Chapter 5 (final)

THE SCAFFOLDS HUMANS ERECT

The structure that humans create to order their environment is the basic determinant of the performance of an economy. It is because it provides the incentive structure which shapes the choices humans make. The last chapter ended with a discussion of cognition in its cultural context, which determines the beliefs humans possess. In this chapter I shall explore the nature of that context broadly considered as a scaffolding that shapes human interaction. The scaffolds humans erect consist of physical capital and human capital here considered in the broadest terms. That is, the physical capital is all the material artifacts that humans have accumulated and particularly the tools, techniques, and instruments humans possess to control their environment; the human capital consists of the stock of knowledge humans possess as embodied in the beliefs they hold and the institutions they create reflecting those beliefs.. While we are interested in the total character of the scaffolds, this chapter focuses more narrowly on the institutional framework.

The institutions consist of the political structure that specifies the way we develop and aggregate political choices, the property rights structure that defines the formal economic incentives, and the social structure--norms and conventions--that defines the informal incentives in the economy. The institutional structure reflects the accumulated beliefs of the society over time, and change in the institutional framework is usually an incremental process reflecting the constraints that the past imposes on the present and the future. All this--and more—makes up the structure that humans erect to deal with the

human landscape and is the subject of this chapter. Successively I shall explore the relationship between beliefs and institutions, the cultural heritage and its implications for path dependence, the structure of decision making that aggregates and implements choices, and finally the nature of institutional change.[1]

I

Let me begin by connecting the intimate relationship between belief systems and the institutional framework. Belief systems embody the internal representation of the human landscape. Institutions are the structure that humans impose on that landscape in order to produce the desired outcome. Belief systems therefore are the internal representation and institutions the external manifestation of that representation. Where diverse and conflicting belief systems exist in a society the institutions will reflect the beliefs of those (past as well as present) in a position to effectuate their choices, a subject to be explored below.

The intimate interrelationship of beliefs and institutions, while evident in the formal rules of a society, is most clearly articulated in the informal institutions--norms, conventions and internally held codes of conduct. These informal institutions not only embody the moral codes of the belief system, which tend to have common characteristics across cultures, but also embody the norms particular to individual societies, which are very diverse across cultures. While formal institutions can be changed by fiat, informal institutions evolve in ways that are still far from completely understood and therefore are not typically amenable to deliberate human manipulation.[2]

[1] I shall not repeat here the analysis of institutions I have developed in earlier studies. This study does build on the earlier work, extending and in some instances modifying earlier analysis.

II

As noted earlier culture consists of the intergenerational transfer of norms, values, and ideas. But the role of culture we are concerned with here as described by Hutchins and Hazelhurst "is a process that permits the learning of prior generations to have more direct effect on the learning of subsequent generations." (p. 690). Thus they speculate that a population over many generations could be capable of discovering things that no individual could learn in a lifetime (p. 690). The transmission that is put in place by past generations is described by them as the artifactual structure. This artifactual structure is the learning of past generations transmitted as culture into the belief structure of present generations. It is also embodied in the institutional structure inherited from past generations. While the formal rules a society puts in place will surely reflect this heritage, the informal constraints embodied in norms of behavior, conventions, and self imposed codes of conduct are the most important "carrier" of the artifactual structure. While the formal rules can be changed overnight (by a revolution for example) the informal constraints change much more slowly and play a critical role in the evolution of polities. "Local learning" is derived from the specific environment (both physical and intellectual) of a society and as changes occur in that environment they are gradually assimilated into the socio-cultural linguistic inheritance and embodied in the artifactual structure.

Hayek maintained that culture is “the transmission in time of our accumulated stock of knowledge” (Hayek, 1960, p27). He included in knowledge all the human adaptations to the environment which were derived from past experience--habits, skills, emotional attitudes, as well as institutions. Hayek’s theory of cultural evolution was largely a spontaneous process since the ability of

[2] There is now an immense--and growing--literature on norms. A good summary from an evolutionary perspective is Bendor, J. and Swistak, P., “The Evolution of Norms”--get final cite from Bendor

human beings to comprehend the ever more complex structure of human interaction was limited. But human intentionality is not spontaneous. Humans deliberately try to shape their future and indeed have no alternative but to try to structure human interaction--the alternative is anarchy or chaos. However imperfectly they are bound to do it, they have no choice. The issue is how they do it.[3]

