# Consider Stages of Development in Preventing Terrorism: Does Government Building Fail and Terrorism Result when Developmental Stages of Governance are Skipped?

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**Abstract** Countries, governments, and cultures must move through each of the stages of human development (Commons et al. (1998). *Developmental Review, 8*(3), 237–278) sequentially. Each stage must be achieved, and failure to recognize this may be a major contributing factor to the rise of terrorism and crime in a society. For example, in a war-like situation, an occupying country's attempts to have the conquered country jump developmental stages will fail more often than not, possibly resulting in negative sentiment and terrorist behavior among those in the occupied country. Although the US is great at winning small wars such as those against Afghanistan, Grenada, Haiti, Iraq, and Panama, it fails at making and maintaining peace and, in turn, creating democracies. This article will address the reasons why this may be, and what can be done to improve upon our current "hit or miss" policies. We will address some of the developmental stages of the tasks of governing, and some of the means by which government activities may move up in stage. Finally, we suggest reasons why the US has had its various successes in preventing or reducing terrorism when it helped itself and other countries move up in stage and failures when it did not, and why governments in general should move up to more complex stages to reduce the number of terrorists generated.

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Responding successfully to terrorism first requires an understanding of the conflicts between the participants. It is true that the participants in these conflicts may be separated from one another by their respective belief systems and ideologies. However, in the developed world, most people overestimate the importance of these belief systems and ideologies as determinants of the choices that their adherents make. Thus, people in the United States tend to believe that the antisocial behavior of the terrorists is caused by backward or wrong ideology. But many societies with whom developed nations, such as the US, are allied, share the terrorist's religious and economic beliefs and ideologies (e.g., Saudi Arabia). Note that the ideologies and beliefs in Saudi Arabia lead to a terrorist population, but that the country as a whole is anti-terrorist. This then leads to the questions: What allows these societies to get along with the US and Western Europe in the absence of a common ideology or belief system? Moreover, what causes some of those societies who adhere to certain belief systems to become terrorist in nature, while others do not? This introduces the notion that ideology and belief systems are useful, but insufficient, to account for the choices made by members of terrorist subcultures. Therefore, on which other factors might we focus our attention? Our pilot analysis shows that the participants of these conflicts, both "terrorists" and those who oppose terrorism, operate at different developmental stages. Understanding these differences in developmental stage makes it possible to design successful strategies for policy development for successful communication among the parties, the creation of beneficial joint enterprises, and possibly, the decrease of terrorism.

The reasons for undertaking this analysis now are that we are on the cusp of a very dangerous future. It is possible that the monopoly of power by larger, more advanced countries will decrease in the future, giving "terrorists" vastly expanded powers. Due to the fact that the technology for biological, chemical, and even nuclear weapons is relatively simple, it is likely that people will be able to construct and possess weapons of mass destruction. Only the relative scarcity of weapon grade fissionable material is the limit for nuclear weapons. Therefore, attempts to control behavior by military means alone seem rather unlikely to succeed.
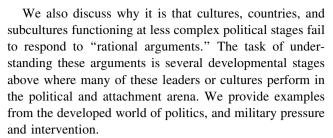
This article will address four questions:

1. What is our developmental approach to terrorism?
2. What are the institutional forces that contribute to terrorism?
3. What developmental progression makes a society more or less likely to generate terrorists?
4. What are the institutional and social factors that support or block those sorts of developments?

In order to understand the development of countries and governments, we need to first understand the development of societies within the country. Developmental notions can help us understand how a society successfully binds people together, and why societies that do not attempt to do so might generate terrorists. In order to examine the developmental underpinnings of a particular group, one may use The Model of Hierarchical Complexity of Development (Commons et al. 1998). This model provides a schema for characterizing the complexity of reasoning and action in individuals, and in the various social and institutional atmospheres in which they function. As such, it allows for a highly precise characterization of interactive processes among individuals within groups. It also provides a measure of the sensitivity of individuals to complex relationships among events and people. The analyses that are made as to stage of development throughout the article are based on the Hierarchical Complexity Scoring System (Commons et al. 2004; see Table 1).

## Early Theories of Cultural Development

During the 1950s and 1960s, there was a notion of cultural development, in which cultures advanced in a progression. Anthropologists used the words "stages of development" and created sequences for such development. However, no evidence was provided for this development based on a systematic mathematical model. In this discussion, we apply the behavioral-developmental view of stage progression to the problem of cultural development, a view that is increasingly becoming the consensus.

We also discuss why it is that cultures, countries, and subcultures functioning at less complex political stages fail to respond to "rational arguments." The task of understanding these arguments is several developmental stages above where many of these leaders or cultures perform in the political and attachment arena. We provide examples from the developed world of politics, and military pressure and intervention.

Countries, cultures, subcultures, and individuals must move through each of the developmental stages sequentially. This is because a more complex stage is defined by and built up of the behaviors of the previous less complex stage. Therefore, a society or group must achieve each stage before tackling the next. Attempts by developed countries to encourage cultures and subcultures to jump more than one stage will fail, no matter what their initial stage of functioning. This is the thesis of this article. While the US is considered effective by many at winning small wars such as those against Afghanistan, Panama, and Grenada, etc., it fails at making and maintaining peace because its government neither recognizes that developmental stages exist nor understands that countries need to transition through the stages. Its efforts to build institutional infrastructure are therefore misplaced. We will address some stages of tasks of governing. We will also address some of the means by which government activities move up in stage, and how larger political communities may speed up this change. Finally, we will address reasons why the US has had its various successes and failures, and why governments in general operate at increasingly more complex stages in the political and economic arenas.

In these introductory remarks, it might be useful to mention that the political domain is quite broad. It contains the legal domain, the economic domain and the military domain, as well as other domains of infrastructure. Governments can vary widely not only across these domains, but also within them. For example, the US may have a great deal of free speech, but have rather draconian laws on association as embodied in the Patriot Act. It might support most civil rights, but continue to incarcerate rather than treat large number of drug addicts. The best examples can be seen in China, which is developing a relatively high stage economy, but continues an oppressive low stage political system.

## Determining if One Task Action is More Hierarchically Complex than Another

Tasks are hierarchically complex when they can be broken down into subtasks of lesser complexity, and the coordination of these subtasks is both unique and necessary to the successful completion of the task. There are three main

**Table 1** Stages described in the model of hierarchical complexity

|  | Order or stage | What they do | How they do it | End result |
|---|---|---|---|---|
| 0 | Calculatory | Exact–no generalization | Human made program manipulate 0, 1 | None |
| 1 | Sensory and motor | Discriminate in a rote fashion, stimuli generalization, move | Move limbs, lips, eyes, head. View objects and movement | Discriminative and conditioned stimuli |
| 2 | Circular sensory–motor | Form open-ended classes | Reach, touch, grab, shake objects, babble | Open ended classes, phonemes |
| 3 | Sensory–motor | Form concepts | Respond to stimuli in a class successfully | Morphemes, concepts |
| 4 | Nominal | Find relations among concepts. Use names | Use names and other words as successful commands | Single words: ejaculatives & exclamations, verbs, nouns, number names, letter names |
| 5 | Sentential | Imitate and acquire sequences. Follows short sequential acts | Generalize match-dependent task actions. Chain words | Pronouns: my, mine, I; yours, you; we, ours; they, them |
| 6 | Preoperational | Make simple deductions. Follows lists of sequential acts. Tell stories | Count random events and objects. Combine numbers and simple propositions | Connectives: as, when, then, why, before; products of simple operations |
| 7 | Primary | Simple logical deduction and empirical rules involving time sequence. Simple arithmetic | Adds, subtracts, multiplies, divides, counts, proves, does series of tasks on own | Times, places, counts acts, actors, arithmetic outcome from calculation |
| 8 | Concrete | Carry out full arithmetic, form cliques, plan deals | Does long division, follows complex social rules, takes and coordinates perspective of other and self | Interrelations, social events, what happened among others, reasonable deals, |
| 9 | Abstract | Discriminate variables such as Stereotypes; logical quantification; (none, some, all) | Form variables out of finite classes. Make and quantify propositions | Variable time, place, act, actor, state, type; quantifiers (all, none, some); categorical assertions (e.g., "We all die") |
| 10 | Formal | Argue using empirical or logical evidence. Logic is linear, 1 dimensional | Solve problems with one unknown using algebra, logic and empiricism | Relationships are formed out of variables; words: linear, logical, one dimensional, if then, thus, therefore, because; correct scientific solutions |
| 11 | Systematic | Construct multivariate systems and matrices | Coordinates more than one variable as input. Consider relationships in contexts | Events and concepts situated in a multivariate context; systems are formed out of relations; systems: legal, societal, corporate, economic, national |
| 12 | Metasystematic | Construct multi-systems and metasystems out of disparate systems | Create supersystems out of systems. Compare systems and perspectives. Name properties of systems: e.g., homomorphic, isomorphic, complete, consistent, commensurable | Supersystems and metasystems are formed out of systems of relationships |
| 13 | Paradigmatic | Fit metasystems together to form new paradigms | Synthesize metasystems | Paradigms are formed out of multiple metasystems |
| 14 | Cross-paradigmatic | Fit paradigms together to form new fields | Form new fields by crossing paradigms | New fields are formed out of multiple paradigms |

axioms in The Model of Hierarchical Complexity (MHC), which state that one task action is more hierarchically complex than others if it:

1. Is defined in terms of two or more lower order task actions
2. Organizes the lower order task actions, and

3. The organization is non-arbitrary

The terms "action" and "task action" are used interchangeably here. The nonarbitrary organization of several lower order actions constitutes one action of a higher order of complexity. For example, completing the entire operation $3 \times (4 + 1) = (3 \times 4) + (3 \times 1)$ constitutes a task

requiring the distributive act. That act uniquely orders adding and multiplying to coordinate them. The distributive act is, therefore, one order more hierarchically complex than the acts of adding and multiplying alone, and it indicates the singular proper sequence of the simpler actions. Although someone who simply adds repeatedly can arrive at the same answer, knowing to do so requires the same degree of complex thinking. By combining both actions appropriately, they enjoy a greater freedom of action. Therefore, the order of complexity of the task is determined through analyzing the demands of each task action by breaking it down into its constituent parts. The hierarchical complexity of any complex task is, thus, mathematically determined.

