Meta-rules

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Abstract

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Abstract

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1. Introduction: North Re-examined

Two concepts form the heart of Nobel-prize winner Douglass North's theory of economic growth. The first is "secondary institutions", which he defines as rules or property rights. This paper refers to "secondary institutions" simply as *rules*.

North calls the second concept "fundamental institutions", defined (1970, p. 10) as "basic 'ground rules' such as the underlying 'constitutional' basis of property rights and basic decision rules with respect to political decision-making." This paper refers to "fundamental institutions" as *meta-rules*, that is, rules for making rules.[1] The term *institution* in this paper refers to a collection of rules or of meta-rules. An *economy* is a collection of institutions that govern the production and allocation of resources.

For North (1970, p. 10), the growth of Western Europe resulted from "cumulative changes in secondary institutional arrangements [rules] (that) ultimately led to a restructuring of fundamental institutions [meta-rules]." He says that the accumulation of *de facto* rules embodying practical, grass-roots responses to changing material and technological conditions eventually led to revolutionary changes in formal

[1] For example, a law that sets the requirements for new laws is a meta-rule. Many authors discuss meta-rules (although they do not use the term), including Williamson (2000), Stiglitz (1998), Granovetter (1985), and Boulding (1981). The prefix *meta* indicates that the root concept acts upon itself. This is useful for three reasons. First, the usage extends easily to multiple levels, such as meta-meta-rules. Second, the pattern generalizes sensibly: second derivatives are meta-derivatives, compound interest is meta-interest, analysis of analyses is meta-analysis, and consciousness is meta-thought. Third, the usage is common in fields outside of public policy (for example, Hofstadter, 1979).

meta-rules. These changes channeled incentives away from activities that served to redistribute resources and toward activities that raised the productivity of income-generating activities. The result was economic growth.

Long-run growth requires that economies adapt to changing conditions. Meta-rules affect the costs of adaptation and thus affect the pace of economic growth. North suggests that economic growth resulted when informal changes in rules led to changes in meta-rules; this paper suggests that continuing economic growth is more likely if changes in rules are guided by explicit, formal, consciously designed meta-rules. Economic growth would be quicker, less painful, and more certain if change is pro-active, gradual, and conscious under meta-rules than if change is revolutionary under the stress of crisis or if change is evolutionary under the forces of chance.

This brief paper is organized as follows. Section 2 introduces the analogy that institutions are to economies as genes are to species. Section 3 discusses meta-rule design. Section 4 concludes the paper with a discussion of some of the potential benefits and dangers of the conscious manipulation of meta-rules in the design of public policy.

2. Institutions : economies || genes : species

Institutions can be seen as collections of rules that constrain and direct the behavior of economic agents by specifying rights and methods to allocate, benefit from, transform, and transfer resources to satisfy preferences. In the same way, genes can be seen as collections of rules that constrain and direct the behavior of living things by specifying rewards and punishments for actions to find, secure, and use resources to satisfy physiological wants in the pursuit of reproductive success (Robson, 2001) .

Both institutions and genes embody meta-rules because they specify how to modify themselves. For example, a constitution may provide for its own amendment, and genes may provide for their own recombination in offspring.

At a deeper level, economies and species may modify how they modify themselves; they embody not only meta-rules but also meta-meta-rules. For example, the requirements to amend a constitution is itself part of a constitution and may itself be amended. Likewise, the introduction of genetic variation may affect how variation itself occurs, as a species that reproduces asexually evolves to reproduce sexually.

Because the environment changes constantly, economies—like species—evolve or die. History is littered with failed economies. As expressed by North (1994, p. 367), "It is adaptive rather than allocative efficiency which is the key to long-run growth. Successful political/economic systems have evolved flexible institutional structures that can survive shocks and changes."

Meta-rules may facilitate the adaptation of rules. Of course, meta-rules may be absent (as with a constitution that does not provide for its own amendment), meta-rules may be ossified (as with a constitution that requires unanimity for amendments), or meta-rules may be too flexible (as with a constitution that changes in huge ways every few years).