How human societies attempt to shape their future leads us to directly deal with a fundamental aspect of the process of change—its historical nature. We cannot understand where we are going without an understanding of where we have been. How the past connects with the present and future is the subject of path dependence—a term which is used, misused, and abused. It could mean nothing more than choices in the present are constrained by the heritage of institutions accumulated from the past. But if that was all there was to path dependence then we could undertake radical change when we observed that the institutions were performing badly. A step towards a more comprehensive understanding of the term is to recognize that the institutions that have accumulated give rise to organizations whose survival depends on the perpetuation of those institutions and which hence will devote resources to preventing any alteration that threatens their survival. But the previous chapter suggests a still more complex view of path dependence. It is the interaction of beliefs, institutions, and organizations in the total artifactual structure that makes path dependence such a fundamental factor in the continuity of a society (a subject to be explored in more depth in Part II). Understanding the process of change entails confronting directly the nature of path dependence in order to determine the nature of the limits to change that it imposes in various settings.

[3] Viktor Vanberg in his "Cultural Evolution,Collective Learning and Constitutional Design" (1994) has an excellent summary of Hayek's theory as well as trenchant criticisms of some of his normative conclusions.

III

The scaffold humans erect not only structures the economic and political game but also defines who will have access to the decision making process. The constitutional structure that humans erect to shape human interaction defines the formal structure of incentives and disincentives that are a first approximation to the choice set. But the scaffold is much more. It is equally the informal structure of norms and conventions and informal codes of conduct. And still beyond that it is the way the institutional structure acts upon and reacts to other factors that affect both the demographic characteristics of a society and changes in the stock of knowledge as briefly discussed in chapter 1.

The formal institutional structure of a society consists of the constitutional framework broadly conceived--that is. the structure that defines the way the political and economic game is intended to be played. While an examination of the U.S. Constitution would give us some understanding of the decision making process in the United States, it would be so incomplete as to render such a study of limited value. How it is actually played is a consequence of the formal structure, the informal institutional constraints, and the enforcement characteristics. In a paper for the World Bank, Cox and McCubbins summarize the formal structure of a representative society as follows:[4]

[4] "Structure and Policy: The Institutional determinants of Policy Outcomes" Working paper prepared for the World Bank--get full cite

> "The structure of a polity may be described as a sequence of principal-agent relationships. In a typical representative democracy, for example, there are three broad delegations that might be noted. First, the sovereign people delegate decision-making power (usually via a written constitution) to a national legislature and executive. The primary tools that the people retain in order to ensure appropriate behavior on the part of their representatives are two: the power to replace them at election time; and the power to set the constitutional rules of the political game....A second step in the delegation of power occurs when the details of the internal organization of the legislature and executive are settled....A third step in the delegation of power takes the legislature (or its political chiefs) as principal and various bureaus and agencies as agents....It is our argument here that the structure of these principal-agent relationships determines, in large measure, the choice of public policy."(pp2-3)

The implications for performance of this structure can be most clearly illuminated by a transaction cost approach to politics. Transaction costs conceived as the costs entailed in the measurement and enforcement of agreements can be usefully applied to analyzing the efficiency of political markets. The U.S. Congress, for example, has relatively low cost transacting as a result of an elaborate institutional structure that facilitates exchanges over time and makes possible credible commitment.[5] But while the institutional structure has made possible relatively low cost exchange, this consequence does not mean that the overall political market is efficient. I can highlight the inherent problems of political markets by exploring a hypothetical political market with zero transaction costs.[6]

[5] See Weingast, B. and Marshall, W. (1988) for an analysis of the organization of congress in these terms.
[6] The following paragraphs are drawn from my "A Transaction Cost Theory of Politics", Journal of Theoretical Politics, Vol. 2 # 4 (1990)

Such a political market would be one in which constituents could accurately evaluate the policies pursued by competing candidates in terms of the net effect on their well-being; only legislation (or regulation) that maximized the aggregate income of the affected parties to the exchange would be enacted; and compensation to those adversely affected would insure that no party was injured by the action. To achieve such results, constituents and legislators would need to possess true models that allowed them to accurately evaluate the gains and losses of alternative policies, legislators would have to vote the constituents' interests--that is, the vote of each legislator would be weighed by the net gains and losses of the constituents, and losers would be compensated such as to make the exchange worthwhile to them. It is possible that the intermediate steps by the legislator--voting what he or she perceives as the constituents' interest and having the votes crudely weighted by the perceived net gain or loss to the constituents--are approximated by the complex legislative structure. But beyond that:

1. How does the constituent know his/her interests? What will the competing candidates really do? Not even the candidates know the variety of issues they will be called on to legislate that will directly or indirectly affect the constituents' welfare. And even if they did,they would have to know the effect on constituents' welfare--easy, perhaps, in cases of obvious redistribution or bills directly influencing income and employment in a district, but simply unknowable for a large proportion of the bills. And as for the constituent, he/she would have to know the consequences of the multitude of bills enacted by the representative and the effect on the individual's pocket book.

