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**CONCEPTUALIZING THE NATURE AND MAGNITUDE OF  
THE TASK IN INSTITUTIONAL ANALYSIS AND DEVELOPMENT**

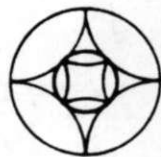
by

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Introduction

Those of us participating in this meeting share a basic concern with institutional analysis and development. Donor agencies working with the less-developed countries of the Third World have identified institutions as one of the important factors affecting potentials for greater achievements in human societies. The U.S. Agency for International Development, in particular, is concerned with taking new initiatives in the design of institutional developments as one of the principal pillars in its program. This emphasis upon the importance of institutional arrangements to developmental potential is, I believe, correct. What institutional analysis and development involves, how one proceeds with the task of institutional analysis, and what one does in undertaking institutional development pose problems that are not easy to resolve.

A great deal of work with "institutions as such" has been discredited as meaningless formalisms. Efforts to transplant American, British, and French institutions of government to Latin America and other parts of the world have not yielded the results achieved in the United States, Great Britain, or France. This would imply that institutional analysis and development cannot be confined to institutions as such, but must be explored within a more general frame of inquiry.

We have had long traditions of inquiry where particular types of institutions have been the objects of study in different academic disciplines and professional fields of study. Economists, have traditionally studied market institutions; lawyers, law and the judiciary; and political scientists, government or the state. Students of public and business administration have been concerned predominantly with organization and management with special reference to bureaucracies. Sociologists have focused upon a level of analysis that is intermediate between organizations and societies-as-a-whole. Much effort has been devoted to such inquiries over a long period of time. Without a common technical language, a common theoretical apparatus, or a shared capability for translating from one to the other, it is difficult to relate work in these diverse fields of inquiry to the more general enterprise of institutional analysis and development.

We are left in a position where reference to institutions as such is flawed and where work with particular types of institutional arrangements does not permit an accumulation of knowledge that permits us to address the relationships among institutions and how those relationships apply the pursuit of developmental opportunities. While we view the relationships between institutions and development to be an important one, we have less confidence in identifying the nature of the task and how to proceed in doing institutional analysis or undertaking institutional design.

We have some reason to be encouraged by the more recent efforts of scholars working at the intersections of different fields of inquiry to address problems of institutional analysis in new ways. This work is proceeding at the intersection of interests in law and economics, law and anthropology, and the application of economic and jurisprudential reasoning to the study of decision making in both market and nonmarket institutions. Renewed interests in constitutional choice, property rights, and transaction costs are stimulating the development of new approaches to institutional economics.

Some of these recent developments are providing conceptual tools that enable us to reread and rethink many important contributions to economic, political, and social analysis undertaken in the seventeenth, eighteenth, and nineteenth centuries. Work by Hobbes, Locke, Montesquieu, Rousseau, Hume, Smith, Hamilton, Madison, Tocqueville, and many others, enables us to understand that different design principles can be used to create differently patterned institutions in human societies. By drawing both upon recent works and reconsidering earlier works, we can begin to appreciate that diverse institutional arrangements are available to human beings for creating their social realities. These diverse possibilities establish the grounds for institutional choice. Institutional analysis has the possibility of informing institutional choice; and institutional choice is the basis for institutional design and development.

In an effort to frame the problem of doing institutional analysis and undertaking institutional development, I shall focus upon patterns of adaptation that contribute to human potentials for development. Increasing variety in both biological and human cultural evolution is accompanied by the development of increasing complex social orders. The critical problems are those associated with complexity. Modern "developed" societies are those that have capabilities both for autonomous development and self-governance in systems of orders that manifest increasing complexity. After, first, exploring the human condition and its relationship to developmental potentials, I shall, second, examine the nature of institutions and their relationship to self-organizing capabilities. I shall, third, explore the task of framing modes of analysis that can be used both in institutional analysis and institutional development.

The Human Condition and Its Relationship  
to Developmental Potential

Forms and Processes of Adaptation

Human beings as a species have an extraordinary heritage yielding an adaptive potential that is greater than that available to any other species. The most fundamental modes of adaptation are those associated with: (1) genetic adaptation and its place in biological evolution, (2) learning and its place in the adaptations that creatures with central nervous systems can make to exigencies of life within the lifetime of individual members of a species, and (3) the articulation, communication, and accumulation of learning through the instrumentalities of language that yield cultural evolution in human societies. The potential for learning accrues as a function of genetic evolution; but that potential is radically amplified by recourse to languages as instrumentalities for acquiring, articulating, communicating and accumulating knowledge across generations. Development accrues as increments in knowledge yielding new opportunities that could not have been achieved in the absence of knowing how conditions can be arrayed to create desired effects or states.

Different forms of adaptation are characterized by processes for achieving covariant relationships which establish patterns of fit among elements at different levels of existence in an evolving order. All forms of adaptation involve openness to variety. There is, thus, some potential for one-many transformations to occur as distinguished from the one-one transformations that occur in purely determinant mechanical orders. All systems that are capable of adaptive responses have recourse to some process for generating potential variety. These are accompanied by other processes of selection, which imply that the one-many transformations are, in turn, accompanied by many-fewer transformations. Only that variety is preserved which survives processes of selection and continue to be reproduced or reiterated through time. Some genetic variations in biological reproduction survive and continue to be reproduced to yield changing patterns in life forms. Forms of life are, as a consequence, subject to increasing complexity both in the variety of species and in the evolution of more complex organisms among species.

Learning accrues as a function of cognitive processes and motor facilities associated with the evolutionary development of animal life. Sensory mechanisms and cognitive processes of the central nervous system enable animals to make stable associations with regard to recurrent events in their environments, and then to induce variety by the way that they act with reference to those events. Learning organisms also have reference to internal indicators experienced as feelings which express preferences or aversions. Among human beings, feelings also establish the basis for empathy with others, and what it means "to be" at other levels of experience. Diverse ways of acting in recurrent circumstances yield different consequences. These are then subject to selection by their effect upon an organism's survival

and well-being. Learning, thus, includes consideration of alternative courses of action and a selection or choice among those possibilities to yield better results. When such circumstances are recurrent, advantageous results are readily reproducible by memory of prior associations and are reinforced by repeated experience.

With the development of languages, human beings have radically amplified their capabilities for learning by being able to organize and express their learning as knowledge, communicate it from one individual to another, and accumulate knowledge over succeeding generations. The development of written and printed languages, as distinguished from spoken languages, has in its turn greatly amplified human capabilities for organizing, transmitting, accumulating, and using increasingly large aggregations of knowledge for shaping the conditions of human life.

#### Processes of Cultural Evolution and Human Development

The process of human cultural evolution, where culture is defined as that which is learned or derived from learning, occurs in complex co-evolutionary processes. Processes of acquiring and transmitting new knowledge are accompanied by parallel processes for creating order in human relationships so that human beings can take advantage of one another's capabilities and come to know the meaning of diverse levels of reality. If the accumulation of potential variety, associated with learning among human beings, were to occur without an accompanying process for creating order in human relationships, human beings would have faced a threat of chaos and have exhausted their potential for increased learning. A threat of chaos arises when variety in the behavioral repertoire of human beings no longer enables human beings to form stable expectations about how other human beings will behave in diverse situations. The failure of the behavioral sciences to predict regularities in stimulus-response situations that apply to all human beings in all societies indicates the magnitude of the problem.

Learning can continue to occur only in the presence of constraint. Predictable regularities must exist before learning organisms can act with advantage by adopting stable and productive ways for dealing in recurrent situations. A general response to a threat of chaos in all human societies is to rely upon the vehicle of language to order human relationships by reference to rules. Each individual may, then, form stable expectations about how others will behave in specifiable situations. By knowing the rules of the road, for example, great numbers of automobile drivers learn to make split-second decisions about how to act with a reasonably high level of confidence. This makes it possible for each driver to act with reference to others in a predictable way and arrive at a specific destination of his or her own choice with a high probability of success.

The potential for continued advances in human development turns both upon extensions of knowledge that give rise to the creation of new possibilities, i.e., to increases in potential variety, and upon

parallel processes for creating order in their relationships so as to establish predictable expectations, and a shared pattern of order, in relating to one another. Predictability in expectations further enables human beings to take advantage of one another's capabilities to engage in mutually productive relationships and come to know the meaning of various types of social experience as institutional arrangements. Each individual is, thus, able to achieve potentials that could not be achieved by acting alone.

Wherever individuals pursue opportunities that are to their joint and mutual advantage on a continuing basis, they again confront the problem of ordering relationships with reference to rules with regard to the tasks to be accomplished. Relationships within any particular enterprise are ordered by what John R. Commons called the working rules of the going concern. The basic architecture of rule-ordered relationships is reiterated throughout human social relationships. This implies that a critical variable in human development pertains to the extent to which members of societies acquire two types of skills. One involves an artisanship in transforming factors into products; the other involves working out stable, productive, predictable, and meaningful ways of relating to one another in the pursuit of joint endeavours. These two revolutionary aspects of human cultural evolution relate to one another, as in all forms of adaptation, by the fit that is achieved. Fit takes account of the way that elements are transformed into products and the way that human beings relate to one another in mutually productive, beneficial, and meaningful ways. Each process must achieve a fit with the other.

