

Foundational Paradigms of Social Sciences

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Abstract

When stripped to the bare bone, there are only 11 foundational paradigms in social sciences. These foundational paradigms are like flashlights that can be utilized to shed light on different aspects of human society, but each of them can only shed light on a limited area of human society. Different schools in social science result from different but often incomplete combinations of these foundational paradigms. To adequately understand human society and its history, we need to deploy all 11 foundational paradigms, although more limited combinations of them may be adequate for understanding more specific social facts.

Keywords

scientific realism, social sciences, ontology, epistemology, synthesis

Introduction

To students of social sciences, the presence of numerous and often warring schools or approaches is both intimidating and confusing.¹ These different

¹I reserve “paradigms” exclusively for the foundational paradigms. I use “schools” or “approaches” to denote things that are derived from combinations of the foundational paradigms. I shall not get into the question whether Kuhn’s paradigms and Lakatos’s “research programs,” which have faced persistent doubt since their birth, are

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schools, it seems, are doomed to stake rival claims of superiority over each other, without ever resolving their differences.

In this article, I seek to clarify this confusing picture at a most fundamental level. Critically building on many previous attempts, I argue that when stripped to the bare bone, there are only 11 foundational paradigms in social sciences. These foundational paradigms are like flashlights that can be utilized to shed light on human society. Each, however, saving the Social Evolution Paradigm (hereafter, SEP)—which in its most complete form synthesizes all the other 10 paradigms into an *organic* whole—can only shed light on a limited area of human society.²

I show that different schools in the social sciences can be broken down into these foundational paradigms, and the differences between different schools—including their different strengths and weakness when it comes to understanding or explaining specific social fact or facts—largely reflect their different combination of the foundational paradigms. Because almost all schools rely on incomplete combinations of the foundational paradigms, these schools inevitably provide limited mileage for understanding human society. To adequately understand human society, we need to deploy all 11 foundational paradigms and synthesize them organically, although more limited syntheses of paradigms may be adequate for understanding more specific social facts.

My exercise serves social sciences on three interconnected fronts. First and foremost, I want to help social scientists, especially PhD students. Too often, graduate students craft a framework without much thought on which paradigms to deploy, partially because they have no idea about these foundational paradigms.³ By stating these foundational paradigms explicitly and rigorously, I provide social scientists with a platform for forging their own combinations of foundational paradigms for understanding specific social

anywhere related to “paradigms,” “schools,” or “approaches” here (Kuhn 1970; Lakatos 1970). My discussion can proceed without their labels.

²For lack of a better word, I am adopting Schumpeter’s usage of “organic” for describing Marx’s analysis of capitalism (Schumpeter 1970, 82). A synthesis is “organic” if it takes interaction of different forces or dimensions that are captured by different paradigms as a key variable for understanding social fact or facts. Hence, organic synthesis is much more than “analytical eclecticism,” which merely packs different paradigms into one framework without necessarily emphasizing interaction of forces as a key variable. I further advocate systemic synthesis, as embodied by the Social System Paradigm (hereafter, SSP), which goes beyond dialectic synthesis (see the discussion in section 3 below).

³I do not know about others, but when I was in graduate school, I was not taught these foundational paradigms. Instead, I was taught schools/approaches and (some) methodologies.

facts. Second, I provide a platform for assessing the *relative* strength and weakness of various schools in social sciences, without imposing a monolithic social science.⁴ Because each foundational paradigm captures an aspect of human society but not the whole, the strengths and weaknesses of schools that combine foundational paradigms differently vary in different issue areas. Third, I lay the foundation for more *organic* syntheses in social sciences. Although many social scientists have recognized the various inadequacies of various schools and called for syntheses of some warring schools, they have not laid out a roadmap for achieving such a synthesis and their attempts have not been all that successful. A key problem has been that different schools often cannot be synthesized because they hold incompatible preferences over the foundational paradigms. Only syntheses based on the foundational paradigms are feasible.

The rest of the article unfolds as follows. Section 1 states some important caveats. Section 2 lists the nine bedrock paradigms and then delineates them rigorously by stating their core ontological and epistemological assumptions—in *their purest form*—as explicitly and completely as possible. This section also discusses how organic syntheses of these seemingly incompatible paradigms may proceed. Section 3 discusses the two integrative paradigms. Section 4 illustrates the utility of my exercise by dissecting several familiar schools in social sciences and demonstrating that different but incomplete combinations of the foundational paradigms do underpin these different schools. More importantly, this section underscores that these schools' inability to capture important aspects of social realities is mostly caused by their incomplete combinations of the foundational paradigms. The article concludes with the obvious implication that sensible synthesis of the foundational paradigms is essential for understanding particular social facts adequately.

I. Caveats

Before I proceed further, several important caveats are in order.

First, I am concerned with social sciences in the minimalist “scientific realism” sense (Boyd 1989; Sankey 2001).⁵ In other words, I talk about social

⁴It is important to stress that the strengths and weaknesses of different schools can only be assessed relatively. After all, even the most vilified schools capture some, although quite limited, social realities (see below).

⁵I take Roy Bhaskar-inspired “critical realism” as equivalent to scientific realism, at least for the discussion here. For introductions to critical realism, see Collier (1994) and Archer et al. (1998). Although I cannot elaborate here, the framework developed here is undoubtedly useful for appraising the strength and weakness of normative social theo-

sciences that hold three central beliefs. (1) There is a real *objective* world out there—whether material or ideational—that exists independently from our individual observation and thinking. In other words, scientific realism submits to *ontological absolutism* (whereas antirealism does not). Scientific realism readily admits that our mental activity is a form of social reality and that our behavior and nonbehavior shape social reality. Scientific realism, however, also insists that even these social realities exist independently from observers' thinking, observation, and behavior: my mental activity is real whether you believe it is real or not. (2) The goal of social science is to understand, and whenever possible, to explain the world around us, of which we ourselves are a part.⁶ (3) Although we may never know our world perfectly, over time we can gain some *true* knowledge about it.

Second, I use both social force and social entity as heuristic labels throughout the discussion, not necessarily taking the two labels as interchangeable. Consistent with scientific realism, I define social force and social entity as real things, mechanisms, and processes that operate within society. These forces or entities can be observed, fathomed, and interpreted: they are real. My definition thus differs from the definition of "social force" in sociology, where social force tends to mean merely that society and social organizations exert an influence on agents' behavior.

Third, although I unequivocally state that a particular social force and/or entity holds ontological priority over another, I can only address the critical but thorny problem of ontological priority and weight versus epistemological priority and weight elsewhere. Briefly, force A holds ontological priority over force B if the latter ultimately cannot exist or operate without force A. Ontological priority thus means which force is more foundational *in a very general sense*. In contrast, ontological weight varies according to different situations: Force A holds more ontological weight over force B if force A contributes more to a social fact than force B. Epistemological priority and weight generally follow from ontological weight: force A should be accorded with priority and more weight epistemologically than force B if force A holds more ontological weight over force B. Combining these two variables (priority and weight) at two levels (ontology and epistemology) results in a

ries, "antiscientific realism social sciences," and ideologies. For instance, functionalism, communism, and nationalism all adhere to collectivism: all of them believe that the collective (i.e., the society, class, or nations) has something called soul, destiny, or consciousness.

⁶Understanding is broader than explaining. For a recent discussion on understanding and explaining in the spirit of scientific realism/critical realism, see Manicas (2006).

very complex picture. For instance, just because force A holds ontological priority over force B does not necessarily mean that force B occupies less ontological weight in underpinning a particular social fact than force A. When this is the case, even if we know that force A holds ontological priority over force B, we cannot straightforwardly assign more epistemological weight to force A than to force B. Yet, ontological weight is not all that matters because ignoring forces with ontological priority will inevitably lead to deeply flawed theories, even if one has perfectly synthesized paradigms that capture forces without ontological priority.

Fourth, I do not deal with more methodological issues (e.g., measurement, prediction, explanation, interpretation, deconstruction, induction, deduction, reduction, etc.) here. Instead, I am mostly concerned with ontological issues and epistemological issues that are grounded on ontological differences (e.g., what paradigms to deploy when understanding a specific social fact). This is based on a conviction that unless we first get these ontological and epistemological issues right, no amount of methodology can get us very far: ontology comes before epistemology, and epistemology before methodology (Bhaskar 2007; Bunge 1996, 242-43; Wight 2006). It is rather misleading to suggest that the most important divisions within social sciences are mostly epistemological or even methodological (e.g., Katzenstein, Keohane, and Krasner 1998; Wendt 1999, 38-39).

