follows from the practical and participative nature of knowledge they seek.

## **6. Conclusion: What can economists contribute to the crafting of institutions?**

The actual design of an institution requires an intellectual order outside social science that generates systematic practical knowledge. Such an order is itself comprised of institutionalised processes of consultation, competition and persuasion. Such a set of rules creates a disciplining tradition for intellectual debates that concern institution design. The legal profession as well as other practical professions represent such intellectual orders. Institutional economists should pay attention to them as important factors in the process of crafting institutions. Does such an intellectual order exist in a particular social situation? Does it generate relevant and effective knowledge? How does it influence institutional design?

Once we acknowledge the primacy of practice-oriented intellectual order, what is the relevance of social scientific knowledge for the practical design of institutions? No intellectual order is hermetically closed to outside influence. It is enough to consider the inclusion of philosophy, sociology and – increasingly – economics in legal education. Arguably, jurisprudence is especially open (or perhaps should be open) to external views of the law in times of fast-paced social change when an interval view of a legal system may act as an intellectual impediment (Gurvitch 1947). This implies that ideas of economics and other social sciences need to be injected into the intellectual order of law and have an indirect influence on practical institutional design. The same applies to other relevant professions, such as accounting, business management or engineering.

However, what if economists become more ambitious (or assumed by others to be more capable) and get directly involved in designing legal rules? In this case, they inevitably change the nature of knowledge sought from non-practical to practical. They take upon themselves a role akin to a counsellor, advocate or judge, depending on the precise character of their involvement. They find themselves within an existing set of rules, where they must adopt a participative rather than observational perspective. This is what happens when an academic transmutes into an ‘expert’, who is expected to give advice on what to do here and now. When Rodrik, Roth, Duflo or Ostrom provide advice to the design of specific institutions, they act as experts.

If economists are to be good experts, they need to create an appropriate intellectual order whose rules are ordered to developing systematic *practical* knowledge. When they employ concepts and arguments developed in academic science and apply it to practical problem-solving, they create and move within a hybrid intellectual order combining practical and scientific types of knowledge. While academics and experts overlap, most experts are not academics, which reflects the benefits of specialising in one or the other order. Since actors of a hybrid order remain partly outsiders, we can expect that they cannot wholly replace practical professionals, such as lawyers, but need to work with them. One can only become a craftsman by fully

engaging a craft rather than just observing and commenting on it. We are then back to the idea of injecting ideas to practical intellectual orders.

Finally, once the primacy of systematic practical knowledge for institution building is acknowledged, economists do well to turn to its practical and non-scientific wisdom for inspiration in their own non-practical work. Economists borrowed freely many key concepts from practice (e.g. contract or property from law; interest or capital from accounting). However, the goal of understanding general patterns led them to make these concepts ever more abstract, shedding a large part of their meaning in their original institutional context (Hodgson 2015). Revisiting the systematic practical knowledge of lawyers, other professionals and even ‘lay’ communities who engage in institutional design may often be an important corrective to this tendency. A better understanding of the internal view of a system of rules is likely to help the social scientist as an outside observer of the system.

## References

- Boettke, Peter J. and Rosolino A. Candela (2015): Rivalry, Polycentricism, and Institutional Evolution, in Christopher J. Coyne , Virgil Henry Storr (ed.) *New Thinking in Austrian Political Economy (Advances in Austrian Economics, Volume 19)* Emerald Group, pp.1-19
- Brousseau, Eric. (2006). Contracts: From Bilateral Sets of Incentives to the Multi-Level Governance of Relations. In: Brousseau, Eric – Jean-Michel Glachant (eds.): *New Institutional Economics. A Guidebook*. Cambridge: Cambridge University Press. pp. 37-66.
- Brundage, James A.(2008): *The Medieval Origins of the Legal Profession: Canonists, Civilians, and Courts*. Chicago: University of Chicago Press.
- Carodozo, Benjamin N. (1928). *The Paradoxes of Legal Science*. New York: Columbia University Press.
- Duflo, Esther (2017). *The Economist as Plumber*. No. W23213. National Bureau of Economic Research.
- Elinor, Ostrom. (2005). *Understanding Institutional Diversity*. Princeton: Princeton University Press.
- Fantl, Jeremy. (2016). Knowledge How. In: Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), <https://plato.stanford.edu/archives/spr2016/entries/knowledge-how> (accessed 11-04-2018)
- Friedman, David D. (2001). *Law's Order: What Economics Has to Do with Law and Why It Matters*. Princeton: Princeton University Press.
- Gurvitch, Georges (1947). *Sociology of Law*. London: Kegan Paul, Trench, Tubner.
- Hadfield, Gillian K., and Barry R. Weingast (2012). What is law? A coordination model of the characteristics of legal order. *Journal of Legal Analysis* 4(2): 471-514.
- Hart, H.L. (1994). *The Concept of Law*. 2nd ed. Oxford: Clarendon Press.