2.1 Meta-rules and development

For both species and economies, *development* may be defined as patterns of change that promote long-term well-being without compromising short-term well-being too much. In the short term, a mule can withstand hostile environments than either of its progenitors, but in the long term, mules are an evolutionary dead-end. Likewise, a public-policy rule may promote short-term economic growth but, without luck or a meta-rule, it will eventually and inevitable lead to stagnation and decline as the economic environment changes and the rule becomes increasingly inappropriate. "Societies that get 'stuck' embody belief systems and institutions that fail to confront and solve new problems of social complexity (North, 1994, p. 364)."

A rule without a meta-rule is an like a contract that does not specify how to re-contract. Changes can be made, but they will depend on bargaining power rather than on rights, occur abruptly rather than continuously, rely on luck rather than design, and perhaps arrive too late to salvage the life of the contract or the health of the economy.

2.2 Meta-rules and death

Why do people age and die? After all, one way for a species to increase its chances of survival is for its members to live until an accident (but not old age) kills them. Understanding how the death of individuals can promote the survival of species sheds light on the role of meta-rules in public policy.

Although the environment is always changing, the genes of an individual are forever fixed. Thus, the average member of a younger generation should have some genetic advantage over the average member of an older generation because the genes of the younger generation have benefitted from more rounds of natural selection, rounds occurring in the most current (and thus most relevant) environments. Because resources are scarce, because members of a given species tend to compete for the same resources, and because older individuals are less well-suited to the environment, the survival of the species is promoted if older individuals die and free up resources for younger individuals.

The faster the environment changes (or the more a species depends on genetically determined features such as instinct or strength for survival), the more frequently variation is needed, the closer the spacing between generations, and the shorter the life span. Evolution selected for humans who, in the span of 35 to 40 years, could reproduce, teach basic skills to their children, and die, freeing up resources.

Conscious adjustment to changes in the environment through learning has overtaken genetic variation as the most efficient adaptation strategy for humans. Instinct and passive learning through trial and error are not no longer adequate; purposeful education is required.[2]

Economies are no different. For most of history, public policy evolved largely through war; economies that lucked into rules that happened to fit the environment better vanquished unluckier economies, or polities revolted when existing rules became too onerous. But war and revolution are inefficient and painful, and, given modern weapons of mass destruction, they probably no longer promote the survival of the species. In short, the environment now changes so rapidly that unconscious evolution cannot keep pace. The conscious design of meta-rules may be the only hope. Whereas evolution produces change haphazardly and whereas war and revolution produce change re-actively, meta-rules offer the possibility of adjusting pro-actively.

[2] As human society grows more complex and deals more successfully with resource scarcity, the importance of genetic capital, compared with cognitive capital from education and experience, matters less and less. Thus, the death of older individuals (who have more cognitive capital) is very costly for the species. Perhaps this explains the recent, rapid increase in human life spans.

3. Design of Meta-rules

Individuals must die to make room for new models, but institutions can be replaced piece-meal. Institutions are not conscious, nor do they anticipate the future, but they may be designed so as to be affected by human consciousness and human expectations. Humans cannot redesign themselves, but they can redesign institutions, especially if the institutions were created with redesign in mind. Meta-rules facilitate orderly adjustment.

3.1 Explicit Meta-rules

Sometimes meta-rules exist, but are not explicit. According to North (1970, p. 10), "The fundamental institutions [meta-rules] may be specified in a constitution or may exist by legal precedent or perhaps only by custom. Sometimes the way these fundamental institutions can be changed is specified [meta-meta-rules], as in the rules for amendment of a formal constitution, but more often they are not." Implicit meta-rules less useful (and more likely to be subverted) than explicit meta-rules.

The transition economies of Eastern Europe provide an example. The leaders of the early communist state did not foresee their shortsightedness, and they did not provide for a peaceful way to change the government or the economic system. Making up the rules as they go has been a painful process and left room for informal institutions (such as the mob) that are not healthy in the long term.

A second example are non-governmental organizations (NGOs) that lend to microenterprises in developing countries. The donor agencies who conceived these institutions never foresaw that the flow of soft money would slow and that survival might require profitability. Without a built-in guide to transformation to for-profit organizational forms, the metamorphosis to for-profit institutions has been extremely difficult and slow. Many NGOs will not make it and will die when soft funds dry up.