## Political Developmental Stage

By definition, a person's stage of performance on a given task is defined as the highest order of hierarchical complexity of correctly performed task actions. Therefore, participants are scored as performing at a given stage on a given task when they successfully complete the most hierarchically complex task of the same order. For example, consider when they successfully complete the above *concrete* order of hierarchical complexity task using distributive action that coordinates the lower order, primary order actions of adding and multiplying. Then they would be performing at the *concrete* stage (which will be later described) on that task. In certain cases, it may be difficult to conduct the task analysis to figure out what ideal actions it may take to complete a task. It may require one to construct an entire task hierarchy from the least hierarchically complex to the task action that is of interest. Although the desired task action is a function of lower order tasks, its hierarchical complexity is independent of the type of tasks to be performed. For example, the task could be military, political, economic, cultural, sociological, psychological, social, or moral in nature. The *political behavioral developmental stage* of an action is defined as the most hierarchically complex *political* task that the given action successfully addresses. This concept applies to the actions of individuals, loosely knit networks (like terrorist groups), formal nation-states, and governments, as well as cultures. Note, that people within a particular political, religious, or cultural group may perform at different stages on the same task. Individuals may perform differently on different tasks.

Political tasks include the types of communication necessary to form alliances between two sets of individuals or groups, in order to protect the interests of these individuals and groups. As we shall see, there is a strong, undeniable relationship between the order of hierarchical complexity of political tasks that need to be solved and the type of policy that can solve them.

How well people or groups perform depends on a number of factors, including the content and domain of the task, familiarity with the task, knowledge of the vocabulary used to present the task, the amount of support (to be defined later) in doing the task, and motivational variables. The stage of performance analyses presented here are preliminary for the most part. Yet, the scoring of performance has reliabilities between .85 and .95 (Dawson 2002), making the analysis quite scientifically based. We suggest profiles of these stages of performance on different tasks for individuals and distributions of stages for people within groups.

## Developmental Political Psychology

The prevalent notions of relativism in political theory have recently been challenged by applications of developmental theory to political development (Emler et al. 1983; Habermas 1979, 1990; Rosenberg 1988a, b, 2002; Rosenberg et al. 1988; Sonnert and Commons 1994; Wagner 1986, 1990; Weinreich-Haste 1986). Whereas relativism posits that a non-arbitrary, cultural evaluation of societal and political systems is impossible, developmental theory provides the means for such an evaluation.

As part of the movement toward understanding political reasoning and action using developmental notions, we examine the relationship between society and the stages of political development. Political reasoning and action have a common core of seemingly unique and diverse ideologies used to describe political atmospheres and programs. Behavioral developmental stage theory can order ideological reasoning in a non-relativist sequence, and point to possible avenues of political development. More specifically, by focusing on the stages of development, this theory leads to an understanding of the possibilities and limitations of the development of political reasoning at each stage.

## Political Atmosphere

Just as behavioral developmental stage theory can order ideological reasoning, it can also order the atmosphere of organizations and societies. The term *atmosphere*, when applied to a society or a social institution, such as a government, refers to the ways in which contingencies affect individual behavior within organizations and the methods by which contingencies are set. A *contingency* is a description of a relationship among events. *Contingent relations* among events describe what the environment

contributes to behavior. In human development, contingencies of interest include the causal relations among a given circumstance, the activity engaged in, and their outcomes. Situation events are quite often referred to as cues or prompts. Cues are events that indicate what behaviors will be reinforced. Activities are referred to as actions, behaviors, or responses. Outcomes of behavior can be simple events such as reinforcers, punishments, or other contingencies. Consequences of a behavior that increase the likelihood of that behavior in the future are termed reinforcers. Consequences that *increase* the future likelihood of the event that they follow, are termed *positive reinforcers*. Consequences that *increase* future behavior when they are removed following the behavior, or made less frequent are termed *negative reinforcers*. Consequences that *decrease* future occurrences of the behavior that they follow are termed *punishers*. Consequences that *decrease* future behavior when they are removed or made less frequent following the behavior are termed *negative punishers*.

*Stage of Atmosphere* refers to the hierarchical complexity of the justifications of contingency setting processes, and of contingencies themselves. Institutional and governmental policies and regulations, along with informal codes of acceptability, maintain powerful reinforcement systems with respect to individual behavior and group interactions. Through establishment of the contingencies for individual behavior, the atmosphere of any social institution can promote or stunt the development of reasoning among its members. By the same token, the reasoning of individual members within any social institution has significant bearing upon institutional atmosphere. Atmosphere includes the contingencies that affect individual behavior within an organization and the methods by which contingencies are set. We use, as examples of different stage behavior and their contingencies, the governmental and economic control over information. In the US, the Federal Communications Commission (FCC) sets the rules (contingencies) governing the use of radio transmission. The laws (more contingencies) governing how the Commission makes regulations were passed by Congress. Stations follow these rules. If not, the contingencies specify that the station's license will be revoked. If they still continue broadcasting after this point, the Justice Department will shut them down. Contingencies thus describe the behavioral and stimulus properties of individuals or groups who will be selected to make rules. Contingency rules to be made might be rules determining who may be selected, and how that person will be selected as a leader or candidate (employees, members, etc.). Furthermore, the behavior of individuals making selections may be controlled partially by the written or spoken rules given by such individuals or groups. Their behavior may also be controlled by the perceived, but informal, contingencies for making a particular decision. As always, there is a distribution of stage of atmosphere, depending on the tasks and the group of participants.

The developmental complexity of contingencies in an atmosphere either constrains or stimulates development of individuals and groups, including cultures and governments. However, we assert that the developmental complexity of the contingencies also influences how individual development constrains or motivates *organizational* development.

We suggest that what the environment contributes to behavior can be described in terms of contingent relations among events. We also maintain that the reasoning of individual members within any institutional or family setting has significant bearing upon organizational atmosphere. As reasoning develops in complexity, individuals are increasingly proficient at discriminating the perspectives of others, and at evaluating and integrating competing perspectives. These skills are integrated into the formal and informal policy-making and policy enforcement structures of the organization. Most often, in such organizations, there are both explicit and implicit statements of contingencies that control behavior. The explicit statements of perceived organizational contingencies are referred to as *verbalized causal rules* or contingencies (Commons et al. 2004). The implicit perceptions of causality are the *perceived causal rules* or contingencies.

In order to characterize atmosphere at the level of organizational macro structure, we believe that it is necessary to examine the individual contingencies embodied in atmosphere, which constitute the organizational micro structure (Goffman 1961, 1966). Microstructure and macrostructure are inseparable. Atmosphere is, therefore, a characterization of the sum of individual contingencies operative within an organization and as Kohlberg (1984) emphasized, their justifications. It is important to note that within this atmosphere of organizations, there is a system of organizational hierarchies. The hierarchy is described by the levels that set and enforce contingencies. Depending on the developmental stage of the atmosphere, and the levels of organization within it, there will be varying types of contingencies. These contingencies not only characterize a society in a certain stage, but they also restrict stage progression.

## What Conditions may Generate Terrorism?

A great deal of terrorism is generated by wars and their aftermaths, and often the resulting collapse of archaic societies. Such situations, which result in periods of

anarchy, promote the success of terrorist organizations. During periods of stability created by the current authoritarian government, there may be total suppression of opposition including terrorists. There seems to be relative stability in impoverished countries that are experiencing very little development. These have authoritarian rulers. There are very few countries today, but historically, China would have been an example. Examples of countries where there has been development under terrorists include the Soviet Union under Joseph Stalin, and China under Mao Tse-Tung. After serious military defeats by western allies in Afghanistan under the Taliban, Iraq under Saddam Hussain, Japan under Tojo, Germany under Hitler, these conquerors had essentially destroyed those authoritarian governments. But they also had to take over the functions of that government if they were to become democracies. Unfortunately, this does not always happen in a smooth manner. This, therefore, leaves room for anarchy.

During anarchy, there are many contenders who could potentially take control. In Russia, World War I gave rise to the successful terrorist revolutionary war of Bolsheviks. They overthrew the provisional government led by Kerensky, which had failed because of its decision to continue in the unpopular war against Germany. The 1947 war between Jordan and other Middle Eastern countries with Israel generated the Hamas, Hezbollah, Islamic Jihad, and the Palestine Liberation Organization (PLO), which is now the Palestinian government. The US, Soviet Union, and Afghanistan civil war generated Al Qaeda. Furthermore, the civil war between the Tutsi and the Hutus caused the collapse of Rwanda, and the subsequent waging of a terrorist war in the Congo by the Hutus. In these cases, the state of societal and governmental disarray caused by war both directly and indirectly contributed to the rise of terrorism in the participating nations.

Another condition that leads to instability resulting in either civil war or terrorism has to do with having large minority groups. Countries that have large minorities such as Papua New Guinea, the Southern Philippines (Mindanao), and Chechnya may also be ripe for terrorists. Usually large minority groups are discriminated against, as were the ex-slaves in the US south. Large religious minorities may also be discriminated against. Some of them came from areas, such as Chechnya, that have since been conquered.

Furthermore, humiliation, or the product of shaming procedures, triggers destructive reactions in most people. In addition, people diagnosed with Axis II character disorder may respond especially poorly in such shaming situations. These disorders are mainly characterized by closed-mindedness and solipsism. Their individual personality traits reflect ingrained, inflexible, and maladaptive patterns of behaviors that cause discomfort, and impair an individual's function in a positive manner. Although most personality-disordered people are prone to anger, there is an even higher potential for violence including the willingness to kill others, criminal activity, and the humiliation of others by people with antisocial personality disorder. These non-empathic behaviors are characteristic of a certain lower stages of development.

