



Spring 2009 Newsletter of the ASA Section on Evolution, Biology & Society Volume 6, No. 1

Chair 2008-2009

Rosemary L. Hopcroft, UNC-Charlotte

Past Chair 2004-2008 Alexandra Maryanski, UC-Riverside.

Chair-Elect 2009-2010 Stephen Sanderson, UC-Riverside

> Secretary-Treasurer 2004-2009

Michael Hammond, University of Toronto

#### **Council Members**

James F. Hollander, Texas Instruments Inc. Dallas, Tx (2004-2009) Christine Horne, Washington State University (2008-2011) Richard Hutchinson, LA Tech University (2004-2009) Alexander Lascaux, University of Hertfordshire, UK J. Scott Lewis, Penn State—Harrisburg Patrick Nolan, University of South Carolina (2008-2011)

#### Newsletter editor and Webperson

Rosemary L. Hopcroft, UNC-Charlotte www2.asanet.org/sectionevol/

#### In this issue:

- Evolution of Evolutionary Thought by Richard Hutchinson
- Book Reviews: Turner and Maryanski's On the Origins of Societies by Natural Selection and Marc Schneider's The Theory Primer
- Section News: New program at UC-Riverside; Conference at Penn State
- 2009 ASA Schedule

You are cordially invited to the

Evolution, Biology and Society Reception

at the 2009 Annual Meeting of the American Sociological Association

Co-sponsored with the Section on Mathematical Sociology & the Rationality & Society Section

> Monday night, August 10 6:30 pm to 8:10 pm Hilton San Francisco Room TBA

# Greetings from the Chair Genetics and Evolution-Heralding the New Biosocial Sociology

Rosemary L. Hopcroft University of North Carolina at Charlotte

#### Dear all,

This is my last letter as Chair of the section, and I want to make the most of it! It has been five years since the section began, and we are going strong! There have been special issues of both the American Journal of Sociology and Social Forces on biology and sociology. Much of the work published in these special issues is on the relationship between genes, neurotransmitters, hormones etc. and social behavior. Not only did the Ad Health study collect genetic data, but as I understand it now the Wisconsin Longitudinal Study will begin collecting this data. I know that most of the researchers analyzing such data understand they are looking at biochemicals, and they also understand that "nothing in biology makes sense except in the light of evolution."

The rise of this work in sociology I applaud. Now I would like to say what I don't want to happen. I don't want this work on genes and hormones, work that emphasizes individual differences, to swamp work that emphasizes what all humans have in common – the vast majority of our DNA. This, I think, is where the evolutionists come in, because evolutionary research in economics, sociology and psychology continues to emphasize our common genetic heritage.

Another thing I don't want to see happen is the evolutionists and the geneticists to part ways. Yes, you can look at the social effects of biology without thinking of evolution, and yes, you can test evolutionary ideas without actually measuring any biological markers. But they are better off together, they complement each other and are both necessary for a truly biosocial sociology.

I have endeavored to build this section to the best of my ability. I have a hunch that it will be the catalyst for a new sociology, the kind the founders envisaged. I urge you all to support the section, and help the section to support biosocial research of all kinds. I have heard people say on several occasions that there is no bias against this kind of work. It is not so, at least with evolutionary work. I have had editors of both sociology and women's studies journals refuse to send my papers out for review. I was denied promotion to Full Professor because of my research in the evolutionary area.

We have two sessions at the ASA representing the evolutionists and the geneticists. They will be great sessions, I am sure. The reception is a joint one – with Mathematical Sociology and Rationality and Society. It is scheduled for Monday evening. I understand that given that our Section Day is Saturday, August 8<sup>th</sup>, this timing may pose problems for some of you. Nevertheless, if your schedule permits, I hope to see you there.

If you can't make the Reception, I do hope you can attend the Business Meeting: Sat, Aug 8 - 5:30pm - 6:10pm, Hilton San Francisco. As you are probably aware, ASA uses business section attendance as a gauge of interest in a section. We need to demonstrate to them that we are what we are - a viable and thriving section!