Fifth, I do not claim originality for recognizing most of the paradigms stated below, saving perhaps SEP, and to a less extent, the antisocialization paradigm (see below). Many philosophers of social sciences and social scientists have come to some appreciation of the different paradigms stated here (especially Bunge [1996]; see also Hallpike [1986, 24-28]; Elster [1989a]; Collins [1994]; Wendt [1999, 22-40]). Yet, some paradigms went largely unnoticed (e.g., biological determinism, antisocialization) or mischaracterized (e.g., the harmony paradigm, the conflict paradigm). Meanwhile, some paradigms (e.g., socialization, SSP) were undersized whereas others (e.g., rational thinking as only one component of the socialization paradigm) were oversized. More importantly, none of them have come to grasp all the foundational paradigms delineated here, not to mention defining them rigorously.

Sixth, to delineate individual foundational paradigms clearly and rigorously, I *intentionally* state the core assumptions held by individual foundational paradigms *in their purest form*. When stated so, most of the core assumptions held by these paradigms and the paradigms themselves will obviously sound extreme and untenable. But this is the exact purpose of such an exercise: by exposing why individual paradigms in their purest form do not hold much water, I reinforce the claim that we have to synthesize them

organically to adequately understand human society. More critically, by exposing that foundational paradigms are incompatible *only* when they stake extreme positions, I reinforce the claim that organic synthesis of them is indeed feasible rather than merely desirable because they are indeed compatible.

Seventh and closely related to the sixth, I readily recognize that most social scientists, saving a small minority (e.g., Parsons), do not hold extreme positions as stated here. Indeed, the very extreme nature of individual paradigms' extreme positions explains why even the most ardent advocates of these individual paradigms cannot remain completely faithful to their cherished paradigms in their purest forms. As a result, most social scientists have been inconsistent.⁷ As such, most examples that I cite as examples of adhering to a particular paradigm below should be interpreted as cases of approximation rather than as exact cases of staking an extreme position.

Eighth, this article serves as a blueprint and a foundation—but only that—for a more extensive and in-depth critique of major schools in social sciences. Because I cover much ground within a limited space here, the discussion on individual paradigms and how to synthesize different paradigms here will necessarily be brief: I have to leave many nuanced issues aside for now. Moreover, I mention only a few schools of social sciences and (again) treat them only very briefly. A critique of any particular school is thorough only if we lay bare the foundational paradigms that the school contains and misses (or under-emphasizes) and then state explicitly the relative strengths and weaknesses that such a particular combination of foundational paradigm entails. A detailed critique of prominent schools in major branches of social sciences is a large undertaking that can only be on taken in a planned book project.

Ninth, although I explicitly call for more sensible synthesis in social sciences, I am not advocating a unified or monolithic social science. In fact, the discussion here makes it abundantly clear that social science will necessarily be a "fragmented" science because different social scientists looking at different social aspects of social reality will have to combine the foundational paradigms differently but sensibly.

Tenth and lastly, although many foundational paradigms and schools have been labeled otherwise and some of the existing labels have been based on misunderstandings,⁸ I can only address the relative validity of these labels

⁷Bunge (1996, part C) caught numerous (and fine) examples of these inconsistencies.

⁸For instance, both Anthony Giddens (1984, 23-84) and Jack Knight (1992) equated functionalism with an evolutionary approach. Yet, properly understood, a genuinely evolutionary approach toward human society actually explicitly rejects functionalism (Hallpike 1986, chap. 2; Haines 1988; Tang n.d.a).

elsewhere because of space limits. Here, I merely use labels that I think are the most appropriate.

II.The Nine Bedrock Paradigms

The 11 foundational paradigms can be divided into two broader categories: *bedrock* ones and *integrative* ones. The nine bedrock paradigms are: materialism and ideationalism; individualism and collectivism; biological evolution determinism, socialization, and antisocialization; and conflict paradigm and harmony paradigm (Table 1). In this section, I state—in *their purest form*—the different ontological and epistemological assumptions held by the nine bedrock paradigms, underscoring that their different epistemological preferences are rooted in their different assumptions at the ontological level, implicitly or explicitly.

Table 1. Bedrock Paradigms of Social Sciences

	First Dimension: Material vs. Ideational	Second Dimension: Individual vs. Collective	Third Dimension: Human nature as Drivers of Behavior; Three Levels	Fourth Dimension: Harmony vs. Conflict
Paradigms with less ontological priority	Ideationalism	Collectivism	Antisocialization	The harmony paradigm
Paradigms with ontological priority	Materialism	Individualism	Socialization Biological evolution determinism	The conflict paradigm

A. Materialism and Ideationalism

The first set of bedrock paradigms is captured by the dichotomy of materialism versus ideationalism.⁹

a1. Materialism. *Ontologically*, materialism stakes two key claims. First, there are objective material things and facts that exist independently from our cognition, even though we have to invent cognitive labels and understandings to describe those things and facts. Second, even “social facts,” which require

⁹I prefer the dichotomy of materialism vs. ideationalism over that of materialism vs. idealism because idealism is also taken by the dichotomy of realism vs. idealism, where it often means “utopianism” (i.e., men, and thus human society, can be totally transformed by good ideas) in political science.

ideational inputs, cannot exist without some input from material forces and entities. In other words, ideational forces always operate on material forces and within the constraints provided by material forces: we cannot escape from the material world. Based on the two key claims, materialism holds that material forces have ontological priority over ideational forces, although it readily admits that there are ideational forces in human society and they are important forces to be reckoned with.

Materialism's stand on ontological priority is easy to substantiate. First, while material forces can exist independently from ideational forces, ideational forces cannot. After all, before the coming of *Homo sapiens*, there was no ideational force on this planet: everything was material. Second, even after human beings have invented ideas, human beings cannot completely escape from the material world. After all, human beings live on earth and their brain is made of material stuff.

Epistemologically, materialism holds two principles, explicitly or implicitly. First, material forces should always be part of the understanding or explaining framework. Second, it is always better to explain social facts with material forces than with ideational forces. Hence, we shall reduce ideational explanations to material explanations whenever possible, or at least underpin ideational explanations with material factors.

Prominent examples of materialism include realism in international politics and Marxian historical materialism. Realism claims that material power rather than ideational forces determine outcomes in international politics and states foremost seek material power (Niebuhr [1932] 1960; Carr 1939; Morgenthau 1948). Historical materialism claims that it is material productive forces that underpin superstructure, which is mostly ideational (Marx 1859, preface).

a2. Ideationalism. *Ontologically*, ideationalism, in its most extreme form, advances two positions. First, ideational forces hold ontological priority over material forces. A weaker formulation of this stand is that ideational forces have at least equal claim to ontological priority as material forces because ideational forces cannot be reduced to material forces. Second, because ideational forces directly shape human behavior—often independent of material forces, ideational forces ultimately determine outcomes in human society. In sum, the more important force in our world is ideational, rather than material (Wendt 1999, 24).

Epistemologically, ideationalism holds two principles. First, because ideational forces directly shape human behavior and thus social outcomes, it is always better to explain social facts with ideational forces. Second, because ideational forces (and thus explanations) cannot be reduced to material forces (and explanations), we should not ask where ideas come from, other than stating that our brain invents ideas.

Because ideationalism's ontological position in its extreme form is so evidently untenable, proponents of ideationalism generally deploy two tactics to

sustain their claim. The first is to advance the following false syllogism: “Because I have to invent labels such as earth, star, sun to label those (supposedly real) material things and these labels are my inventions (and they do not exist outside of my mind), there are no real things out there. Real things only exist in my mind.” In Derrida’s famous quote, “there is nothing outside of the text.” (Derrida quoted in Burr [2003, 82]; see also Rorty [1998, 87, 90]) The second, which has been a favorite among social constructivists, is to argue that material forces hold no ontological priority over ideational forces because ideational forces somehow *constitute* material forces or that material forces and ideational forces co-constitute each other (e.g., Wendt [1999, chap. 3]).¹⁰

Epistemologically, proponents of ideationalism often assert that one particular idea (or a set of ideas) largely determines a particular social outcome, but then tells us nothing about where the idea comes from in the first place. More importantly, by overemphasizing ideational forces, these ideational explanations tend to obscure material forces. Thus, Max Weber (1958) pinpointed the Protestant ethic as the spirit of capitalism in Europe. More recently, Alexander Wendt (1999, chap. 6 and 7) asserted that the transformation of one type of anarchy to another type in international politics requires ideational (or cultural) changes among states without telling us why states should change their ideas. Much of the literature on institutions, culture, belief, norm, ideology, or simply the influence of ideas on human behavior and social outcome also falls into this category (e.g., Almond and Verba [1963]; Denzau and North [1994]; Johnston [1995]).

a3. Toward a Synthesis. Human society is made of both material forces and ideational forces. Thus, any social science must be based on both materialism and ideationalism. A purely materialistic approach is obviously untenable because human beings invent ideas and ideas have profoundly (re)shaped human society and the physical environment. A purely ideationalistic approach will not do either, because even if one insists that an idea matters—and ideas do matter—one still needs to explain how that idea comes to exist and matter. And unless one is prepared to accept infinite regression, there is no alternative but to look at the material world for explaining how and why an idea comes to exist and matter.¹¹ The challenge is how to synthesize materialism and ideationalism organically.