The creation of order that is consistent with further learning, acquisition of knowledge, and the development of new possibilities means that human cultural evolution is characterized by increasing complexification. This complexification is manifest in the growth and differentiation of specialized fields of knowledge and in the growth and differentiation of professional and occupational skills that apply specialized fields of knowledge to human endeavours. Similar patterns of complexification are also characteristic of both the variety of tools and the complexity of particular tools that human beings use in their diverse endeavours. Industrialization is a process of assembling tools in large facilities so that manufacturing occurred in a sequential flow of transformations where artisans pursued their craft in a vast assemblage of tools. In turn, particular tools, like aircraft used to transport people on intercontinental flights, have become instruments of extraordinary complexity. Much the same observations could be made about the social artifacts which we call money and use as media to facilitate the exchange of goods and services.

This same principle applies to the goods and services available to communities of people in organizing their conditions and ways of life. Modern societies probably have access to hundreds of thousands of different types and variations of goods and services that are potentially available for the use and enjoyment of human beings (Hensel, 1974). Each depends upon some technology to yield the transformations that are necessary to produce a good or service. The

principle of complexification also applies to the establishment of rule-ordered relationships among those people who are engaged in a vast variety of different endeavours and share different types of social experience with one another.

The condition of human cultural evolution and development depends upon each new generation acquiring the knowledge, skills, and sensibilities, continuing the productive efforts of prior generations, and making its own advances in the unfolding of new ideas and new possibilities. Whole infrastructures of educational facilities, laboratories, research facilities, associations, and enterprises contribute to the transmission and acquisition of knowledge, skills, and sensibilities to inform the productive activities that go on in a society. Economic activity pertaining to the production and distribution of tangible goods is only a more apparent manifestation of the efforts that are constitutive of the ways of life in a society. The transfer of developmental capabilities to less developed societies implies important changes in fundamental ways of life and experiences.

#### Innovations, Uncertainties, and Anxieties

The magnitude of problems associated with human cultural evolution and development becomes apparent when we reflect upon the way that deliberate strategies of inquiry were developed in what might be called the age of discovery and enlightenment that opened with Copernicus, Galileo, Bacon, Newton, and a multitude of others. Intellectual frontiers were advanced not by relying exclusively upon random innovations but by using search procedures aided by modern methods of inquiry. Discovery is facilitated by providing general explanatory accounts of causal relationships. The demands of the new methodology was to provide a public explanation that would enable anyone else following the same procedures to achieve comparable results. This method required explanations that would withstand critical scrutiny and be reproducible by experimental methods. The development of a method to facilitate learning implies that human beings learn how to learn.

The development of a new cultural tradition devoted to scientific inquiry has radically accelerated the generation of new knowledge, technologies, and productive potentialities. This is the process that has driven the development of modern civilization. It comes with correlative burdens that are often overlooked. As the generation of new knowledge and the development of new possibilities have accelerated, human beings correlative face an increasing magnitude of uncertainty about the future. Creatures that generate new knowledge and evoke new possibilities must necessarily create uncertain futures for themselves. They cannot know what the future holds in the absence of knowing how new advances in knowledge will transform the future exigencies of life. Long-term, comprehensive planning is not possible in such circumstances. The more rapid the generation of new knowledge, the greater the uncertainty in anticipating the future; the longer the time horizons, the greater the degree of uncertainty about the future.



The relationship between the generation of new knowledge and uncertainty about the future is the source of serious anxieties in human societies; and these anxieties are likely to be greater among those elements of a population or among those peoples who do not understand the processes that are at work in transforming long-established, traditional ways of life into unfamiliar ones. Anxieties about the future may lead to a quest for solutions that assume Utopian proportions. There may be strong tendencies to wish for a return to the simplicity of an earlier order. Wishful thinking, if based upon invalid conceptions, may lead to social movements where instrumentalities of coercion associated with institutions of government are mobilized to repress methods of critical inquiry and demand increasing sacrifices to achieve unattainable goals. Human fallibility is accompanied by potentials for error that can assume disastrous proportions.

These tendencies may manifest themselves in any society. The rise of Hitler in one of the more scientifically-advanced societies indicates the destabilizing effect that anxieties about uncertain futures can have anywhere. We can expect these anxieties to reach more serious proportions among the less-developed countries of the world as they move toward the patterns of development associated with the more developed societies. No society is immune from such anxieties.

This is a process that we ourselves do not adequately understand. Basic considerations are at work, however, which cannot be ignored. One is the way that innovation in science, technology, and artisanship must be accompanied by parallel processes for creating commensurate patterns of order in human relationships so that human beings can take best advantage of unfolding opportunities, while attempting to reduce the costs of dislocation and uncertainty that necessarily accompany change. This process is one that is accompanied by increasing complexification.

#### Conditions for Achieving Continued Development

These difficulties are potentially subject to resolution when people in human societies achieve capabilities for both self-development and self-government. Self-development can occur where there is a critical appreciation for using methods of inquiry to provide a general explanation of unfolding possibilities that are assessable and comprehensible to others. The high degree of randomness in this process of search and discovery implies substantial uncertainty. Public explanation and critical assessment allows for an awareness to develop about the potential opportunities and risks that are implied. A capacity to act so as to foreclose some possibilities that are detrimental to human welfare while leaving open other possibilities that contribute to continued advances in human welfare must occur in a process that parallels that of discovery and innovation. This implies that self-organizing (self-governing) capabilities are necessary for achieving and sustaining development in any society. The reiteration of these processes with substantial

degrees of spontaneity is a measure of the self-developing and self-organizing capabilities achieved by any society.

#### The Nature of Institutions and Potential for Self-Governance

Order in human societies is achieved by reference to rules. In exploring the relationship of institutional analysis and development to other aspects of human development associated with the generation of new knowledge, technologies, and productivity, we need to explore a potentially knowable universe of discourse that applies to rules and the maintenance of rule-ordered relationships in human societies. Aspects of the rule-ruler-ruled relationship imply patterns of dominance that are not easily reconciled with potentials for self-organizing capabilities associated with self-governance.

#### The Nature of Rules

Rules are linguistic structures that enable human beings to distinguish the realm of all possible actions into those that are prohibited, permitted, and required. The possibilities foreclosed establish limits to human conduct; and the possibilities permitted leave open a range of opportunities that are subject to choice. Rules thus establish constraints that allow for predictability in human relationships, while leaving open a range of possibilities to take account of other calculations that impinge upon human welfare.

#### Norms and Normative Inquiry

The distinction between that which is prohibited and that which is permitted implies that all rules have reference to some norm or criterion for making distinctions. In simple cases, these distinctions may have reference to relatively objective criteria such as moving to the left or moving to the right as in driving an automobile or in establishing priority by first in time, first in right. All systems of rules, however, go on to implicate criteria that have reference to making interpersonal comparisons of an ethical or moral character that have to do with avoiding harm for others and taking account of interdependent communities of interest and meaning shared with others.

All rule-ordered relationships, thus, are based upon presuppositions that methods of normative inquiry exist so that human beings can come to know the meaning to be associated with value terms that establish norms and criteria for choice. A capacity to distinguish right from wrong is an essential criterion in establishing the competence of individuals to make responsible choices. To act with reference to a rule requires that individuals make normative distinctions to apply rules; and to enforce rules requires that norms and criteria of choice be subject to public understanding by all of those who are involved.

When institutions are defined as systems of rule-ordered relationships, both the working of institutions and the analysis of institutions depends upon methods of analysis for assigning meaning to value terms. In an essay on "A Fallibilist's Approach to Norms and Criteria of Choice" (V. Ostrom, 1985c), I have indicated how Hobbes, Hume, and Smith have addressed this problem and provided an explanation for how human beings derive general criteria for distinguishing right from wrong, just from unjust, and the calculations that pertain to economic well-being. The method is inherent in the ancient moral precept which we identify as the Golden Rule. In the absence of knowledge about what the future holds, it becomes possible for human beings to order their relationships with one another in mutually respectful and productive ways as the future unfolds. Learning to make distinctions based upon the meaning of value terms in constituting mutually respectful and mutually productive communities of relationships is the ground for knowing what it means to be free.

Making interpersonal comparisons about norms or criteria of choice is much more difficult to achieve across human societies that have reference to different cultural traditions. Such comparisons are theoretically possible, but they are subject to all of the difficulties that are inherent in translating from one language to another in a way that takes account of the full nuance of meanings to be assigned to terms in different languages. Cultural traditions associated with the meaning of value terms and methods of normative inquiry are among the important elements to be taken into account in any efforts to undertake institutional analysis and development that apply to people of different cultural traditions.