-Rosemary Hopcroft

Richard Hutchinson, Louisiana Tech University

#### Darwin Day, February 15, 2009

On the occasion of Darwin's 200<sup>th</sup> birthday, I hope to offer some perspective on what Darwin's contribution really was and what it was not, on what came before Darwin and what came after. To the public, the name Darwin is inextricably associated with "the theory of evolution." In science, and particularly in biology, Darwin is recognized for his theory of natural selection, a central mechanism of evolution. On the one hand Darwin was far from the first to propose the idea of evolution, the idea that organisms change over time. Given a broad enough definition of evolution, versions of the idea have been traced back as far as Empedocles over 2400 years ago (Osborn 1929), and "[t]he idea of evolution had been widespread for more than 100 years before 1859" (Mayr 1976b: 278). Referring only to 18<sup>th</sup> and 19<sup>th</sup> century writers, Darwin acknowledged that "...the view that species were subject to change had, before him, been held by ... Marchant, Montesquieu, Buffon, Maupertuis, Diderot, Darwin's own grandfather Erasmus, Geoffroy St. Hilaire, Goethe, Lamarck and Moritzi" (de Beer 1958: 1). On the other hand it is certainly true that Darwin's The Origin of Species had a huge impact both in the scientific community and in society generally, in Britain and beyond. It popularized the idea of evolution and convinced most scientists of the fact of evolution, the fact that biological organisms change over time, if not the particulars of how it happens. The general trend in evolutionary thought has been away from metaphysics and toward empirically grounded theory, and Darwin's theory marked a huge advance in that direction.

#### Evolution in Biology

The idea of what we now call evolution was on the rise in the 19<sup>th</sup> century, but in that period it was known as *transmutationism*. One of the leading transmutationists was Lamarck. Like others of the period, influenced by the ancient Greeks, Lamarck believed that simple new forms of life arose spontaneously, and then changed over time, an alternative to both religious creationism and the evolution through common descent of all living things that is the prevailing view among biologists since Darwin. Lamarck proposed two forces of transmutation, the complexifying force and the adaptive force (Larson 2004). Lamarck's powerful and coherent vision of evolution had at its core the idea of progress, a ladder of perfection from lower to higher forms of life (Mayr 1976a).

Darwin's great contribution was his theory of natural selection. At a single stroke this mechanism made unnecessary any sort of vitalism, any internal forces within organisms other than survival and reproduction. Darwin, like his grandfather Erasmus, also a biologist, proposed that all living things are related, descended from a common ancestor. This position eliminated the need for spontaneous generation of new life, something which was no more observed by Lamarck or his contemporaries than a one-time creation of the universe. According to Richard Lewontin, even natural selection was not Darwin's most important contribution, for "...it is, in the end, only a completion of the unfinished Cartesian revolution that demanded a mechanical model for all living processes" (Lewontin 1983). In Lewontin's view, it is Darwin's emphasis on variation, the variation among organisms in populations, that makes him an epistemological revolutionary. Prior to Darwin, and still persistent today, is the Platonic, essentialist view that emphasizes a typical organism, or an average, or an essence, rather than taking the variation as the important source of change. What is selected in evolution via natural selection? Individual organisms live or die, what Spencer (in)famously called "survival of the fittest," but the result is not just inviduals, but rather populations with shifting sets of traits.

Darwin actually proposed a second mechanism of evolution that has been supported in subsequent research, and that is sexual selection. Like the peacock's tail, the standard example, some traits are not adaptive in any sense other than in attracting a mate. What is not well understood by the public, though, is that there are several important mechanisms of evolution beyond natural selection and sexual selection that Darwin did not discover. So to call evolutionary theory "Darwinian theory" is not just a simplification, it is simply not accurate.

One of the most crucial pieces missing from Darwin's understanding was the inheritance of traits. He proposed something called *pangenesis*, a purely speculative idea that proved totally wrong. It was a contemporary of Darwin in Austria, Gregor Mendel, who discovered the laws of inheritance through experiments on pea plants. Though his research was published in 1866, Mendel's basic framework of genetics only became widely known after the turn of the century, and it wasn't until the decade from 1936 to 1947 that Darwin's theory of natural selection and Mendelian genetics were combined in what came to be called the Modern Synthesis.