Elsewhere, I argue that only a social evolutionary approach, in the spirit of Karl Popper and Donald Campbell’s “evolutionary epistemology” (Popper

¹⁰For more examples of social constructivism’s tactics and critiques of them, see Norris (1997), Hacking (1999), Palan (2000), Boghossian (2006), and Wight (2006).

¹¹In other words, a purely ideational explanation cannot be genuinely endogenous. Of course, to ground ideas on material forces is not to reduce ideas to biology, chemistry, or physics.

1979; Campbell 1974a),¹² can organically brings material forces and ideational forces together. Briefly, (1) our world is made of both material forces and ideational forces and they interact with each other to shape our world, although material forces hold ontological priority over ideational forces. (2) Ideas are made on a material foundation and within material constraints, and ideas are then selected by “artificial selection”, in which both the physical environment and human intelligence are involved. (3) Ideas, however, can come back to change both the ideational environment and the physical environment via human behavior. (4) Although human-induced changes can never completely remake the physical world, manmade changes of the physical environment do come back to impact the biological evolution of human beings, in the long run.

B. Individualism and Collectivism

The second set of paradigms is captured by the dichotomy of individualism versus collectivism (Bunge [1996, chap. 9]; see also Lukes [1968]; Coleman [1990]; Collins [1992]; and Udehn [2002]).¹³

¹²One can perhaps trace this “evolutionary epistemology” to Kant. In his “An Idea for Universal History with a Cosmopolitan Purpose,” ([1784] 1991) Kant spoke of “it [i.e., reason] requires trial, practice and instruction to enable it to progress gradually from one stage of insight to the next.” He also emphasized that this process of epistemological evolution can only occur through generations of populations (Kant [1784] 1991, 94-95).

¹³Individualism has been called “atomism” whereas collectivism has been called “holism” or “organicism.” Some have also mistakenly taken collectivism to be structuralism. Here, it is important to emphasize that the dichotomy of individualism vs. collectivism is not the same as that of micro vs. macro, as Collins (1992) and Coleman (1990, chap. 1) seem to hold. With perhaps the exception of economics, the dichotomy of micro vs. macro in most fields of social sciences is a heuristic device that does not really capture anything at the ontological level. Micro and macro are two levels of analysis and thus purely a problem of epistemology. In contrast, individualism and collectivism reflect epistemological differences that are based on differences at the ontological level. Indeed, even at the micro-level, as Collins (1992, 80-81) himself admits, there is structure, which can only exist within collectives. For instance, one can investigate a village or many villages, and this is fairly micro. Yet, if one is looking for something beyond individuals, one is working within collectivism, even though one is doing micro analysis. This is essentially Bourdieu’s work ([1980] 1990). Likewise, Foucault examined the micro-physics of power, yet he mostly worked with collectivism because he was more interested in the structure of power (Foucault [1976] 1990, 1980, 1986). Finally, neoclassical economics approach is an extreme individualism approach, even when it studies *macro* economic issues. Bunge’s discussion earlier came closest to what I expound here.

b1. Individualism. *Ontologically*, individualism holds three bedrock assumptions. First, individuals make collectives. Second, collectives have no extra or unique properties other than the sum of the properties of the individuals within them (J. S. Mill, cited in Bunge [1966, 243]; see also Coleman [1990, 5]). Third, even if collectives have some unique properties, they have little effect on individuals' behavior thus social outcomes.

Epistemologically, individualism asserts that to adequately understand human society, all we need is to understand the individuals and how their actions together add to the collectives: there is little beyond individuals that cannot be understood by simply adding up individuals. Because collectives' properties—if there are any—have little effect on individuals' behavior and thus social outcomes, we can safely ignore collectives' properties most of the time. In its extreme form, individualism essentially assumes groups to be nonentities and thus irrelevant for understanding society. Not surprisingly, individualism adopts a reductionist methodology of reducing groups to individuals, either implicitly or explicitly (Collins 1981; 1992).

Extreme individualism is most prominently exemplified by the neoclassical economics approach, which assumes atomistic individuals with (bounded) rationality. The rational choice approach (hereafter, RCA) in sociology and political science, which is based on the neoclassical economics approach, is another prominent strain of extreme individualism (see section 4 below). In sociology, both James Coleman (1990) and Randall Collins (1994) staked the extreme individualism position. In political science, the RCA-based "individual interaction" approach toward ethnic conflict from James Fearon and David Laitin (1996, 717), by contending that conflict between two ethnic groups is no different from conflict between two individuals, also symbolizes extreme individualism. In political theory, individualism is foremost represented by classical (economic and political) liberalism (e.g., Hayek [1967]; [1973]; Berlin [2002]; Rawls [1971]).

b2. Collectivism. *Ontologically*, collectivism insists on two key notions. First, collectives have extra properties other than the sum of the properties of the individuals within them,¹⁴ although individuals make collectives. More specifically, collectives contain interdependence among individuals, group/collective identity, and social structure that are absent among independent individuals (Turner et al., 1987, chap. 2). As such, collectives cannot be reduced to the simple sum of individuals: collectives are real entities. Second, although individuals within collectives create properties of collectives, properties of collectives, once in place, inevitably come back to shape and, sometimes

¹⁴Although Margaret Archer's (1982) notion of "emergent properties" also captures collectives' properties that emerge from interactions among individuals, I avoid this label because "emergent properties" can emerge from any interaction. In other words, "emergent properties" captures something really broad.

dominate, individuals' mentality and behavior and thus social outcomes. To paraphrase John Commons (1934, 635-36), properties of collectives, while a creation of individual human agents, have a life of their own once created.¹⁵

Epistemologically, collectivism upholds two principles. First, to adequately understand human society, we need to understand collectives' properties (e.g., group identities, structure, culture, and norm) and how these properties change and shape social outcomes over time. Second, for understanding individuals' behaviors, we need to understand how collectives' properties impact or even dictate individuals' behaviors. Collectivism thus explicitly rejects the reductionist position of reducing collectives to the mere sum of individuals within collectives.

All schools that emphasize collectives either as an agent or as a starting point for understanding social realities are adherents of collectivism. Extreme collectivism even holds that collectives often have logic, soul, or reasons. This is the position of "holism" as Wendt (1999) and Udehn (2002) called it or "organicism" as Neumann (2004) labeled it. Holism essentially reifies groups by taking collectives as an organism. The Comte-Spencer-Durkheim-Parsons-Merton (structural) functionalism, which explicitly holds that society is an organism with needs, ethos, and purpose (*telos*), is an example of extreme collectivism (Spencer [1860] 1891; Durkheim [1893] 1984; Parsons 1951; Merton 1968).¹⁶ For functionalism, the society is an organism that drives individuals into conforming to its needs, and when individuals do so, the society achieves an organic integration based on almost perfect division of labor and thus functions like a highly adapted and/or well-functioning organism.

Because (social) structure is a component within the unique properties of a collective (e.g., group, class, community, society, etc.) and can only exist within a collective (Turner et al. 1987, chap. 2), structuralism in various fields of social sciences is also a form of collectivism (Parsons 1937, 1951; Merton 1968; Skocpol 1979; Giddens 1979, 1984; Bourdieu [1980] 1990).¹⁷ Not surprisingly, all works with a collectivism approach put enormous weight on the

¹⁵Campbell (1974b) labeled the general fact that things at a higher level, although dependent on things at a lower level, can come back to impact things at a lower level as "downward causation."

¹⁶The core idea of functionalism, of course, can be traced all the way back to Confucius's and Plato's discussion on the ideal state in their mind.