- Hayek, Friedrich A. (1960). *The Constitution of Liberty*. Chicago: University of Chicago Press.
- Hayek, Friedrich A. (1982). *Law, Legislation and Liberty*. London: Routledge and Kegan Paul.
- Hayek, Friedrich A. (1945). The use of knowledge in society. *American Economic Review* 35(4): 519-530.
- Hodgson, Geoffrey M.(2015). *Conceptualizing Capitalism: Institutions, Evolution, Future*. Chicago, London: University of Chicago Press.
- Holmes, Oliver Wendell (1997 [1897]). The Path of the Law *Harvard Law Review* Vol. 110, No. 5: 991-1009
- Jakab, András (2005). Who is a good lawyer? Or was Magnaud a really good judge? In: Szigeti P. (ed.) *State Theory, Political Philosophy and Legal Philosophy*. Universitas, Győr. 215-228.
- Kronman, Anthony T. (1987). Living in the Law. *University of Chicago Law Review* 54.3: 835-876.
- Labrousse, Agnès (2016). Not by technique alone. A methodological comparison of development analysis with Esther Duflo and Elinor Ostrom. *Journal of Institutional Economics* 12 (2): 277-303.
- Llewellyn, Karl N. (1940). The Normative, the Legal and the Law-Jobs: The Problem of Juristic Method, *Yale Law Journal* 49: 1355-1400.
- Mastronardi, Philippe A. (2001). *Juristisches Denken*. Bern: Haupt.
- Matthews, Robin C. (1991). The Economics of Professional Ethics: Should the Professions be More Like Business? *Economic Journal*, 101(407): 737–750.
- McQuade, Thomas J. and William N. Butos. (2003). Order-dependent knowledge and the economics of science. *Review of Austrian Economics* 16(2-3): 133-152.
- Mike, Károly. (2017). The intellectual orders of a market economy. *Journal of Institutional Economics* 13(4): 899-915.
- Ogus, Anthony. (2000). Self-Regulation. In: B. Bouckaert and G. De Geest (eds.), *Encyclopedia of Law and Economics, Volume V. The Economics of Crime and Litigation*, Cheltenham: Edward Elgar, pp. 587–602.
- Ostrom, Elinor. (2013). Overcoming the Samaritan's dilemma in development aid. *Development Challenges in a Postcrisis World*, 25. World Bank.
- Pistor, Katharina, and Chenggang Xu (2002): Incomplete law. *New York University Journal of International Law and Politics*. 35: 931-1013.
- Polanyi, Michael. (1998 [1951]). *The Logic of Liberty*, Indianapolis: Liberty Fund.
- Polanyi, Michael and Harry Prosch. (1976). *Meaning*. Chicago: University of Chicago

- Polinsky, A. Mitchell, and Steven Shavell. (2000). The Economic Theory of Public Enforcement of Law. *Journal of Economic Literature* 38(1): 45-76.
- Posner, Richard R. (1986). *Economic Analysis of Law*. 3rd ed. Little, Brown, and Co.
- Rodrik, Dani. (2007). *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton: Princeton University Press.
- Rodrik, Dani. (2015). *Economics Rules: The Rights and Wrongs of the Dismal Science*. WW Norton & Co.
- Roth, Alvin E. (2002). The economist as engineer: Game theory, experimentation, and computation as tools for design economics. *Econometrica* 70(4): 1341-1378.
- Rubin, Paul H. (1977). Why is the common law efficient? *Journal of Legal Studies* 6(1): 51-63.
- Schauer, Frederick (2009). *Thinking like a Lawyer. A New Introduction to Legal Reasoning*. Cambridge, MA., London: Harvard University Press.
- Shaked, A. and J. Sutton (1981). The Self-Regulating Profession, *Review of Economic Studies*, 48(2): 217–234.
- Shavell, Stephen. (2005). Law versus Morality as Regulators of Conduct. In: Parisi, F., Rowley, C. K. (eds.) *Origins of Law and Economics*. Cheltenham, Northampton: The Locke Institute, Edward Elgar, pp. 396-421.
- Szabó, Miklós. (2005). Legal theory and legal dogmatics. In: Szigeti P. (ed.) *State Theory, Political Philosophy and Legal Philosophy*. Győr: Universitas, pp. 273-292.
- Twining, William and David Miers. (2010). *How to Do Things with Rules. A Primer of Interpretation*. 5th ed.. Cambridge: Cambridge University Press.
- Wilburg, Walter. (1950). *Entwicklung eines beweglichen Systems im bürgerlichen Recht*. Kienreich.
- Wilson, David S., Elinor Ostrom, and Michael E. Cox. (2013). Generalizing the core design principles for the efficacy of groups. *Journal of Economic Behavior & Organization* 90: 21-32.