So between Darwin's 1859 publication of The Origin of Species and the evolution of mature evolutionary theory in biology was an approximately 80-year period of mutual incomprehension and fierce competition among rival schools of biologists. According to Ernst Mayr, "[t]he number of competing theories of evolution in vogue before the synthesis is guite bewildering" (Mayr 1980: 4). He presents a simplified typology of five rival schools: Geoffrovism (inheritance of acquired characters), orthogenesis (a built-in drive toward progress), saltationism or macrogenesis (sudden large mutations), the original Darwinism (which did not decisively rule out soft inheritance), and neo-Darwinism (which did). The least metaphysical groups were the Mendelian experimentalists and the Darwinian naturalists. The naturalists still didn't have a mechanism for inheritance, while the geneticists mistakenly believed that mutations had to be large and discontinuous, leading to new species, and therefore did not think gradual evolution by selection was possible. These groups finally came together in what Julian Huxley first called the Modern Synthesis (1942), pioneered by R.A. Fischer, J.B.S. Haldane, Sewall Wright, and Wright's student Theodosius Dobzhansky (Eldredge 2000; Grene & Depew 2004).

The core of the synthesis was the mathematical work of Fischer, Haldane and Wright in population genetics. Fischer showed that the probability of a genetic mutation being diffused through a population is inversely proportional to the effect of the mutation, thus demonstrating that genetics and selection were perfectly compatible at the population level. Haldane applied the same statistical procedures to the famous field studies of peppered moths with shifting frequencies of melanin in response to industrial soot. Wright developed the concept of an adaptive landscape and added the crucial mechanism of genetic drift to the new evolutionary synthesis, with isolated populations developing divergent frequencies of traits. Drift is now generally believed to be more powerful than selection in shaping the gene frequencies of populations (DeSalle & Tattersall 2008: 83).

This new understanding was fleshed out and elaborated by Dobzhansky, Ernst Mayr, George Gaylord Simpson and G. Ledyard Stebbins (Grene & Depew 2004; Dobzhansky et al 1977). Therefore natural selection, genetics and genetic drift are all central to evolution, and in place of the name Darwinism for evolutionary theory, it would be more accurate to speak of Darwin-Mendel-Wrightism! The Modern Synthesis was firmly in place by the 100<sup>th</sup> anniversary of *Origin* in 1959. It is beyond the scope of this talk to address more recent developments in biology. <u>Evolution in Sociology and Anthropology</u>

Darwin was not the only scholar whose name was synonymous with evolution in the Victorian Age. Herbert Spencer was widely read and highly acclaimed in his time, but had gone into eclipse by the time he died in 1903. Self-taught and intellectually overambitious, Spencer sought to explain everything from physics through biology to psychology and sociology using the principle of evolution. Nowadays generally reviled for a caricature of his libertarian political ideology, his theory of sociocultural evolution has been largely forgotten, leading later scholars to periodically reinvent it (Turner 1985).

Spencer's theory of the evolution of the super-organic realm of society involved a systematic analysis of the social structure, including environmental factors, population size, division of labor, and increasing size of government. His functionalist theory focused on regulatory, sustaining and distributive structures. Spencer was a general systems theorist before his time. He proposed that evolution involved a movement toward differentiation, toward greater complexity of structure, but he included dissolution as the counter-tendency. In other words, in his scientific social theory he did not assume upward progress (teleology), as his optimistic political views might indicate.

Sociocultural evolution is not central to either sociology or anthropology as evolution is central to biology, and evolutionary theorizing in both fields has gone through various cycles of acceptance and rejection, chronicled by Stephen Sanderson (Sanderson 2007). Jonathan Turner's recent theory of institutional selectionism updates Spencer with two mechanisms of social selection: Durkheimian selection, in which competition for resources creates new niches and thus social differentiation, and Spencerian selection, in which population growth creates increased logistical loads which leads to institutional innovation, leading so social differentiation (Turner 2003). In anthropology, Marvin Harris's cultural materialist theory proposes a an intensification-depletion-renewed intensification model to explain the broad pattern of sociocultural evolution, including such relatively archaeologically welldocumented events as the origin of agriculture and the state (Sanderson 2007).

Another area of research on sociocultural evolution looks not at macro-level social structure but at individual-level interaction. Robert Boyd and Peter J. Richerson have used game theory to model the transmission of culture (Richerson & Boyd 2005). Their project is an attempt to develop a general-purpose agent-based theory of sociocultural evolution parallel to biology's theory of biological evolution. One of the central topics of this research is the origin and evolution of social cooperation (Hammerstein 2003). Rooted in cultural anthropology, Boyd and his collaborators draw more on psychology and economics than sociology, and their work points in a direction that seems guite fruitful for future interdisciplinary work in social science.