¹⁷Indeed, some (e.g., Parsons, Merton) have used "structural approach" and "system approach" interchangeably. This is incorrect: social system is more than and subsumes social structure. There are many definitions of structure. The definition adopted here (and by most of the authors cited here) is an institutional definition: structure is the institutional and cultural system (which is mostly ideational) that gels the society together. An exception is Kenneth Waltz's definition of international structure, which is almost purely material (Waltz 1979). For discussions on how to define structure, see Porpora ([1989] 1998), Lopez and Scott (2000), and Wight (2006, chap. 4).

agent and structure problem (e.g., Giddens [1979], [1984]; Wendt [1999]).¹⁸ Approaches that stress that some properties of collectives that can come to shape individuals' behavior and thus social outcome, ranging from "social capital" (Putnam 2000; Fukuyama 1995), institutions/structure (North 1981), (civic or strategic) culture (Almond and Verba 1963; Johnston 1995), civilization (Huntington 1996), ethic/ethos (Weber 1958), and class "consciousness" (Marx and Engels 1848, Lukacs 1971[1920]), to collective identities (Wendt 1994, 1999; Legro 1996), all fall into this category.¹⁹

b3. Toward a Synthesis. At least for a (very) limited period of time, an individual can live independently from a group. In contrast, at any time, a collective cannot exist without having more than two individuals. Moreover, collectives inevitably need some bonds—usually in the form of an institutional structure—to hold individuals together, and this institutional structure is almost purely ideational. In contrast, an individual is mostly material when standing alone. Both facts suggest that individuals have ontological priority over collectives.

Yet, because we humans are inept predators as individuals, we cannot survive long as individuals. As such, we have to live as groups: group has been part of our "natural environment" since the early time of our species (Caporael and Baron 1997). Inevitably then, group categorization, identity, and living influence individuals' psychology and behavior profoundly and pervasively (Brewer 2004; Caporael 1997; Brewer and Caporael 2006), as the "minimal group paradigm" in social psychology has powerfully demonstrated (for a review, see Tajfel [1982]). This *ontological* fact means that when seeking to understand human society, individualism and collectivism should not be pitted against other: neither individualism alone nor collectivism alone is adequate or tenable.

Because individuals have ontological priority over collectives, collectivism cannot operate without some input from individualism (Collins 1981, 1992; Lukes 1982, 16-7). A purely collectivist approach essentially assumes away collective action, ideology, political entrepreneurship, (political) mobilization, intragroup and intergroup conflict, domination, and legitimacy etc. (North 1981, 61-2; Oberschall 1978, 295-97). Most

¹⁸Apparently, agent must hold ontological priority over the social structure because agent is at least partly material whereas structure is almost purely ideational.

¹⁹Because these entities are mostly, if not purely, ideational, these approaches are almost inevitably a more ideationalist approach. Approaches that study the emergence of norms, institutions, and order among individuals are not necessarily collectivism. Indeed, these approaches are often based on a micro-economic individualism approach (e.g., Hayek [1967, 66-81], [1973, chap. 2]; Elster [1989b]; Ostrom [1990]).

fundamentally, a purely collectivism approach assumes away individuals' self-interest, painting a misleading picture of human nature (see below). Thus, structural functionalism must implicitly assume that individuals are not self-interested. Instead, they all work together to make the society function as a healthy organism: individuals are zombies who simply internalize whatever rules and norms a society has to offer (Collins 1992, 87-89; 1994, 198-203). Likewise, Marxism's theory of social revolution based on class must implicitly assume that collective action by members of a class tends to be unproblematic because of the presence of "class consciousness" among them.

A purely individualist approach is also untenable. Any theory of individual behavior, unless at the level of biology, assumes some socialization and this socialization is only possible within collectives. Even the supposedly pure individualism approach of *Homo economicus* as preached by neoclassical economics has to implicitly or explicitly assume that there is some kind of social structure that enables economic calculation (Granovetter 1985). Although individualism can operate without collectivism in some (very limited) circumstances, it cannot get us very far most of the time.

To adequately understand human society, we again have to synthesize individualism and collectivism organically. Such a synthesis should follow the following five principles.²⁰ (1) Individuals make collectives, thus holding ontological priority over collectives. As such, all collectivism theories must contain assumptions at the individual level, implicitly or explicitly. (2) Collectives have extra properties other than the sum of individuals' properties: collectives cannot be reduced to the simple sum of individuals. (3) Individuals invent and deploy both material stuff (e.g., temples and monuments) and ideational stuff (e.g., ideas, rituals, identities, norms, institutions, and culture) to hold the collectives together. (4) Once created, these collective-derived properties come back to shape individuals' mentalities and behavior, and thus social outcomes afterward. The information flow between individual and collective is an enclosed circle rather than a one-way street. (5) To adequately understand human society, we need to understand the interaction between individuals and collectives (i.e., how individuals' actions shape collectives and how collectives shape individuals). This interaction, in which the much debated agent-structure problem is only a part, has been one of the major driving forces behind the evolution of human society.

²⁰Bunge's discussion on systemism comes closest to the position expounded here (1996, chap. 10). He, however, took systemism as only suitable for synthesizing individualism and collectivism/holism. In contrast, I hold that SSP is capable of synthesizing all nine bedrock paradigms.

C. Human Nature: Biological Evolution, Socialization, and Antisocialization

Discussion on human nature has essentially disappeared from social theories.²¹ Most social scientists have been pretending that the problem has been resolved or that social sciences can move on without some basic understanding about human nature, and thus social scientists can safely leave human nature to biology, sociobiology, or psychological science. In reality, human nature remains a thorny problem that will not—and should not—go away because no social theory is possible without some assumption over human nature: all social theories assume some kind of human nature, one way or another.

Because of the enormous complexity of human nature, I can only deal with it in-depth elsewhere. Here, I shall merely state the three foundational paradigms toward human nature and their epistemological implications.

c1. Biological Evolution Determinism. *Ontologically*, biological evolutionary determinism advances four notions. First, biological evolution has been the most critical, if not the only, force that has shaped human nature. Second, biological evolution has endowed the human mind with certain specific traits before the coming of human society: the human mind has never been a *tabula rasa* or blank slate (Pinker 2002). Third, this biological evolution-endowed human nature is universal and fundamental, and more importantly, *inerasable* (through socialization or antisocialization). Fourth, the two most critical drivers of human behavior have been survival (i.e., security) and reproduction (Buss 1995).

Epistemologically, biological evolution determinism seeks to uncover and then explain human psychological traits exclusively with biological evolution, especially with the drive to survive and reproduce. The principal explanatory mechanism for biological evolution determinism is the central mechanism of biological evolution, that is, variation-selection-inheritance.

Earlier applications of Darwin's theory of biological evolutionary via natural selection to human and human society have resulted in some crude forms of biological determinism, most notoriously among them all, Social Spencerism/Darwinism, which forms part of the intellectual foundation of racism, Geopolitics and Nazism. More recent applications have yielded sociobiology and its

²¹What needs to be stressed is that human nature is not human behavior per se. Human behavior is a function of two determinants: internal drivers (interest, capability, resolve, etc.), external environment (e.g., opportunity, constraints). Human nature is about the drivers of human behavior and human's *inherent* potentiality for certain behavior (e.g., sucking, eating, etc.). Here, I do not address human's inherent potentiality for certain behavior. Apparently, only a part of human nature (e.g., abstract thinking) is really human-unique (Buller 2005, chap. 7).

more sophisticated upshot, Evolutionary Psychology (hereafter, EP). Although sociobiology and EP improve on earlier crude biological determinism by rejecting gene-determinism and Social Darwinism, they are still under the spell of biological evolutionary determinism because they still insist that *natural selection has been the only or, at least the major, driving force of human behavior* (Wilson [1975] 2000, 1978; Cosmides and Tooby 1992; Buss 1995).²²

c2. Socialization Paradigm. Contra biological evolutionary determinism, both the socialization paradigm and the antisocialization paradigm toward human nature insist that social forces have been the more dominant force in shaping human nature, and by implication, human behavior.

Ontologically, the socialization paradigm holds two interconnected notions. First, human behavior is fundamentally constrained and shaped by the social system, especially its institutions (often backed by power) and culture. Second, human behavior is fundamentally driven by individuals' urge to conform and adapt to the social system—especially its institutions and culture, and individuals' conforming and adapting to the society in turn underpins a society's stability.²³

Epistemologically, the socialization paradigm holds that individuals' behavior is best explained by a society's constraints and individuals' (rational) urge to conform and adapt and thus satisfy themselves materially and psychologically. Individuals' conforming and adapting to the society in turn explains a society's stability.