#### Counterintuitive Relationships and Positive Inquiry

Apart from normative considerations, which distinguish that which is prohibited from that which is allowed and provide the moral foundations for social order, puzzles also arise about the counterintuitive character of the relational aspects of rules. Rules always take account of interpersonal relationships involving motives or intentions, interactions, and the consequences which follow. Difficulties arise in making a positive assessment of conditions and consequences associated with rule-ordered relationships because the consequences may be contrary to motives or intentions of actors. Private vices can yield public good; rule-ordered relationships may involve counterintuitive relationships. What is presumed to be a common-sense relationship may not be valid. It is for this reason that Tocqueville indicates that self-interest is not an adequate basis for human activity "without understanding the science that puts it to use" (I: 11). Thomas C. Schelling's Micromotives and Macrobehavior is the fullest account of the counterintuitive effects yielded in human interactions.

Hobbes's analysis of man in a state of nature indicates how patterns of human relationship which are devoid of any enforceable rules whatsoever will, under conditions of scarcity, yield

consequences that are contrary to intentions. Each individual seeks his own good. Conflict over scarce goods escalates to a point where each individual is at war with every other individual. Individuals who sought their own good become involved in patterns of interaction that yielded misery instead.

Competitive markets yield counterintuitive effects. Each producer is motivated to maximize profits. Competitive rivalry in a market with many producers creates pressures to reduce profits and to lower prices. Lower prices yield increased consumer surplus at the cost of lowered producer profits. A similar principle operates wherever competitive rivalry occurs. Rivals struggle to "win" or to gain dominance. Innovations offer prospects for an advantage to accrue to the rival introducing an innovation. Other rivals then have incentives to acquire the innovation and whatever advantage it offers. Short-term tendencies to introduce innovations are accompanied by long-term tendencies among rivals to acquire like capabilities. Competitive rivalry yields tendencies toward convergence. Conflict as well as cooperation among equals and adherence to common rules of law all have tendencies that yield regularities in human societies. Each may have important contributions to make to achieving fit in a dynamic environment subject to high levels of innovation and change.

Similarly, bureaucratic structures with a strict superior-subordinate relationship are intuitively assumed to be a rational way of maintaining a uniform pattern of order associated with legal rationality. This conception of bureaucracy as an ideal-type organization that is capable of maintaining a rational legal order was developed by Max Weber. However, his description of a fully developed bureaucracy assumed counterintuitive proportions where such a structure cannot be controlled by anyone — political masters, professional bureaucrats, or anyone else. The critical computation that was ignored in Weber's account of bureaucracy is the loss of information and control associated with the span-of-control problem. When this factor is taken into account, bureaucracies yield counterintuitive effects where predictable patterns of institutional weaknesses can be expected to manifest themselves. These effects can be expected to diverge most sharply from the intentions of those who assume that bureaucratic structures provide them with a perfect command-and-control system.

The counterintuitive characteristics that are likely to pervade human institutions means that they are subject to specifiable limits. When those limits are not recognized, we can expect institutional weaknesses and institutional failures to occur. We are thus confronted with a circumstance where both institutional analysis and institutional design need to take account of capabilities and limitations which can be expected to apply in an assessment of what effects are likely to be yielded by the way that human relationships are structured in particular types of situations.

Failure to take account of the counterintuitive character of relationships inherent in human institutions gives rise to two extreme tendencies. One is to represent institutions of a particular type as

diabolical machines that have the effect of perverting human relationships or, in the extreme, enslaving mankind. In Karl Polanyi's The Great Transformation, market institutions are viewed as such diabolical machines. Marxist traditions also view markets as diabolical machines enslaving workers. Neoclassical economists by contrast view market structures as equilibrating machines adjusting supply and demand by prices which equate the value of all goods and services subject to exchange relationships. In some cases, like Weber, we have bureaucracies being portrayed as ideal models for achieving legal rationality on the one hand and as diabolical machines capable of enslaving mankind on the other. Discourse about diabolical machines and perfectly operating mechanisms does not have much to contribute to either comparative institutional analysis or to institutional design in practical circumstances.

Instead, we face the circumstance of recognizing that both market arrangements and bureaucratic structures are subject to variable characteristics that must take account of different analytical circumstances. Fortunately, human beings in all different societies face similar contingencies having to do with land, water, climate, environmental conditions, and productive processes which enable comparisons to be made in the study of human institutions. Some factors can be sufficiently specified to test hypotheses about the working of different types of institutional arrangements. We then have the prospect for testing conjectures about the counterintuitive effects that may be yielded by human institutions across a variety of different circumstances. Both normative considerations and relational contingencies enter into the way that human beings pursue strategies within sets of rule-ordered relationships that apply to the opportunities that are available to them in specific types of situations.

#### The Maintenance of Rule-Ordered Relationships

Rules also have the further characteristic that they are human artifacts that do not have an existence apart from their meaning for and use to human beings. Rules as such are not self-formulating, self-applying, and self-enforcing. Instead, it is human beings who formulate rules, apply rules, and enforce rules. This consideration needs emphasis because it is meaningless to refer to institutions as such. They acquire their meaning and usefulness only when given meaning and put to use by human beings.

The fact that rules are not self-formulating, self-applying, and self-enforcing means that human agents must perform these functions. Since specialized agency relationships having to do with formulating rules, applying rules, and enforcing rules may be performed by individuals other than those who are immediately involved in any given field of action, various rule-ordered relationships will co-exist and function interdependently with one another. In an effort to distinguish these realms, I shall identify three levels of rules that apply to: 1) authorized relationships. 2) authoritative relationships, and 3) constitutional relationships. All three of

these realms form the aggregate structure of authority relationships that exists in a society. How rule-ruler-ruled relationships are structured in human societies will be explored in the following section.

Authorized relationships can be defined as specifying an authority to act in relation to the ordinary exigencies of life. This is the world of action as formulated by Riser and Ostrom in their "Three Worlds" paper (Riser and Ostrom, 1982). This is the right-duty relationship as formulated in Wesley N. Hohfeld's Fundamental Legal Conceptions and in John R. Commons's Legal Foundations of Capitalism. Many aspects of law, that have to do with property rights and exchange relationships and are denominated as pertaining to private law within the Roman code-law tradition, would apply to the domain of authorized relationships.

Commons specifies a paradigm of relational contingencies where one's rights are correlated to others' duties. Another's duties have limits that establish liberties to act in the same way that one's rights have limits that establish one's exposures. In turn, another's liberties is correlated with one's exposures. Rights and liberties assign capabilities while duties and exposures assign limitations to act.

Wherever conflicts arise in determining the application of a rule and in enforcing a rule, a domain pertaining to authoritative relationships is invoked. This domain is the world of collective action in the Riser and Ostrom formulation and of power-liability relationships in the formulations advanced by Hohfeld and by Commons. There is a sense in which ordinary law in the world of action depends upon an extraordinary exercise of authority that has to do with formulating, applying, and enforcing legal relationships. Activities associated with "government" turn in essential ways to formulating law (legislative), applying law (adjudicative), and enforcing law (executive). Authoritative relationships have to do with something called government. Government in a generic sense is what Riser and Ostrom call the world of collective action.

As both Commons and Hohfeld emphasize, right-duty relationships in the world of action are closely correlated to power-liability relationships. A right that cannot be enforced is without meaning. The meaning of a right depends upon the availability of remedies which establish entitlement to enforce a right. A right without a remedy (i.e., a capacity to enforce a right) is without effective meaning in the world of action. Right-duty relationships are thus correlated with the performance of those who exercise authoritative relationships that have to do with determining, enforcing, and altering legal relationships. If authoritative decisions are exercised in an arbitrary way, then persons who presumed to have a right may then find themselves standing exposed, without an ability to enforce that claim to right.

The way that authorized relations are correlated to authoritative relationships indicates patterns of interdependency that exist among

diverse institutional arrangements in human societies. Market transactions, for example, can be more easily and extensively pursued to the extent that confidence exists in the reliability of decisions taken by those who exercise the authoritative decisions having to do with applying and enforcing legal relationships in market transactions. Where that confidence is lacking, exchange will be confined to simultaneous trade relationships or to relationships among known trading partners.

The correlative relationship between authorized and authoritative relationships and the problems that arise from arbitrary decisions by authoritative decision makers give rise to constitutional considerations. A constitution can be viewed as a set of rules that specify the terms and conditions of government. Constitutional relationships pertain to setting and maintaining the terms and conditions of government, i.e., the set of rules that apply to authoritative relationships and that govern authorized relationships. A people who are capable of setting, maintaining (applying and enforcing), and revising the rules that apply to the processes of government in diverse exigencies are capable of self-governance.

This set of relationships has not been adequately addressed in analytical jurisprudence. Yet, constitutional considerations have an important bearing upon the way that authorized relationships and authoritative relationships are correlated with one another. Critical questions arise about the way that rules formulated at the constitutional level can be applied, enforced, and revised so as to establish the terms and conditions of government and maintain due processes of law that apply to taking reliable decisions of an authoritative nature. To resolve this issue requires an examination of the structure of rule-ruler-ruled relationships in human societies.