The targets of the violence are seen as objects rather than as individuals. These characteristics and their developmental basis are parallel to those who have been known to participate in acts of terrorism. Since most terrorists operate at lower levels, they are more likely to react to humiliations in a negative manner. Their responses may then lead to further humiliations, and the cycle only perpetuates. It is important to recall, however, that people at various developmental stages react poorly to humiliations. The developmental basis lies within the actual behavioral response, and the thought process that generates that response. Individuals who operate at a more complex stage are less likely to respond with violent, non-empathic behavior. Therefore, it is important to take this into account in countries where shaming procedures are embedded in the culture. Most often, the victims are those who operate at a low stage and will undoubtedly respond negatively. This will only foster future acts of violence and terrorism (see Lindner 2001a, b).

## An Analysis of how to Bring about Change

Which general processes facilitate political stage change, irrespective of the beginning stage? In order to answer this question, it is important to first examine the process by which such transition takes place. The first part of stage transition (based on a discussion by Flavell 1963, 1971) involves *deconstruction* of the previous stage actions. Deconstruction starts with the individual or group engaging in action A, the present stage action. This step is followed by a new, added step, in which the person or group learns that the present stage action fails them. This new step, the failure of A (the previous stage action) is the critical step. When the action A is perceived as failing, there is a resulting drop in the perceived rate of reinforcement, as previously discussed. Detection of the rate of reinforcement may be done through self-checking (observing what happens when one engages in different actions), observing others receiving reinforcement for certain actions, or merely through trial and error. The next step is when individuals or groups use a present stage action, B, which is either the opposite or complement of stage action A. The deconstruction part of transition ends when there is alternation between A and B, the relativistic step.

The second part of transition, *construction*, follows deconstruction. In this part, the construction of the

new-stage actions takes place. Construction begins with a new step, which is made up of sub-steps (these are based on Kuhn's (Kuhn and Brannock 1977) analysis of stage change; they in turn base their analysis on dialectical strategies described in the Piagetian probabilistic transition model (Flavell 1963, 1971). These steps were later systematized by Commons and Richards (1984, 2002)). The sub-steps illustrate three possible ways of learning to coordinate actions A and B in an incomplete manner. Random parts of both A and B are combined into more complex actions. Since the coordination is not complete, actions A and B are said to be "smashed" together. Finally, the individual or group reaches the last step, where A and B are coordinated, forming a new action, C. It is not until this step that successful transition to the next, more complex stage can take place.

In order to examine this process from a political perspective, one can look at those governmental actions that have failed to facilitate developmental stage progression in the past. For example, it seems that just giving instruction in democracy to individuals has not necessarily worked, Action A. Neither visitation to, nor residency in, democratic countries seems to induce many individuals to become democratic leaders. Moreover, Western nations' attempts to Christianize people did not lead to good governments based on Christian principles as seen, for example, in Nigeria, Rwanda, and Haiti. Our society assumes that observing democratic ways "supports" the modeling of such behavior. However, the observed democratic actions and perceived ideals are translated through the sometimes less complex stage filters of distant observers, and understood in ways very different from what we often assume (Wagner 1990). Piaget (1962; Piaget and Inhelder 1973) showed that behavior of more than one stage away was not even remembered by observers. "Considering the stage of the society one plans to make more democratic" could be Action B. When these are fit together, they become "presenting information about democracy, exposing people to it, and supporting democratic activity"–all at the stage of functioning of that society, as this article describes, and given that is the mission. This in turn, leads to the next stage behavior.

It is also important for all societies to realize that successful methods of progressing in stage and decreasing terrorism are dependent upon the present developmental stage of the individuals, groups, organizations, and countries. Intervention studies have shown that interventions targeted to produce a change of one or two stages work best with individuals (e.g., Kohlberg 1971; Berkowitz et al. 1980). Contingencies within tasks that are more than one or two stages above the current working stage of the person fail to make contact with the behavior in a way that the people comprehend or translate into their own familiar

terms of reference. Reinforcement contingencies do not change behavior without additional support. There are different types of support that have varying degrees of effectiveness. With one layer of support, people are merely given a procedure to follow and monitor their own progress. Conversely, with two levels of support, people are actually walked through a given procedure, and their progress is monitored. Their correct performances are also noted, which leads to increased confidence and, therefore, future correct performances. Offering two levels of support is especially effective when the participants operate at a low stage. Kegan and Lahey (2001) discuss how changing the way we talk can change our developmental stage. The specific application of support layers to governments will be later discussed with respect to each stage.

## Concrete Stage Societies

In general, the concrete stage is defined by following fairly straightforward or simple social rules, and coordinating the perspectives of others only insofar as how others affect the self or close group. For example, the rules are used to form cliques and plan deals between individuals. The end result at this stage is the formation of interrelations, social events, reasonable deals and constructing a causal form of knowledge of what happens among others. There are no centralized governmental bureaucracies in societies characterized by a "pure" concrete stage. At this stage, rule is exercised by making deals and exerting raw power in the "friend or foe" dyadic relationships. Leadership and policy are determined simply by weapons, money, and tribal and family affiliations. The Somali and Afghan warlords are good examples of concrete stage power-based governance. Government may be based on ethnic and religious affiliation, as was the case in Bosnia in the 1990s civil war. Feudal, and archaic countries are examples. There is some degree of popular support within these religious factions: Roman Catholics (Serbs) who supported an ethnically cleansed greater Serbia, Eastern Orthodox Catholics (Croats) who dominate in Croatia, and Bosnian Muslims.

In much of the world, there is a clash between religious, ethnic, and tribal factions with each other, and with other cultures. Individual leaders lack social and political empathy. They have no concern for people with whom they are not associated, since their dyadic relations are based on personal contact with and knowledge of others. For example, Lenin and Stalin said that they were not concerned by the innocent people caught up in the terror campaigns by the communists. Also, there were many in the US who were not concerned with the death of American Indians. The cultural and institutional atmosphere of concrete stage social arrangements is characterized by the

dyadic patron-client relations that provide the primary social glue. For example, in Afghanistan, war lords and individuals changed sides as part of monetary bargains. Such governments are viewed from the Western perspective as corrupt, yet from the concrete society's perspective, the bribes and secretive deals are viewed simply as "the way things are/get done." The activity of hostage taking is seen by some as a legitimate financial and political activity, ignoring the perspective and/or feelings of the person taken. People can be bought and sold, which further illustrates the non-empathic views of individuals in a concrete stage society.

Other concrete stage societies, such as China during the cultural revolution, provide models for subjugating and brutalizing people. Often punishment is public and celebrated. In the event that these societies fail, due to invasions from the outside, the people socialized by them persist with their former punitive and distrustful behavior. It makes it difficult to have them move up in stage. The benefit is that such strict governments discourage terrorists because the government operates its own terrorism against dissidents, including would-be terrorists.

Another glaring example of concrete stage action is seen in attempts to regulate free speech and media access. Throughout the world, there are different degrees of contingencies regulating these domains of free speech and media access. These regulations help one identify a country's developmental stage. In concrete stage societies, the people have very little access to public broadcasting and thereby, are not allowed a voice in the government. For example, the Taliban government of Afghanistan forbade the use of satellite TV and VCR's. Implementing complete bans on such aspects of society are attempts to regulate and control the individuals of the society. This, in turn, impedes the development of the society as a whole, which is characteristic of the concrete operational stage.

The concrete stage is the modal stage for feudal and archaic countries. That does not mean that people do not operate at more complex stages in various domains. They may repair complex weapons (formal stage), build complex networks of terrorists using email and webpages, and the like (formal stage). We will address this issue in the discussion of higher stage actions.

## Abstract Stage Societies

In general, the abstract stage is defined by forming variables out of finite classes, and making and quantifying abstract propositions. This allows for the formation of variables such as stereotypes and quantification (none, some, all). The end result at this stage is the use of comprehensive set of variables: time, place, act, actor, state, type; quantifiers (all, none, some) and categorical assertions (e.g., "We all die"). In abstract stage societies, there is an abstract form of affiliation, such as belonging to a party, movement, or religious organization. Unlike concrete stage social relations, the relationship no longer has to be local or personal. There is often a strong preference for a powerful charismatic leader, with the primary need being a strong, paternal authority. One may see this in the transitional government in Iraq in 2004. The people want a strong leader to achieve peace and harmony. It is at this stage that bureaucracies come into being, yet they are not fully formed. They are merely organizations that are tied to the leader. In politics, that leader may have more extensive power to rule by decree. The organization serves. For example, consider Iraq under Saddam Hussein. There was a water department and a power department, but Hussein could, and did, interfere in each. Appointments to jobs favored his family and tribesmen.

Most importantly, the leader of such a society may espouse what appears to be an ideology. Quite often, such apparent ideology is nothing more than a statement of prejudices, stereotypes, and definitions of the "in group" and the "out group". Such dualisms of "us versus them" are characteristic of the abstract stage, and patron–client relations continue to characterize much of the cultural atmosphere even when the institutional atmosphere does not appear to overtly support them. One might then ask, what role does ideology play in these societies? This can be answered by considering one large branch of terrorists that comes from the Muslim Brotherhood and the Wahabie schools. The militancy of these groups is an example of abstract stage operations, and illustrates the dominance of certain ideologies in such societies.

Furthermore, consider the example regarding regulation of free speech and media access. In China, it is a common governmental practice to try to block the use of email and the web. Due to the fact that this is difficult to do, the government is not entirely successful in this endeavor. Therefore, the people of China still have some access to public broadcast (through the web) and free speech. However, as a counter attempt to limit free speech, the government has imposed restrictions on political protests and the like. Although these governmental contingencies are characteristic of low developmental stage operation, they are more normative practices than those exercised in Afghanistan. Therefore, China would be said to operate at the abstract stage.