The Comte-Spencer-Durkheim-Parsons-Mertonian structural functionalism represents an extreme form of the socialization paradigm. For functionalism, (most) individuals adapt to society's needs by willingly internalizing these needs, and it is through this internalizing that most individuals find their proper positions and perform their proper functions in the society. For functionalism, individuals are inevitably "oversocialized" (Wrong 1961).

²²Following Buller (2005), I use Evolutionary Psychology (EP) to denote the paradigm toward human psychology, whereas "evolutionary psychology" is a field of inquiry. EP is more sophisticated than sociobiology because the former emphasizes that biology influences human behavior via evolved psychological mechanisms whereas the latter jumps from biology to behavior directly (Buss 1995; Cosmides and Tooby 1992). Apparently, different authors differ on how large the biological evolution-dictated hardcore of human nature is, and thus implicitly, how much room is left there for social forces (e.g., socialization and antisocialization) to shape human behavior. When EP's proponents slipped, they often admitted that natural selection may not be the only mechanism in shaping human psychology and that many of our psychological mechanisms *are socially evolved and for social purposes* (e.g., Buss [1995]).

²³The second part of this position is often only implicit but should logically follow from the first part.

c3. Antisocialization Paradigm. Whereas society is often a happy family for the socialization paradigm, it is the oppressor for the antisocialization paradigm: it is the society that has prevented human beings from achieving their ultimate emancipation/liberation.

Ontologically, the antisocialization paradigm asserts three key notions. First, socialization (and by implication, society) limits human's (natural) freedom: "man is born free; and everywhere he is in chains" (Rousseau ([1762] 1973, 181). Second, human behaviors are fundamentally driven by the urge to rebel against the prevailing social system (i.e., its norms, power, knowledge, etc.). Third, this urge to rebel is what ultimately drives social change, and perhaps more importantly, what brings human emancipation.

Epistemologically, the antisocialization paradigm upholds three principles. First, agents' behavior is best explained by the oppression in the society and agents' urge to rebel against it. Second, if subjects (as agents) have yet to rebel, then we must look for domination, "false consciousness," and power/knowledge (Weber 1978; Gramsci [1926-1937] 1992-1996; Foucault 1980). Third, agent's success or failure to rebel and rebel successfully explains societies' stability and change.

For the antisocialization paradigm, the goal of social science is to understand how a society drives agents to rebel against it and how agents strive to break the chains imposed by the society and thus dig the society's grave. The antisocialization paradigm thus has an integral "critical" or "negative" component to it, although the weight of this component varies. As such, the antisocialization paradigm always implies a reformist or even revolutionary spirit: reasoning is (for) revolting and revolutionizing, to paraphrase Herbert Marcuse ([1941] 1960), Jean-Paul Sartre (quoted in Kirtzman [1988, xiii]), and Michel Foucault ([1972] 1977, 208).²⁴ The antisocialization paradigm is prominently represented by Marxism, the Frankfurt School's "critical theory" (e.g., Marcuse, Habermas), and postmodernism (e.g., Nietzsche, Foucault, Deleuze).²⁵

²⁴Marcuse's title was "Reason and Revolution." Sartre's original words were: "An intellectual exists in order to draw attention to the principles of revolution." Foucault's original words were "[Theory (or practicing theory as practice)] is a struggle against power, a struggle aimed at revealing and undermining power where it is most invisible and insidious." Quoting them does not mean that I endorse their ideas.

²⁵Obviously, the antisocialization paradigm entails a conflictual approach toward social interactions. In contrast, both biological evolutionary determinism and the socialization paradigm are compatible with both the conflict paradigm and the harmony paradigm. Nonetheless, the differences between antisocialization on the one side and biological evolutionary determinism/socialization on the other are not the same as the differences between the harmony paradigm and the conflict paradigm (discussed below).

What must be emphasized here is that the antisocialization paradigm holds that all of us are capable of critical thinking against the prevailing social order—it is part of our nature, although not all of us actually do critical thinking. The “power elite” have no incentives to be critical because they profit from the prevailing social order (Mills 1956). Others are simply too busy in getting by under the oppressing social system to get on with critical thinking, because they are coerced (Weber 1978), deterred (Bachrach and Baratz 1962), and/or penetrated by “false consciousness” and power/knowledge (Gramsci [1926-1937] 1992-1996; Foucault 1980).

c4. Toward a Synthesis. There cannot be any doubt that biological evolution provides the most fundamental part of human nature: socialization and antisocialization must have a material foundation, and this foundation could only have been provided by the biological evolution of the ancestors of our species (i.e., pre-*Homo habilis* species). The part of human nature determined by biological evolution, which in all likelihood is inerasable and universal, obviously holds ontological priority over both socialization and antisocialization.

As our ancestors after *Homo erectus* began to live in larger and larger groups, the weight of social forces gradually increased. At the beginning of our group living, institutional structure was sparse, and socialization by the large society was relatively weak and antisocialization was even weaker. As a society's institutional structure becomes denser, however, pressure for socialization becomes more pervasive and pressing.²⁶ This increasing institutionalization or “rationalization” of society then inevitably drives some individuals to antisocialization—there is a dialectic relationship between socialization and antisocialization. As such, socialization holds some, but not much, ontological priority over antisocialization.

The problem with biological evolutionary determinism is apparent: it fails to take social forces into account, at least not adequately. Because human beings and human societies today are a product of social evolution, rather than biological evolution alone, *natural selection alone cannot possibly account for all, perhaps not even the major, drivers of human behaviors.*²⁷ Indeed, as I argue in detail elsewhere, artificial selection by human intelligence but within the constraints provided by the material forces has become the more powerful selection force in human society as humans produce more and more ideas.

²⁶This is mostly because of the fact that institutions are usually made and backed by power (Tang n.d.a).

²⁷Most critics of sociobiology and EP have failed to appreciate this more fundamental problem associated with biological evolution-determinism. Instead, they have dwelled on the two approaches' empirical flaws and methodological problems (e.g., Kitcher [1985]; Buller [2005]; Richardson [2007]).

The problem of the socialization paradigm is that it overemphasizes the socializing process, thus committing two critical errors. First, it often implicitly assumes a *tabula rasa* picture of the human mind, thus denying that part of human nature cannot be completely socialized.²⁸ Second, it fails to recognize that increasing socialization inevitably drives (some) individuals to antisocialization.

The antisocialization paradigm also commits two critical errors. First, it overemphasizes the antisocializing process as if the society does not provide any real benefit to individuals. Second, it downplays the fact that society inevitably implies some socialization and demands some individuals to be socialized—often successfully. After all, no society can exist long when all of its members resist socialization completely.

Once again, the challenge is to synthesize the three broader drivers of human behavior as captured by the three bedrock paradigms organically when seeking to understand human nature. Elsewhere, I shall argue in greater detail that only SEP is capable of such a synthesis. Briefly, a social evolutionary approach toward human nature entails five principles. First and most obvious, we shall admit that human nature has three broad drivers that are captured by the three paradigms, and none of the three paradigms can claim that it alone gets all human nature right, although biological evolution holds ontological priority over both socialization and antisocialization. Second, the three broad drivers interact with each other rather than function independently. Third, the three broad drivers of human nature may have different weight in different domains of human behavior. As such, there is no ground for asserting weight for a particular driver of human behavior *ex ante*. Fourth, if the part of human nature determined by biological evolution is essentially universal; then the interaction between socialization and antisocialization—which is underpinned and constrained by the part of human nature determined by biological evolution—must account for the bulk of the diversity of human behavior across different societies. Fifth, because humans constantly invent new ideas, both socialization and antisocialization can be boundless. As such, the diversity of human behavior can be boundless and a complete theory of human nature is impossible, although we can achieve a decent understanding of human nature.

D. Conflict Paradigm and Harmony Paradigm

The last set of bedrock paradigms is captured by the dichotomy of conflict paradigm versus harmony paradigm.²⁹ To some extent, these two paradigms

²⁸Another way of advancing this position is to state that “there is no such thing as a human nature independent of culture” (Geertz 1973, 69). For a thorough critique, see Pinker (2002).