2. How well does the institutional structure of the legislature approximate the zero transaction cost model? The U.S. Congress has relatively low cost transacting and as compared to a totalitarian regime is clearly efficient, but as the endless studies of the U.S. Congress attest a very mixed set of incentive signals provide for strategic voting and pork barrel legislation.

3. How close are intentions to outcomes? The models that guide legislators are one source of error. Legislators simply do not possess the information or theoretical models to achieve the desired results. More than that, legislation is enacted and implemented by agents who have their own utility which will affect the final outcomes.

Imperfect models of the complex environment that the politician (and constituent) is attempting to order, institutional inability to get credible commitment between principal and agent (voter and legislator; legislator and policy implementer), the high cost of information, and the negligible payoff to the individual constituent of acquiring information all conspire to make political markets inherently imperfect.[7]

Surely this conclusion should not be surprising. After all,the basic separation between the polity and the economy has always, even amongst confirmed libertarians, left a residual of activities to be undertaken by government because of the inherent difficulty that arose from the public good attributes, free riding, and costly (and asymmetric) information of certain types of activities. We do not expect a random sample of issues to become public. Those that can be readily handled by individual or small group bargaining do not need to be placed on the public agenda. What remains for the public agenda are issues with attributes described above,or those the market outcome of which some groups do not like—groups who have enhanced bargaining power in the polity to achieve their objectives. Necessarily bargaining strength and the incidence of transaction costs are not the same in the polity as in the economy, otherwise it would not be worthwhile for groups to shift the issues to the political arena. Thus the selection process is one in which the high transaction cost items gravitate to the polity. Madison's

insightful views about the inherent nature of the political process as described in Federalist Paper # 10 are as pertinent today as they were two centuries ago.

The foregoing discussion has schematically outlined the political framework of representative government, a subject that has been explored at length by political scientists. It is more difficult to model the political process in third world polities where corruption, bribery, and Mafia-like extortion tend to be the order of the day. Modeling the actual structure as it in fact works in such polities has increasingly occupied the attention of political economists in recent years but we are some distance from having good working models. The enormous diversity of performance of polities makes the subject a crucial one for improving our understanding of economic change.[8]

In general we have been less successful in modeling the political process than modeling economic markets. The brief account of transacting in political markets suggests some of the reasons. Political markets do not work like economic markets. The difficulty begins with the behavioral assumptions we employ. They are more complicated than those we employ in economic models reflecting moral and ethical norms and "non-rational" behavioral responses. Political decisions make more complicated demands on cognition because of the nature of consciousness and intentionality. And it is precisely in this context that the political market in its dynamic context offers the promise of more effectively dealing with uncertainty in a non ergodic world. As described in chapter two, uncertainty can be reduced by institutions that encourage an open-ended process of discovery. Democracy, in its ideal

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[7] For more sanguine views about the efficiency of political markets see Lupia, A., McCubbins, M., and Popkin, s., Elements of Reason: Cognition, Choice, and the Bounds of Rationality, 1999 in the series I cite in the following footnote.

[8] The literature on the subject is growing. The Cambridge series on the Political Economy of Institutions and Decisions contains some of the most important work on the subject.

form does precisely that. Michael Wohlgemuth in his essay "Democracy as an Evolutionary Method"[9] states three propositions that characterize the dynamic aspects of democracy:

1. political preferences and opinions build on fallible conjectures and theories.
2. democratic opinion-formation results from an open-ended process of interactive learning and discovery
3. the important element in this process is not the supremacy, but the contestability of current majority opinions.

Wohlgemuth's approach is derived from Hayek who argued, "Democracy is above all, a process of forming opinion….It is in its dynamic, rather than in its static, aspects that the value of democracy proves itself….The ideal of democracy rests on the belief that the view which will direct government emerges from an independent and spontaneous process. It requires, therefore, the existence of a large sphere independent of majority control in which the opinions of the individuals are formed."[10]

This positive view of the crucial role of democracy in both the perpetuation of liberty and in the promotion of economic growth is the very foundation of liberal (in the classic meaning of the term) thought. But such views poses a conundrum. When we run regressions between democracy and economic growth the results are, to put it mildly, positive but very weak.[11] I shall attempt to confront this conundrum in Part 11 of this study but here I simply set out the analytical framework.

