



Principles of Inter-Societal Dynamics

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Abstract

World-system dynamics are re-conceptualized as inter-societal systems with some de-emphasis on the notions of core, periphery, and semi-periphery. This tri-part division has been useful in forcing sociology to rethink macro-level sociological analysis and in establishing the importance of considering inter-societal systems as a fundamental unit of human social organization, but this Weberian-like ideal type is constraining theoretical analysis. Moreover, core, periphery, and semi-periphery are not consistently found across a broad range of inter-societal systems, beginning with those among hunting and gathering societies and moving to the current capitalist inter-societal system. Furthermore, the often-implied view that the current geo-economic global system has replaced geo-political systems is overdrawn because geo-economics and geo-politics constantly intersect and interact in all inter-societal systems. Some illustrative general models are drawn for geo-political systems, while abstract principles for geo-political and geo-economic inter-societal relations are articulated. The goal of the paper, then, is to move current world-system analysis back, in a sense, to earlier conceptualizations of geo-economics and geo-politics and empire formations that have always existed among human populations and that now drive the dynamics of the globe today. In this analysis, the seminal work of Christopher Chase-Dunn is referenced as a source of inspiration for this small, but important, shift in analysis and modes of theorizing.

Keywords: theory, geo-economics, geo-politics, warfare, empires, rise and collapse



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Christopher Chase-Dunn has for the last forty-five years added significantly to theorizing about world-system dynamics (e.g., Chase-Dunn 1988, 1990a, 1990b, 1992, 1998, 2001; Chase-Dunn and Inoue 2016; Chase-Dunn and Grimes 1995; Chase-Dunn and Hall 1991, 1997, 1998; Chase-Dunn and Mann 1998; Chase-Dunn, Manning, and Hall 1998; Chase-Dunn et. al., 2000, 2009; Chase-Dunn and Lerro 2014; Chase-Dunn and Willard 1993, 1994). As a theorist, I have found much of his work important in my own theorizing about what I prefer to conceptualize as inter-societal dynamics rather than as world-system dynamics. Among his important contributions are: (a) a view of world system dynamics as unfolding in all stages of societal development, (b) an emphasis on the critical point that more is to be gained by viewing *a system of societies* as the fundamental unit rather than any of the constituent societies in this system, (c) a theory that views world-systems as [i] hierarchical formations among societies in response to a series of ecological forces revolving around [ii] technological changes, [iii] population growth, [iv] intensification of production and resource consumption, environmental degradation, [v] population pressures, [vi] emigration, [vii] circumscription, and [viii] conflict within and between societies, (d) a conception these forces in (c) as constantly iterated in cycles leading to the build up and decline hierarchical formations among societies (his “iteration model”), (e) a view that societal evolution involves upsweeps in the size and complexity of a world system, and (f) a theoretical assertion that many, though not all, conflicts and changes in world-system hierarchy are initiated by semi-peripheral societies and, by implication, the assertion that semi-peripheral societies are one of the driving forces of major upsweeps in size and complexity of inter-societal systems.

Along with this theoretical legacy is a rich body of empirical work detailing the dynamics denoted by (a) through (f) above. The data arrayed by Chase-Dunn and collaborators to illustrate the plausibility of his theoretical arguments represent an impressive accomplishment, in their own right, in addition to their importance in testing the key ideas in his theoretical works. In my effort to theorize about many of the same process as Chase-Dunn, I have borrowed from his work, but I also approach some ideas in world-systems theorizing with a certain degree of skepticism, which I should lay out here before presenting my theoretical ideas. First, I am increasingly skeptical about the continued use of “world-system” as the label for work that I see as the study of *inter-societal dynamics*. Relations among pre-literate societies do not really constitute, literally, “a world system” but simply very small inter-societal systems. Secondly, and related to the label “world system,” I am not sure that conception of the world system as consisting of a core, periphery, and semi-periphery is entirely correct. It was a very useful conception when Wallerstein (1974, 1984, 1989) first proposed it, but to continue to advocate for this tri-part distinction (Wallerstein 2004) is, I feel, not the best strategy. While core, periphery, and semi-periphery do indeed still capture some of the dynamics of the capitalist world system, the distinction now gets in the way of more general theorizing about inter-societal dynamics across the full range of inter-societal systems

today and, more significantly, in the past among pre-literate populations. Third, the implicit view of many world-system theorists that the current capitalist world-system is evolving toward a truly global society, organized by the principles of socialism, is more of an ideological hope than a likely empirical reality. In many ways, hoping for this longer-term outcome biases theorizing and leads to a great deal of selective attention to some but not all dynamics.

These points of skepticism are simply my views; and I am sure that most who conduct research and engage in theorizing within this world-system tradition would reject what are probably seen as irritating objections of an outsider. Still, I emphasize this skepticism here in order to clarify why I do not phrase my arguments in terms of a world-system vocabulary. I am not a world-system theorist but a general theorist who sees inter-societal dynamics as one generic and fundamental type of sociocultural formation in the human social universe, but hardly the only one and perhaps not even the most important one. Nonetheless, I certainly agree with Chase-Dunn's assertion that when inter-societal formations become the unit of analysis, a great deal more is explained than when focus is only on societal formations.

Conceptualizing Inter-Societal Dynamics

I always preferred Wallerstein's and others' distinction between geo-political and geo-economic empires, but disagree with the implication that the former has been largely replaced by the expanding world-capitalist system. Geopolitical systems continue to emerge and collapse, with the Soviet Union being the best example. Other geo-political formations, such as contemporary China (built from what remained of the previous dynastic collapse), are often built up again through geopolitical conflicts and then solidified as geo-economic empires, but even contemporary China could collapse again, as it has a number of times in the history of various dynasties. And in fact, one would build an argument that this will be China's fate in the long-run. Thus, both geo-political and geo-economic systems cycle to some degree: they are built up, only to stagnate, and eventually collapse and then be rebuilt through geopolitical as much as geo-economic action. Since this has cycling has occurred throughout human history, especially over the last 10,000 years, the "end of history" argument of world systems theorists that a world society is in the future are no more accurate than "end of history" arguments of twenty-to-forty years ago (e.g., Fukuyama 1992; Parsons 1964, 1966, 1971) that societies were headed toward universal political democracies. Chase-Dunn's iteration model would support this note of skepticism, as would his analysis of upsweeps, followed by declines, although Chase-Dunn nonetheless seems to hold out hope for one final upsweep to world-level socialism.

Thus, I begin my own theorizing by retaining the older conception of inter-societal relations as revolving around varying patterns of geo-politics and geo-economics as well as the view that these types of formations are built up, only to eventually disintegrate *in perhaps an endless cycle*.

And, I do not see the present set of geo-political and geo-economic systems as an end-of-history exception. It is far more likely, empirically, that the appearance of movement toward a global society are just that—a somewhat elusive appearances that will, like all of its historical predecessors, de-evolve from warfare and, in the present era, from unstable dynamics that are inherent to capitalism.