Two hundred years after Darwin's birth, and 150 years after the publication of *The Origin of Species*, evolutionary thought continues to evolve into the 21<sup>st</sup> century!

#### References

- de Beer, Sir Gavin. 1958. "Forward" to *Evolution By Natural Selection* by Charles Darwin and Alfred Russell Wallace. Cambridge: Cambridge University Press.
- DeSalle, Rob and Ian Tattersall. 2008. Human Origins: What Bones and Genomes Tell Us About Ourselves. College Station, TX: Texas A&M University Press.

Dobzhansky, Theodosius, et al. 1977. *Evolution*. San Francisco: W.H. Freeman & Co.

- Grene, Marjorie and David Depew. 2004. The Philosophy of Biology: An Episodic History. Cambridge: Cambridge University Press.
- Hammerstein, Peter, ed. 2003. *Genetic and Cultural Evolution of Cooperation*. Cambridge, MA: MIT Press.

Huxley, Julian. 1942. *Evolution: The Modern Synthesis*. London: George Allen & Unwin.

- Larson, Edward J. 2004. *Evolution: The Remarkable History of a Scientific Theory*. NY: Modern Library.
- Lewontin, Richard. 1983. "Darwin's Revolution." *New York Review of Books*, Volume 30, Number 10: June 16.
- Mayr, Ernst. 1976a. "Lamarck Revisited." Ch. 17 in *Evolution and the Diversity of Life* by Ernst Mayr. Cambridge, MA: Harvard University Press.

\_\_\_\_\_. 1976b. "The Nature of the Darwinian Revolution." Ch. 22 in *Evolution and the Diversity of Life* by Ernst Mayr. Cambridge, MA: Harvard University Press.

\_\_\_\_\_\_. 1980. "Some Thoughts on the History of the Evolutionary Synthesis." Prologue to *The Evolutionary Synthesis: Perspectives on the Unification of Biology*, edited by Ernst Mayr and William B. Provine. Cambridge, MA: Harvard University Press.

- Osborn, Henry Fairfield. [1894] 1929. From the Greeks to Darwin: The Development of the Evolution Idea Through Twenty-Four Centuries, Second Edition. NY: Charles Scribner's Sons.
- Richerson, Peter J. and Robert Boyd. 2005. Not By Genes Alone: How Culture Transformed Human Evolution. Chicago: University of Chicago Press.
- Sanderson, Stephen K. 2007. *Evolutionism* and Its Critics. Boulder, CO: Paradigm.
- Turner, Jonathan H. 1985. *Herbert Spencer: A Renewed Appreciation*. Beverly Hills, CA: Sage.

. 2003. *Human Institutions: A Theory of Societal Evolution*. Lanham, MD: Rowman & Littlefield.

# Book Review: On the Origins of Societies by Natural Selection

Mel Barber Flagler College

#### On the Origins of Societies by Natural

Selection, by Jonathan Turner and Alexandra Maryanski is an important and propitious book. The title of the book alone announces it as an ambitious treatment of evolution in the Darwinian tradition; its substance will provoke scientific debate and research for years to come. Turner and Maryanski attempt to explain the origins and evolution of human societies. In reality the book is a composite of two streams of research that attempt to explain the origins of society; it is, then, two books in one. The first part of the book attempts to account for the development of human societies by tracing the development of social relationships from primates to modern humans. The second part of the book attempts to develop an account of the evolution of society by natural selection from the first horde societies through industrial societies. Let us examine the first part of the book.

The authors begin their work by making a provocative statement, "human society evolved from earlier forms of social structure that became unique to apes." The authors argue that the social structure of human society differs from the social structure of apes; it is a much more compact social structure that is adapted to an environment in which there are large predators and open terrain. Ape social structure evolved in a three dimensional environment that was relatively safe from predators; there is a basic transformations of emotions, the adaption of the primate brain, and the basic mammalian physiology to an arboreal environment, which reshaped vision, hearing, touch, and smell to an environment in which vision and prehensile appendages. Apes have a relatively loose social structure with weak social ties and more fluid social relationships. In turn, the ape social structure is different from that of monkeys. Turner and Maryanski observe a distinct evolutionary

development of social structure from monkeys to humans. Humans develop a more compact social structure with stronger social ties to adapt to a more open environment with an abundance of large predators. The more compact social structure and the stronger social ties are seen to provide a selective advantage to hominids and they are able to expand their populations.