#### The Structure of the Rule-Ruler-Ruled Relationships

The linguistic character of rules and their dependency upon agency relationships implies that fundamental inequalities or asymmetries must exist as a necessary condition for the maintenance of order in human societies. Rules to be effective in binding human actions depend upon some form of ruler-ruled relationship. Furthermore, the exercise of rulership prerogatives depends upon the use of sanctions where it is possible to impose penalties to maintain law as enforceable rules. The exercise of authoritative prerogatives implies that their rightful exercise involves a power by some to impose sanctions or penalties upon others.

Fundamental inequalities between rulers and ruled exist; and those inequalities extend to the lawful use of instruments of coercion to impose deprivations upon others. Those who exercise the prerogatives of government that pertain to formulating, applying, and enforcing rules of law have access to prerogatives that can dominate the allocation of values in a society and allow some who function as rulers to exploit others who are subject to their rulership. The rule-ruler-ruled relationship is the most enduring source of the

inequalities that accompany opportunities for oppression and exploitation in human societies. Working out the terms and conditions that apply to the rule-ruler-ruled relationship is the most critical problem in the constitution of order in human societies.

Two fundamentally different design principles have been formulated for working out the rule-ruler-ruled relationships in human societies. One is most fully expounded by Thomas Hobbes in Leviathan. The other can be best understood by reference to Montesquieu's The Spirit of the Laws, to essays by Hamilton and Madison in The Federalist, and to Tocqueville's Democracy in America in contrast to his Old Regime and the French Revolution. I have elaborated upon the latter formulation in my Political Theory of a Compound Republic. A brief comparison of the two formulations is made in an essay on "Constitutional Considerations" (V. Ostrom, 1985a). Adolph Gasser, in Geschichte der Volkfreiheit und der Demokratie (History of Freedom and Democracy), distinguishes the principle of Herrschaft (lordship; dominance) and the principle of Genossenschaft (comradeship; association) as the two fundamental principles used in the governance of human societies. I shall briefly state only the barest essentials of the two formulations in this presentation.

#### Sovereignty and Monocentricity

Hobbes proceeds on an assumption that human beings in any given society depend upon a common set of rules for ordering their relationships with one another and that a common body of law depends upon a single source of law. The unity of law depends upon a unity of power. He expounds a theory of sovereignty where rulership resides in one man, or in one body of men, who exercises the ultimate powers of government in any given society. This is consistent with the definition of a state as a monopoly of the exercise of authoritative relationships in a society. Given presumptions about the unitary character, or monopoly structure, of the fundamental institutions of government, Hobbes then identifies the basic attributes that necessarily accompany such relationships. The prerogatives of sovereigns are unlimited so far as subjects are concerned: a right to govern implies no enforceable legal duty to subjects. Since their powers are unlimited, those who exercise sovereign prerogatives are not accountable to other human beings in a society. Those who are sovereign are the source of law, and as such, they are above the law and cannot be held accountable to law. It is within the prerogative of sovereigns to decide what means may be necessary for peace and prosperity of commonwealths. The prerogatives of sovereigns are indivisible. Thus, prerogatives of law making, law applying, and law enforcing can have a basic integrity only if these processes are unified in a single ultimate source of authority in a society. A state, thus, is a unitary control apparatus that is capable of functioning as an autonomous actor that rules over society. The basic structure of ruler-ruled relationships is a superior-subordinate relationship where those who are not sovereign are subjects.



There is a fundamental puzzle in a unitary concept of sovereignty, i.e., the authority to govern. Those who are sovereign are the source of law and as such are above the law and cannot be held accountable to law. They are in some basic sense free to be outlaws. Locke recognized this when he observed:

For the same persons who have the power of making law to have also in their hands the power to execute them, whereby they may exempt themselves from the obedience to the laws they make, and suit the law, both in its making and execution, to their private advantage, and thereby come to have a distinct interest from the rest of the community contrary to the end of society and of government. . . .  
(Locke, 1952: Para. 143).

Persons who exercise sovereign authority or act as agents of sovereigns are not only in a position to exempt themselves from law but to exempt others as **well**. This is why bad **laws** become "traps for money" as Hobbes recognizes and why political regimes provide unique opportunities for some to exploit others. Yet, Hobbes argues that to create someone to judge the sovereign is to create a new sovereign. There comes a point where a reliance upon human agents to exercise the prerogatives of a single sovereign means that the ultimate source of authority is paradoxically beyond the reach of law.

In his passage on the natural punishments Hobbes recognizes that sovereignty is an insufficient condition for a stable and prosperous commonwealth. He argues that basic attributes of humanity require that human societies be built upon conditions of reciprocity and mutual respect. He attempts to achieve these conditions by holding sovereigns accountable to God and the maintenance of a worshipful obedience that is respectful of the basic attributes of humanity on an assumption that such attributes are consistent with the eternal laws of God's kingdom by nature. Hobbes's solution falls in the absence of those conditions.

Hobbes's theory of sovereignty might be viewed as an interesting intellectual curiosity except for the circumstance that numerous approaches to a theory of government also turn upon presuppositions that a unity of power is necessary to a unity of law and that any system of government involves a monopoly over the legitimate use of force in a society. Those who occupy that monopoly position cannot lawfully be held to account by others; they are a potential source of arbitrary authority that can be used to repress and exploit others. Lenin's theory of revolution involves similar presuppositions where it is the leadership of the Communist party that organizes and directs a revolutionary movement and uses the coercive instrumentalities of the state to undertake the essential transformations in fashioning a socialist society. The state never withers away as presumed in Marxist theory; and the leadership of the Communist party continues to exercise rulership prerogatives over socialist societies organized on **Leninist** principles. The leadership of the Communist party is sovereign and exercises a monopoly over the coercive instruments of power in socialist societies.

Miles Copeland, in The Game of Nations, demonstrates how similar calculations have been used as a recipe for organizing successful military dictatorships among nations that are allied with American efforts to fashion a coalition of nations identified with the "Free World" (V. Ostrom, 1985b). The first order of priority in the organization of a successful coup d'etat or revolution is to consolidate control over the repressive instrumentalities of state power and establish a monopoly of the instruments of coercion. We, thus, find many political structures constituted on the basis of formulations that are characteristic of Hobbes's theory of sovereignty. This is the prevailing pattern of political organization among most countries in the Third World.

#### Constitutional Rule and Polycentricity

An alternative way of constituting the rule-ruler-ruled relationship can be derived by making reference to a democratic alternative as conceptualized by Hobbes. Hobbes defines a democracy as that form of government where an assembly of all citizens, who would come together, exercise the prerogatives of government (sovereignty) in a society. Rule by an assembly depends, however, upon a people having worked out mutually agreeable terms and conditions that specify the rules of assembly. When we distinguish the rules that apply to the organization of an assembly from the rules adopted by an assembly to govern other relationships in a society, we are making a basic distinction between constitutional rules and the rules that are enacted in the exercise of governmental prerogatives. Those rules adopted by an assembly to apply to people in the ordinary exigencies of life, refer to ordinary laws, i.e., authority to act. People who make decisions about the terms and conditions that apply to the conduct of an assembly as a government are making constitutional decisions. People who participate in an assembly and formulate rules that apply to the lives of people outside of an assembly are making authoritative decisions and functioning as a government. People who pursue activities and relate to one another in market places, and in the other exigencies of life, are making authorized decisions. Authorized decisions may also have constitutional implications as these pertain to the constitutional authority of persons and citizens in a democratic society. People in a democracy then function both as rulers and as subjects. Their fundamental task is to sort out the discrete realms of law that apply to constitutional relations, authoritative relations, and authorized relations so as to maintain a system of law within the bounds of what is right and just in mutually respectful and productive communities of relationships.

Drawing upon these distinctions it becomes possible to devise a system of constitutional rule that applies to more extended systems of governance. Principles of constitutional choice can be reiterated to apply to multiple units of government that implicate diverse communities of interest in federal systems of government. Within particular units of government, authority can be distributed in ways so that all exercises of the prerogatives of governance are subject to limits and no one can exercise unlimited authority. This depends upon

a division of authority and responsibility among diverse decision structures. Such an allocation of authority is reflected in modern societies by establishing the constitutional prerogatives of persons and citizens which place correlative limits upon the authority of governmental officials. Officials are, in turn, subject to a division of authority reflected in a distinguishable organization of legislative and judicial bodies apart from executive instrumentalities. Constitutional provisions further specify linkages that allow either for the direct or indirect participation of citizens in the formal instrumentalities of government. Elections provide for an indirect participation when citizens select those who do become legislators, executives, or judges. Juries provide the occasion for direct participation of citizens in judicial processes. Further, constitutional decision processes can be distinguished from other processes of governmental decision making; and citizens can participate directly in constitutional decision making, through such constitutional processes as constitutional conventions, constitutional initiatives, and constitutional referenda. Governments then are not free to establish their own terms and conditions of rulership, but can be held accountable by citizens who exercise essential constitutional prerogatives in establishing and revising the basic terms and conditions of government and by directly or indirectly participating in the other processes of government.