Thus, for me, theorizing on inter-societal systems should focus on those conditions that increase the scale and size of geo-political and geo-economic systems, and conversely, those conditions that cause their disintegration and de-evolution to smaller-scale sociocultural formations. The notion of iteration and upsweeps in Chase-Dunn's theorizing would suggest this same conclusion, but as noted, a more ideological agenda sneaks into his and others' theorizing with hopes that the contradictions of capitalism on a global scale will finally usher in Marx's revolution. More likely, I think, is disintegration of the existing world system to something less integrated than it is today, with very active geo-political and geo-economic dynamics ruling a conflict-ridden world. But, my assertion of this is only an extrapolation from history, and extrapolation is not the best way to develop a theory. It is a better strategy to focus, instead, on fundamental and generic dynamics driving inter-societal formations and, then, to theorize about their operation. This is the strategy that I employ here.

The Dynamics of Geo-Politics

Herbert Spencer (1874-96) was the first social theorist working self-consciously as sociologists to emphasize *inter-societal selection* as an important dynamic in the movement of sociocultural formations from simple to more complex forms. His famous phrase—"survival of the fittest"—was first uttered in 1851 in *Social Statics*, before he turned to sociology and eight years before Darwin (1859) published his famous work on natural selection. When Spencer finally did turn to sociology in the 1870s, he tended to use this phrase to describe warfare among nations. War is a competition among societies for territorial space, human labor and wealth, or any resource seen as valuable. Wars are typically won, he argued, by larger, more technologically advanced, and politically organized populations over those who are smaller, less technically advanced, and less politically organized. While the loser in a war can be vanquished or extinguished, more typical is some mode of consolidation—ranging from merging of societies into various forms of coercive economic and political domination to cooptive extraction of key resources. The end result is that the consolidated society or inter-societal system is larger and more complex, and for Spencer, this meant that warfare furthered societal evolution. And, he emphasized that geopolitical formations need not be large, but they generally are larger than before war began. Indeed, he saw conflict among preliterate societies as one force driving the initial phases of societal evolution from simple to more complex forms. Long before Spencer was the work of Ibin Khaldun who explained the dynamics

of empire formation and collapse of dominant societies in the middle east as a process whereby empires are built up through conquest, reach a peak, and then decline, only to be conquered by another society that then initiates what Khaldun saw as a four-generation cycle of rise and fall. Peter Turchin's recent work begins with Khaldun's emphasis on solidarity as the key to winning wars and sustaining empires; and in a series of stunning theoretical treatises (Turchin 2003, 2013; Turchin and Nefedov 2007), Turchin has argued that warfare is both a destructive and, like Spencer, a creative force because, in the end, it increases the scale of sociality and cooperation in evolving societal formations. Like Khaldun, he sees many of the dynamics of war as cyclical, with societies on the marginal steppes outside of an existing empire often revealing more social solidarity and often new technologies of warfare (such as the Mongols' use of the horse) that enable them to conquer larger empires on downside of the "Khaldun cycle"—an argument that is similar to Chase-Dunn's assertion that new hegemonies in world systems often come from the semi-periphery and through conflict or economic competition reshuffle the hierarchy of a world system (Inoue et al., 2016).

Borrowing from Goldstone (1990), Turchin and Nefedov (2009) develop Khaldun's argument that that population growth sets into motion a series of related events causing disintegration of an empire over time, but in their case, they often posit a much longer cycle of, in Chase-Dunn's (1997) words, "rise and demise." In agrarian societies, a series of related events set into motion the "demise" side of the cycle that is generally set into motion by population growth, resource scarcity, price inflation, escalated costs to the state, state borrowing, elite expansion and demands for patronage, falling real wages, rural poverty, migration of restive young-age cohorts to urban areas. All of these cascading processes work to cause a polity to fail, whether from internal revolt by commoners and/or by elites or from external conquest by another polity. Turchin extends these ideas, viewing them as a cycle that occurred in not only agrarian societies, but also in other historical epochs, thereby allowing for a more general theory of cultural evolution (Turchin 2013). His models contain many of the same forces as Chase-Dunn's, emphasizing the relationship among population growth, environmental degradation, reduced carrying capacity of the environment, and internal fiscal stress on an existing hegemon which, in turn, leads to increased inequality and reduced solidarity, thereby making an existing empire vulnerable to invasion and conquest. And while conquest has an integrative phase that builds up productivity and solidarity, this phase eventually turns into stagflation, thereby initiating the downward part of the cycle. All of this is quite reminiscent of Chase-Dunn's iteration cycle, which applies across all types of societies, not just the agrarian empires that have been Turchin's focus until his recent book on *Ultra Society* (Turchin 2013).

Modeling Empire Formation and Collapse

Like Carneiro (1967, 1970) as well as Chase-Dunn and Hall (1977), I see circumscription has often part of the dynamics of empire formation. Warfare generally begins occurs between societies that have become circumscribed in space; and if one society or several societies are conquered by another, more innovative society, the new empire can initiate an upsweep, as Chase-Dunn argued, increasing circumscription and, thereby, making warfare likely to continue in cycles like those outlined by Khaldun and Turchin, or Chase-Dunn with his emphasis on iteration. In Figure 1, I outline a model that I have used in the past (Turner 2010: 295) but modified to take account of Chase-Dunn's and Turchin's arguments. Like Spencer and Carneiro (1970, 2015), I see population growth, increasing production, increasing regulation through polity, and territorial expansion as inherently related in the social universe. Population growth generates what I have termed "Spencerian selection pressures" (Turner et. al. 2017; Turner and Abrutyn 2016) because population growth forces members of a growing population to find to means and modes for (1) increased production, (2) consolidation of the four bases of power—coercion, administration, symbols, and material incentives—into a larger, more centralized polity, and (3) development of distributive infrastructures for moving people, resources, and information about a territory and across sociocultural formations. And, with high circumscription of a population, this consolidation increasingly forms around the coercive and administrative bases of power causing mobilization of a population for conflict with neighboring populations.

Success in war comes with a larger coercive force, with more advanced military technologies, and higher levels of solidarity among members of a society and its coercive forces. With success, however, *logistical loads* on a conquering society increase with respect to controlling larger territories of defeated populations holding resentments—all of which generally increase the ratio of coercive/administrative bases of power over incentive/symbolic bases. As these loads increase over time, a hegemon becomes vulnerable from revolt from within and/or conquest from other populations, but just *how* vulnerable an empire becomes is dependent on the dynamics outlined in the model presented in Figures 1 and 2. Figure 1 outlines the complex dynamics that I see as involved in a society initially mobilizing for warfare. For many, such models appear too complex, especially those interested with explaining variance in data with a few key equations. There is nothing wrong, of course, with such efforts, but the key forces involved—say, warfare—are part of *a much larger set of interacting forces* that feed forward and reveal reverse causal effects. Thus, Figure 1 is an example of the kind of modeling that I prefer, even if it is not as parsimonious as most modelers seek to build.