At the abstract stage, most terrorist groups have multiple sets of norms. There are pro-social norms within the group. Order and conformity are very important. There are also strong anti-social, anti-western norms, which help to unite the group, on the grounds of a common enemy. As said before, many of these groups represent "traditional"

values, ones that have long disappeared in large segments of the population in the West. The alien social and religious norms put these groups at odds with West. For example, groups of terrorists aligned with this and related ideologies come from or operate primarily in Saudi Arabia. Many Muslim countries have Kings, dictators or are, at best, very limited democracies functioning at the abstract stage. Within them, there are religious schools and other institutions that promote anti-social, anti-western norms, characteristic of the abstract stage. Other Muslims groups operate in the Philippines, Iran, Syria, and Palestine. There are also many leaders who act at the abstract stage from all over the Arab world who are benign and in favor of modernization, as in Qatar, Jordan, Morocco, etc. There are also other terrorist groups of different ideologies such as the Irish Republican Army. Since the fall of the Soviet Union, there are still a few communist insurgency groups: Peru's Shining Path, and Columbia's and Nepal's Maoist Communist party. These groups base themselves on some form of communist ideology. The abstract stage might be the modal stage in many second world countries.

## Change from Concrete Stage to Abstract Stage Societies

At the concrete stage, the beginning of the transition to the abstract stage requires clear contingencies, and strict law and order. Otherwise, chaos and anarchy including tribal, regional, and warlord fighting may ensue. A big country or coalition must occupy the country for a period of many years. There has to be leadership and institutional structures that exert the necessary strong authority over society to both stabilize and unify it for the first time. The leader has to be an authoritarian and rule by decree for a long period of time. To move from tribalism, in which a warlord or tribal leader led, to nationalism, one has to appoint a benign strong leader, and establish a common language and a common military.

At the transition to the abstract stage, group norms come into being. This allows for societies to first build nationalism. For nationalist norms to exist in the group, a number of critical steps must take place. First, it is important to create both a public and private national television system. One also has to supply democratic norms. A helpful mechanism to foster this change in institutional and cultural atmosphere is the introduction of such patriotic slogans that can be understood at the concrete stage, for example, "Life, liberty and the pursuit of happiness," in the early US, and "Truth and Reconciliation," in South Africa. In the transition to the next stage, centralized government structures are attempted, but the institutional and cultural atmosphere of warlord-led tribal societies results in ineffective centralization efforts. This is greatly illustrated by the difficulties of the central government of Afghanistan in 2004, where elections had to be postponed because of the fighting.

A country or regional coalition should establish an advisory legislature of elders, tribal, regional, and military leaders. Bringing the existing concrete societal structures into the new abstract structure is the way to replace prior rivalry with greater status, a reinforcement contingency. Structurally, it is irrelevant that some of these warlords and tribal leaders were once the enemy. Yet, this is a crucial transition to accomplish because, with respect to political atmosphere, the citizenry's level of distrust for "the enemy" will dissipate very slowly. However, bringing the previous tribal and military leaders into the government exposes them and embeds them in the more complex stage structure. It also reduces their alienation from losing, and thus their capitulation to the cultural atmosphere that still pervades their former parochial followers. The new institutional atmosphere will present the new challenges needed for concrete stage acting leaders to adapt to the new abstract institutional structure. Governments may hold elections because at the abstract stage, variables come into being. The new variable associated with elections is popularity of the politicians and leaders. The electoral process tends to replace the exercise of raw power.

Throughout this transition, there are still problems in running governments. What we might think of as bureaucracies, are more like fraternities. The affiliation is to the unit and working group, not to the overall organization and the public it serves. Harmony is more important than efficiency. The social practices oppose modernization and improvements. Government may accept certain kinds of help. Technical assistance is one improvement that seems to be accepted in many places in the world. Improvements in public health are an outstanding example of this. Health and family planning have had large successful impacts in Taiwan, Uganda, India, and China.

In order for such a country, which operates at the concrete stage, to move into the abstract stage pre-bureaucracy, a number of changes must occur. A pre-bureaucracy consists of organization minus logical regulations and operationally defined roles. Part of these required changes must be to establish an infrastructure and more modern bureaucracy. First, a major goal of bureaucracy is to establish a taxation system, bookkeeping and records, and transparent accounting. At the abstract stage, the first step toward this goal may be taken. This requires training and supervising people in the use of computers, data entry, bookkeeping on the computer, record keeping, and simple accounting practices based on simple computer programs. It is likely that these countries also do not have a working private banking system. It may be necessary to set up national banks, private banks, and most importantly,

banks that lend to micro bankers, as well as a micro banking system.

Furthermore, part of the capital formation process that leads to stability and a high degree of investment in the society is property ownership. About 500 million people worldwide are squatters (de Soto 1989) living on land that they have no legal right to occupy, usually on the outskirts of cities. Squatting presents a growing economic problem in less-developed countries. For example, de Soto's (1989) program led to four million Peruvians getting legal titles to their land and reduced the power of the Shining Path. All of this regularizes economic activity and increases the stake of people in the government.

One huge change for many of these societies must take place. All the girls, and the boys, must be put in public schools. The biggest impact on both boys and girls in their own terminal stage of developmental is their mother's education. Mothers' education is predictive of how far their children go in school, of their health status, and of the amount of ambition they possess (LeVine 1980, 1987, 1995; Schultz 1991). Furthermore, higher education leads to a reduction in family size so that the investment per child will be higher (Ainsworth et al. 1995; LeVine et al. 1991; The Impact of Female Schooling on Fertility and Contraceptive Use. World Bank Living Standards Measurement Study). This is another form of investment that leads to a reduction in terror. Societies that offer hope and real opportunity have much lower rates of terrorism. Since one of the best predictors of the rate of economic development is mothers' education (e.g., Castañeda and Aldaz-Carroll 1999; Jejeebhoy 1996), it is not surprising that almost all terrorist societies have a large section of the population who are poor and do not have much hope for societal advancement. In order to improve upon this state, it is crucial that all children be put in public schools. The schools for boys and girls may even be separate. Either way, this will not only reduce feelings of economic hopelessness, but it will also ensure education of the country's future generations.

## Formal Stage Societies

In general, the formal stage tasks require solving problems using logic, mathematics, and empirical investigation in order to find out what is true. At this stage, logic is linear and one-dimensional, and the end result is formation of relationships out of variables. But only a single variable at a time may be examined. People functioning at this stage begin to take an empirical interest in how to get others to be more productive, how to train them, and how to distribute the vastly greater wealth. Again, governments, societies, and countries are characterized by the modal

stage, at which individuals within those institutions operate. Formal contracts may be drafted. These in turn lead to formal economics and law. Social relations, which were already more abstract than at the previous stage, now come under the control of the contingencies of the marketplace. Also one's role within an organization is critical. The competition between individuals is regulated and relatively civil. Economic production becomes increasingly organized, mechanized, and automated. Extensive written law and regulations develop, and are carried out in a quite literal fashion. Written regulations and written procedures form the basis of bureaucratic governments at this stage. They are also used to moderate crime and terror. Enforcing both criminal law and civil law becomes utilitarian in that it promotes trade, commerce and investment. Terrorism reduces the confidence in economic activity by introducing great uncertainty. It thereby reduces investment. Writing becomes universal, and simple arithmetic, elementary algebra (in modern times), and rudimentary rules for argument in the narrative become necessary. Questions of religion become central not only to local government, but also to war. The countries that operate at this stage do not necessarily have a real multiparty system, even if they have free and fair elections. This stage was the modal stage for countries of the eastern block and many Latin American countries.

## Change from Abstract Stage to Formal Stage Societies

Abstract stage societies ultimately fail because there is neither logic nor empirical basis to decisions made by the government. For example, as popular as Juan Peron was in Argentina, he gradually destroyed the economy by his populist policies. At this stage, governments are often inconsistent, and there tends to be chaos. The people who work for the government request that there be some regulations that they can follow, rather than obtaining approval for every decision made. There is also tremendous pressure to have regulations that reduce corruption. The process of voting moves the government up in stage over time because the people vote for candidates that have strong track records in reducing such corruption. Hence, the abstract stage popular voting leads to formal stage logical regulations with empirical checks that the regulations are being followed.

Often nepotism laws (government employment) and regulations (business employment) are adopted to decrease corruption in government and large organizations. Corruption is seen as driving up costs of doing business. Small family owned businesses may be fiercely competitive because everyone has a stake and everyone's effort counts. There are lots of these businesses. But in the government

and in larger groups, with nepotism, family and political connections have little immediate effect on the income or job security of other family workers. Relatives, friends, and political allies thereby swell the bureaucracies with non-productive workers. The nature of organizations reflects moves beyond being personal to more impersonal. There may be decentralization of economies with small companies that employ a number of employees coming into being. There might also be stock ownership rather than all businesses being totally family owned.

Power is more clearly defined by legal and regulatory roles, both for politicians and businesses. Multi-religious states that have to be secular slowly become more secular. The attempts to exclude groups backfire over the long run. Many such groups agitate for a separate country. Sometimes, large groups of people leave. One solution is to allow for religious freedom. This requires a logical and empirical analysis to go beyond the normative majority rule. Religious tolerance reduces religious terrorism because everyone's rights to their religion are respected. Governments who are fighting terrorism in countries such as Iraq, Afghanistan, or Chechnya, must maintain the functions of the infrastructure or work to restore them.