Government, under these circumstances, takes place through concurrent exercises of authority by diverse instrumentalities and processes of governance that are subject to potential vetoes to maintain the exercise of all authority within limits. Judicial processes afford any person with veto capabilities when governmental authorities violate the constitutional rights of persons or citizens or fail to discharge their responsibility in accordance with due processes of law as established by rules of constitutional law that specify the terms and conditions of government. A due process of law has meaning in establishing equivalencies in the exercise of right-duty, and power-liability relationships in accordance with constitutional requirements. Constitutional requirements necessarily turn upon a shared community of understanding about the meaning of value terms and a critical understanding of the counterintuitive character of human institutions that yields a "utility of form" as Tocqueville would characterize the essential quality of institutions to life in a democratic society (Tocqueville, 1945: Vol. II, Book 4, Chpt 7).

A system of governance based upon principle of constitutional rule is one that manifests equilibrating tendencies. The basic design principle uses "power . . . to check power" as Montesquieu expressed the essential concept, in Chapter 11 of The Spirit of the Laws, or "opposite and rival interests" as Madison expressed much the same concept in Federalist 51. Something called government occurs within an interorganizational milieu. The diverse processes of governance occur in multiple structures that can be potentially linked as a series of simultaneous and sequential games when human institutions are viewed from a game-theoretical point of view as being playable games. The emphasis is upon sharing power with others rather than exercising power over others.

Potential for Self-Governance

When a system of governance based upon principles of constitutional rule is contrasted to one organized on a unitary theory of sovereignty we can ask whether it is possible for human societies to become self-governing rather than be dependent upon circumstances where sovereign states rule over societies. This requires us to consider whether a unity of power is necessary to a unity of law or whether human beings can assess the interdependence of interests associated with conflict and perceive the way than an incremental structure of rules can establish the basis for a mutually respectful and productive community of relationships. Where a unity of power is assumed to be necessary to a unity of law, the basic structure of authority relationships is viewed from a top-down perspective. There is some high authority that exercises the ultimate prerogatives of government and is beyond accountability to others. The unity of law is reflected in a uniform structure of law that applies to everyone throughout a domain who is subject to a common body of law.

Where principles of constitutional rule generally prevail there, by contrast, is an effort to achieve consensus about the terms and conditions of governance that are applicable to any association, enterprise, and community of interest. Where conflicts occur, institutional arrangements are available to process conflict in ways that facilitate conflict resolution. Conflicts among diverse communities can be addressed in relation to another more encompassing community of interests that include reference to the those who are in conflict.

This shift from less encompassing to more encompassing communities of interest to resolve conflict has the potential for yielding the same manifestations of centralization of authority that is inherent in a unitary theory of sovereignty unless there are well-established limits upon all governmental authority. Citizens must be able to maintain an extended realm of activity that is free from interference and dominance by governmental officials and is subject to substantial degrees of spontaneous organization by individuals. This possibility critically bears upon constitutional rights that have to do with freedom of speech, assembly, and communication so that individuals have independent grounds for processes of discussion, critical dialogue, and expression of preferences apart from the processes of government that can be dominated by officials.

Citizens might then have an independent capacity to assess and judge the performance of officials and the way that institutions of government may work to yield consequences in the governance of society. Further, constitutional authority would apply to the independent standing of persons and citizens and their authority to associate together to accomplish joint tasks of mutual benefit including that of opposing measures taken by officials and advancing proposals to alter the terms and conditions of government. The independent standing of religious institutions, institutions of press and publicity, and of voluntary associations provide an infrastructure

that can countervail to maintain the independence of citizenship and public opinion in juxtaposition to the authority of officials in the most encompassing unit of government.

Where there is an awareness of a logic of collective action and of the constraints that apply to the exercise of the prerogatives of constitutional choice, we can contemplate conditions where people can achieve self-organizing capabilities both in the governance of their individual affairs and in the governance of the affairs shared by diverse communities of interest. A rule of law under such circumstances is compatible with diverse patterns of rule-ordered relationships and does not require uniformity. A unity of law can be achieved in a complex order which allows both for diverse sets of rules and for processes to resolve conflicts of law when these arise. Patterns of order can be incrementally achieved which are open to substantial degrees of variety. This leaves an openness to continued learning and experimentations which allows for innovation and the pursuit of new developmental opportunities. Societies that are self-developing in the sense that they are autonomously capable of generating new knowledge, technologies, and productive potentials might also become self-organizing or self-governing in the sense that people are capable of fashioning their own patterns of order.

If a criterion of self-government is to be applied to institutional analysis and development, we might consider whether such capabilities may manifest themselves in the context of diverse institutional arrangements in human societies. It would be a rare society where people have not achieved some levels of organization where they are capable of mutually productive communities of relationships which include capabilities for maintaining enforceable rules. These conditions might be achieved in families, more extended kinship structures, work teams, warrior societies, neighborhoods and villages, or in other types of collective endeavour including outlaw societies and revolutionary groups. We might assume that every society has learned to cope with elemental problems of organization having to do with family life, teamwork, exchange relationships, the management of common-pool resources and facilities, the provision of collective goods, and conflict and conflict resolution. Where "informal" markets arise, for example, we might expect to find the manifestation of self-organizing capabilities with high degrees of complexity pertaining to the operation of diverse enterprises, maintaining lawful relationships among enterprises and with other market participants together with correlative institutions of governance. It is from these experiences that institutions evolve. An explicit awareness of the contingencies that apply to institutional analysis and development can be derived from reflecting upon such experiences in light of an understanding of alternative ways of addressing the same experiences.

A comparative study of human institutions together with a critical assessment of experience with diverse institutional arrangements is the ground for building a common body of knowledge about institutional analysis and development. These may be applied to the immediate exigencies of interdependent relationships which people

share in their daily lives or to the interdependent relationships that are applicable to multinational communities of interest that apply, for example, to the constitution of a European Community. In light of this observation, why have we failed to achieve a greater degree of proficiency in institutional analysis and development than we have achieved at this point in human history? In the last section of this paper, I shall conclude by indicating the nature of the problem we face in creating a common framework that is appropriate to institutional analysis and development. Elinor Ostrom will also pursue that problem further in her presentation on "Formulating the Elements of Institutional Analysis."

#### Framing Work in Institutional Analysis and Development

##### Recapitulating the Argument Regarding Complexity

Human institutions, even in relatively simple societies, represent an extraordinary degree of complexity. To recapitulate the basic argument, institutions reflect an ordering of relationships that has to do with the adaptive potential achieved by the use of language to generate, communicate, and accumulate increasing large bodies of knowledge that yield commensurate potentialities for variable patterns of behavior. Rule-ordered relationships imply reference to normative considerations that apply to knowing the criteria for distinguishing between what is foreclosed (prohibited) and what is allowed (permitted) in the ordering of human relationships. Further, the relational computations involving intentions, interactions, and consequences may be of a counterintuitive character. The results achieved may be contrary to the motives, intentions, or objectives of the actors involved. A common-sense conception of a means-ends calculations pertaining to the achievement of specifiable goals is likely to run afoul of counterintuitive relationships that manifest themselves in human institutions.

These considerations are further complicated by the overlaying of rules that apply to the world of action (authority to act) and the world of collective action where authoritative relationships exist that have to do with formulating, applying, and enforcing rules of law. These may be further extended to a realm of constitutional considerations that have to do with rules that apply to the authoritative relationships of formulating rules, applying rules, and enforcing rules with reference to the ordinary exigencies of life (the world of action). The maintenance of rule-ordered relationships requires a complex assemblage of rules. Systems of rules become nested in one another.

The problems of asymmetry that are inherent in the rule-ruler-ruled relationship raise questions about the structural conditions that apply to institutions of governance. A unitary theory of sovereignty yields one type of structure; but conditions of subjection are insufficient to yield stable, prosperous commonwealths.

Some pattern of symmetry must be achieved in the basic asymmetry of rule-ruler-ruled relationships if there are to be stable and prosperous commonwealths. The measure of "good" laws is their contribution to the welfare of people comprising a commonwealth. An alternative structure for a democratic system of governance using principles of constitutional rule is one where the rule-ruler-ruled relationships depend upon differentiating decision-making capabilities so that all authority is subject to limits in any one unit of government and that multiple governments can coexist to tend to diverse communities of interests in a compound system of governance. The possibility of achieving self-governing capabilities in human societies depends upon highly complex orders of relationship. This is consistent with the basic principles that can be expected to occur in all systems of adaptive relationships. Increasing variety is accompanied by patterns of order that manifest increasing complexity.

#### Simplification as Necessary to Thought

Human capabilities for learning, also, depend critically upon simplification. This condition presents us with a seeming paradox. All language involves simplification in as much as any one word refers to a larger class of events. Learning depends upon conceptualizing common patterns of relationships and using those common patterns of relationships to establish patterns of order that can be related to and acted upon in predictable ways. How to achieve elements of simplicity in understanding patterns of organized complexity is the task that confronts anyone concerned with institutional analysis and development.