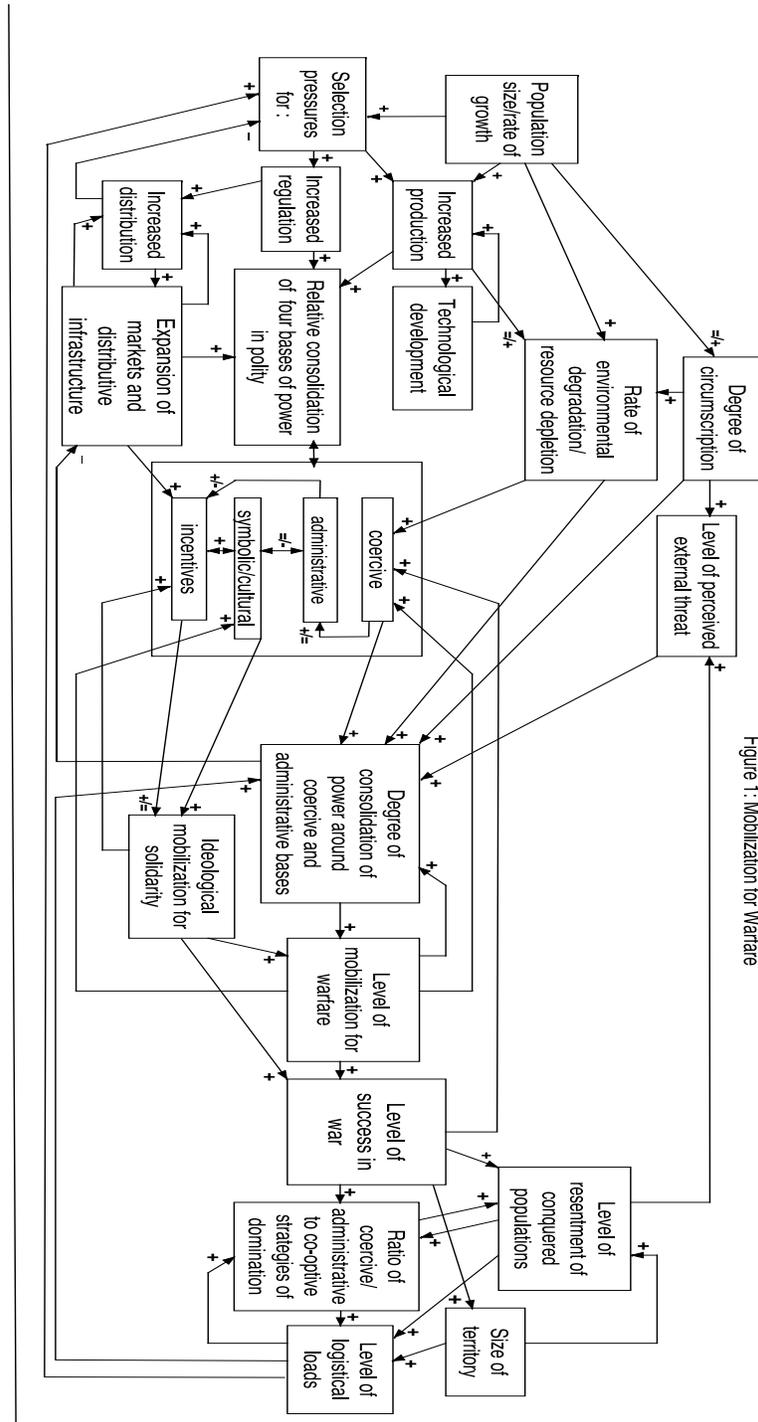


Figure 1: Mobilization for Warfare

Time flows from right-to-left, and in the model in Figure 1, with population grown and high rates of population growth initiating the processes denoted in the middle row. Population growth always generates selection pressures on individuals and corporate actors to increase the level of differentiation along three fault lines of all sociocultural formations: production, regulation, and distribution. Large populations require more capacity to produce, to distribute, and to regulate and coordinate individuals and corporate units.

Increased production comes from technological innovations as they allow more goods (and services) to be produced; increased regulation comes from the consolidation of a polity and its centralization around the four basic bases of power (Turner 1995). If production has caused environmental degradation under conditions of high circumscription, neighboring societies are often seen as a threat, and along with environmental degradation and circumscription, the consolidation of power tends to revolve around its coercive and administrative bases of power in order to address external threats, and potentially internal threats from its own population. This kind of consolidation biases decision making—as Spencer emphasized—toward mobilization for warfare; and symbolic or ideological bases of power, coupled with incentives as yet another base of power, also become biased for inducing members of a population to accept an ideology legitimating warfare that, in turn, lead to the mobilization of the population in general to support warfare and, more specifically, to increased solidarity among those who must fight the war—as Khaldun had emphasized.

Success in war is dependent on historical conditions but, in the end, a larger, better organized, more technologically advanced, and symbolically (ideologically) unified population will generally win wars. And, once a society has success in warfare, reverse causal dynamics encourage further consolidation of power around its coercive base, leading to more coercive/administrative strategies of domination over cooptation strategies employing the manipulation of material incentives for those conquered. Cooptive strategies, where institutional systems and elites are left in place but taxed in some way, are more complex and dynamic but they generally allow for longer periods of control over other populations—with the Roman Empire being a prime example. But, most hegemonies in an inter-societal system rely upon the coercive/administrative bases of power and, thereby, increase logistical loads for control of a restive population; and coercion and administration are very expensive forms of domination and generally will cause fiscal crises, while generating more resentments to the extent that those conquered are heavily taxed to support their own domination by coercive forces and tight administration of an external hegemon. Also, as an empire gets larger, it encounters dramatically increased logistical loads for controlling territory, as existing distributive structures eventually prove inadequate and as the number of “boots on the ground” required to maintain regulatory control continues to increase and stretch fiscal resources of the dominant actor in an inter-societal system. Thus, as the dynamic of conquest play out, they

set into motion reverse causal effects that generally increase the reliance on coercion and tight administration (and the costs thereof, especially as resentments arise from those conquered); and coupled with increasing size of the system of domination, the logistical loads, including fiscal loads, begin to erode the coercive and ideological bases of power of the hegemon and, thereby, the commitments of its own population. The result is that the empire formed can simply collapse, or be restructured by another advancing military power.

Figure 2 selectively emphasizes some of the forces outlined in Figure 1, while adding some additional considerations about the conditions increasing the size of a geopolitical formation built around warfare. The key is mobilization of coercive power which is a function of the overall size of the population available for military activity, the technological sophistication of armaments, and the level of solidarity among a society and, especially, its coercive forces; and if all of these forces are high, then the likelihood of success in war increases. The level of distributive structures is also important, particularly modes of moving coercive forces, information, and resources about a territory. Thus, distributive infrastructures become critical in determining how large an empire can become. The capacity to move information and resources rapidly to sustain armies using advanced military technologies and revealing high solidarity can overcome some of the logistical problems of controlling territories. Further, the extensions of markets across a territory controlled by a hegemon, as well as the territories of other societies outside its direct control, is also critical in supplying coercive and administrative branches of polity. And, if a dominant society can use more co-optation relative to coercion and tight regulation, it can reduce logistical loads stemming from cultural diversity and resentments among conquered peoples.