²⁹The label of conflict approach has been fairly accepted, especially in sociology. The dichotomy of conflict paradigm versus harmony paradigm better captures the

can be derived from two different combinations of the seven bedrock paradigms defined above. For instance, when we add the limited supply of material and symbolic/ideational goods and the ego-centric (i.e., selfish) nature of human individuals and groups,³⁰ we are led to admit that some conflict of interest and thus some conflict is inevitable, thus the conflict paradigm. On the contrary, if we admit that humans are inept predators individually, we are led to admit that some cooperation (often within fixed groups) is essential for our species at the very beginning, thus the harmony paradigm. Because these two paradigms do capture critical ontological reality and thus something fundamental of human society, I list them as bedrock paradigms although they are slightly secondary to the other seven bedrock paradigms.

d1. Conflict Paradigm. *Ontologically*, the conflict paradigm holds three key assumptions. First, agents (i.e., individuals or collectives of individuals) generally have divergent interests. As such, agents often have conflict of interest—mostly real but sometimes imagined—among them. Second, agents often resort to actual conflictual behavior—that is, quarreling, passive resistance, struggling, threat of force, and actual use of force—to advance their interests. Third and following from the first two, most social outcomes are produced by agents' conflictual behavior to advance their interests.

Epistemologically, the conflict paradigm holds that it is most productive to understand social outcomes from the assumption that agents have conflict of interest and often end up in conflictual behavior and thus actual conflict. Hence, to understand social outcomes, we must do three things. First, we want to uncover agents' conflict of interest, real or imagined. Second, we want to understand agents' conflictual behavior for advancing their interests. Third, we want to understand social outcomes as the product from the interaction of agents' conflictual behaviors to advance their interests.

The conflict paradigm is prominently represented by Marxism sociology, Weberian sociology, realism in international politics, and Foucauldian post-modernism. Marxist sociology sees class conflict as inescapable and the ultimate driving force of human history (Marx and Engels 1848). Likewise, Weber (1978) emphasized a variety of dominations (e.g., authority, legitimacy,

essential divide between the two paradigms than other existing dichotomies. For a more detailed discussion, see n.d.a (refers to A General Theory of Institutional Change, unpublished book manuscript).

³⁰Here, I state categorically that from a social evolutionary point of view, *selfishness as part of human nature is normatively neutral because it is essential for our (individual) survival*. Selfishness can do both good (i.e., powering economic growth) and evil (i.e., causing the current financial crisis). Again, I can only address human nature in detail elsewhere.

law, order, etc.) in shaping society. Similarly, realism in international politics holds that international politics is inherently conflictual: states (or other collective of human agents, such as bands, tribes, and chiefdoms) have often ended up in war and it has been war that had made much of the human history (Niebuhr [1932] 1960; Carr 1939; Morgenthau 1948; Diamond 1997; Tilly 1990). Finally, Foucauldian postmodernism insists that power is everywhere and it penetrates our body and mind. As such, we (the self) have to resist the corrosion of power whenever and wherever (Foucault 1980, [1976] 1990).

d2. Harmony Paradigm. *Ontologically*, the harmony paradigm holds three key assumptions, implicitly or explicitly. First, there is a general harmony of interest, or at least, more common interest than conflict of interest among agents. Second, even when conflict of interest does exist, agents will generally eschew conflictual behavior and favor cooperative and coordinative behavior to resolve their conflict of interests. Third and following from the first two assumptions, most social outcomes are produced by agents' cooperative and coordinative behavior to resolve their conflict of interest and improve their collective welfare.

Epistemologically, the harmony approach holds that it is most productive to understand social outcomes from the assumption that agents have harmony of interest and often end up in cooperation and coordination, if not perfect harmony. Hence, to understand social outcomes, we must do three things. First, we want to uncover agents' common interest, including their urge to harmonize their interest. Second, even when agents have conflict of interest, we want to understand agents' cooperative and coordinative behaviors because of their urge to advance their common interest while minimizing their conflict of interest. Third, we want to understand social outcomes as the product from the interaction of agents' cooperative and coordinative behaviors.

The Comte-Spencer-Durkheim-Parsons-Mertonian functionalism school in sociology adopts the first ontological assumption of the harmony paradigm. Functionalism assumes a general harmony of interest among individuals, and as such, the society is a "big happy family" (Darhendorf 1968, 176-77). Neoclassical economics, including neoclassical economics-inspired New Institutional Economics (e.g., Coase [1937]; Williamson [1975], [1985]), adopts the second ontological assumption of the harmony paradigm. This approach insists that agents generally resort to bargaining to resolve the conflict of interest and move toward the Pareto frontier for mutual gains even when they have conflict of interest. Essentially, this approach admits conflict of interest but not actual conflict.

d3. Toward a Synthesis. As individuals, we have to live on material stuff and have basic needs (not to mention other nonbasic needs). As such, an

individual is foremost concerned about his or her own survival, and is thus self-centered or egoistic. With a growing population over the past 11,000 years (Diamond 1997; Kramer 1993), material resources inevitably become scarce. Indeed, even if supply of material goods is unlimited, we still desire position-symbolizing goods and positional goods (e.g., prestige, status) and these goods are inherently limited (Hirsch 1977). As such, we are bound to have conflict of interest rather than harmony of interest among us, most of the time. While conflict of interest does not automatically lead to actual conflict and cooperation is another means for resolving conflict of interest, human history has been extremely bloody, not to mention acts of less violence (Tilly 1990; Diamond 1997). As such, the conflict paradigm holds ontological priority (and perhaps, weight too) over the harmony paradigm.

Yet, common interests do exist among human beings and human beings do often cooperate with each other to avoid conflict and advance common interest. This is especially true within ingroups, but sometimes also true between two outgroups. As such, the harmony paradigm does capture some social reality, although less than the conflict paradigm does. Once again, the challenge for social scientists is how to synthesize the two paradigms organically for explaining social outcomes.

An organic synthesis of the two paradigms may resemble the following. Ontologically, we must admit the following three principles. First, there is both conflict of interest and harmony of interest among agents and they often coexist, *although conflict of interest often exceeds harmony of interest*. Second, agents engage in both conflictual and cooperative behaviors, depending on circumstances. Third, social outcomes are the products of both conflictual and cooperative behavior. In other words, more often than not, cooperation and conflict are intermixed, and cooperation sometimes is achieved in the shadow of possible conflict.

Epistemologically, we shall follow two principles. First, just because agents have conflict of interest does not mean that they are doomed to actual conflict. Likewise, just because agents have common interest does not mean that they will cooperate or coordinate. Second and following from the first, we cannot assume conflict of interest behind actual conflict or harmony of interest behind cooperation and coordination. Instead, each particular social outcome needs a careful search for its specific causes.

III. The Two Integrative Paradigms

The two integrative paradigms are the Social System Paradigm (SSP) and the Social Evolution Paradigm (SEP). In its most complete form, SSP

Table 2. Schools of Sociology

	Functionalism	Marxism	Weberian
Materialism vs. ideationalism	Mostly ideationalism	More on materialism but also emphasizing class consciousness, ideology	Both, but more on ideationalism, emphasizing ideology, legitimation, and rationalization
Individualism vs. collectivism	Collectivism (i.e., society as organism)	Collectivism (i.e., class as the basic agent)	Both
Human nature:	Only socialization		
A. Biological evolution		Mostly antisocialization (e.g., alienation, contradiction, conflict); implicitly admitting biological evolution	Both socialization and antisocialization; implicitly admitting biological evolution
B. Socialization			
C. Antisocialization			
Conflict vs. harmony	Mostly harmony	Mostly conflict, but harmony within classes	Mostly conflict, although harmony also exists
SSP: how systemic	Very limited because it ignores too many bedrock paradigms	Quite limited because it too ignores many bedrock paradigms	The best among the three because it contains most bedrock paradigms
SEP: how evolutionary	Antievolutionary: the system cannot be changed	Quasi-evolutionary: conflict drives changes	Quasi-evolutionary: conflict drives changes

Note: SSP = Social System Paradigm; SEP = Social Evolution Paradigm

synthesizes the nine bedrock paradigms organically and provides us with the means for capturing snapshots of the dynamics within a social system at a given time. SEP adds the dimension of time to SSP and thus provides us with the means for understanding the transformation of social systems through time.

A. The Social System Paradigm

Even with the nine bedrock paradigms or syntheses of them as outlined above, we still do not have an adequate framework for understanding the dynamics within a human society. What we need is a paradigm that—in its most complete form—synthesizes the nine bedrock paradigms into an organic whole. This is SSP.³¹

Ontologically, SSP insists that human society is a complex system made of agents (including the ideas they have individually), a social structure (i.e., its institutional and cultural system), and the physical environment (including time and space).³² The system contains all the forces/dimensions captured by the nine bedrock paradigms, and these forces/dimensions interact with each other to shape human society. Interactions between the nine forces/dimensions generate enormous complexities far beyond what is possible if those forces/dimensions act alone or merely additively.