One possibility is that efforts to simplify may yield oversimplifications. This danger is inherent in all efforts to portray highly generalized structures as either diabolical machines or ideal-type mechanisms. Markets cannot simultaneously be perfectly equilibrating mechanisms and diabolical machines. Nor can bureaucracies be ideal structures for creating and maintaining legal rationality and simultaneously function as diabolical machines enslaving mankind. Diverse capabilities and limitations would appear to be at work; and levels of conceptualization that are capable of distinguishing different characteristics need to be sorted out. Competitive markets may manifest predictable tendencies toward reducing producer profit and increasing consumer surplus. Not all markets, however, are competitive. Monopoly markets may yield different results. To refer broadly to markets as applying to all economic exchange relationships is not appropriate for a discriminating analysis concerned with the effects that might be expected to flow from different types of market structures. Much the same observation might be made about the hierarchical orderings associated with bureaucratic structure.

The same problem occurs with tendencies to associate all authoritative relationships with something called the "government" or the "state." When the government or the state is used as the basic unit of analysis, it is then often juxtaposed to a equally broad and

amorphous concept that has reference to the market. The fundamental institutional structures in human societies are then assumed to have reference only to states and markets. We then see only highly aggregated and isolated structures. It is difficult to conceptualize the precise ways that authoritative relationships give effect to authorized relationships to yield a correlative relationship between rights and remedies and establish reliable meaning for rules in structuring human relationships. The viability of market relationships, especially among strangers, depends in essential ways upon the reliability with which judges and other officials construe right-duty relationships in economic transactions.

#### From Simplicity to Complexity

How can we arrive at methods for simplifying relationships that are sufficiently discriminating to sort out essential distinctions and to avoid oversimplifications is problematical and subject to serious differences in judgment. These are matters for discussion, reflection, and choice on the part of those who seek to explain and on the part of those who wish to use knowledge to inform action. These matters are too often ignored as both scholars and practitioners busily go about doing their respective things. The differences in approaches are potentially subject to constructive resolution under two sets of conditions. The first involves a willingness of scholars to attempt to achieve equivalency in translating from one type of conceptualization to another. The second condition would require the specification of a computational logic (i.e., a theory) that establishes the context between elements and relationships that are essential in defining the logically necessary relationships entailed in any conceptualization. Such a computational logic would also serve as a basis for informing that level of artisanship that would be concerned with yielding an artifact that has the essential design characteristics for translating a conceptualization into an operating reality.

One way to approach this problem is to apply efforts to simplify in specifying the basic elements to be taken into account in undertaking institutional analysis and development. This is the same basic method that Francois Jakob refers to when he observes that it is only a few constitutive elements, put together in different ways, which "distinguishes a butterfly from a lion, a hen from a fly, or a worm from a whale" (Jakob, 1977: 1,165). A minimal set of elements can be used in an analysis to come to a basic understanding of highly varied and complex patterns of ordered relationships. The problem is moving from the simple to the complex by drawing upon a minimal set of constituent elements in order to understand how greater variety and complexity are achieved. These same methods are applicable to the scholar who seeks to understand and to explain what exists, and to the artisan who would use a minimal set of constituent elements to produce or create an artifact. An artisan's know-how (recipe) has reference to the same basic explanation of causal relationships that are used by scientists to explain what is occurring.



In problems of institutional development, efforts to create patterns of organization of one type or another always depend upon a shared community of understanding on the part of those who are undertaking an effort to do something. People can draw upon ideas and design concepts developed by others; but what they do in the development of institutional arrangements, that permit the pursuit of new opportunities in human societies, always depends upon their own knowledge and skills. People must always draw upon their own background of experience, skills, and knowledge in developing new possibilities. The best that can be done in such circumstances is to help others acquire the knowledge and skills to help themselves.

Institutional analysis and development is always a study in human achievements and potentials. The two must always go together. Any new development must always be grounded in prior achievements and how to use what is known, or can be learned, to make further efforts to achieve the opportunities that are potentially available. This depends upon knowledge, and skills, in drawing both upon the world of nature and in relating to capabilities of other human beings. These principles apply as much to the artisanship that is involved in fashioning rule-ordered relationships in human societies as to the artisanship that is involved in fashioning physical tools that are capable of moving mountains, building roads, changing the course of rivers, cultivating the earth, and in creating all that human beings use and enjoy in the course of living their lives.

#### Analysis of Limiting Conditions

A common mode of analysis is applicable to many types of problem solving. The critical task is that of identifying constraining or limiting conditions that prevent or foreclose the realization of some opportunity. The point of the analysis, beyond specifying the limiting conditions, is to indicate the requirements or necessary conditions which will yield the opportunity that might be achieved. These calculations apply both to the design calculations of one who is attempting to create some artifactual state of affairs and to the explanatory account that is rendered by one who only seeks to understand causal relationships.

In this type of problem solving, the challenge always exists in knowing the relationship between the constraining or limiting conditions and the larger configuration of relationships to which some element or some factor, or its absence, is a limiting or constraining condition. The essential contingencies in institutional analysis, for example, may involve equivalency relationships between particular rules that are operable in exchange relationships and the particular rules and processes that exist within the configuration of governmental institutions. The discrete division of labor which has led economists to focus upon market institutions and political scientists to focus upon governmental institutions has itself been a serious limiting condition in the development of analytical and design capabilities that focus upon essential correlative linkages among market arrangements and governmental institutions. This is why

multidisciplinary scholarship focusing upon law and economics or upon the application of economic and jurisprudential reasoning to the study of both market and nonmarket decision-making arrangements is contributing to the development of important, new analytical capabilities in institutional analysis and development.

This implies, contrary to the assumptions in some theoretical models, that human beings in their propensity to strive for some new level of understanding and development will always be testing the limits of human knowledge and development. The ways of ordering human relationships in the pursuit of scholarship and in rendering services to one another may, in turn, become limiting conditions that foreclose a range of opportunities and possibilities. We, who find ourselves in such exigencies, are required to reflect critically upon our own circumstances and have recourse to self-organizing capabilities that enable us to address the limiting conditions and opportunities that currently exist in the contemporary world. Established academic disciplines and bureaucratic agencies are not immutable modes of organization that must remain fixed in a rapidly changing world of human endeavour.

#### Conclusion

I have in this paper attempted to indicate the nature and magnitude of the task involved in institutional analysis and development. The task is one of a very substantial magnitude. Success is to be measured by the degree to which peoples in human societies might achieve capabilities for autonomous development under conditions of self-government. Dependency relationships would yield to mutually productive and enlightening interdependency relationships among diversely constituted communities of people. Where such conditions can exist and be reproducible through successive generations, human beings have the possibility of achieving stable relationships with one another under conditions where freedom is available to extend the frontiers of learning while creating new opportunities and maintaining respectful patterns of ordered relationships with one another. Patterns of order that are amenable to increasing variety require both diversity and complexity. If we are to fashion a civilization that is capable of continued innovation and development, we must know both how to advance the frontiers of knowledge and to create orders that are subject to increasing measures of complexity where productive fits are being achieved among the great variety of tasks being performed.

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Appendix

**INSTITUTIONAL ANALYSIS AID DEVELOPMENT:  
THE MATURE AID MAGNITUDE OF THE TASK**

**I. BASIC PUZZLE**

- A. WE ALL KNOW, FROM PERSONAL EXPERIENCE, THAT THE WAY HUMAN BEINGS ORDER THEIR RELATIONSHIPS WITH ONE ANOTHER IS AN IMPORTANT FACTOR IN DETERMINING WHAT CAN BE ACHIEVED.
- B. YET, LITTLE AGREEMENT EXISTS ABOUT HOW TO ANALYZE AND CREATE SYSTEMS OF ORDER IN HUMAN RELATIONSHIPS THAT FACILITATE HIGHER LEVELS OF ACHIEVEMENT IN HUMAN SOCIETIES.
- C. THIS IS THE CENTRAL ISSUE THAT WE FACE IN ADDRESSING OURSELVES TO PROBLEMS OF INSTITUTIONAL ANALYSIS AND DEVELOPMENT.
- D. IN DOING SO, WE NEED AN APPROACH THAT ALLOWS SUFFICIENT GENERALITY FOR THE COMPARATIVE STUDY OF INSTITUTIONS IN DIFFERENT SOCIETIES AND TAKES ACCOUNT OF THE COMMON FEATURES THAT OCCUR IN THE CONSTITUTION OF ORDER AMONG ALL HUMAN SOCIETIES.

**II. WHERE TO BEGIN?: HOW DO WE GROUND OUR PRESUPPOSITIONS ABOUT THE NATURE AND MAGNITUDE OF THE TASK INVOLVED IN INSTITUTIONAL ANALYSIS AND DEVELOPMENT?: FORMS AID PROCESSES OF ADAPTATION**

**DF** ADAPTATION IS A COVARIANT RELATIONSHIP WHERE A FIT IS ACHIEVED AMONG TWO OR MORE ELEMENTS BY REFERENCE TO PROCESSES THAT ALLOW MODIFICATIONS (ALTERNATIVES) TO OCCUR. ALL FORMS OF ADAPTATION INVOLVE PROCESSES FOR: (1) GENERATING VARIETY (ALTERNATIVES), (2) SELECTION, AND (3) REITERATION OF THE SELECTED VARIANTS.