The problem, however, is sustaining cooptation in the face of pressures generated by episodic resistance from conquered populations because such resistance inevitably causes escalated control by actors in the coercive and administrative branches of a conquering polity. The final problem facing expanding empires is that they increasingly are likely to come up against another advancing empire (Collins 1981) in a showdown war that they can lose or against societies with sufficient capacity to hold off further advancement by an empire that is logistically challenged by mounting problems of controlling large, diverse subpopulations spread across a larger expanse of territory. Once empires begin to lose battles or just stall out against resistance, they are increasingly seen as “not “winning.” This perception can quickly erode a polity’s legitimacy at its home base (Weber 1922; Skocpol 1979), while the conquered populations can begin to be less intimidated by a stretched out polity and, as result, engage in disruptive activities that further expose coercive and administrative weakness.

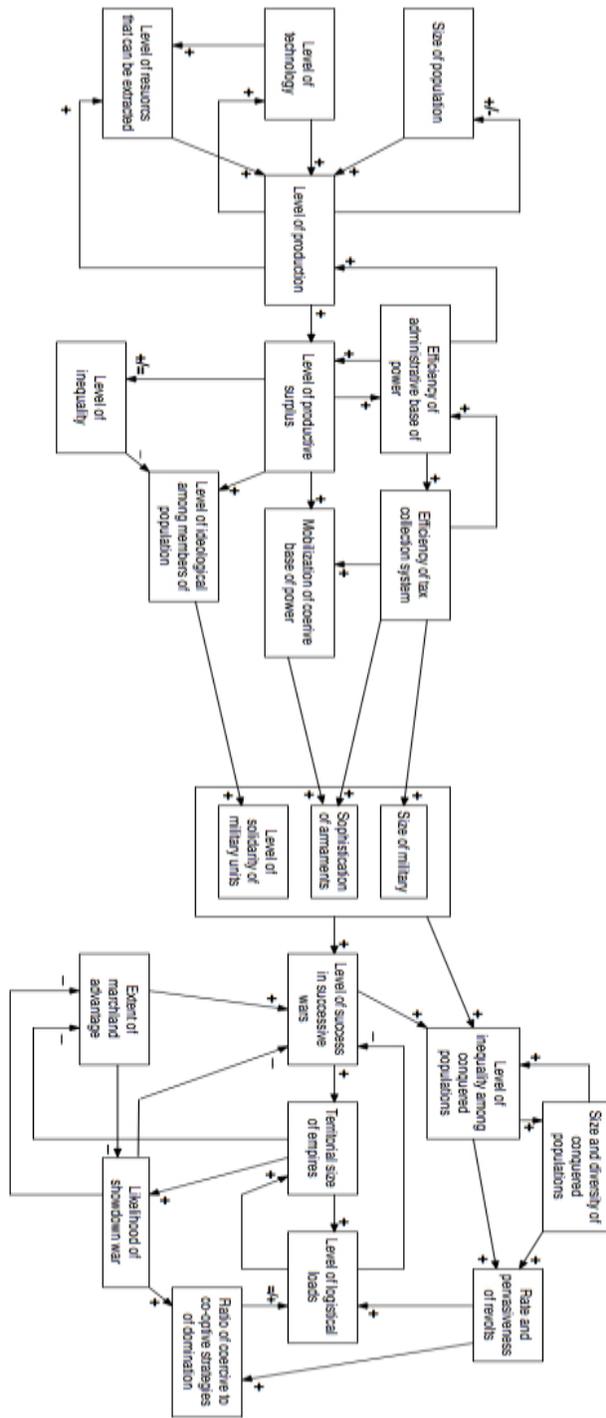


Figure 2. Conditions Affecting Size of Geo-Political Formations

The result is that an empire can begin to pull back, or simply be over-run by internal revolts or by another societies that is organized coercively and administratively for conquest.

Large empires have thus historically been difficult to hold for more than a comparatively brief period of time because of the inherent problems of controlling larger, diverse, and restive populations at many hot points across a large territory. More cooptive empires relying upon distributive and incentive systems to control large, diverse populations can last longer but they always suffer from the complexity of sustaining dominance while allowing existing institutional systems and their leaders, as well as cultural systems, to remain largely intact. Cooptation cuts down on logistical loads of the conquering society but, at the same time, makes it vulnerable to manipulation and quiet revolts that erode the power of the dominant society, unless it retains a strong coercive and administrative presence that, in turn, generally pushes for less cooptation and more coercive and centralized administrative control which, of course, dramatically increases logistical loads revolving around social control as well as fiscal problems in financing coercive and administrative control.

Principles of Geo-political Dynamics

Models like those in Figures 1 and 2 are not easily tested as a whole, but they are amenable to simulations that allow for assessment of their plausibility. Moreover, any subset of direct and reverse causal sequences in the model is testable empirically. The reason that I draw such models is because the world is complex; there are direct, indirect, and reverse causal dynamics operating even when the goal of a theory is to explain geo-political mobilization, expansion, and collapse. Often the effort to explain variance, *per se*, leads to highly parsimonious models that explain a great deal but these models often ignore the many causal forces in play, and if explaining variance is all that counts, then more complex models are unnecessary. However, if understanding of the complex interactions of the forces in play is the explanatory goal, then we are forced to produce more complex models.

One way to simplify somewhat complex models is to develop abstract propositions delineating the generic conditions under which key dynamics increase or decrease. Thus, models like those in Figures 1 and 2 can be “translated” into propositions; and in fact, new variables can be introduced in such propositions that, if desired, can be expressed as equations. In this way, a more robust way to assess variance on outcomes, such as geo-political mobilization, expansion and growth, and decline, can be explained more parsimoniously but not at the expense of ignoring key causal relations. It is still useful to develop abstract models as well in order to tease out causal connection that, inevitably get lost in equations, even the more complex equations that emerge from abstract principles to be delineated below.

Geo-political Mobilization. We can begin with how geo-political formations initially take form, as actors in a society mobilize for warfare with another society or set of societies. Thus, we can state principle 1 in the following manner.