The second part of the book treats the development of societies from the horde, the simplest human society, to the most complex industrial societies; it is a theory of societal evolution. They describe the hunting and gathering society as the primordial society; from it all other forms of societies develop. Natural selection is seen as a universal mechanism for this theory, a mechanism that can be used to analyze all the phenomena they observe. Still, they cannot tell us precisely how society moves from one type to another, but they assume that there is an evolution. Turner and Maryanski believe they have "explained why and how institutions formed" as well as how and why they differentiated. In addition, they examine the selection pressures responsible for the evolution of society through the four stages of evolution (hunting and gathering, horticultural, agrarian, and industrial/post-industrial societies. Their argument revolves around the assertion that social evolution occurs in society through the development and differentiation of social institutions.

Turner and Maryanski do identify a possible mechanism, but they fail to use it in a way in which can account for the phenomena they observe. For example, they do not demonstrate how the principle of natural selection actually selects societies and the institutions within them. They do not tell us why societies seem to operate by a different principle than organisms do in biological evolution.

Natural selection in biology operates on the basis that organisms reproduce at a prolific rate and the majority of the organisms will reproduce and preserve the traits they have. However, at random points in the process, there are changes in the traits of some organisms and because of the advantages of the new traits the organisms reproduce at a greater rate than the initial population. Over time the organisms with the new traits are able to displace the organisms with the old traits. I see no such mechanism with Turner and Maryanski's selection process. The societies are static entities, which reproduce and change with no real connection with the environment in which they exist. Population growth is seen to be the causal agent that leads to the developments in society, but no direct mechanism is presented that accounts for the changes in traits. Hunters and gatherers are transformed into horticulturalists as if by magic. Population growth and permanence of settlement are seen by Turner and Maryanski to have an impact on the shift to the cultivation of plants. However, they do not explain how population and permanence of settlement lead to the cultivation of plants.

A basic problem for the Turner-Maryanski system is determining why such things as polity, surplus, economy, property, etc. have developed. Just indicating that they developed because conditions were right does not explain why or how the phenomena occurred. Developing a narrative of the development definitely does not explain the phenomena. In evolution, the causal sequence is extremely important. Overall, Gerhard Lenski (2005) contributes a causal sequence of types of societies, but by no means has he been able to demonstrate how one type of society leads to another other than in some sort of chronological sequence. Lenski cannot demonstrate how society moves from a simple society to a more complex one. This, of course, involves a fundamental principle in science: the nature of things does not change, so it is most important to identify natural things, describe their nature and demonstrate how those natural things are responsible for the phenomena we observe. Turner and Maryanski follow Lenski's sequence without modification but they cannot tell how the evolution from one to the other occurs. They do, however, overlook a significant type of society that may be important in the explanation of the evolution of societal complexity: pastoral societies. It is not wholly Turner and Maryanski's fault that

they fail to document the sequence of societal evolution, but that is a fundamental problem that needs to be solved if a satisfactory theory is to be developed. Likewise, if the institutional framework is to be explained, the sequence and timing are crucial. It is far more important for the theorist to isolate and to setup problems for the fundamental mechanism to solve than to solve all the problems related to the theory. A simple explanatory model will provide theoretical models for a lot of phenomena. It is much more important to demonstrate that a specific problem needs to be solved in order for the science to proceed. The chief problem is the transformation of an egalitarian type of social organization to a social organization in which power is present. How this happens is the key issue. Turner and Maryanski tell us that there is a transformation, but they use a Spencerian type of "explanation" to understand the process; how the process actually happens is never explained.

A more fundamental problem with the book is that it fails to provide explanations of phenomena using natural selection as a theory. Instead they use natural selection as an interpretive device in a narrative description of the changes in society. An important example of this problem is in their examination of the rise of what Turner and Maryanski term power. Power is used by them as a device to explain the key developments in social structure in horticultural societies. Their discussion of power provides another illustration of the lack of analogy with biology; they perceive the development of power as somehow connected with the effects of population growth on hunting and gathering societies. They find that population growth in hunting and gathering societies leads to a degree of consolidation of power. How is that so? Population growth in hunting and gathering societies actually leads to the segmentation or fissioning of the societies; thus the population of each new society remains roughly the same and there is very little basis for (selective?) pressure, let alone increased consolidation of power.

