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# Driving with the Rear-view Mirror: On the Rational Science of Institutional Design

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**ABSTRACT:**

On its own, the Rational Design initiative is outstanding. Other methods pertinent to the formation of international organizations are not discussed, however. I take a look at two nearby "contrast spaces" to make comparisons easier. What explains institutional design? is the key topic of the first chapter, which also discusses competing and complementary theories that are farther along in the causal chain. This inquiry exposes epistemological distinctions between institutional design and positive social science, which might be linked to various temporal perspectives. Making institutions is about the future and has a normative component by nature. Institutional explanations often focus on the past and do not include this normative aspect. Information about institutional efficacy and information about what values to seek are two additional types of knowledge that are necessary in addition to the knowledge provided in this book if we are to avoid "driving with the rear-view mirror." As a result, the issue of institutional design is useful for creating a more comprehensive and useful vision of social science that incorporates normative and constructive issues.

**KEYWORDS:**

Design, Designers, Institutions, Institutional Design, Social.

## I. INTRODUCTION

How can social scientists most effectively influence how international institutions are created? Our usefulness presumably rests in providing design knowledge that those institutions that design lack. What kind of knowledge, however, is that? What should the "about" of a science of institutional design be? International relations (IR) as a field has only recently started to include institutional design. Anarchy encourages players to depend on power and interest rather than institutional solutions to problems, making the international system one of the least welcoming of all social systems. Skeptics may be correct that none of this activity is significant, but politicians seem to think otherwise. And as a result, IR now has less to say to them than it otherwise would [1], [2]. This book consequently makes a significant step toward a more policy-relevant discourse about international politics by putting aside the question of whether institutions matter and focusing instead on the issue of institutional design. The chapter in this book merit evaluation on their own terms, within the specific rationalist framework outlined in the introduction by Barbara Koremenos, Charles Lipson, and Duncan Snidal. That paradigm emphasizes the issues with collective action and inaccurate information as barriers to institutional design. However, I am not especially competent or motivated to provide an internal rationalist criticism of the Rational Design project, nor was that the expectation when I was graciously asked to participate. The editors purposefully disregarded a number of "nonrationalist" arguments from the outset in order to test the limits of their solution to the issue. This feedback was requested in order to acquire a different viewpoint [3], [4].

Actually, I don't have the skills or desire to provide an entirely objective review either. I share the volume's dedication to social science, even if certain epistemological concerns will be raised. While I don't think rationalism can tell us everything, I do believe it can teach us a lot. Rejecting social science or rationalism outright could provide further insights about institutional design, but I won't do that here. However, I intend to highlight some rather basic issues concerning the strategy in the area between a strictly internal and strictly outward criticism. The volume's ignoring of alternatives to its justification of institutional designs is the first. The idea of rational design's fundamental tenet is that governments and other players choose international institutions in order to serve their own interests. This equates to a functionalist assertion: agents choose institutions because they believe they will serve a useful purpose. Alternatives to this premise exist in at least two different forms, both of which are connected to "sociological" or "constructivist" perspectives on institutions [5], [6].

Alternatives might, on the one hand, be competing theories, where the link to the theory of rational design is zero-sum; variation explained by one equals variance not explained by the other. At first look, it could seem difficult to identify believable competitors. Of course players create institutions to further their interests what else would they do? one may be inclined to reply. However, there are also compelling counterarguments to both the idea that institutions are deliberately selected and the idea that they are created. I go through each one individually and make the case that ignoring these options makes it more difficult to evaluate the volume's findings. On the other hand, "alternatives" might be used to provide explanations that support rational-design theory while also placing it within larger social or historical contexts that help to create its constituent parts (preferences, beliefs, etc.). The difference mentioned in the question with competing explanations is different from the problem at hand, which is "causal depth." Even if governments make reasonable decisions, the underlying processes that give rise to some decisions being rational in the first place may be more intriguing. Sociological and constructivist approaches to institutions often concentrate on these types of structures [7], [8].

This first criticism, while its emphasis on alternative explanations, is still internal in that it implies that the question we are attempting to answer regarding institutional design is an explanatory one: Why do institutions have the traits they have? However, in my opinion, one of the things that makes the issue of institutional design intriguing is that it raises additional questions that go beyond that explanatory concern. The phrase "design" in particular immediately raises the pertinent policy issue, "What kind of institutions should we design?" Given that this book focuses on a theoretical question with significant policy ramifications, it is instructive to consider how the distinction between positive and normative may be even more blurred in this article [9], [10].