It is the polity that defines and enforces the formal economic rules of the game and therefore is the primary source of economic performance. The formal economic rules are broadly speaking property rights defining ownership, use, rights to income, and alienability of resources and assets as

[9] Pelican, P. and Wegner, G. The Evolutionary Analysis of Economic Policy, Northampton, Ma., 2003
[10] Hayek, F., The Constitution of Liberty, London: Routledge, 1960, p. 108f.

expressed in laws and regulations. Since there is an immense literature on this subject I shall not explore it further here.[12]

We are less successful at modeling the way informal constraints influence economic performance. We do have a good deal of recent research modeling specific norms and their impact set in a game theoretic framework,but examining the overall consequences of culture for economic performance is still in its infancy although, again, some recent research is suggestive. Demsetz (1967), for example, makes the point that a norm may emerge when an activity creates rising external effects and the norm has the consequence of internalizing those effects. I have argued (North, 1990) that in societies where interaction is on a small and personal level informal norms generally suffice and will only get converted into formal rules as impersonal exchange and the necessary growing use of external symbolic storage systems in such complex human environments induces such changes. But we still have a way to go to deal with the origins of norms and the persistence of inefficient norms. Let me start with the issue of origins.

Any discussion of the role of beliefs and values in shaping change inevitably turns to Max Weber's pioneering work. His Protestant Ethic and the Spirit of Capitalism emphasizes the reeligious origins of such values. Yujiro Hayami in his opening address to the International Economic Association Meeting in Tokyo in December 1996 stresses the importance of moral codes in business transactions in Japan. "...it was an admixture of Confucianism, Buddhism and Shintoism, but in substance it taught the same morals that Adam Smith considered to be the basis of the wealth of nations--frugality, industry, honesty and fidelity. Clearly this ideology was an important support for commercial and industrial

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[11]GET CITE FROM BARRO OR OTHERS.

[12] An excellent discussion is Barzel, Y., The Economic Analysis of Property Rights, 2nd edition (199?)

development in the late Tokugawa period, as it suppressed moral hazards and reduced the costs of market transactions" (Hayami and Aoki, eds. 1998, p.15).

But Jean-Philippe Platteau and Yujiro Hayami (1998, Chapter 12) turned to a different origin of social norms. They emphasized the contrast between redistributive norms in African tribal communities and the reciprocal norms in Asian village communities and ascribed the differences to different degrees of settlement density and consequent property rights in agriculture. "Culturally, people whose living is based on settled agriculture are the believers of 'great religions' eg., Buddhism in Thailand, Islam in Indonesia, Christianity in the Philippines, Buddhism and Confucianism in China, Korea and Japan" (p. 386). The implication of their analysis is that the religions are derivative from the basic demographic conditions rather than the independent variable initiating the resultant norms. They want to draw attention to "...structural forces that are at the root of serious market imperfections, to wrong incentive systems that arise from traditional social fabrics (and not from government policy mistakes) and to natural or technological handicaps, all outcomes which tend to make agricultural progress especially costly or difficult to achieve in SSA (Sub-saharan Africa)." (p. 359) Platteau and Hayami have an important point in their emphasis on population density and land use patterns as important in the African/Asian contrast and their essay is suggestive of the origins of a variety of norms important in Asian development. But despite a voluminous literature on this subject we are some distance from a definitive understanding of the source and implications of diverse cultural backgrounds.

Even more troubling is the persistence of inefficient norms. Thrainn Eggertsson (1996, 1998) has documented the persistence of such norms in Iceland over centuries and Jan Elster (date) has written extensively about such norms. We have a way to go to understand such issues.

Taken together formal and informal economic institutions and their enforcement characteristics determine the efficiency of economic organization (and hence jointly with production costs) economic efficiency. The burgeoning literature on transaction costs has begun to give us a tool to analyze both the costs of economic organization and to get a better understanding of sources of poor economic performance.[13]

IV

How do institutions themselves change? Five propositions about institutional change are:[14]

1. The continuous interaction between institutions and organizations in the economic setting of scarcity and hence competition is the key to institutional change.

2. Competition forces organizations to continually invest in skills and knowledge to survive. The kinds of skills and knowledge individuals and their organizations acquire will shape evolving perceptions about opportunities and hence choices that will incrementally alter institutions.

3. The institutional framework provides the incentives that dictate the kinds of skills and knowledge perceived to have the maximum pay-off.