3.2 Designed Meta-rules

The weakness of evolution is that variation depends on chance, and there is always the chance that no new well-adapted entity will develop. To mitigate this, species encourage serendipity by systematically producing genetic variation. Public policy can likewise encourage systematic adaptation by consciously equipping institutions with meta-rules.

Individuals and institutions have some capacity to adapt even in the absence of genetic variation or meta-rules.[3] But just as evolution does not produce all useful adaptations, the institution of the market does not produce a complete set of rules. Better adjustment would not rely only on unconscious adaptive ability of institutions to evolve or to react to crises.

[3] For example, muscles (and presumably brain interconnections) develop with use. In the case of institutions, informal practices may circumvent useless or counterproductive formal rules.

Institutional design should recognize that design cannot anticipate all contingencies. Design should provide for changing the design. Non-conscious meta-rules change rules too slowly and too haphazardly. As expressed by North (1994, p. 364), "Human beings have, by trial and error, learned how to make economies perform better; but not only has this learning taken ten millennia (since the first economic revolution), it has still escaped the grasp of almost half the world's population." The conscious, explicit consideration of meta-rules in institutional design offers some hope to improve the quality of public policy and the speed with which it adapts to the changing context.

4. Benefits and Dangers

Explicit, purposeful meta-rules should make policy reform more gradual, practical, and peaceful. If a system cannot adjust itself gradually to small disequilibriam, then crisis is required to trigger policy reform. Pro-active meta-rules have several advantages over haphazard evolution and over the dialectical revolution of Marxian/Hegelian thesis-antithesis-synthesis:

- It is peaceful rather than violent;
- It is gradual and continuous rather than sporadic and abrupt;
- It provides for mid-stream redirection to avoid overshooting the target or throwing out the good with the bad.

If policy reform is worthwhile because better rules acts as a lever that multiplies the potential of efforts to improve well-being, then the design of meta-rules should be even more attractive because it acts as a lever of levers that exponentiates the potential to improve welfare.

Unfortunately, meta-rules also exponentiate the potential to damage to welfare with poor policy. Just as tinkering with Nature can produce monsters, designing meta-rules attracts both reformers and rent-seekers. Designing meta-rules that balance protection from rent-seeking against openness to reform is not simple.[4] Too much

[4] The bitter debates over the centralization of power in a federalist European Union are an example.

flexibility leads to instability; policies that are easy to reverse are easy to subvert. At the same time, eliminating rent-seeking would fossilize all rules and doom an economy to extinction. If any or all rules can be changed at any or all times, then the transactions costs of considering potential changes could outweigh the benefits of being able to make changes. If modifications are unlimited, potential rules may never become an actual rules.[5]

Even explicit, designed meta-rules may not promote economic growth. In fact, North (1970, p. 7) suggests that many (if not most) meta-rules serve to *reduce* the efficiency of the economy. Meta-rules may facilitate changing rules to redistribute income to rent-seekers in addition to (or instead of) increasing the productivity of income-generating activities. For example, the ruling party in Puerto Rico recently designed a bill to increase the number of judges in its Supreme Court from seven to nine. Had this proposed meta-rule been passed, neither productivity nor adaptability would have increased, but the party in power would have graven its position into future rule-making.

There are some principles to safeguards the design of meta-rules. First, not all rules can be subject to meta-rules. At the end of a meta-. . .-meta-rule chain, there must be either an unchangeable rule (such as decision of the Supreme Court) or a

[5] This is why Congress tied its own hands by giving fast-track authority to GATT.

meta-rule that acts on itself (such as a majority required to amend laws that also applies to the majority required to amend the majority required).

Second, irreversible decisions (such as treaties with other polities) should be more difficult to approve that reversible decisions (as is the case, for example, in the United States).

Third, rent-seeking can be reduced if the (untradable) weight given to any given individual in the political process corresponds to that agent's weight in the social welfare function. For example, utilitarianism should provide for simple majority rule with one vote per person. Wealth should not be allowed to influence voting because individual utilities in the social welfare function are not weighted by wealth.

Meta-rules may backfire. This will occur less often, however, if meta-rules are designed, rather than left to Nature, and explicit, rather than implied. The hope is that conscious design of meta-rules may lead to the adaptation of rules to the ever-changing economic environment at a pace conducive to survival and perhaps even growth.

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