**FORMS AND PROCESSES OF ADAPTATION YIELDING PATTERNS OF EVOLUTIONARY DEVELOPMENT**

**P R O C E S S E S**

<b>F O R M S</b>	<b>GENETIC ADAPTATION</b>	FORMS OF LIFE SURVIVING SELECTION  INTERGENERATIONAL  <b>BIOLOGICAL EVOLUTION</b>	<b>I N C R E A S I N G  C O M P L E X I T Y</b>
	<b>LEARNING</b>	BEHAVIORAL REPERTOIRE ADAPTIVE TO DIVERSE CIRCUMSTANCES  INTRAGENERATIONAL  <b>MATURATION</b>	
	----- <b>PLUS LANGUAGE</b> -----		
	<b>CULTURAL ADAPTATION</b>	KNOWLEDGE AND BEHAVIORAL REPERTOIRE ADAPTABLE TO DIVERSE CIRCUMSTANCES  INTRAGENERATIONAL AND INTERGENERATIONAL  <b>CULTURAL EVOLUTION</b>	

**HUMAN DEVELOPMENT IS A FUNCTION OF CULTURAL EVOLUTION:** THE ACCUMULATION OF KNOWLEDGE ACROSS GENERATIONS, ACCELERATED BY METHODS OF SCIENTIFIC INQUIRY, GIVES HUMAN BEINGS ACCESS TO AN EXTRAORDINARY RANGE OF ADAPTIVE POTENTIALS.

**B. CO-EVOLUTIONARY ASPECTS OF DEVELOPMENT**

1. **INNOVATION:** THE GENERATION OF NEW IDEAS — NEW KNOWLEDGE — YIELDS NEW POSSIBILITIES

IDEAS \_\_\_\_\_ TECHNOLOGIES \_\_\_\_\_ ARTIFACTS

2. **CREATION OF ORDER:** RULES TRANSFORM ALL POSSIBLE ACTIONS INTO THOSE THAT ARE PROHIBITED, PERMITTED, AND REQUIRED. "THE ORDERS IN WHICH WE LIVE ARE THE FOUNDATIONS OF OUR EXISTENCE AND WAYS OF LIFE" (K. PAUL HENSEL).

**C PROBLEMS**

1. HUMAN POTENTIAL FOR LEARNING (GENERATING NEW KNOWLEDGE) MEANS THAT HUMAN BEINGS ALWAYS FACE UNCERTAIN FUTURES: LONG-TERM PLANNING OF HUMAN PRODUCTIVE EFFORT IS NOT POSSIBLE.
2. EACH INDIVIDUAL HAS ACCESS TO ONLY LIMITED KNOWLEDGE AND SKILLS.
3. EACH NEW GENERATION MUST MAKE A SUBSTANTIAL INVESTMENT IN ACQUIRING ACCUMULATED KNOWLEDGE AND SKILLS, DEAL WITH THE UNFOLDING EXIGENCIES OF LIFE THAT ARISE FROM THE GROWTH OF NEW KNOWLEDGE, AND CREATE APPROPRIATE PATTERNS OF ORDER TO TAKE ADVANTAGE OF THOSE OPPORTUNITIES.
4. THE CONDITIONS OF LIFE ARE SUBJECT TO INCREASING COMPLEXITY IN RELATION TO THE AGGREGATE POOL OF KNOWLEDGE, TYPES OF TECHNOLOGIES, RANGE OF GOODS AND SERVICES, PATTERNS OF ORGANIZATION.

**D. BASIC CRITERIA OF A DEVELOPED SOCIETY**

1. **SELF-DEVELOPMENT:** CAPABLE OF SUSTAINING ITS OWN ADVANCES IN KNOWLEDGE, TECHNOLOGIES, AND PRODUCTIVE EFFORTS.
2. **SELF-GOVERNANCE:** CAPABLE OF CREATING APPROPRIATE PATTERNS OF ORDER IN ORGANIZING DIVERSE ENTERPRISES AND OPPORTUNITIES TO FACILITATE NEW PATTERNS OF DEVELOPMENT.

THE CHALLENGE FACING MODERN MAN IS: (1) LEARNING HOW TO LEARN **Ci.e.**, GENERATE NEW KNOWLEDGE) AND (2) LEARNING HOW TO CREATE, MAINTAIN, AND ALTER ORDERED RELATIONSHIPS UNDER CHANGING CONDITIONS.

- E. DANGER:** RELATIONSHIP OF INNOVATION TO UNCERTAINTY AND ANXIETIES CAN GENERATE EXTREME, PERVERSE SOCIAL DEVELOPMENTS.

**I I I . SOME COMPUTATIONAL CONTINGENCIES APPLICABLE TO RULE-ORDERED  
RELATIONSHIPS (INSTITUTIONS)**

**A. BASIC PROPOSITION:** RULES TRANSFORM ALL POSSIBLE ACTIONS INTO THOSE THAT ARE PROHIBITED, PERMITTED, OR REQUIRED.

**B. NORMS AID THE PROBLEM OF NORMATIVE INQUIRY**

1. NORMS ARE THE CRITERIA FOR DISTINGUISHING THAT WHICH IS PROHIBITED FROM THAT WHICH IS PERMITTED.
2. KNOWING THE MEANING OF NORMS IS NECESSARY TO THE USE, APPLICATION, AND ENFORCEMENT OF RULES IN INTERPERSONAL RELATIONSHIPS.
3. A METHOD OF NORMATIVE INQUIRY IS NECESSARY FOR KNOWING THE MEANING OF THE VALUE TERMS USED AS NORMS IN ORDERING HUMAN RELATIONSHIPS.
4. SOME NORMS SERVE AS CRITERIA FOR ASSESSING PERFORMANCE: MORAL CONSIDERATIONS SERVE AS A FOUNDATION BOTH FOR JURISPRUDENTIAL AND ECONOMIC REASONING.

**C. RELATIONAL CONTINGENCIES AID POSITIVE ANALYSIS**

1. RELATIONAL CONTINGENCIES INHERENT IN RULES HAVE REFERENCE TO INTENTIONS, INTERACTIONS, AND CONSEQUENCES.
2. INTENTIONS MAY OR MAY NOT BE CONGRUENT WITH CONSEQUENCES. ACTORS MAY SEEK THEIR OWN GOOD, BUT PATTERNS OF INTERACTION WILL SOMETIMES YIELD MISERY INSTEAD.
3. WHEN PATTERNS OF INTERACTION YIELD CONSEQUENCES THAT ARE CONTRARY TO THE INTENTIONS OF ACTORS, RULE-ORDERED RELATIONSHIPS MANIFEST COUNTERINTUITIVE TENDENCIES.
4. ANY POSITIVE SCIENCE IS CRITICALLY CONCERNED WITH A KNOWLEDGE OF COUNTERINTUITIVE RELATIONSHIPS. COMMON SENSE KNOWLEDGE IS UNRELIABLE IN THE PRESENCE OF COUNTERINTUITIVE RELATIONSHIPS. MEANS-ENDS CALCULATIONS PERTAINING TO GOALS TO BE ACHIEVED ARE VULNERABLE TO ERROR.
5. TWO EXAMPLES:
  - A. PRODUCERS IN COMPETITIVE MARKETS SEEK TO MAXIMIZE PROFITS, BUT THE FORCE OF MARKET COMPETITION YIELDS REDUCED PROFITS AND INCREASED CONSUMER SURPLUS.
  - B. BUREAUCRACIES DESIGNED TO ACHIEVE SPECIFIABLE GOALS ARE SUBJECT TO GOAL DISPLACEMENT.



6. CONFLICTING ANALYTICAL TENDENCIES:
  - A. INSTITUTIONS AS DIABOLICAL MACHINES; e.g., K. POLANYI, MARX, WEBER.
  - B. INSTITUTIONS AS IDEAL-TYPE MECHANISMS; e.g., NEOCLASSICAL ECONOMICS; WEBER ON BUREAUCRACY.