1. The potential for geo-political mobilization by one society for territorial expansion through conflict with another or other societies is an additive function of:

- A. The capacity of a society to consolidate bases of power into a polity as an autonomous institutional system, with this capacity being an additive and multiplicative function of:
 - i) the absolute size and rate of growth of its population
 - ii) the level of economic surplus and wealth generated by a population
 - iii) the degree of circumscription of a society by neighboring societies, coupled with the level of resource depletion and environmental degradation, as they increase the intensity of the selection pressures on political and economic actors to find new resource bases.
- B. The extent to which the culture and institutional systems of neighboring societies are viewed by key actors in polity, economy, and religion as an external threat, with the perceived threat being an additive function of:
 - i) the level of economic competition among actors in the economic domains of neighboring societies
 - ii) the level of political competition and/or military mobilizations among a set of neighboring societies
 - iii) the rate and intensity of past conflicts with another society or set of societies
 - iv) the degree of perceived divergence in values and ideologies, particularly religious ideologies, with those of another society or set of neighboring societies
- C. The level of potential internal threat perceived by actors in polity which, in turn, is a negative function of rates of mobility across social class line, while being a positive and multiplicative function of:
 - i) the level of economic inequality
 - ii) the degree of class formation
 - iii) the extent of cultural differences among social classes
 - iv) the linearity of rank orderings of classes
 - v) the rigidity of barriers and boundaries to mobility across classes
- D. The historical extent to which centralization of power has been around the coercive and administrative bases of power which, in turn, is a positive and multiplicative function of 1-C and 1-D above.
- E. The historical propensity and capacity of the existing polity to use its symbolic (ideological) base of power to formulate legitimating ideologies for conflict by polity

which, in turn, is a positive and additive function of 1-C, 1-D, and 1-E above, while being a negative function of the extent to which polity has historically used the manipulation of incentives through markets and legitimating ideologies emphasizing autonomy of actors to pursue self interests.

Initiation of Territorial Expansion. To some degree, mobilization for warfare biases perceptions of the range of options and alternatives that are available to actors in polity. Such biases thus increase the likelihood of decisions to initiate conflict with other societies and, thereby, to expand territory and the resources to be gained such territorial expansion.

2. The likelihood that the polity of one society will initiate conflict and attempt territorial expansion is an additive function of:

- A. The conditions listed under 1-A, 1-B, 1-C, 1-D, 1-E, and 1-F.
- B. Perceptions (whether accurate or not) by actors in polity that they have a productive advantage over potential adversaries for financing military operations.
- C. Perceptions by actors in polity that their base of symbolic power is potentially eroding from inequalities and internal threats.
- D. Perceptions that success in conflict and access to resources can restore their base of symbolic (ideological) power and, through the increased capacity for patronage to members of the home population, expand their material incentive base of power as well.
- E. Perceptions by actors in polity that they possess a marchland advantage *vis-à-vis* neighboring populations.

Success in Warfare. It is, of course, one thing to perceive that success in warfare is possible, and often leaders of polity misperceive the likelihood of success and/or feel the inertial pressures of the dynamics listed in Principle 1 and, hence, feel that they have little alternative but to initiate warfare. Principles 3 delineates come of the conditions that increase the likelihood a society will be successful in war with its neighbors.

3. The likelihood that a society will be successful in conflict with other societies is an additive function of:

- A. The capacity to mobilize coercive forces superior to those of adversaries which, in turn, is an additive function of:
 - i) the relative size of a population and its availability for recruitment
 - ii) the level of internal solidarity within units of the coercive base of power that, in turn, is a function of the degree of consensus over the ideologies used to mobilize the symbolic base of power across the whole population or, strategically, to important subpopulations in a society
 - iii) the level of military technology relative to adversaries

- iv) the level of wealth to support and sustain military activities and to purchase military hardware which, in turn are a additive function of:
 - a. overall size of economic production
 - b. level of per-capita productivity
 - c. degree of efficiency of the tax collection system
 - d. level of liquid income and wealth that can be taxed
 - v) the level of development of infrastructures to move resources, personnel, information, and military hardware across territories
 - vi) the level of transportation technologies and the resulting transport units for moving personnel and armaments across territories
- B. The degree to which a marchland advantage exists for initial conflicts as well as the extent to which this advantage can be sustained in conflict with successive adversaries.

Size of Geo-political Formations. Conditions allowing for success in conflict are also critical to sustaining the resulting geo-political formations. Yet, winning successive battles does not assure that an emerging hegemon can retain territories, and so, we need an additional principle of what allows a geo-political formation to become large, followed by one on the stability of geo-political formations once established. As the propositions below outline, controlling territories for longer periods of time is a difficult-to-achieve balance between (a) implentating cooptation based on material incentives and (b) using superior coercive-administrative power as a background threat, without over-using coercive-administrative power that, in turn, will shift control strategies away from cooptation and use of the material incentive base of power. For, superior coercive power almost always will, over time, erode the effectiveness of cooptive strategies and eventually increase logistical loads and costs of sustaining a large empire.

4. The overall size of a geo-political formation is an additive function of a polity's capacity to:
- A. Employ cooptive strategies of control over conquered populations relative to coercive-administrative strategies of control which, in turn, is an additive function of:
 - i. the ability is recruit members of conquered populations into administrative structures engaged in taxation, monitoring, and policing of their own populations
 - ii. the willingness to tolerate and encourage a high degree of autonomy in indigenous institutional systems, particularly polity, law, economy, and religion, of conquered populations
 - iii. the willingness and ability to convert a geo-political formation into a geo-economic formation (see principles of geo-economics below) that allows for development of the indigenous economy, particularly its means of production and its system of market distribution

- iv. the willingness to limit exploitive exchanges and economic dependency in geo-economic relations with conquered populations
- B. Maintain superior coercive and administrative power over conquered populations which, in turn, is an additive function of the capacity to:
 - i. prevent conquered or dominant populations from copying military technologies, armaments, and organization systems organizing coercive forces
 - ii. deploy sufficiently large numbers of military forces across dominated territories over long periods of time
 - iii. construct and sustain distributive infrastructures that allow for rapid military deployment, growth of the domestic economy, and less exploitive market-based exchange relations between hegemon and conquered societies
- C. Sustain resource, productive, and marchland advantages
- D. Sustain legitimacy as the home base of a hegemon and, at the same time, legitimacy among conquered populations through mobilization of symbolic base of power incorporating ideological systems of indigenous populations of conquered societies
- E. Avoid a showdown war with another advancing polity
- F. Resist over-use and extension of control by coercive-administrative bases of power as logistical loads increase
- G. Negotiate from a position of potential use of coercive power in order to reduce revolts and other points of conflict with conquered populations as the populations to be governed increase in size, diversity, and spatial dispersion

Stability of Geo-Political Formations. As the above propositions suggest, it is very difficult to sustain the balance necessary for controlling large territories over long periods of time. Cooptation and use of material incentive bases of power often become unworkable if the conquered population is restive, while coercion-administrative bases of power increase logistical loads because of (a) resentments of those governed and (b) the costs of control across large territories. For this reason, very few large empires have last for a long period of time, with the average time much far less than 100 years. Exceptions like the Roman Empire are the result of sustaining a cooptive revolving around leaving institutional systems and cultures of those conquered largely in tact (while also retaining a decisive coercive advantage over indigenous populations). In contrast, most other empires have over-used coercion and tight administration and, as a result, have not lasted for long periods of time.