I will argue that closing this gap requires acknowledging the epistemological distinctions between the types of information sought in the scientific and policy realms, which result from different perspectives on time. Positive social scientists seek "explanatory knowledge," or information on the causes of events. Since we can only describe what has already happened, this must be a backward-looking explanation. As opposed to this, policymakers and institutional designers require "making" or "practical" knowledge, or understanding of what to do. Since it concerns how we ought to behave in the future, this is unavoidably forward-looking. We "live forwards but comprehend backwards," as Henry Jackman puts it. It is impossible to reduce the former to the latter. Understanding the reasons behind our previous behavior might help us learn useful lessons, but unless the social world is deterministic, the past and future are only contingently connected. It is up to actors to decide whether to maintain an existing institution, like state sovereignty, or create a new one, like the EU.

However, explanatory knowledge and practical knowledge may interact in intriguing ways. To demonstrate this, I briefly describe two institutional design-related research fields that are not included in this book in the latter part of this paper. Institutional effectiveness comes first. The second area focuses especially on norms. What principles need to guide institutions? Although positive and normative questions are obviously quite different from one another in many respects, a science of institutional design that solely addresses the former would be lacking and mainly effective for "driving with the rearview mirror." Therefore, the bigger issue I want to pose here is one of epistemology: What should constitute "knowledge" regarding institutional design? In social science, we often presume that knowledge consists only of historical explanations. In the case of institutional design, the nature of the issue—making things in the future may call for a larger perspective.

## II. DISCUSSION

### Alternatives to Rational Design

What accounts for variety in institutional design, then? It is obvious that the rational-design hypothesis offers considerable sway. How much leverage, though? Before we make vertical comparisons to deeper explanations and lateral comparisons to competitors, it is impossible to tell. Therefore, I divide the volume's hypothesis into two parts: that institutions are selected rationally and that they are designed, provided that the term "rational design" is not redundant.

#### 1. Alternatives to ‘‘Rational’’

There are many ways to define rationality. The term "logic of consequences" or "instrumental thinking" is used in the rational-choice theory. When actors make decisions they feel will have the best results given their interests, they are acting rationally. This is a subjective definition of rationality since a rational option is one that an actor believes would maximize their payoffs rather than one that will really maximize their payoffs we can refer to this as a "objective" interpretation of rationality. When there are several players, as in international politics, a rationally selected organization will be one that addresses their collective-activity issue. If rational action for a single actor is what subjectively maximizes its interests, then rational action for multiple actors is what

objectively solves that problem. In summary, collective-action problems are subjective at the group level because they are created by a common perception of certain facts as being a "problem" (versus not), requiring "collective action" (versus not), and having specific characteristics that define what kind of collective-action problem it is (coordination, cooperation, security, economic, and so on). Only a few of these understandings are based on real-world, objective facts. Additionally, they are created via a communication process that involves understanding what that world means and how and why designers should be concerned about it. What are the alternatives to the idea that governments choose institutions in a subjectively reasonable way? Of course, one is that nations purposefully choose institutions that would undermine their goals, but that does not seem particularly likely. We must search elsewhere for intriguing substitutes. I talk about two.

### i. The Logic of Appropriateness

Instead of assessing costs and advantages, governments might instead adopt institutional designs based on what is normatively suitable. This is known as the "logic of appropriateness." There are several instances of decision-making based on appropriateness in international politics. What prevents the United States from conquering the Bahamas instrumental circumstances or the conviction that doing so would be wrong to cite an earlier example? It is possible to create a "as if," cost-benefit narrative to justify nonconquest, but I highly doubt this is the underlying process at play. It is more probable that American leaders see this as being unjustifiable. Nina Tannenwald's research on the "nuclear taboo" reveals that even when instrumental reasons, such as those in the Vietnam War, favored deploying nuclear weapons, U.S. decision-makers resisted on moral grounds. This is a more challenging and hence intriguing case. The internalization of norms is how such a logic eventually works. As actors are socialized to norms, they incorporate them into their identities, which in turn sparks a general interest in norms as goals in and of themselves. Internalized self-control is the end outcome; people behave in a certain way because it is expected of them in their society, not because it serves their own interests.