4. Perceptions are derived from the mental constructs of the players.

5. The economies of scope, complementarities, and network externalities of an institutional matrix make institutional change overwhelmingly incremental and path dependent.

Let me elaborate on each of these propositions:

[13] For an overview as applied to the firm see Masten, S. and Williamson, O. GET CITE

[14] This section is drawn from my essay, "Five Propositions about Institutional Change" in Knight, J. and Sened, I., Explaining Social Institutions, (1995) Ann Arbor: University of Michigan press.

1. The study of institutions and institutional change necessitates as a first requirement the conceptual separation of institutions from organizations. Institutions are the rules of the game, organizations are the players and it is the interaction between the two that shapes institutional change (see North 1990 for an elaboration of this distinction).

Institutions are the constraints that human beings impose on human interaction. Those constraints (together with the standard constraints of economics) define the opportunity set in the economy. Organizations consist of groups of individuals bound together by some common objectives (firms, trade unions, cooperatives are examples of economic organizations; political parties, the Senate, regulatory agencies illustrate political organizations; religious bodies, clubs are examples of social organizations). The opportunities provided by the institutional matrix determine the kinds of organizations that will come into existence; the entrepreneurs of organizations induce institutional change as they face the ubiquitous competition derived from an economic world of scarcity. As they perceive new or altered opportunities they induce institutional change by altering the rules (either directly by political bodies or indirectly by economic or social organizations pressuring political organizations); by the gradual withering away of social norms, conventions, and codes of conduct as organizations, in the course of interaction, evolve new informal means of exchange; or by deliberately (and sometimes accidentally) altering the kinds and effectiveness of enforcement of rules or the effectiveness of sanctions and other means of informal constraint enforcement.

2. New or altered opportunities may be perceived as a result of exogenous changes in the external environment which alter relative prices to organizations or they may be a consequence of endogenous competition among the organizations of the polity and the economy. In either case the ubiquity of competition in the overall economic setting of scarcity induces entrepreneurs and the

members of their organizations to invest in skills and knowledge. Whether it is learning by doing on the job or the acquisition of formal knowledge, the key to survival is improving the efficiency of the organization relative to that of rivals.

While idle curiosity surely is an innate source of acquiring knowledge among human beings, the rate of accumulating knowledge is clearly tied to the pay-offs. Secure monopolies, be they organizations in the polity or the economy, simply do not have to improve to survive. But firms, political parties, or even institutions of higher learning faced with rivalrous organizations must strive to improve their efficiency. When competition is "muted" (for whatever reasons) organizations will have little incentive to invest in new knowledge and in consequence will not induce rapid institutional change. Stable institutional structures will be the result. Vigorous organizational competition will produce rapid institutional change.

3. There is no implication in the foregoing proposition of evolutionary progress or economic growth--only of change. The institutional matrix defines the opportunity set, be it one that makes the highest pay-offs in an economy income redistribution or one that provides the highest pay-offs to productive activity. While every economy provides a mixed set of incentives for both types of activity, the relative weights are crucial factors in the performance of economies. The organizations that come into existence will reflect the pay-off structure. More than that, the direction of their investment in skills and knowledge will equally reflect the underlying incentive structure. If the highest rate of return in an economy is to piracy we can expect that the organizations will invest in skills and knowledge that will make them better pirates. Similarly if there are high returns to productive activities we will expect organizations to devote resources to investing in skill and knowledge that will increase productivity.

The immediate investment of economic organizations in vocational and on the job training will obviously depend on the perceived benefits; but much more fundamental, the extent to which societies will invest in formal education, schooling, the dissemination of knowledge and both applied and pure research will mirror the perceptions of the entrepreneurs of political and economic organizations.

In similar fashion the institutional matrix will embody incentives with respect to fertility behavior and indirectly by the way in which the incentives influence knowledge about sanitation and infectious diseases, public policy instruments to effectuate control over sources of morbidity and mortality. But it is important to stress that the institutions put in place will reflect the beliefs of the players, which in the case of fertility and mortality sources have been notoriously wrong throughout much of history.[15]

4. The key to the choices that individuals make is their perceptions: that is the way the mind interprets the information it receives. As noted in the previous chapters the mental constructs individuals form to explain and interpret the world around them are partly a result of their cultural heritage, partly a result of the "local" everyday problems they confront and must solve, and partly a result of non-local learning. The mix between these sources in interpreting one's environment obviously varies as between for example a Papuan tribesman on the one hand and an economist in the United States on the other (although there is no implication that the latter's perceptions are independent of his or her cultural heritage).