## Systematic Stage

In general, the systematic stage is defined by people coordinating more than one variable as input, and considering simple relationships in contexts. These coordinations and considerations construct multivariate systems, matrices, and webs of causation. The end result is that events and concepts are situated in a multivariate context, and systems are formed out of formal stage relations. Such systems include: legal, societal, corporate, economic, and national. Throughout this stage, governments work to achieve multiple goals simultaneously, society is predominately lawful, and there is advanced accounting practice that makes business relatively transparent. The laws are carried out in a fashion that promotes the intention of the law, not just the letter of the law. There is functioning democracy, and the governmental processes are orderly and mostly fair.

Current day Japan is a good case in point. The institutions of society are hierarchically organized. Also, status, and not just role within organization, is critical. The competition between institutions is regulated and relatively civil. Economic production becomes increasingly organized, mechanized, and automated. Increasingly, corruption is reduced at the systematic stage because of the introduction of professional norms, etc. Part of being a professional is having a role that is independent of personal affiliations and conflicts of interest (Gutheil et al. 2000).

Markets, stock exchanges, and the like produce complex impersonal relationships among people. Laws and regulation are developed to stabilize markets and prevent monopolies. These laws deal with multidimensional aspects of markets requiring advanced systematic stage actions. There are still readily identifiable "in groups" and "out groups," and war is still used in international conflicts. Most importantly, there are very low rates of terror within such societies. However little terrorist activity there might be, is covert state terrorism (e.g., the secret bombing in Cambodia, and possibly the atomic bombing of Nagasaki). Such state terrorism has a small national and societal effect. This is because such terrorism is directed outward toward other countries and people, and thus it may be less worrisome to its perpetrators. Individual terrorists often risk their lives and bring retaliation upon not only their own groups, but upon the countries, in which they operate.

## Change from Formal Stage to Systematic Societies

As societies move from the formal to the systematic stage, one overriding set of actions becomes clear. There is an increasing understanding that the world is complex, and that there are no simple solutions. One sees this in debates on policy where not only the intended effects, but also possible unintended side effects, are presented. The government develops sophisticated systems of measurement and analysis such as the Bureau of Standards, the Bureau of Labor Statistics, the Federal Reserve, the Federal Drug Administration, National Weather Service, etc. Each department of the government funds research, collects multivariate statistics, and builds complex models in an attempt to understand the data. Most of these departments grow out of simpler administrative units and write regulations. They engage in the rule of law rather than decree—a hallmark of the systematic stage. But because of the many countervailing forces, the government is forced to consider the problems in multivariate way. For example, the National Weather Service used to measure just temperature, humidity, barometric pressure, and wind direction and speed. It simply reported them and noted that a falling barometric pressure predicted storms—a formal operational relation. Now it has complex computer models that predict the course of storms.

When countries are really formal operational in action, with huge unresponsive and corrupt bureaucracies, terror is even more likely. Consider Sri Lanka, which was a model of orderly political and economic development before the Tamil Tigers began their campaign of terror. In fact, democratic elections were the occasion for the Tigers' campaign. Likewise, consider India, where the British colonials established elaborate governmental institutions

that were developed further and made democratic by Nehru and successors, but nevertheless has been plagued by terrorist actions by several groups during the past two decades.

To move into the systematic stage, there is a necessity for institutions that function with checks and balances to reduce corruption. There have to be deeds to property, and courts with judges that have terms that cannot be altered by the government so as to force their political agenda. The police have to be supervised. Trials must be open. The press must be free.

Movement to the systematic stage has rapidly occurred in the Eastern Block countries. Most of them had a history of democracy before German and Soviet expansion engulfed them. Explicit contingencies for having democratic government, free-speech, and capitalist economies have had their positive effect. Foreign aid flows more, and foreign investment increases as these countries become democratic with a law-based society. There is still more to be done, however. For example, reducing the ethnic nature of these countries is a crucial step that needs to take place in order for further developmental progression to take place. There is also a need for the most advanced societies to better deal with dissent, terrorism, and opposition throughout the world. If this is achieved, these societies will successfully move toward the systematic stage.

The modal stage today for the democratic Latin American countries is transitional between formal and systematic. For example, Mexico and Brazil have multiparty democracies with increasing amounts of private ownership.

## Metasystematic Stage

In general, the metasystematic stage is defined by actions that create supersystems out of systems, compare systems and systematic stage perspectives, and name properties of systems (e.g., homomorphic, isomorphic, complete or incomplete, consistent or inconsistent, and commensurable). The end result is that supersystems and metasystems are formed out of systems of relationships. At this stage, our analysis suggests that governments should move beyond the conceptualization of the legal system based on the simple use of a combination of Logic and Folk Psychology. Legislators, judges, and administrators have a great tendency to view the problems of government based on their own experience. Their own experiences are then projected onto others in a logical, but non-empirical or scientific manner. The use of folk psychology prevents them from effectively dealing with both internal and international affairs in obvious ways. Folk psychology leads them to fail to understand the huge individual

differences among people, and they still base their thinking on the idea that everyone has freewill, and will respond as they assume they would to inducements and threats. They assume a common value system or if there is a difference in value systems, the system of the legislators or government officials is "right" and that of the others is "wrong."

There are a number of metasystematic political systems, all of which are incomplete and inconsistent. For example, many of the considerations in the US Bill of Rights and the Constitution together form a metasystematic system. There is a coordination in the system of rights under the Bill of Rights and duties in the Constitution. Also consider the Declaration of Independence and the concepts and principals embedded in the European Union (EU).

## Change from Systematic to Metasystematic Stage Societies

In the transition to metasystematic stage governments, there are multiple parties that divide in an ideological spectrum. There are a number of ways to do this. In Europe, parliamentary governments are the rule. Most of the time, representatives are elected by a process called "first past the post." That means that the candidate that gets the most votes is elected. This generally forces two parties because third parties act as spoilers. This can be seen in a presidential system with a congress. This arrangement leads to a two party system, in which the parties must compete for the momentary middle. This spectrum, along which these parties exist, must be multidimensional. In a parliamentary system, coalitions quite often have to coalesce to make it possible for a government to be formed. This effectively results in two parties—the governing party and the opposition. There can be a change of parties through free elections that are not fixed to any great extent. There is freedom of speech and individual rights, as well as a social contract.

One of the hallmarks of the metasystematic stage is that all persons have equal standing. One considers fairness from the perspective of the least advantaged (Rawls 1971). At this stage, issues of nationalism and cultural preference are overridden by a respect for every individual. Due to this, the legal, economic, and political systems work to further reduce corruption and expand fair competition. The mechanism is that less corrupt producers have lower prices and, therefore, increase their chances against more corrupt competitors. As prices fall, the buying power of almost everyone is increased. This particularly benefits the poor who often are considered the least advantaged. Investment is high because the economic and political systems are relativity stable without much of a guiding hand (the expectation is the central banks). Productivity is also

extremely high. This is because the manipulation of information replaces the manipulation of materials by hand. Services expand over manufacturing because education and innovation in competitive modern societies make labor elsewhere cheaper. The less developed economies must depend on the advanced ones for knowledge, innovation, etc. When agriculture is reduced to 5% of the economy, educational demands escalate to overwhelm supply (Kegan 1998). This should be a generalized trend that will occur in all societies at this stage. As the countries of the world move into the metasystematic stage, trade barriers are eliminated so that people and groups can compete on more equal footing, regardless of where they are. This is extremely hard to achieve because it is difficult to go against local interest groups and nationalism, but it increases productivity and, thereby, reduces costs. Incomes go up where labor is less expensive and those economies grow. There is increased demand for products and services that only the most advanced economies produce. Therefore, the world markets unify to a great degree. The transmission, storage, and processing of information is computerized and increasingly distributed on the World Wide Web. Email lists provide the exact intensive form for building supersystems and communicating them to others. The society increasingly stratifies as to attained education and competence in communication. People all around the world develop multiple systems for accomplishing these activities. This hugely affects the transition to metasystematic stage thinking because so many metasystems appear, and are explained relatively well. Rough comparisons are made among these systems, which is characteristic of the transition to the metasystematic stage.

As previously mentioned, the governmental regulations placed on free speech in a country are highly indicative of the stage at which the government is operating. In order to gain a better understanding of operation at the systematic stage, it would be useful to consider the governmental practices of the United States in this domain. Here, regulation is most often used to protect the system. Although the US avows in the Constitution to grant its people free speech, there are still limitations on this right. For example, the US allows free speech only as long as it is truthful, peaceful, and within the realms of morality. Therefore, in order to broadcast publicly, it is required that an individual or group obtain a license. Unlike China and Afghanistan, however, there are very few restrictions on use of the web. This has led most broadcasts in the US to move to the Internet, where no license is required and very few limitations apply. However, the right to privacy prevails over the right to free speech in this case. For example, people in the US have the right to block spammers, who argue that they are exercising their right to free speech. In essence, this is a restriction on free speech in one particular

population, in order to protect those that are the targets of this practice. This is also the case with restrictions on child pornography, which the Supreme Court banned from the Internet. This decision was based on the fact that the production of these films is harmful and abusive to children. These examples illustrate the fact that the US employs restrictions on civil rights and public broadcast mainly to protect the system and its members. This is highly characteristic of operation at the systematic stage, with the potential to transition upward.

Although the US is one of the most highly developed countries in the world, there is still room to progress developmentally. A main goal of a society might be to reach the metasystematic stage in politics and economics, where there would be no need for governmental regulation of public broadcast content. In order to achieve this, a wellfunctioning democracy with layers of reinforcement contingencies is essential. This means that there must be public openness and individual relationships between members of each of the organizational hierarchies (among the audience, the broadcasters, the stockholders, for example). This would allow for development of all those involved, which would, in turn, create a society that functions through interaction and mutual benefit, rather than parasitism.