The examples of the Bahamas and the nuclear taboo show how the logic of appropriateness has often been used in IR to explain regime compliance. Design, on the other hand, is a separate issue from compliance, where it is less clear that logics of appropriateness are immediately applicable. However, there are at least three ways that normative logics might compete with logical justifications for institutional design. One way is by offering desiderata for organizations that lack coherence from a consequentialist perspective. In many international systems, for instance, a rule of universal membership applies. Why does Luxembourg have a vote in the EU or landlocked nations have a voice in the Law of the Sea? The Rational Design framework's emphasis on enforcement and distributional issues may not be the best place to look for the solutions. Or think about the standard that Great Powers have unique privileges. Without mentioning this concept, it is difficult to understand why Russia was admitted to the Group of Eight or to comprehend discussions over the UN Security Council's future. The standard that democratic governance of international organizations should be the norm is also gaining support. Although the Rational Design framework suggests that designs for institutional control reflect levels of uncertainty and asymmetries of contribution, questions of legitimacy and principle appear to be more important in discussions about how to address the "democratic deficit" in the EU and other international organizations so on. These alternatives do not rule out the possibility that rational reasons play a role in regime formation, but they do imply that the situation could be more nuanced than a strict consequentialist account would allow.

By excluding design possibilities that would be instrumentally appealing as "normative prohibitions," logics of appropriateness might also serve to create competing hypotheses. A trusteeship option may be included in a strictly logical system for dealing with "failed states," but the international community rejects this because of its connection to colonialism. Finally, norms on the appropriate forms of coercion to apply in certain situations may also influence how a regime is designed. In the nineteenth century, military action to collect sovereign debts was acceptable, but it is difficult to envision this happening today. All instrumentally relevant possibilities, not simply those that are deemed acceptable by normative standards, would be included in a genuine test of the rational-design theory. In addition, design modalities for institutions may be historically particular as a consequence of suitability logics. Therefore, logics of appropriateness may aid in the structuring of international organizations in at least three different ways. These options don't rule out the possibility of consequentialism altogether. However, because our goal is to evaluate the variance explained, the logic of appropriateness indicates that competing variables could also be significant.

### ii. About Uncertainty

Rationality is defined in this book as relying on a specific, and contentious, method of addressing ambiguity in addition to instrumental reasoning. As the editor’s note, one of the major changes from past rationalist (and nonrationalist) studies on international institutions is the Rational Design project's emphasis on uncertainty.

Addressing uncertainty may make IR more realistic and policy-relevant since it is inherent to social existence, particularly institutional architecture, which attempts to organize an otherwise open future. The Rational Design framework, on the other hand, seems to consider uncertainty's nature as unproblematic, and the result is a conceptualization that successfully reduces uncertainty to risk. This claim could appear incorrect given that the editors claim to be using "standard terminology" by using the word "uncertainty" instead of "risk," yet this terminology is based on the idea that the two terms are interchangeable. At least from Frank Knight's seminal work from 1921, there has been knowledge that there is a significant contrast between risk and uncertainty. This distinction is still employed in certain rationalist study today, even by Snidal in other places.

However, most orthodox economics and formal theory combine the two, and this book seems to be primarily influenced by this literature. Knight's distinction is vehemently upheld by heterodox Austrian and post-Keynesian economists, who in fact heavily rely on it in their criticism of mainstream economics. Risk refers to a scenario where certain aspects of the decision issue, such the preferences or views of other players, are not known with certainty but, crucially, where all options are known and may be given probabilities that total up to 1. These probabilities are then used to assess the benefit of various courses of action, giving rise to the formalization of expected-utility theory. Risk has the important implication that even though actors cannot be certain about the results of their decisions, they can at least see well-defined (though still probabilistic) relationships between ends and means, allowing them to calculate with accuracy the likelihood that their objectives will be attained using various strategies. If you pick option A, there is a fixed probability that payoff X will occur; if you choose option B, there is a second chance, and so on. This is crucial because it implies that the question, "What is the rational thing to do?" always has a clear and principled response.

When an actor cannot assign probabilities to all of the possibilities in a circumstance or when the probabilities do not add up to one, there is uncertainty. In this heterodox tradition, uncertainty is frequently described using terms like "strong," "hard," "genuine," or "structural" to distinguish it from the conventional viewpoint. When there is genuine uncertainty, the obvious (if probabilistic) relationship between ends and means breaks down, making it possible for optimal behavior to be indistinguishable from suboptimal behavior. What is instrumentally reasonable is no longer clearly defined if optimality can no longer be calculated. This raises a competing theory for the behavior of rational agents. According to the conventional wisdom, actors with limited knowledge should continuously modify their beliefs and tactics in response to shifting assessments of the situation. The volume's hypotheses regarding the impacts of uncertainty on rational design, notably that institutions should maximize human control and flexibility, reflect the significance of such updating. Ronald Heiner contends, on the other hand, that actors faced with real ambiguity may be better off refraining from attempting to optimize since they lack the knowledge necessary to understand the actual nature of the issue and are thus more likely to err and regret their actions.25 In other words, in his opinion, expected-utility theory may actually be a poor guide to "rational" action under circumstances of true uncertainty. Contrary to what that theory suggests, agents should obey clear, unbending norms and refrain from often changing anticipated values. Heiner continues by saying that given that their conduct is far more consistent than would be anticipated if they were continually optimizing, most individuals in the actual world realize this. The "origin of predictable conduct" in actual uncertain circumstances is our propensity to stray from the optimum norm. Therefore, when it comes to institutional design, it could make more sense to decrease control and flexibility rather than to maximize them.