Epistemologically, SSP insists that the system called human society can only be understood with a systemic approach. More specifically, SSP insists that each of the nine bedrock paradigms captures some ontological reality, but not the whole picture. To understand the dynamics of a human society, we need to synthesize all the nine bedrock paradigms into an organic whole.

³¹Because a system exists whenever two units exist and interact with each other (Jervis 1997, 6), the label of “systemic (approach)” has been the most invoked and thus most abused label in social sciences. Most schools in social sciences are incomplete syntheses of the nine bedrock paradigms, yet almost all of them adopt a somewhat systemic approach, because they do examine interactions between two or more forces. The “system paradigm” can also be applied to nonsocial systems (e.g., the solar system, the eco-system before the coming of humans). I therefore use the label of SSP to differentiate it from all the other “systemic” approaches or schools. Bunge (1996, chap. 10) takes systemic approach or systemism as an alternative to individualism and holism. This understates the power of the systemic approach: systemic approach is more than a dialectical or even an organic synthesis of individualism and holism.

³²Evidently, SSP subsumes the much debated agent-structure problem, because the agent-structure problem makes up only a (small) part of the dynamics with a social system.

Table 3. Neoclassical Economics and Rational Choice Approach (RCA)

	Neoclassical Economics	Rational Choice Approach (in Political Science and Sociology)
Materialism vs. ideationalism	Mostly materialism	Mostly materialism
Individualism vs. collectivism	Purely individualism	Purely individualism
Human nature: A. Biological B. Socialization C. Antisocialization	Very limited inclusion of biological evolution and socialization	Very limited inclusion of biological evolution and socialization
Conflict vs. harmony	No antisocialization	No antisocialization
	Mostly harmony, very limited room for conflict	Compatible with both conflict and harmony
SSP: how systemic	Very limited because it ignores too many bedrock paradigms.	Very limited because it ignores too many bedrock paradigms
SEP: how evolutionary	Pseudo-evolutionary: one step toward equilibrium	Pseudo-evolutionary: one step toward equilibrium

Note: SSP = Social System Paradigm; SEP = Social Evolution Paradigm

Methodologically, SSP first accepts the synthesizing principles within the four sets of bedrock paradigms outlined above. More importantly, SSP strives to synthesize all nine bedrock paradigms into an organic whole and emphasizes the interaction as an indispensable independent variable for understanding or explaining any particular social facts. SSP readily admits that interactions between the nine forces/dimensions are enormously complex and that only careful empirical investigation can provide an adequate understanding for any particular social fact. As such, SSP cautions against simplistic measures for understanding society, such as searching for simple (if not mono-) causal links, linear thinking, assigning weight to particular forces, and adding up effects provided by individual factors to understand the whole, etc. Rather, we should look for interactions, feedbacks, and path dependence, etc. within social dynamics. Regarding social outcomes, we should look for indirect/direct, delayed/instant, unintended/intended, and observable/unobservable, rather than just direct/instant/intended/observable alone (Jervis 1997).³³

³³Although many have discussed the systemic approach, Jervis's discussion is the best so far. Judging by the obvious failure to emphasize interaction as an independent variable in some of the leading texts on methodology (e.g., King, Keohane, and Verba [1994]; Brady and Collier [2004]), however, systemic thinking has yet to enjoy a wide following.

B. The Social Evolution Paradigm

The social system paradigm allows us to understand the dynamics within a social system, but not the possible transformation of the system. To understand the transformation of social systems, we need SEP.³⁴

Ontologically, SEP adds the dimension of time to SSP and gives time the potential to transform social systems. SEP asserts that a social system, as a system populated by human beings, is inevitably an evolutionary system through time. As such, human history is essentially a product of social evolution (as a fact) through time. SEP further holds that social changes are driven by the interaction among the forces captured by the nine bedrock paradigms, *within a social system and across time*.

Epistemologically, SEP holds three principles. First, human society can be productively studied with an evolutionary approach, with its core being the mechanism of variation-selection-inheritance. Indeed, SEP holds that the history of human society can only be adequately understood with an evolutionary approach, with SEP as its embodiment. Second, the application of evolutionary thinking to human society must not be metaphorical or purely biological. Third and most importantly, the central explanatory mechanism of social change must be the central mechanism of *artificial* variation-selection-inheritance.³⁵

SEP adds the dimension of time to SSP, thus subsuming SSP, and in turn, all the nine bedrock paradigms. SEP thus possesses all the properties of SSP but will be able to explain the transformation of social systems through time. As a result, SEP should be understood as the “*ultimate*” paradigm of social sciences.

³⁴Many have called for an evolutionary approach in social sciences, but none have explicitly stated what social evolution is or what constitute a proper evolutionary approach for understanding human society (e.g., Blute [1997]; Liberson and Lynn [2002]; Hodgson [2002]). I elaborate on social evolution as a fact and as SEP a paradigm in greater detail elsewhere (Tang n.d.b). Here, suffice it to emphasize that earlier applications of evolutionary thinking to human society have been mostly failures, resulting in racism, Social Darwinism, Geopolitics, eugenics, and sociobiology, among others. Yet, properly understood, SEP explicitly rejects all these misguided applications and provides robust rationales for doing so. For applications of SEP to international relations, see Tang (2008). For application of SEP to institutional change, see n.d.a (refers to A General Theory of Institutional Change, unpublished book manuscript).

³⁵This rule prevents metaphorical and purely biological application of evolution to social evolution.

IV. Schools/Approaches Dissected and Exposed

Over the past decades, debates among some major schools in social sciences, often centered on which has more validity and thus epistemological superiority, have shaped the various fields of social science. Yet, these debates have mostly failed to resolve the competing claims of validity advanced by different schools.

Building on the discussion above, I now dissect several familiar schools in social science and show that these schools are indeed the product of various combinations of the foundational paradigms. I use self-explanatory tables to compare their different combinations of the foundational paradigms but leave detailed references and discussions for elsewhere. I underscore that although some schools do unambiguously offer more mileage than others, none of them has managed to combine all the bedrock paradigms, not to mention combining them organically and evolutionarily. This fact, I shall contend, has been the most fundamental reason why they can offer only limited mileages for understanding human society. My discussion thus adds more clarity to the debates of different schools. By doing so, I illustrate the power and utility of my exercise.

A school's power is largely determined by the following four dimensions:

How many bedrock paradigms does the school deploy?

Does the school include paradigms with ontological priority?

How organically does the school synthesize the bedrock paradigms?

In other words, does the approach contain some elements of SSP?

For a school that seeks to explain social changes, does it contain some elements of SEP?

The first three dimensions determine how much social reality a school captures or misses at a given time. All else being equal, schools that ignore more bedrock paradigms will miss more social reality. Between two schools that deploy the same bedrock paradigms, the one that synthesizes those paradigms more organically captures more social reality. Schools that neglect paradigms with ontological priority, however, are fundamentally defective regardless how many other bedrock paradigms they deploy. The fourth dimension dictates how well a school captures social change: all else being equal, a school that is more social evolutionary does a better job than a school that is less so.

A. Sociology: Functionalism versus Conflict Approaches

Although the debate between (structural) functionalism and (Marxian and Weberian) conflict approaches in sociology had long subsided, the debate

had never fully settled the issues, mostly because the debate had focused on only two fronts separating the two sides: harmony versus conflict and stability versus change (e.g., Darhendorf [1968]; Lockwood [1957]; Van den Berghe [1963]; Wrong [1961]). Armed with the discussion above, this section shows more completely, and thus more convincingly, why functionalism is a dismal school for understanding social reality and why Weberian conflict approach is the most preferable among the three.

Functionalism explicitly or implicitly maintains that the society is held together by a system of norms (i.e., the ideational structure). Functionalism fails to appreciate that such a structure itself relies on power, sometime brutal power, and at least part of power is material (i.e., army, police, bureaucrats, etc.). Functionalism thus marginalizes material forces and is a mostly ideational approach. Functionalism is also a purely collectivist approach: it takes society as an organism and leaves individuals only a marginal role. Functionalism emphasizes only the socialization part of human nature, relegating antisocialization traits to the embarrassing label of "anomie." Moreover, functionalism has virtually no role for the biological evolution-determined part of human nature. Finally, functionalism emphasizes harmony while marginalizing conflict within the social system: for functionalism, the society is a happy family for all individuals and classes (see table 2 for a summary). Because functionalism neglects so many bedrock paradigms, it inevitably misses a large chunk of social reality. Moreover, because functionalism ignores many bedrock paradigms with ontological priority, it is a fundamentally defective approach for understanding human society.