Part of the reason for this tendency for employing coercive control is, of course, that the polity of empires created by violence is structurally and cultural biased toward this form of control and another part is exploitive extraction of resources from indigenous populations gives hegemons options for manipulation of incentives among members of armies and administrative staff in the

field and to key subpopulations at the home base of an empire. The result is growing resentments, increasing logistical loads; and if the empire is large and spread across large expanses of geographical space, the costs of control eventually become too much. These logistical loads and costs only escalate exponentially when conquered territories are spread across oceans, as the Spanish and English learned in the Americas and as the British Empire soon learned for an empire where “the sun never set.”

5. The degree of instability of a geo-political formation and the likelihood of its collapse back to its home base is an additive function of:

- A. The degree to which a dominant polity has lost its coercive, productive, resource, and marchland advantages which, in turn, is an multiplicative function of:
 - i. the absolute size of the territory to be controlled
 - ii. the level of costs in maintaining a coercive and administrative presence in territories
 - iii. the number of hostile societies at boundaries of territories to be controlled and their relative coercive power
 - iv. the level of competition and/or conflict with other dominant societies engaged in geo-economic or geo-political expansion; and the greater their proximity to territories controlled by a hegemon the greater the level of competition and conflict
- B. The degree to which the distributive infrastructures prove increasingly inadequate to move necessary information, people, armaments, and resources across territories and/or the degree to which they have been breached and disrupted by hostile acts by indigenous populations.
- C. The level and intensity of internal threats at a polity’s home base and/or the level of threat posed by subpopulations in a hegemon’s territories
- D. The extent to which a polity’s symbolic base of power at its home base or in its extended territories has eroded to the point of de-legitimation of polity which, in turn, is a function of losing a war, stalling in efforts to expand territories even if a war is not actually lost, losing out in geo-economic and/or geo-political competition with other hegemons (again even if not losing a war), and losing the capacity to control revolts in hot spots of conquered territories (even if these do not evolve into more widespread revolt).

The Dynamics of Geo-Economic Systems

As theorists like Frank (1969, 1978, 1979) have emphasized, inter-societal relations are often driven by the economic dependency of a society or set of societies on a more economically developed and militarily powerful society. Dependency generates exploitive patterns of trade that generate wealth for the more powerful society and do very little to develop the dependent society. These dynamics still exist, of course, in the current world system, but the spread of capitalist modes

of exchange has increased the number of free-market, or relatively free market, forms of geo-economic inter-societal systems. Below, I develop some basic principles for each type of geo-economic inter-societal system, but both types can exist within any particular world system. So, it is a matter of relative degrees of dependence or free exchanges of resources because both types frequently overlap in the empirical world. Moreover, the relative amounts of dependency or free-market systems are often tied to patterns of geo-political domination.

The Dynamics of Dependency Geo-Economic Systems

Societies that do not have well-developed and differentiated markets and meta-markets (e.g., equity, bond, money, etc.) as well as the service systems (banking, insuring, marketing, trading) goods, services, and financial instruments of their own easily become dependent upon societies that have markets, meta-markets, and NGOs such as the World Bank and International Monetary Fund. When such is the case, geo-economic and geo-political hegemons, or in world-system terms, core and semi-peripheral actors can gain some control of peripheral or dependent societies through their hold and control of the capital and technologies needed by these less developed societies. Dependency increases particularly when chartered corporate actors from other societies provide capital for infrastructural development, for financial liquidity, and market development. These external corporate actors operate to serve their own narrow interests and, thereby, bias development toward their goals and, in the process, take *de facto* control of a dependent society's economy or key sectors of the economy and often the polity as well (Frank 1969, 1978, 1979).

Control generally involves cooptation and payoffs to political actors in dependent societies that, in turn, fosters a culture of corruption that further erodes the ability of a society to control its own economy. Moreover, corruption generally leads to shortages of essential goods and monetary instability, such as rapid inflation that, in turn, only increase dependency of a society on another society (for capital, technology, financial services, and foreign aid). Societies providing this "help" generally pursue self interests, and the result is highly exploitive trade relations in an inter-societal system.

The lack of entrepreneurial capacity—that is, the ability to organize resource extraction, production, distribution, and market services---assures that all economic activities will be performed poorly and will be impregnated by massive corruption. When external economic actors enter to perform these entrepreneurial functions, they do so under often unfair terms, such as zero taxation on their profits, and thus further erode a dependent society's capacity to develop indigenous sources of capital, financial services, technology, and corporate units capable of performing basic economic function of resource extraction, production, distribution, and external trade in ways that increase wealth. The result is high inequality, low real wages, constant fiscal crises, and continued corruption. And, when external corporate actors can "buy off" key political

actors, these actors will bestow more favorable terms in trade, thereby allowing “foreigners” to control much of a society’s fate.

Geopolitical position can exacerbate dependency when a society lacks a strategic location that can be exchanged for economic aid, whereas with a strategic positions in either or both geo-economic and geo-political systems, hegemonies are more likely to offer better terms for what they provide, if the polity of a dependent nation is not highly corrupt and, hence, sufficiently strong to bargain for more favored treatment by external actors. And, if there is intense economic and political competition among core actors in an inter-societal system, strategic position in this system can become a valuable resource for negotiations. And, while exploitive trade may not be eliminated, it can be mitigated. And, in some societies where dependency has been historically low, strategic position can often bring such societies highly favorable trade and financial assistance for economic development and upward mobility in the inter-societal system. All of these dynamics can, I think, be reduced to a relative small number of principles.

Principles of Geo-Economics Under Conditions of Dependence

6. The probability of a dependency geo-economic formation evolving, in which more powerful and economically developed societies engage in exploitive exchange will less powerful and less developed societies, is an additive function of:

- A. The lack of technological development, coupled with low levels of physical and human capital formation, for extracting resources and converting resources into finished goods and commodities by the indigenous economy of a society.
- B. The lack of infrastructural development for distribution of domestically produced commodities and services in the economy of a society.
- C. The lack of development and differentiation of (1) markets for distributing goods and services and (2) meta-markets for distributing financial services, equities, capital, bonds, and other instruments of capital formation in the economy of a society.
- D. The lack of bargaining power possessed by polity in a society which, in turn, is an additive function of:
 - i. the lack of highly valued human and physical capital resources that cannot be easily secured elsewhere in the geo-economic system
 - ii. the lack of a strategic position in global and regional geo-politics among societies
 - iii. the inability of polity in a society to mobilize all bases of power to control domestic production and to resist incursions by political and economic actors from more developed societies

- iv. the lack of a sufficiently large population, labor pool, and market demand for goods produced by developed societies
- v. the inability to overcome the conditions listed in 6-A, 6-B, and 6-C above

The Dynamics of Free-Market Geo-Economic Inter-societal Systems

Free-market inter-societal systems are built from trade relations among corporate actors from different types of societies, including: for-profit private corporate units, state-sponsored corporate units, and cartels of corporate units. The dynamism of inter-societal units increases when markets are, indeed, open and free and when chartered, for-profit corporate units dominate with relatively light regulation to assure that contract and laws are adhered to. This dynamism also leads to market collapses, which are inherent in capitalist production and exchange relations, *per se*, and which are dramatically increased by vertical meta-markets in which the medium of exchange in a lower-level market becomes the commodity exchanged at a higher level, more speculative meta-market, such as equity markets, money markets, futures markets, mortgage markets, derivative markets, etc. When left unregulated, meta-markets will expand (Braudel 1972, 1977, 1979; Collins 1990) and become a driving force for growth in the economies of geo-economic actors, as well as collapse in their economies.