## 2. Alternatives to ‘‘Design’’

I plotted part of the contrast space that "rationality" as a determinant of institutional variation revealed in the section before. Even though there will be some overlap, applying the same logic to "design" will highlight the volume in a distinctive way. To map differences to the design hypothesis, it might be helpful to think of rational design as fundamentally the same as rational choice. Three conclusions flow naturally from the notion that designs are choices: (1) designers exist before designs; (2) designs are planned; and (3) designers have some discretion. Each one refers to several theories, some of which compete with the rational-design theory and others of which have more complex causal relationships.

### i. No Designer?

Do institutional designers' designs have causes or effects? The solution must be causes on some level. Institutions are not created in a vacuum; they are the result of human design. On another level, though, we may also see the opposite logic at work, with designers being created by their own creations. In that sense, institutional design may be more complex than the rationalist perspective indicates. In both a constitutive and causal sense, designers may be considered designs. First, the actors who create designs in the future may be constructed as a result of institutional designs made today. This might happen on three different levels. One step would be institutional

designs that broaden the group of people who make up the succeeding designing actor, as Koremenos, Lipson, and Snidal briefly mention. In their use of the EU as an example, they show how decisions about enlargement made in the past had an impact on those making decisions now and will have an impact on those making decisions in the future. When institutions have an impact on the identities and interests of designers, this is a second kind of feedback on the actors.

NATO is a nice illustration: Even while its founding principles mirrored the self-interests of its members, it may be argued that through time, they have grown to connect with the organization and hence perceive themselves as a collective identity, considering NATO as a goal in and of itself rather than merely a means to an end. Third, institutional designs may have an impact on actors through altering their environmental perceptions. Even though these feedback effects may not have been anticipated at the time of original design, they are more likely to happen the longer our time horizon is. Over time, both designers and designs have an impact on each other. The problem also raises doubts about reason. How can we evaluate the logic of the decisions institutional designers make today if part of what they do is choose future designers? The Rational Design framework describes rationality in terms of a certain self-concept. This is OK for certain uses, but what happens if our decisions cause the Self to change? Do we take into account the preferences of potential future designers who, specifically and at what discount rate? These crucial concerns would be brought to light by paying attention to alternatives to the presumption that designers are given when making design decisions.

### ii. No Intentionality?

The Rational Design framework also assumes that the characteristics of international organizations are selected consciously or deliberately via a process of calculation. Since people are not machines, it is first difficult to imagine a logical replacement for this. As a result, the process through which institutions are developed will always include some intentionality. This does not necessarily imply that institutions are what we might expect, however. Advocates of a competing, "evolutionary" explanation of institutions, particularly Friedrich Hayek and his intellectual offspring, have long fought against the design approach (which they cynically refer to as "constructivism") in social theory. The severity of the opposition is caused by both a theoretical dispute over the reasons for institutions and the alleged political ramifications of those explanations. Evolutionists contend that creating institutions is really exceedingly difficult, and that failing to acknowledge this has resulted in overconfidence and some of the worst design blunders in history, like communism and fascism. They prefer the "invisible hand" of natural selection and trial-and-error learning as an alternative to "constructivism," which operates behind the backs of rational actors.

The evolutionary perspective's proponents don't necessarily reject the idea that individuals have free will, make logical decisions, or even that we should make changes to current institutions. Many people are better characterized as being "rationalists" themselves. Instead, they are concerned that, despite the possibility of gradually altering institutions to better achieve our goals, we should not assume that we can design successful institutions from the start due to the severe limitations of human knowledge and cognitive power. Even intentionally crafted institutions, like the U.S. Constitution, have undergone several amendments since their creation. Each amendment to the Constitution was undoubtedly intended when it was ratified, but in what way and by whom were the revisions' outcomes planned? Maybe the Founders, whose "original intent" inspired the development of the Constitution and who also purposefully included a process for altering it. However, it would be strange to claim that the Founders "designed" the current Constitution since they could not have foreseen the modifications that have been made; in many ways, it is obviously an unintentional result of past decisions. Therefore, it is unclear whether the presumption that institutional designs are intended relates to the gradual evolution of the overall structure through time or the specific adjustments made at each stage. The existence of local or micro-level intentionality and the absence of global or macro-level intentionality are perfectly compatible.