Furthermore, consider the relationship between the United States and North Korea. Hope for useful dialog between the two depends on the possibility of change in developmental stage of political atmosphere and action on both sides. The US has to be able to take the perspective of the North Korean leaders. Taking their perspective means understanding the historical and current background that inspires their ideology and promotes their recruiting and support, identifying the specific circumstances that are likely to evoke terror attacks, and anticipating the effects of our actions. The US is slowing beginning to see that tit-for-tat is not workable in the MidEast, as seen by the violent retaliation as in Israel. It could be argued that the ability of the US to take an adversary's perspective is related to its political and economic development. It may be that the only way it can change, however, is with help from the outside.

In the 20th century, the United States regularly interfered with the affairs of other countries. It did so by supporting various groups within those countries, many of which terrorized the populations as many of the dictators did supporting coups and insurrections. When the attacks touch us or our allies, we term them "terroristic." More recently, since the fall of the Soviet Union, the US also has largely gone out of the terrorist business. Likewise, the Western world has to help provide the means and alternative routes for terrorists for their legitimate goals. In Afghanistan, the Westerners are providing the Warlord

would-be-terrorist with alternatives, rather than attempting to exterminate them. This requires the Westerners to take their perspective and, in effect, co-opt them. For example, the Roman Empire staved off armed uprisings by bringing leaders of conquered tribes into the apparatus of empire. A terrorist group's willingness to consider alternatives is evidence of something like stage change, although it might have more to do with the blend of engagement and coercion used by governmental powers.

One overall solution is to help all the world develop economically. In relation to democracy and capitalism, it might be argued that terrorist movements do thrive in advanced democratic capitalist nations. This may suggest that the modern countries should help remake the world in their own image, as proposed by Rumsfeld and Wolfowitz. However, this may not be a good idea until a country is somewhat close to reaching the metasystematic stage. At that stage, the least advantaged in the society find the government actions fair. Many Western countries are called democratic, but barely perform at the systematic stage. They surely do not co-construct a perspective from which to judge the people with fairness that are alienated from them. In the US, gangs represent urban terrorists to some extent. The Basque separatist group ETA in Spain (after Franco), Action Directe in France, the Red Army Faction in Germany, and the Red Brigades in Italy may not be thriving, but certainly have had major disruptive effects in their advanced home countries.

## Paradigmatic Stage

As developmental stage increases, the number of societies that operate at that stage decreases. The paradigmatic stage, for example, has yet to be reached by a single society in today's world. In general, this stage is defined by fitting metasystems together to form new paradigms. But this is not always possible to do simply, so processes that make partial synthesis possible are developed. At this stage, governmental and societal issues are addressed through co-construction (Sonnert and Commons 1994). The impossibility of finding a complete and consistent set of governing principles forces this solution. Madison, in drafting the US Constitution, was aware of the need to balance the incommensurate and potentially conflictual systems of administration, legislation, and justice. But the means to adopt a process beyond a weak political structural one, is such a difficult task that no government has been able to do it, let alone address the need to do so.

The potential for a paradigmatic stage in political development arises out of the dashing unbounded optimism of the modern period first by cracks in the fabric of math, logic, and physics. Heisenberg's (Price et al. 1977)

uncertainty principle, particle-wave duality, and Godël's (1931) incompleteness theorem made it clear that the hope of a complete mathematics, in which a proper set of axioms would lead to all mathematical truths, was premature. Attempts to integrate Einstein's general theory of relativity with Planck's quantum mechanics have failed so far. Systems of observation, such as particle-wave duality, were seen to be ultimately inconsistent. Limits to scientific inquiry were proposed (Holton 1978, 1979). It is important to note that awareness of the limits to scientific inquiry has led to awareness of the limits of government.

Paradigmatic actions transcend the abstraction of the individual at the metasystematic stage, in which there is an abstract concept of society that does not face the structural dynamics and limitations of such conceptions. Such limitations are illustrated by Arrow's (1951) welfare theorem, Plott's (1967, 1971; Plott and Levine 1978) voting dilemmas, and Hardin's (1968) tragedy of the Commons. Extensions of theories and fields led to these non-computability notions. In Arrow's welfare theorem, he showed that a pie could not be fairly divided among three people. This had ramifications for voting systems. No voting system has been found to be complete and adequate. This is because there is more than one metasystem describing voting, each including different sets of desirable properties found in each metasystem. And no rational political scientist can non-arbitrarily determine that a particular (internally consistent) voting supersystem is best. Thus, the voting dilemma, and Arrow's and Hardin's dilemmas, illustrate that "monologic" attempts at solving it are either complete, but inconsistent or consistent, but incomplete and arbitrarily selective.

In the social domains, such as politics, morality, and conceptions of the good, paradigmatic actions are based on the co-construction of an acceptable shared set of precepts. Thus, even enemies must be brought into the co-construction process. Positive side-effects of such co-construction, is that the participants become owners of the co-constructed supersystem. This is similar to the lower stage action of forming of an alliance with the "healthy" part of a person so that a mutual set of positive goals may be pursued. The concept of healthy and unhealthy parts of a person at this stage is replaced with one's preferences as a stakeholder.

Consider the example of two supersystems of capitalistic market economics and social welfare economics. Each of these supersystems is inconsistent with the other. Market economics does not protect individuals, nor companies, from fair competition. Social welfare economics uses transfers of wealth to compensate for differences in competitiveness, thereby, reducing the effects of competition. For example, welfare economics provides disability benefits for the severely impaired. At the paradigmatic stage,

the question is how to consider the issue of how to assimilate people of differing abilities into a united, functioning whole. This is a problem that every society is faced with, yet the approach taken to formulate a solution is what characterizes their developmental stage. Upon addressing this issue, the question of equity versus equality inevitably arises. Equity states that all people are granted with equal opportunities, yet there is recognition of differences between individuals. A society that subscribes to this belief allows all people to reach their potential, but does not solve the issue of severely impaired individuals.

In many societies, there has been the institution of financial "dis-incentives" for these people. For example, the availability of welfare and disability pay allows people to not have to work for their money. In essence, this attempt at equity is a paradoxical breech of equality for those who *do* work for their money. There is a similar problem in many Scandinavian countries, where child support laws have probably led to increased instances of unwed mothers. These laws reinforce the notion that a mother does not have to depend on a husband to be able to support children. From within the framework of social welfare economics, there is the question of what would happen to these children if the support were not available.

It is this issue of conflicting claims that separates metasystematic societies from the paradigmatic ones to come. In order to address these issues, such a society would hold open discussions, in which the opinions of people at all developmental stages were honored. This would allow for a consistent solution to a particular problem, and an effective integration of all members of the society. There would be no jockeying for removal of policies or laws from the system, but only co-construction of solutions (Ross 2002). Once a society has achieved this ability, it is said to operate at the paradigmatic stage. This is the primary goal for those operating at the metasystematic stage and lower. When the public discourse is extended in time, has real power, is inclusive, and establishes its own rules and agenda, and when it engages in real co-construction of its rules, agenda, and prioritization of assumptions, then the discourse may be paradigmatic.

## Change from Metasystematic Stage to Paradigmatic Societies

Acting at the metasystematic stage requires taking the perspective of the opposition and acting toward them in a non-strategic way, regardless of the stage at which they operate. The fact that people in the modern countries have such difficulty in doing so, is evidence that we are not fully functioning at this stage. Most of the time we are not forced to function at this stage, because we can apply existing laws to situations, without ever leaving the political system to which we belong. We also can use power to get our way in the world and even within society. The use of power is strategic, showing that we are further from operating at the paradigmatic stage. Yet, once a group or society begins to practice operating at the metasystematic stage and can effectively take the perspective of the opposition, the next step is to incorporate them into the co-construction process. Again, this allows for all participants to become owners of the co-constructed super-system. In order to attain the paradigmatic stage of development, it is crucial that a group or society first masters all the aspects of the metasystematic stage, and then transitions into co-construction. According to Ross (personal communication) we can design and implement metasystematic methods and processes that equip people at all scales, from local to global, with the procedural mechanisms for more complex co-constructive thinking generated by their collective levels of engagement.

At the metasystematic stage and paradigmatic stage, it becomes clearer that a possible solution is to bring people into the larger society, giving them a voice, rather than pushing them out. For example, one might have invited Saddam Hussein to the UN to speak and acknowledged the good things that he had done. Also, giving him responsibilities, in which he had to work as a part of a very small public group to protect civil rights and liberties, and institute democracy may have changed the way he behaved at home.

Also, consider the conflict between the developed world versus Al-Qaeda and their allies. The developed world operates at the systematic to metasystematic stage, and Al-Qaeda and its allies operate at some amalgam of concrete through formal stage in the arena of governmental stage as discussed above. There is also evidence that some of the members such as Mohamed Atta functioned at the systematic stage in some arenas, such as engineering.

Atta studied architecture in the Engineering Faculty at Cairo University. According to his peers, he was an average student. Atta also studied in Hamburg at the Technical University of Hamburg-Harburg (TUHH). He enrolled in a degree program in urban planning in the faculty of engineering. Most often, postgraduate degrees are associated with the systematic stage. This further illustrates the notion that a variety of developmental stages may be present in a single governmental system, and that the successful integration of all the members operating at these different stages would allow for transition to a more complex stage. However, the fact that we, in the developed world, have not attempted to engage Al-Qaeda to co-construct its members and people of the developed world may be one reason underlying its lack of developmental progression.

## People and Societies Function at Different Stages on Tasks in Different Domains

It is most important to note that although the modal stage of a society may be quite low, it is possible for a number of individuals to operate at stages higher than the formal stage. That allows for the *development* of bureaucracy at the abstract stage, and then *refinement* of bureaucracy at the formal stage to replace concrete stage groups who govern and run things. Any country at any stage can begin this process. After taking over a country like Iraq, in order to keep the system running the infrastructure efficiently, it is important to rehire what ever bureaucracy there is. This includes the implementation of civil service and governmental ministries. Almost all people who work for new governments have more loyalty to their jobs than to their ex-governments. Yet, it is still crucial to remove the previous political leaders.