The implication of the foregoing paragraph is that individuals from different backgrounds will interpret the same evidence differently and in consequence make different choices. If the information feedback on the consequences of choices was "complete" then individuals with the same utility function would gradually correct their perceptions and over time converge to a common equilibrium but as

emphasized in chapter 2 imperfect comprehension together with a non-ergodic world in continuous change provides assurance that we can, and will get it wrong very frequently. As Frank Hahn has succinctly put it, "There is a continuum of theories that agents can hold and act upon without ever encountering events which lead them to change their theories" (Hahn, 1987, p. 324). The result is that multiple equilibria are possible.

5. The viability, profitability and indeed survival of the organizations of a society typically depend on the existing institutional matrix. That institutional structure has brought them into existence and upon it their complex web of interdependent contracts and other relationships have been constructed. Two implications follow. Institutional change is typically incremental and is path dependent.

It is incremental because large scale change will create too many opponents among existing organizations that will be harmed and therefore oppose such change. Revolutionary change will only occur in the case of "gridlock" among competing organizations which thwarts the ability of organizations to capture gains from trade (the subject of Chapter 8).

Path dependence will occur because the direction of the incremental institutional change will be broadly consistent with the existing institutional matrix (for the reasons described above) and will be governed by the kinds of knowledge and skills that the entrepreneurs and members of organizations have invested in.

Now let me justify each of the propositions.

Proposition 1: The study of institutions has been bedeviled by ambiguity about the meaning of the term. It is not possible to develop a theory of institutional change that mixes up the rules of the game

[15] See Easterlin, R. (1998) and David, P. (1997) for fascinating illustrations.

and the players. Institutions are the rules of the game and organizations are the players and each entails a different modeling to understand the way they operate and interact with each other. Modeling institutions is modeling the man-made constraints on human interaction that define the incentive structure of the society. Modeling organizations is theorizing about the structure, governance, and policies of purposive entities.[16]

While individuals are the actors it is typically individuals in their capacities as part of organizations that make the decisions that alter the rules of the game.

Proposition 2 simply restates the fundamental postulate of economics and specifically applies it to the organizations of an economy. It bears emphasis, however, that the stock of knowledge the individuals in a society possess is the deep underlying determinant of the performance of economies and societies and changes in that stock of knowledge is the key to the evolution of economies. The rise of the western world was ultimately a consequence of the kinds of skills and knowledge (not only "productive knowledge" but notably knowledge about military technology) that were deemed valuable to the political and economic organizations of the medieval western world. The key point is that learning by individuals and organizations is the major influence on the evolution of institutions.

Proposition 3: Throughout most of history and indeed in much of the present world economies have been perceived by the players as zero sum games in which the acquisition of skills and knowledge has as its objective doing better at the expense of others. The institutional matrix has reflected the bargaining strength of those able to make or change the rules. Their perceptions with respect to the gains to be made by redistributive versus productive activities will shape the rules of the game and the

[16] There is an extensive literature modeling the internal structure of organizations notably by Oliver Williamson, Gary Miller, and Jim March (among many others). This literature is invaluable in order to understand how decision making

resultant opportunity set. That in turn will shape perceptions about the kinds of skills and knowledge that will payoff. The transition from a belief system built to deal with the uncertainties of the physical environment to one confronting the opportunities of the human environment involves a change in perceptions from a zero sum game to a positive sum game and is a critical turning point in the process of economic change.

Proposition 4: Where do the perceptions come from that individuals possess? Neo-classical theory simply skips this step under the assumption that people know what they are doing. This may be true in evaluating opportunity costs at the supermarket, but it is wildly incorrect when it comes to making more complicated choices in a world of incomplete information and of subjective models used to interpret that incomplete information.

What we mean by rationality requires explicit specification for social scientists in general but particularly for those who employ rational choice models. If we are going to employ the choice theoretic approach we must be explicit about just how people arrive at the choices they make. This entails explicit specification of the subjective models people possess to interpret information and the information they receive.

Proposition 5: Why can't economies reverse their direction overnight? This is surely a puzzle in a world that operated as neo-classical theory would have us believe. But it is simply a fact that the overwhelming majority of change is incremental, gradual and constrained by the historical past. Incorporating the implications of the above analysis and description of institutional change provides us

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occurs inside organizations. It is not the focus of this study which explores the interaction between institutions and organizations

with the basic building blocks we need in order to explore the overall nature of the process of economic change.