#### MAINTENANCE OF RULE-ORDERED RELATIONSHIPS

1. **BASIC PROPOSITIONS:** RULES ARE NOT SELF-FORMULATING, SELF-APPLYING, AND SELF-ENFORCING; THEY ARE HUMAN ARTIFACTS THAT DEPEND UPON HUMAN AGENTS TO FORMULATE, USE, APPLY, AND ENFORCE RULES.
2. **THEREFORE,** ALL INSTITUTIONS ARE MANNED; NO INSTITUTION EXISTS APART FROM HUMAN ACTORS. THE HUMAN ELEMENT IS AN ESSENTIAL COMPONENT IN ALL COMPUTATIONS ABOUT INSTITUTIONAL ANALYSIS AND DEVELOPMENT. IT IS **MEANINGLESS TO SPEAK OF INSTITUTIONS,** AS SUCH.
3. **FURTHER,** DIVERSE SETS OF RELATIONSHIPS APPLY IN RULE-ORDERINGS. THESE INCLUDE **AUTHORIZED RELATIONSHIPS; AUTHORITATIVE RELATIONSHIPS, AND** POTENTIALLY **CONSTITUTIONAL RELATIONSHIPS.**
4. **AUTHORIZED RELATIONSHIPS** ARE THOSE THAT INVOLVE AUTHORITY TO ACT IN THE ORDINARY EXIGENCIES OF LIFE.
5. **AUTHORITATIVE RELATIONSHIPS** ARE THOSE THAT INVOLVE AUTHORITY TO APPLY, ENFORCE, AND ALTER AUTHORIZED RELATIONSHIPS. THIS IS THE EQUIVALENT OF THE POWERS TO GOVERN.
6. **BASIC PROPOSITION:** A RIGHT THAT CANNOT BE ENFORCED IS WITHOUT EFFECTIVE MEANING. THEREFORE, THE EFFECTIVE MEANING OF A RULE OF LAW IS CORRELATED WITH THE RELIABILITY (NONARBITRARY CHARACTER) OF DECISIONS TAKEN BY OFFICIALS WHO EXERCISE AUTHORITATIVE PREROGATIVES.
7. THE CORRELATIVE CHARACTER OF AUTHORIZED AND AUTHORITATIVE RELATIONSHIPS IMPLIES THAT ESSENTIAL INTERDEPENDENCIES EXIST BETWEEN GOVERNMENTAL AND NONGOVERNMENTAL INSTITUTIONS. MARKETS ARE NOT INDEPENDENT OF INSTITUTIONS OF GOVERNANCE AS THESE PERTAIN TO THE LIVES OF PEOPLE.
8. A THIRD REALM IN THE MAINTENANCE OF RULE-ORDERED RELATIONSHIPS IS POTENTIALLY CONCEIVABLE. THIS PERTAINS TO **CONSTITUTIONAL RELATIONSHIPS,** WHERE THE TERMS AND CONDITIONS OF GOVERNMENT (AUTHORITATIVE RELATIONSHIPS) ARE SPECIFICALLY FORMULATED AS ENFORCEABLE RULES OF CONSTITUTIONAL LAW. IT WOULD THEN BE POSSIBLE TO ROUND THE CIRCLE SO THAT OFFICIALS MIGHT BE HELD TO ACCOUNT IN THE EXERCISE OF AUTHORITATIVE RELATIONSHIPS UNDER CONDITIONS OF DUE PROCESSES OF LAW THAT INCREASED THE PUBLIC RELIABILITY ATTACHED TO THE MEANING OF ENFORCEABLE RULES OF LAW. SUCH A POSSIBILITY DEPENDS UPON WORKING OUT ALTERNATIVE WAYS OF STRUCTURING THE RULE-RULER-RULED RELATIONSHIP IN HUMAN SOCIETIES.

**ALTERNATIVE APPROACHES TO STRUCTURING THE RULE-RULER-RULED  
RELATIONSHIP**

**1. UNITARY THEORY OF SOVEREIGNTY**

A UNITY OF LAW DEPENDS UPON A UNITY OF POWER: COVENANTS WITHOUT THE SWORD ARE WITHOUT MEANING. SOME SINGLE CENTER OF AUTHORITY EXERCISES A MONOPOLY OVER THE LEGITIMATE EXERCISE OF COERCIVE CAPABILITIES IN A SOCIETY. THOSE WHO EXERCISE THE ULTIMATE AUTHORITY TO GOVERN ARE THE SOURCE OF LAW, ABOVE THE LAW, AND CANNOT BE HELD ACCOUNTABLE TO LAW. THE PREROGATIVE OF A SOVEREIGN IS UNALTERABLE, UNLIMITED, UNACCOUNTABLE, AND INDIVISIBLE. THE PEACE AND PROSPERITY OF A COMMONWEALTH DEPENDS UPON THE OBEDIENCE OF SUBJECTS AND UPON THE ACCOUNTABILITY OF A SOVEREIGN TO AN UNDERSTANDING OF AND OBEDIENCE TO AN ETERNAL ORDER OF BEING, CONCEPTUALIZED AS GOD.

**2. A THEORY OF CONSTITUTIONAL RULE**

CITIZENS IN A DEMOCRATIC SOCIETY CAN EXERCISE THE ESSENTIAL PREROGATIVES OF RULERSHIP IF THEY CAN ESTABLISH AND MAINTAIN THE ENFORCEABILITY OF BASIC RULES FORMULATING THE TERMS AND CONDITIONS OF GOVERNMENT. THESE TERMS AND CONDITIONS DEPEND UPON DISTINGUISHING PROCESSES OF CONSTITUTIONAL DECISION MAKING FROM PROCESSES OF GOVERNMENTAL DECISION MAKING AND OF CONSTITUTIONAL LAW FROM ORDINARY LAW. THESE TERMS AND CONDITIONS ALSO DEPEND UPON PLACING LIMITS UPON ALL EXERCISES OF GOVERNMENTAL AUTHORITY SO THAT NO ONE CAN EXERCISE UNLIMITED AUTHORITY. ALL EXERCISES OF AUTHORITY CAN BE HELD TO ACCOUNT SO THAT NO ONE IS ALLOWED TO BE A JUDGE OF HIS OR HER OWN CAUSE IN RELATION TO THE INTERESTS OF OTHERS. SUCH PROCESSES CAN BE REITERATED IN DIVERSE UNITS OF GOVERNMENT PERTAINING TO MULTIPLE AND OVERLAPPING COMMUNITIES OF INTEREST. A UNITY OF LAW IS ACHIEVED BY INCREMENTALLY RESOLVING CONFLICTS OF LAW. FEDERAL STRUCTURES AND PROCESSES ALLOW FOR BOTH DIVERSITY AND UNITY OF LAW IN COMPLEX ORDERS.

THE CRITICAL CALCULATION TURNS UPON THE CAPABILITY OF CITIZENS TO MAINTAIN AND ENFORCE LIMITS AND TO ALTER CONSTITUTIONAL TERMS AND CONDITIONS WHEN NECESSARY. THIS CONDITION DEPENDS UPON A KNOWLEDGE OF AND SKILLS IN A SCIENCE AND ART OF ASSOCIATION THAT ENABLES SOCIETIES TO BECOME SELF-GOVERNING.

**3. ALTERNATIVES ARE POSSIBLE; CHOICE EXISTS WITH REFERENCE  
TO INSTITUTIONAL DESIGN AND DEVELOPMENT IN HUMAN  
SOCIETIES.**

4. ALL ADVANCED DEMOCRATIC SOCIETIES HAVE ACHIEVED SPECIALIZED DECISION STRUCTURES AND DECISION PROCESSES THAT DIFFERENTIATE LEGISLATIVE AND JUDICIAL FROM EXECUTIVE INSTRUMENTALITIES OF GOVERNANCE. THESE ARE LINKED IN VARIOUS WAYS; BUT THEY ALL ESTABLISH SOME LIMITS AND CORRELATIVE PATTERNS OF ACCOUNTABILITY THAT INCREASE RELIABILITY IN THE GENERAL APPLICATION OF RULES TO THE DEVELOPMENT OF RELATIVELY STABLE AND PRODUCTIVE COMMUNITIES OF RELATIONSHIPS.
  
5. CONTINGENCIES PERTAINING TO THE ACHIEVEMENT OF STABLE REGIMES FOLLOWING SUCCESSFUL REVOLUTIONS AND COUP D'ETATS DEPEND UPON RECIPES THAT FORECLOSE CONSTITUTIONAL RULE AND PLACE PRIMARY RELIANCE UPON UNIFIED CONTROL OVER REPRESSIVE INSTRUMENTALITIES OF GOVERNMENT (V. I. Lenin: What Is To Be Done? and State and Revolution; M. Copeland: The Game of Nations). THIS IS THE PREVAILING PATTERN OF GOVERNANCE IN THE THIRD WORLD. A BASIC DILEMMA, THUS, EXISTS WITH REGARD TO THE CREATION OF INSTITUTIONAL ARRANGEMENTS THAT OFFER FAVORABLE PROSPECTS FOR ACHIEVING THE SELF-DEVELOPING AND SELF-GOVERNING CAPABILITIES THAT ARE NECESSARY TO MODERN CIVILIZATION.
  
6. SINCE ALL INSTITUTIONS MUST BE MANNED, THE ACHIEVEMENT OF CONSTITUTIONAL RULE, AND THUS ROUNDING THE CIRCLE OF AUTHORITY RELATIONSHIPS, REQUIRES THAT WE BUILD UPON THE PRESENT ACHIEVEMENTS OF PEOPLE TO GOVERN THEIR RELATIONSHIPS WITH ONE ANOTHER IN FAMILIES, AND KINSHIP STRUCTURES, JOINT ENTERPRISES, AND OTHER COMMUNITIES OF RELATIONSHIPS. **HUMAN BEINGS ARE THE MOST VALUABLE RESOURCES AVAILABLE FOR TRANSFORMING WHAT EXISTS INTO THE NEW OPPORTUNITIES AND POTENTIALITIES OF WHAT MIGHT BE.**