Over time, selection pressures favor regulation of geo-economic markets through laws governing international trade, treaties among key economic actors, policies of NGO actors such as the World Bank and World Trade Organization, and consortiums and agreements among large economic actors (e.g., G7-, G8, or G-9 depending upon who is currently allowed to be a member), national regulation of dominant trading markets (e.g., London and New York Stock exchanges), Trade agreements within regions (e.g. North American Trading Agreement, European Common Market). The effectiveness of these regulatory forces varies, depending upon the current political alliances among powerful societies, geo-political strains and conflicts, and Juglar cycles within and among various societies.

The fundamental problem in geo-economic systems relying on free markets is that it is difficult to create and sustain control by international law and tribunals, enforced by fiscal punishments and, ultimately, coercive power. Societies fluctuate in how willing they are to subordinate themselves to external authorities, particularly when they are in geo-economic and geo-political conflict with the very societies making the rules and enforcing them. This fundamental problem makes, I believe, the often hypothesized movement to a one-world system very problematic. In addition to these regulatory problems of creating a viable world government, the size and diversity of a world system of 7 billion people is probably beyond the organization capacities of humans by any known set of structural and cultural tools.

Moreover, inter-societal free-market systems are often composed of societies where the respective domestic markets of each society are variously regulated or unregulated, and where the political systems vary by such critical factors as degree of democracy and level of management of production and distribution within the society. The less regulated are the markets of members in an inter-societal geo-economy, the more dynamic can these markets become but, at the same time, they also more prone to over-speculation and collapse..

The world-capitalist system that has evolved over the last 200 years, especially the last 40 years, has also depended upon the elaboration of meta-markets that are global; and in turn, these markets depend upon dramatic advances in computer and communication technologies that make trades across the globe virtually instantaneous. At the same time, these distributive infrastructures in global markets increase speculation and potential collapse of specific sets of markets and, potentially, the entire global system of markets. And, as is evident today in a number of obvious places, and as will be evident in the indefinite future of the globe, geo-political dynamics can intervene in highly destructive ways and unravel a geo-economic inter-societal system.

Free-market geo-economic inter-societal systems will evolve into economic-base empires, often supported by geo-political coercive force, when key actors within the societies of these systems can (a) produce goods and services in high demand, (b) produce and distribute these goods and services at a price and/or quality advantage over other actors in other societies, (c) subsidize this production in domestic markets, thereby giving corporate actors advantages in inter-societal markets, (d) erect trade barriers that allow domestic producers to retain their advantages in domestic markets and in balance of trade, (e) rely on inexpensive labor as a draw from capital and technological investments from other societies. Yet, in free-market geo-economic systems, such strategies are difficult to sustain in the long-term because trade barriers will often be challenged in international tribunals or countered with new import tariffs on goods produced by protectionist societies and because labor costs inevitably rise, even with societies importing labor, and create disincentives for foreign investment, which will generally seek a cheaper source of labor.

Yet, these kinds of strategies often allow semi-peripheral societies (in world-system's terminology) to grow and become more politically powerful, with the result that they can become more central players in a geo-economic system, and particularly if their accumulating wealth allows them to also become politically and militarily well-organized. The result is that geo-politics inevitably penetrates and intersections with geo-economics, often causing disruptions to geo-economic systems. The result is that free markets become more difficult to sustain, and if geo-economic systems experience inevitable contractions (inherent in capitalism), geo-political actions may begin to intersect to the degree of disrupting or causing a contraction of the geo-economic systems. Indeed, the politics of a society will, when societies experience domestic recessions, begin to have ever-greater influence on economic actors in a geo-economic inter-societal systems.

Indeed, it is quite possible that the existing geo-economic system could “crash” and cause a retreat to more a local regional systems, such as the North American Free Trade Agreement, as the larger global system enters a period of contraction and perhaps heightened military tensions among key geo-political actors.

Dependency Geo-economic Formations. Dependency and free-market formations reveal somewhat different dynamics, although the basic exchange principles are the same. A dependency system is created when one actor has valued resources that another actor cannot secure easily elsewhere, thereby giving this actor with resources a power-advantage that will be used in exploitive trade. Yet, as Richard Emerson (1962) emphasized in his power-dependence model of exchange, dependent actors will seek balancing strategies when confronted with an exploitive exchange. Such strategies can involve finding alternative sources of resources, offering resources that power-advantaged actors cannot get easily elsewhere, doing without the resources of power-advantaged actors, and other strategies to reduce dependency. Thus, an exploitive exchange relationship is inherently unstable, and even if a society cannot break dependency, the internal conflict that may emerge in a dependent society can destroy a power-advantaged society’s investment. Thus, domestic politics can erode the advantage of foreign actors that have been exploiting a dependent society that, ironically, gives the dependent society yet another type of balancing strategy (revolts, riots, terrorism) to pursue.

7. The likelihood of a dependency-market empire, in which the more powerful and economically developed societies engage in exploitive and unequal exchanges of resources with less powerful and developed societies, is an additive function of:

- A. The lack of technological, physical, and human capital formation in the less-developed society for extracting resources and converting them into goods and commodities.
- B. The lack of infrastructural development in the less-developed society for the distribution of resources domestically and internationally.
- C. The lack of development and differentiation of domestic (a) markets for distributing goods and services and (b) meta-markets for distributing financial services, equities, capital, bonds, and other instruments of capital formation in the less-developed society.
- D. The lack of a developed and differentiated financial sector in the domestic economy, particularly for banks, insurance, and investments regulated by positivistic legal systems and centralized polity, in the less-developed society.
- E. The lack of bargaining power possessed by the less-developed society which, in turn, is an additive function of:
 - i. the inability to overcome the conditions in 7-A, 7-B, 7-C, and 7-D above