The Rational Design project seems to fall firmly on the evolutionist side of this argument since uncertainty is a key component of the Hayekian case. The introduction and two of the empirical papers, however, contain assertions that cloud the situation. Koremenos, Lipson, and Snidal specifically contend that the notion of rational design may account for even organizations that have developed extremely gradually provided their norms have sometimes been the subject of deliberate choosing. They use sovereignty as an example, whose characteristics today are the product of several deliberate modifications made to the original Westphalian laws. Do the editors intend to imply that sovereignty as we know it today was "intended" in 1648 or that all of the individual designers of sovereignty since 1648 add up to a single, trans-historical designer? Rational-design theory may shed light on some of the micro-level causes of these changes. Probably not, but if so, a second, unintentional explanation for how sovereignty is organized now would be necessary. Additionally, Mattli contends that the evolution of

international private arbitration may be described by a process whose results are equal to those of a direct attempt at rational design.

Perhaps the point being made by these writers is related to their functionalism: We may refer to an institution as being "designed" if throughout time, actors intentionally alter it in such a way that the final outcome is functional. However, this seems to introduce a different concept of "functionalism" than the one that guides this book. If micro intention and macro intention are identical, then it seems that subjective and objective (or "trans-historically subjective") rationality are equivalent. But it can't be right, can it? Institutions may develop in a manner that is objectively functional as a result of incremental modifications, but this evolution is more of a covert than a deliberate process, and as such, it would have to be explained by the structures in which purposeful actors are immersed, not their intents. The distinction between "intentional" functionalism, where outcomes are explained by the expected results of intentional action, and "invisible hand" functionalism, where advantageous outcomes are explained by structural features of a system, may be useful if we stick with functionalist imagery. As it is, rational design theory is unable to account for the latter.

### iii. No Choice?

Last but not least, the word "design" tends to indicate that designers have the ability to behave differently and that their designs are "choices." This has to be more than simply an existential freedom in order to be fascinating. Assuming that people have free will, they can always "simply say no," even if doing so would result in their being shot. Instead, the assertion must be that actors have real options, particularly if we use the word "design" in an artistic context, which denotes a self-expression of desire when the designer had the option of acting differently but chose not to. Some philosophers have argued that the mechanical and deterministic nature of the rational-choice theory's picture of man makes actors into mindless gears in the machine of Reason, raising the issue of whether it is consistent with true choice. However, I will accept the premise that institutional designers make decisions at face value and instead concentrate on how structural limitations can prohibit them from doing so. Two other hypotheses, route dependence and teleology, both adequately explain the possible repercussions of such limitations.

Paul Pierson has thoroughly examined the consequences of route dependence for functional theories of institutional design. Would-be designers may encounter a significant accumulation of preexisting norms and practices, particularly when institutions are developed piecemeal rather than ex nihilo. Through a logic of "increasing returns," such historical structures enable the development of current norms and prevent the adoption of norms that would undermine them. Therefore, actors may be prevented by current institutions from making optimal rational decisions, whether for consequentialist or normative reasons. As a result, they get trapped in a path of institutional "design" that essentially removes their choice in the issue.

## III. CONCLUSION

The Rational Design initiative is a significant step in the direction of resolving the opening question. Through the functionalist premise that states will perceive subjectively what is objectively reasonable, it simply alludes to the second. The third or so of this volume is quiet. If all three questions were answered affirmatively, would it still be considered science? Most likely, it wouldn't fit the typical definitions of the phrase. To make social science relevant to the institutional design issues that face real-world decision makers (and us, their consumers), we need to expand our understanding of social science to include positive and normative concerns. Work influenced by Aristotle, Dewey, Buchanan, and Habermas has several representations of a useful social science. The significant effect of positivism on our field is likely one cause for this marginalization, but the long-standing theoretical supremacy of realism has given it further momentum. If international politics is destined to be a place of perpetual war, then normative concerns may be brushed off as "fantasy theory" and the future cannot be different from the past. The most we can hope for is survival, and all we need for that is a positive social science that uses lessons from the past to direct our trip "back to the future." The concept of institutional "design" is meaningless in such a limited and predetermined cosmos.

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