In contrast, to a varying degrees, Weberian conflict approach contains most of the foundational paradigms mentioned above, perhaps except SEP, partially because of Weber's rejection of evolutionary thinking for human society (Roth 1978). As such, Weberian conflict approach captures the most social reality among the three approaches.

Even the Marxist conflict approach fares better than functionalism, partly because it too emphasizes conflict rather than harmony. The Marxist conflict approach, however, captures less than Weberian conflict approach. To begin with, the former is mostly collectivism whereas the latter embraces both individualism and collectivism. Regarding individualism versus collectivism, the Marxist approach is actually more akin to functionalism: whereas the former assumes a collective consciousness among members of a class; the later assume a society-wide consciousness. Moreover, although both Marxism approach and the Weberian approach implicitly admit that some human behavior is driven by biological evolution, the former emphasizes mostly

antisocialization whereas the later contains both socialization and antisocialization.

In terms of SSP, the Weberian conflict approach is the best among the three simply because it contains most of the bedrock paradigms, with Marxism coming in second. In terms of SEP, functionalism is essentially antievolutionary: there is no possibility of systemic transformation in functionalism's purview. Weberian conflict approach is far more evolutionary than functionalism, notwithstanding Weber's desire to distance himself from Spencerian pseudo-evolutionism. The Marxist conflict approach is more evolutionary than functionalism but less so than the Weberian conflict approach.

B. Rational Choice Approach: Limited Power and Unlimited Ambition

Perhaps no approach in contemporary social science arouses more emotion than the rational choice approach (hereafter, RCA). On the one side, its defenders contend that RCA is not only a "useful fiction" but also a "miracle maker."³⁶ On the other side, RCA's detractors in various fields of social sciences protest against its limited utilities for understanding social life (e.g., Bunge [1996, chap. 14]; Somers [1998]; Walt [1999]; Shapiro [2004]). My criticism below adds more weight to the existing criticism. I show that RCA cannot possibly capture much social reality, simply because RCA misses too many foundational paradigms.

RCA is essentially a purely materialistic approach: indeed, it is largely incompatible with an ideationalistic approach toward human behavior.³⁷ Yet, a large portion of human behavior is socially (thus also historically) constructed, and this social construction includes not only material interest but also emotional and ideational influence.

RCA is also a purely individualism approach (Bunge 1996, 243-47, 363). Like its neoclassical economics root, RCA assumes actors to be "atomistic" (Granovetter 1985). For RCA, collectives are nothing more than the sum of

³⁶For the problems of this dual defense, see MacDonald (2003). In light of scientific realism, the first defense is ultimately untenable. Although RCA is often accused of being an evil manifestation of economics imperialism, RCA does differ slightly from neoclassical economics approach (see table 3 below).

³⁷Although one can argue that RCA is compatible with ideationalism by stating, for instance, "I did this because I got high by doing this," doing so renders RCA tautological and any testing of RCA explanations impossible (Bunge 1996, esp. 366-70). Raymond Boudon's "cognitive rationalism" was going toward this direction, but even he admitted the problem of being tautological (Boudon 1998, 826).

atomistic individuals (Coleman 1990, 5; Fearon and Laitin 1996). Even when RCA has to admit some properties of collectives (e.g., institutions, culture, or identity) from time to time, it is usually done as an afterthought when RCA cannot do the explanatory trick.

Regarding human nature, RCA admits only *one* aspect within the socialization paradigm: behaviors are driven by (bounded) rational calculation of material gains and losses alone. Yet, human behavior is driven by far more factors (e.g., honor, status, greed, fear, ethnocentrism etc.) than RCA is willing to admit, and many factors are not compatible with RCA. Although (neoclassical) economists and RCA theorists have recently admitted defeat and discovered “behavioral economics”—which imports some psychology into economics (Elms 2008), the psychology that (behavioral) economists are willing to admit is very limited. So far, most of it has been restricted to “loss aversion” as captured by prospect theory (Kahneman and Tversky 1979; Tversky and Kahneman 1986). Yet human psychology is far and away more than what has been captured by prospect theory. Worse, RCA has no place for human behavior driven by antisocialization.

RCA does slightly better when it comes to conflict versus harmony. Although its neoclassical economics root is an almost pure harmony approach, RCA is compatible with both harmony and conflict, and has been deployed to study social conflicts.

When it comes to SSP, RCA is utterly dismal. Because RCA misses so many bedrock paradigms, it misses a great deal of the social system and has little systemic flavor. When it comes to evolution, RCA is at best pseudo-evolutionary: once equilibrium is reached, there will not be any further change unless there is an exogenous push. As such, RCA cannot possibly provide an endogenous explanation for any social change. Indeed, because RCA essentially has no place for social and thus historical context of agents’ behavior, RCA is antievolutionary.

Hence, once we unpack RCA; it becomes clear that RCA is no miracle-maker but only a useful fiction, and its usefulness is extremely limited. As an approach that misses so many foundational paradigms, RCA cannot get us very far toward the goal of adequately understanding human behavior and social outcomes. By all accounts, RCA is an approach with very limited power, but unfortunately, vaulted ambition.

Concluding Remarks

Foundational paradigms of social sciences are like flashlights: each one of them can shed light on one aspect, but never the whole, of human society.

Because different schools in social sciences contain only a limited number of foundational paradigms, these schools are inevitably inadequate for understanding human society. In a real sense, proponents of different schools are like those poor blind men in the fable of “Blind men with the elephant”: each believes that he has grabbed the whole truth (or at least the most central part) of the strange animal called human society, without realizing that he has only touched only part of it (Thompson 2001, 3). Worse, perhaps driven inexorably by the dynamics of scientific debate with ego inevitably getting involved, most proponents of these schools have been reluctant to admit the limit of their schools and the need to include the paradigms that are left out in their cherished schools. Not surprisingly, various calls for greater synthesis have generally gone unheeded.

Yet, even if we want to synthesize different schools, we cannot achieve sensible syntheses if we do not know the various foundational paradigms that make up at the different schools. There have been numerous calls for and attempts at synthesizing different schools or approaches in various fields of social sciences, but on the whole, existing attempts inevitably fall short. Many schools have explicitly or implicitly staked ontological and epistemological assumptions on foundational paradigms, often in their extreme forms. As such, these schools are indeed incompatible with each other and synthesizing them is impossible. Many attempts of synthesizing have failed to appreciate that synthesis is possible *only if* we start with foundational paradigms and bridge their ontological and epistemological assumptions. By making explicit the foundational paradigms and their ontological and epistemological assumptions and then showing that different schools in social sciences are made from different combinations of these foundational paradigms, my discussion not only exposes the causes as to why past attempts at synthesis have generally failed but also facilitate genuine syntheses in social sciences.

To adequately understand the complex system called human society and its history, we need to deploy all the 11 foundational paradigms, although a combination of fewer paradigms may be adequate for understanding specific social facts. Ultimately, students of human society themselves must decide what paradigms should be deployed for tackling the facts they choose to tackle, although they must bear all the foundational paradigms in mind. All in all, as emphasized repeatedly above, there is no easy guide for which paradigms to deploy: students of human society have to grapple with this challenge when facing a particular fact/problem, often case by case. Only by doing so can they truly appreciate the potential, but equally if not more important, the limitations of their explanatory framework. And as

they proceed with their research, they may find it necessary to bring more paradigms into their frameworks rather than staying with their preconceived framework stubbornly. Only by doing so can we prevent the search for framework from becoming a hindrance to understanding, as Hirschman forewarned us (1970).

When it comes to what foundational paradigms to deploy when facing specific social facts, four general principles should be observed. First, do not be too dogmatic with one's framework: different facts often require different combinations of foundational paradigms, and they often require more paradigms than one initially anticipates. Second, do not ignore those paradigms that capture forces with ontological priority: any school that ignores these paradigms will be fundamentally defective, regardless how many other paradigms the school has admitted. Third, we are invariably dealing with aspects of a complex system. Hence, a systemic approach in the spirit of SSP, which allows us to synthesize the various bedrock paradigms organically, is essential. Fourth, for understanding social chances, a social evolutionary approach in the spirit of SEP is the way to go.

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Bio

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