- ii. the lack of a strategic position in global or regional geo-politics that can be used as bargaining ploys in negotiation of rates of exchange in the overlapping geo-economic system
 - iii. the inability of polity in the dependent society to mobilize all bases of power, especially the material incentive, symbolic base, and administrative bases relative to over-mobilization of the coercive base of power, to regulate production.
 - iv. the inability of polity of the dependent society to resist external incursions, whether coercive or economic, into domestic economic and political processes
 - v. the lack of a sufficiently large population base and higher-income labor pool to support internal market demand for goods and services produced and distributed domestically as well as demand for goods produced internationally
- F. The persistence of a dependency geo-economic systems is a function of the inability of dependent societies to develop and employ balancing strategies with respect to:
- i. Finding alternative sources of resources from more developed societies and playing these societies off against each other
 - ii. Mobilizing coercive power, whether by the state or revolutionary element of the population, to challenge existing domination by external economic and/or political actors.
 - iii. Doing without resources from external actors and developing domestic means for securing these needed resources
 - iv. Providing valued resources to external powers, particularly using strategic locations in a geo-political system, to negotiate for needed economic resources
 - v. Reducing alternative sources of resources needed by the more powerful and developed societies by forming coalitions among the potentially dependent societies
 - vi. Finding a means to be the mediator of exploitive relations between developed and undeveloped societies, using this middle position to develop the infrastructures and other institutional systems reducing dependence on external actors

Free-market Geo-economic Formations. Free-market geo-economic formations are rarely wholly free or equal in exchange relations. Typically, there are, in world-system terms, core nations that have advantages that they can use to create, at least for a time, economic dominance of other societies. Such “empires” tend to be short-lived because of the dynamics of capitalism whereby economic actors always seek to maximize profits, even at the expense of undermining economic hegemony of the societies where they are chartered.

8. The probability of a free-market empire forming, where economic actors in one society or transnational agencies of a this society, can intervene and, to varying degrees, control markets in another society or societies, is an additive function of:

- A. The scale of global markets linking both developed and less developed societies which, in turn, is an additive function of:
- i. the level of development and prevalence of chartered corporate units in developed societies and their need for less expensive labor and material resources in other societies
 - ii. the level of capital formation and reach of transnational agencies in developed societies to infuse capital, technology, and entrepreneurial models into less developed societies
 - iii. the existence and power of transnational mediating agencies and tribunals to arbitrate trade disputes among developed societies and to enforce decisions
 - iv. the level of development of transportation and communications technologies
 - v. the level of development of transportation and communication infrastructures by economically developed societies across large portions of the globe
 - vi. the development of meta-markets in developed societies for trading financial instruments across a large number of societies, both developed and undeveloped
- B. The capacity of one or more societies in global markets to:
- i. produce goods and services in high demand and low supply in global markets
 - ii. produce goods and services that enjoy price and quality advantages over alternative producers
 - iii. procure resources necessary for production by domestic actors from dependent trading partners, or from global markets where supply exceed demand
 - iv. exert disproportionate control over global meta-markets and influence over transnational agencies fostering development
 - v. use superior coercive power to force favorable trading arrangements by either threats or alliance formation in a geo-political system
- C. The likelihood that one or more historically less-dominant societies in a geo-economic system will become an economic power in this system is an additive function of:
- i. the capacity of the less-dominant society to protect domestic markets from imports from other global economic actors without retaliation by the polities of others societies which, in turn, is an additive function of:
 - a. the bargaining capacities of polity to promise future trade concessions in opening markets in exchange for immediate access to other societies' domestic markets, with these bargaining capacities increasing with:
 1. the size of a society's population and potential for generating high levels of market demand for goods and services in the future and, hence, profits for developed societies

2. the size of the low-cost labor pool of the society as an incentive for external actors to invest technology and capital into order to enjoy the price advantage over competitors their own domestic markets and the markets of other societies in the geo-economic system
 - ii. the ability of the polity in a less-dominant society to protect its own natural resources for domestic production rather than export to other societies and/or to secure needed resources from other societies at low costs
 - iii. the degree to which a less-dominant society occupies a strategic position in the geo-political rivalries of other developed societies and, as consequence, can use this position to negotiate technological and capital investments from competing developed societies
 - iv. the degree to which a society occupies a strategic or central position in markets and meta-markets of the global system of markets
 - v. the degree to which a society has greater political and/or economic power than its immediate neighbors in the larger geo-political and geo-economic systems
9. The likelihood of breakdown and collapse of geo-economic inter-societal systems and empires is an additive function of:
- A. Instability in global meta-markets or the meta-markets of a central economic hegemon(s)
 - B. Warfare among regional powers or global hegemons, for whatever reasons, but particularly over trade disagreements
 - C. Global economic recessions and economic collapse that cause polities in the global system to install trade barriers and other restrictions to protect domestic production

Conclusion

I realize that for many, these kinds of propositions are too general and cannot explain unique historical details. But, if world-systems theorizing is to be truly theoretical and explanatory, it must develop something like the principles offered in this chapter. Otherwise, explanations will be historical, tracing sequences of events in inter-societal systems over time. There is nothing wrong with such historical explanations but they are not scientific; they do not explain the general and generic dynamics of geo-economic and geo-political formations in all times and places. The generalizations that I offer assume, however, a certain level of political and market development, but they can also apply to simple horticultural and agrarian systems, and as Chase-Dunn has consistently emphasized and demonstrated, very small geo-economic and geo-political inter-societal systems can also be subject to theoretical explanation in much the same terms as large and complex systems. Thus, the generalizations enumerated above may need some reformulation to be

truly explanatory across all types of inter-societal systems that have ever existed and that are likely to exist in the future.

I am not sure that most “world-systems” research and theory should use this label anymore because what is really being address is inter-societal systems from the simplest to most complex phases of societal evolution. True, there is something like a core, periphery, and semi-periphery at many historical periods, but I am not convinced that we should continue to use this tri-part distinction because it does not hold up in all times and places. It is better to include in theories the *relative amounts* of power and/or economic development and how these generate *generic types of relations* among societies—types of relations that extend beyond those now conceptualized by the tri-part ideal type of core, periphery, and semi-periphery. Beginning with non-universal categories and assumptions that do not denote the key properties of **all** inter-societal systems leads to a shoving and stuffing of empirical reality into these categories. Even though Chase-Dunn’ still employs the tri-part distinction among core, periphery, and semi-periphery, this is done, I think, to emphasize the importance effects of the semi-periphery in the dynamic of inter-societal systems, such in periodic upsweeps of inter-societal systems. But, it would be better, I think, to employ a somewhat different label, if only to escape the constraints of Wallerstein’s categorization, which does not work well in pre-literate and pre-capitalist inter-societal relations. And, the iteration model does not need the Wallersteinian categories because hierarchies among societies can take many different forms; and in fact, the emphasis on inter-societal stratification by power and wealth may be better without the core-periphery distinction which, for a time, was useful in making inter-societal systems the unit of sociological analysis but, now, with the enormous advance of world-systems theorizing and research it probably less essential and necessary as a legitimating intellectual ploy. Inter-societal systems are an appropriate units of analysis for understanding virtually everything about patters of human social organization. There are fundamentally more important conceptual distinctions and theoretical models and principles built around these distinctions than the core-periphery distinction. It is time, I think, for more theoretical principle and probably better ones than I have enumerated to explain the dynamics of inter-societal systems.

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