If we define power as the capacity to dictate the actions of others, Turner and Maryanski observe four bases of power: This really is a typology of power.

- **Coercive Power** the ability to use physical force to make others obey the power holder.
- **Symbolic Powe**r the capacity to use appeals to values and ideologies to control the behavior of others.
- Material Incentives the use of incentives or disincentives (I suppose rewards and punishment) to secure obedience to the power holder.
- Administrative Power the use of organizational systems to monitor and control actions of others.

There are two important dimensions of power:

- Consolidation of Power refers to which bases of power and to what degree those bases of power are utilized as a means of regulating and controlling the actions of others.
- Centralization of Decision-Making and Leadership – denotes the degree of concentration of decision-making prerogatives among actors.

What is the advantage of viewing power in this way rather than as Max Weber observed power? Why not classify power as nonlegitimate power (coercive power) and legitimate power? Why not then treat legitimate power as Weber did when he defined them charismatic (symbolic power), traditional (no cognate type in Turner and Maryanski's classification), and rational-legal power (Turner and Maryanski's administrative power)? Why aren't coercive power and material power combined into a single type of power, coercive power or non-legitimate power? What is gained by referring to a legitimate type of coercive power? If we control a corporation do we not have both coercive power and material power? How can we be certain that coercive power is different from material power? It is important that a

is the intent in conceptualizing power relations? For Weber, it was to provide a vantage point from which to observe the action and meaning of the actors in a situation, which is primarily a descriptive purpose. Turner and Maryanski appear to have an explanatory purpose, but they fail to observe that the concepts they use are not explanatory, but rather they are still only descriptive. Their concepts are designed for the same thing Weber's concepts are designed for, to observe social action. After observation, the concept has done its work. It is then necessary to develop new concepts to observe newly revealed situations. Traditionally we have given the name ideographic to refer to such concepts. They lead in the opposite direction from nomothetic explanatory theories and concepts. Why aren't coercive power and administrative power combined into a single type of power, coercive power? Isn't administrative power coercive? What Turner and Maryanski illustrate here is that their concept is designed for the observation of something that may be referred to as a power relationship; the concept is designed to observe and describe social action and not to explain it.

theoretical term has a singular meaning. What

It is most interesting that Turner and Maryanski argue that the consolidation of power inevitably leads to a centralization of power (2008:189). However, they argue that consolidation of coercive and administrative power leads to power that is more centralized than power that is consolidated on material and symbolic bases; therefore, a polity which monopolizes coercive and administrative power has a distinct selective advantage over religion which will always lead to an expansion of polity. Are Turner and Maryanski referring to some kind of chemistry of power? And will symbolic power like that of the Ayatollah Khomeini or Adolf Hitler be less centralized than the administrative power of George Bush or Jimmy Carter as presidents?

There is a fundamental problem with the Turner-Maryanski conception of power. Part of the problem is the attempt to use concepts, which have been designed for the observation of phenomena as concepts for the explanation of phenomena. Generalization of observation concepts will not provide explanation. Power is a concept developed for the observation of social action, as such it is a heuristic concept and is useful in observing relationships, but it is not useful in the explanation of those same relationships. Concepts of a different type are required to explain the phenomena. A key question here then is how is consolidation of power distinct from the centralization of power? Turner and Maryanski's analyses turn out to be a matter of distinguishing various phenomena rather than demonstrating how the workings of phenomena are described by the operation of a mechanism.

There is an important piece of evolutionary theory missing in Turner and Maryanski's account of the origins and evolution of human society by natural selection. They depend on a conventional understanding of biological theory to provide a shadow explanation of the appearance of society and its development into new forms. In evolutionary theory there is an abundance of forms and the forms compete for the resources in an environment. There is also a variety of forms, in varying degrees of fitness to the environment, competing for the resources available. The machinery of selection is driven by reproduction replicating the various forms. Those forms that are most suited to the environment are selected by the natural characteristics of the environment to remain to reproduce. In fact, a truly successful species is able to expand its population. Those who are not fit will reproduce until they cannot. They will be replaced by the successfully reproductive forms.