Foreign peace keepers are almost always necessary to supervise and transform previous governments. The new bureaucracies need to be populated broadly, and must consist of all groups, tribes, religions, and political persuasions. This is part of modeling how a democratic society is supposed to work. This allows for people who both think and act at a less complex stage to assimilate into democratic practice. Nepotism, or town and tribe favoritism, should be reduced to eliminate concrete stage practices that encourage great amounts of corruption. Furthermore, civil service tests should be instituted for hiring, in order to promote competency and fairness in the workplace. The peace keepers should retrain the present people in their present functions for the most part. This allows the new government to incrementally improve the practices of the government. The government bureaucracies should reduce the number of people necessary to approve things. They should institute the use of computers, provide computers and training. They should also decentralize function, increase pay rates so that corruption is not so attractive, and finally, fire people who are not performing, or who are found to be behaving corruptly even after a warning.

Since law and order are always extremely important, the police should be rehired and run by the peace keepers. They should also be reassigned to new areas and reorganized so that they work with new people within their force. This gives the peace keepers more of a chance to have an impact and will also function to reduce corruption. As part of that effort, the courts should be available and utilized immediately. The legal system should use local law, but it should be changed by decree to make it fit for democratic standards.

Much of the prevention of terrorism and attempts to combat what will arise after old governments are defeated, depends on a new normalcy being established quickly. This is true for nearly all the stages of development of the societies. The presence of obsolete systems of functioning in these countries is one of the main problems confronting positive reconstruction. It is important to hire purchasing agents to get infrastructure working, and then maintain it. They can then buy parts to get water, electricity, and water and sewage treatment working if they exist. This is a major concern for these countries, since it is difficult to find these parts and the expertise to buy and assemble them. For example, almost all infrastructure and parts in Iraq were from the Soviet Union or France prior to its collapse. In this case, it was crucial that Iraq had competent and clever people to buy parts, since the Soviet Union and France had difficulty providing them.

One of the things that is so confusing to most people is the wide range of stage of development with terrorist action. Remember, terrorists often function at the formal or systematic stage in some arenas. The Al-Qaeda "pilots" flew jet planes into the World Trade Center and the Pentagon, which is a systematic stage task, based on the coordination, planning, and jet flight training that it required. However, these same pilots operate, at most, at the abstract stage in the social and empathetic domain. They have only abstract stage loyalty to a charismatic leader, ideology, or religion. Furthermore, the suicide bombers that "enact" the terror are likely at the concrete or abstract at most. They are often young teenagers. Yet, many terrorists appear to exhibit qualities of the concrete operations stage, in that they do not consider what the person(s) whom they are killing feels.

More examples note both that individuals may differ in the stage at which they operate with respect to different domains, and that members of a group, organization, society, or country can also differ in stage from *each other*. The Al-Qaeda is very new, considering it was founded in 1989, by Osama bin Laden and Muhammad Atef. Its membership comes from all over the Muslim and Arab world. These members come from societies that run the gamut of political problem solving stages, from concrete to systematic. For example, Al-Qaeda does not have bureaucratic regulations and legal institutions created at the formal and systematic stages, respectively. There *is* extensive use of email and websites, however.

Al-Qaeda also used multivariate organizational (systematic stage) measures to execute a complex plan, and considered many variables and integrated them. But in the attachment domain, it seems that many of the terrorists did not know they were flying to their death and Bin Laden laughed about it on the video tape. He appeared to not consider them. They were simply instruments in his convoluted plan. His behavior illustrates the challenge of raising the stage of attachment so that people take into positive consideration a wider range of individuals.

Furthermore, Saudi Arabia is a slowly modernizing feudal society, so the operative contingencies governing leadership are characteristic of the late abstract stage with a monarchy and a large family dominated bureaucracy, which was created by the British. The economy of Saudi Arabia is one that functions at the systematic stage, by virtue of the fact that is extracts and sells oil to the West in a complex set of interacting rules developed in the OPEC framework. Saudi Arabia also manages its potential oil surplus by increasing or decreasing oil production based on market demand or on agreements adopted among the oil-producing nations. This task requires the coordination of multiple variables (a systematic-stage task). However, Saudi Arabia is not a participatory society and mainly functions at the concrete stage in the political arena. Only the royal family has power, wealth, and the ability to determine succession. Also, because the society uses the Koran for much of their law, there is no possibility of changing the laws much other than reinterpreting what they mean. Such changes await more complex thinking. The fundamentalists believe that the Koran does not allow for a society with division of powers or a secular government. This fact constrains the political development of the society enormously. But there are countries with large Muslim populations that have a good deal of democracy, and do allow for such a division such as Lebanon and Turkey, both of which are committed to having a secular state. But civil war and externally sponsored terrorism and invasions have overwhelmed Lebanon over the past 15 years. Popular institutions such as parliaments, which developed in both Western societies and Eastern societies early in their history, have not developed in Saudi Arabia. Stage research would expect that such a situation would lead to terrorism because of the frustration that the more educated people would suffer.

As retrograde as societies such as Saudi Arabia may appear to us, they are regarded by the Al-Qaeda as modern, and therefore, wicked and corrupt. The Al-Qaeda has an anti-formal and anti-systematic stage *political* perspective. It rails against empirical and logical truth over the word of Koran. If one looks at the Al-Qaeda itself, the contingencies governing political change within it were early abstract, based, as they are, on prowess and seniority. Osama bin Laden's authority has been based, to a large part, on a number of facts: He founded the Al-Qaeda; financed it, and ordered acts of prowess by having the World Trade Center demolished. Osama's sons are also Al-Qaeda members, and if Osama were dead, they may or may not inherit his mantle (something that would occur at the early abstract stage). They surely would be considered as potential leaders.

In fact, it is large gaps in stage between the modern societies politically and the terrorist groups that make terrorism so likely to develop and become dangerous. But the development of terrorism is a self limiting process in modern societies. The attempt to restrict access to what these terrorist view as the "corrupt" Western values, portrayed in the media, does not work. Even in the least developed countries, there is increasing access to cassette recorders, televisions, and video tapes. The penetration by the Western media seems to have a larger effect than we are aware of in the West. Otherwise why would these terrorists be so upset? Consider the popularity of VCRs in Afghanistan after the Taliban was overwhelmed. The media moves people up in stage. First, it models a life of work and economic success. It shows smaller families, more material benefits, health, and adults and children benefitting from education. At the higher stages, it provides a complex world with multiple relationships discussed endlessly.

One of the most important things for Western countries to do is to reduce internal discrimination in the Western countries so that people from these other cultures may feel at home, welcomed, and valued. They should be eligible for citizenship as is the case in the US. This is all part of our transition to a systematic stage society where the intent of being non-discriminatory leads to improved practice. It is instructive to see that the terrorists do not come from the large number of Muslims and Arabs in the United States, but from countries like Germany, France, and Spain, which discriminate much more. The most violent members of the Al-Qaeda typically have lived in Europe unhappily (and are disaffected with those societies).

Consider the leader of the World Trade Center bombings. This lengthy description is included almost in total to give the actual history of one of the most important people in the 9/11 terrorist attacks. The following description is from http://www.en.wikipedia.org/wiki/Mohammed_Atta. Mohammed Atta was born on September 1, 1968 in Kafr El Sheikh, a city in the Nile Delta in Egypt, and also carried a Saudi passport. He grew up in Cairo, Egypt and graduated with a degree in architecture from Cairo University. He apparently was not particularly religious at this time. He then moved to Germany, where he was registered as a student of urban planning at the Technical University of Hamburg-Harburg in Hamburg from 1993 to 1999. In Hamburg, Atta worked on a thesis exploring the history of Aleppo's, the second city of Syria, urban landscapes. It explored the general themes of the conflict between Arab civilization and modernity. Atta criticized how the modern skyscrapers and development projects in Aleppo were disrupting the fabric of that city by blocking community streets and altering the skyline. He received a high mark on his report from his German supervisor.

In Germany, Atta was registered as a citizen of the United Arab Emirates. His German friends describe him as

an intelligent man with religious beliefs who grew angry over the Western policy toward the Middle East, including the Oslo Process and the Gulf War. In MSNBC's special "The Making of the Death Pilots," a German friend named Ralph Bodenstein who traveled, worked, and talked a lot with Mohammed Atta said, "He (Atta) was most imbued actually about Israeli politics in the region and about US protection of these Israeli politics in the region. And he was to a degree personally suffering from that." While in Germany, Mohammed Atta became more and more religious, especially after a pilgrimage to Mecca in 1995. A German terrorist of Syrian origin, Mohammed Haydar Zammar, claims he met Atta at this time and recruited him into Al-Qaeda. [http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId=A7829–2002Jun18&notFound=true] (Zammar had Al-Qaeda contacts going back a decade, and knew Osama bin Laden personally.) Atta started attending an Islamic prayer group at the university, and is thought to have recruited for fundamentalist causes there. Other students remember him making strident anti-American and anti-Semitic statements. In a visit home to Egypt in 1998, his former friends noticed that he had become much more of a religious fundamentalist than he had been before.

On November 1, 1998, Atta moved into an apartment in Germany with terrorists Said Bahaji and Ramzi Binalshibh. The Hamburg cell was born at this apartment. (http://www.newsday.com/news/nationworld/world/la-012702atta.story; http://www.nytimes.com/2002/09/10/national/10PLOT.html?ex=1090987200&en=00e7941222956576&ei=5070). They met three or four times a week to discuss their anti-American feelings and plot possible attacks. Many Al-Qaeda members lived in this apartment at various times, including hijacker Marwan al-Shehhi, Zakariya Essabar, hijacker Waleed al-Shehri, and others. In all, 29 men listed the apartment as their home address, while Atta's name was in the lease. The 9/11 mastermind Khalid Shaikh Mohammed visited the apartment repeatedly. In late 1999, Atta, al-Shehhi, Jarrah, Bahaji, and Binalshibh decided to travel to Chechnya to fight against the Russians, but were convinced by Khalid al-Masri and Mohamedou Ould Slahi at the last minute to change their plans. They instead traveled to Afghanistan to meet Osama bin Laden and train for terrorist attacks. In addition, Atta was trained in passport alteration. Immediately afterward, Atta, al-Shehhi, and Jerrah reported their passports stolen, possibly to erase travel visas to Afghanistan.

Atta and the other hijackers began to work at appearing normal, shaving their beards and avoiding known radicals. Starting in 2000, the CIA put Atta under surveillance in Germany. He was trailed by CIA agents, and was observed buying large quantities of chemicals. [http://www.cooperativeresearch.org/timeline/2001/afp092201.html]; [http://

www.cooperativeresearch.org/timeline/2001/focus092401.html][http://www.cooperativeresearch.org/timeline/2001/berlinerzeitung092401.html].

## What in General has Produced Developmental Change in Political Organizations Recently?

For the lowest stage societies, successful government building counters terrorism most effectively. It denies terrorists the support of the population, therefore isolates them. Successful governments provide a developing economy, a rule by law, and increasing degrees of law and order. People care more about economic and safety issues than ideological ones in most cases. When governments are more democratic, they mirror the wishes of the populace better. It thereby encourages others to turn in the terrorists. Failure to build a successful peace occurs when there is a failure to take into account societal stage.

We historically assume that the problem is ideological and cultural. Whereas it is true that ideologies are correlated with stage of development of the society, they are not the cores of the problem. When other countries assumed that another society has been operating at a more complex stage than it has, there is failure in: (a) successful government building, (b) the development of safety and trust, (c), and the suppression of the growth of terrorism. When the stages are more similar, as in the case of Mexico (formal in transition to systematic) and the United States (systematic in transitional to metasystematic), there is more transfer from Western countries who ignore stage. A primary way of successfully inducing governmental stage change seems to require participation in democracy by the people of a country. This was the case in India. In 1917, the British Parliament announced that Indians would be allowed greater participation in the colonial administration, and that self-governing institutions would be gradually developed (http://www.moreorless.au.com/heroes/nehru.htm). By 1919, the promise of self-governing institutions was partially realized with the passing of the Government of India Act by the British Parliament. The act introduced a dual administration, in which both elected Indian legislators and appointed British officials shared power. India did move from a concrete monarchy to a formal operations democratic bureaucracy. To a much lesser extent, Nigeria and Ghana have also begun to follow the same route. This appears to be effective from the concrete stage up. Actually, engaging in more complex stage behaviors in the country is one of the most effective ways of raising stage of citizens who previously operated at primarily lower stages.

As previously stated, the United States is a shining example of a modern-day country undergoing stage transition. What factors, then, are promoting this transition

from the systematic to metasystematic? What could promote transition in stage from where the US operates at the systematic stage toward the metasystematic? One factor is the inverse of Kirkpatrick's Law. That inverse states that political democracy promotes higher productivity and profits. This has recently been manifested in the US stock market. Companies that had more democratically run boards of directors, earned a whopping 7% more than companies that had dictatorial practices. Democratically run boards did not have poison pills, and did not have many rules or bylaws, which made takeovers difficult. Corporations are more responsive to their environment when they face the prospect of being taken over. Maybe, they are more likely to be "learning" corporations, which require a movement away from the systematic stage toward the metasystematic stage. There is no reason to change at the systematic stage because there is no threat of take over that would force a comparison with other corporate systems. But in a learning corporation, such a comparison takes place.

As Jeanne Kirkpatrick (1979, 1982) warned during the 1980s, totalitarians (who operate at the concrete and at most abstract stage) are adamantly opposed to markets (which is how you can distinguish them from authoritarians), because freedom in the market always leads to political freedom. "Kirkpatrick's Law" stipulates that institutions follow a certain path to democracy. The sufficient foundation of this path is capitalism; capitalism leads to the formation of democratic market structures, characterized by openness and transparency. In her idealized view, democratic economic structures then give rise to democratic governmental structures, characterized by the same qualities of openness and transparency. As mentioned above, companies in the US with democratic control by stock holders (no poison pills or other methods to disenfranchise stockholders) have significantly higher earnings. This leads stockholders, both large and small, to buy the stocks of democratic companies. By the laws of selection, the number of democratic companies thereby increases. Of course, there is a need for regulations to require accurate accounting, means to stop fraud, means to break up monopolies, and means to require companies to pay for the indirect cost (such as tobacco companies paying for health effects).

Limitations in fairness are reflective of a systematic stage society. For example, in the US, discrimination against certain minorities exists. There are huge inefficiencies in the social policies, which are mostly the result of the formal and systematic stages' inability to resolve conflicts and antisocial activity because our policies are determined by our folk psychology rather than compelling social science research. Education and the correctional system are two egregious examples of gross inefficiencies.

In Tennessee (Dorren Klausnitzer, 10/03/04, Middle Tennessee News & Information), generally, private school scores on college entrance exams were above the state average, with private schools' ACT scores as much as 6.6 points higher than the 2002–2003 state average of 20.4. Four Midstate public school systems also bested the state average. Metro, with an ACT average of 19.1, did not. But private education probably does no better than public when one corrects for the "quality" of the students entering. And of course, this article argues that US and other Western countries' foreign actions (there is no policy) leave a great deal to be desired.

Democracy serves as a necessary foundation to the development of groups and governments alike. However, the question arises whether the wish for world-wide democratic governments is, in a figurative sense, a religious endeavor. The argument is made in the West that wars for democracy protect existing democracies. Although one could sustain this argument with regard to World War II, it is much more dubious when applied to Vietnam or for that matter, Haiti, and Iraq. In the case of World War II, after Germany, Japan and Italy were defeated, there were extensive government building activities. The US, England, and France occupied the West and the US occupied Japan. All, but Japan are in transition to the metasystematic stage. All had governments, constitutions, courts, law, banks, and accounting, some of which were set up by the US, Great Britain, and the newly "free" France.

But what about Brazil, Mexico, Chile, Venezuela, and the like? How did they advance in stage from formal to systematic stage? They were not occupied, nor were their governments imposed. One may argue that they followed Kirkpatrick's law. Kirkpatrick's law is relatively true. Free economies do seem to lead to democracies over an extended period of time.

## Support, and how Support Facilitates Governmental Stage Change

Support is another factor that facilitates governmental stage change. Government building can come in many forms. When countries ask for help building governmental institutions, such as civil law in China's case, or a court and accounting system, stage change will follow. China has moved from the formal operational stage (with many abstract stage elements) to the beginnings of the systematic stage. Such help may be considered "support" of next stage behavior in the Fischer (Fischer et al. 1984) sense of support. Requests for economic transparency are usually accompanied by technical support, an obvious form of support. The requirements for joining the World Trade Organization and, to some extent, for obtaining loans from

banks such as the IMF (International Monetary Fund), leads to greater economic transparency. Transparency is openness and accuracy in financial dealing and accounting, both of which are prerequisites for economic democracy.

Under one level of support, one finds imitation. Maintaining close contact with the US, and being subjected to a great deal of pressure, the US has strongly influenced Korea and Taiwan to adopt governments friendly and acceptable to the US. Both Korea and Taiwan have, for the most part, transitioned from late abstract stage governments to democratic, systematic stage governments. As shown by Korea and Taiwan, even many of the liberated countries have been transitioning from late abstract stage dictatorships to formal operational bureaucracies into more democratic, systematic stage governments. Both have opposition parties, and have dramatically reduced corruption.

Conversely, under two levels of support, one finds direct administration. Two levels of support directly institutes the higher stage of behavior being required. It directly trains and instructs the people on how to carry out the required new stage behaviors. It goes beyond modeling the behaviors by actually training them directly. This may have led to democracy in Germany, Italy, Japan, and India, but did not lead to true democracy in Pakistan. It might be due to differences in education, the relative power of the army and, among other reasons, Pakistan is a relatively religious state, and has not successfully dealt with the corruption. Direct administration has been what NATO has done in Bosnia and Kosova with only some positive results. The fact that we directly administered the Philippines did not lead to the Phillippines becoming democratic until recently.

## Conclusion

What has changed about our understanding of the development of more complex stage governance? Societies must have multiple operating institutions that are transparent and based upon consent of the governed:

1.  Accounting (necessary for business and investment)
2.  Law (Deeds for property that people are currently using as squatters, are missing in most societies. Absolutely essential for the formation of capital)
3.  Courts (Independent of politics and non-corrupt)
4.  Administration (We love to concentrate on election of officials. It is necessary, but not sufficient)
5.  Legislative (We also love to concentrate on this)
6.  Opposition, a free press, and communication (These seem to be part of the transition to systematic stage government. In Russia, the Internet is open, but papers

and TV are not. The Internet has become a driving force of stage change. One reason governments are so bad in Africa is that they are so isolated. This is also true of the Muslim countries in general.)

There are a number of questions left unanswered at this point. How far will US policy get with its wars of "liberation?" How much will government building be developed systematically? Will Afghanistan, Bosnia, and Kosova, among others, become democratic? How far will the Muslim world *go?* How far will Africa get? The only successful means of reducing terrorism is to move governments up in stage. When governments operate at least at the systematic stage, there is a high probability that there will be a sufficient alliance between the citizens and the government. There will be sufficient means for people to alter the policies of the government and to engage in political and religious acts of a wide range. As the effectiveness of individual terrorists increase, the importance of civil ways of reducing terrorist acts increases. This can be done through integration of stage research into governmental processes, and successful government building for all parties involved. Government building is an activity that has not yet been scientifically studied sufficiently, and it is crucial that upon the commencement of such research, behavioral developmental approaches are considered.

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