What is the future of human societies if its forms and nature are determined by natural selection as described by Turner and Maryanski? Shall we see the continuous reproduction of industrial societies? Or will we see society change in predictable ways because of natural selection? It seems that Turner and Maryanski are describing what they are observing, but how they are extending the scope of evolutionary theory is an open question.

#### References

Jonathan H. Turner and Alexandra Maryanski (2008), *On the Origins of Societies by* 

*Natural Selection*, Boulder: Paradigm Publishers.

Lenski, Gerhard (2005), *Ecological-Evolutionary Theory*. Boulder: Paradigm Publishers.

\*\*\*\*\*\*

# Book Review: Scientific Theory in Sociology: Some Thoughts on Schneider's The Theory Primer: A Sociological Guide

Mel Barber Flagler College

Schneider's book, *The Theory Primer*, is a rare book in theory. It attempts to engage the reader in the adventure of theory construction and evaluation. It also attempts to teach the reader the skill of theorizing. Schneider is well prepared to discuss theory. He has masterfully discussed the works of the classical theorists, Marx, Weber, Durkheim, and Mead. He has also masterfully linked those theories with contemporary theories. He takes contemporary theorists to task for failing to take up the task of theorizing in the classical mode.

This is an excellent treatment of theory. Schneider explains how theories work and how the scientific theories are different from empirical generalizations. However, Schneider fails to make use of the theories by demonstrating how strong theories can be linked (or subsumed) to develop cumulative knowledge. He develops a good analysis of the difference between analytic and truly scientific theories, but he fails to use that knowledge to build stronger theories. Nevertheless, Schneider has a good grasp of what is necessary to evaluate theories. First of all, he distinguishes three types of explanation: analysis, explication, and causal accounting or causal modeling. He demonstrates how

analysis (the process of determining the constituents of things and breaking things down into their essential components) and explication (the process of determining the true meaning of things) are part of the theorizing process, but Schneider argues that true theorizing is found in causal modeling (the process of uncovering the causal mechanisms for all processes within the theoretical field being explored). Schneider then develops the criteria for creating and evaluating theories (Chapter 1).

Schneider sees theorizing as a three phase process: defining a problem, creating a theory, and evaluating the theory. Each of the phases in the theorizing process are further broken down into steps. To describe the entire process, Schneider utilizes a typification of the research process and tacitly emphasizes the importance of the experimental method in scientific theorizing. In the problem phase, he identifies the importance of curiosity and wonder. He uses the concrete example of the culture of honor theory of violence in the South as developed by Nisbet and Cohen.

#### Paradigms and Theories

Schneider makes a distinction between what he calls paradigms and theories and argues that paradigms are too general. This is how he refers to conflict theory, functionalism (consensus theory), and symbolic interactionism. What he fails to see is that with the exception of symbolic interaction the "paradigms" are theories of society, the fundamental theories of the science of sociology. Through these theories sociologists formulate models explaining phenomena. Such models; they are applications of the fundamental theories. So fundamental theories are much more than orienting strategies; they constitute the very heart of our science.

Schneider's discussion of theory formation gives the reader the erroneous impression that theories are formulated ad hoc without any other aid than the powers of reason. This may be the practice of theory formation in sociology, but in science it is much more organized, and theories often suggest empirical research. When an experiment is done, it is performed to demonstrate the capabilities of a primary mechanism; it is also performed in the context of exploring the limits of a theory. When wonder occurs, it is explored in the context of a well developed fundamental theory and in terms of well understood mechanisms. What is attempted is the application of what is known to what is not known. And when the scientists are confronted with implacable anomalies, they have clues to follow which might improve their fundamental picture of the universe and its mechanisms.

When Kuhn developed his conception of paradigm, he used a single science as his model, physics. In that science he observed competing theories jockeying for dominance in the field of physical theory. He also observed that often a candidate for a new paradigmatic dominance was selected even when it did not actually explain more than the other theories. What this illustrates is that a science can have only a single paradigm and that the paradigm drives research and theory development. The whole process is seen as social and evolutionary.

The interesting thing is that sociologists did not view the process of paradigm shaping as a social process, but rather as a world where paradigms developed and persistently or perpetually remained separate from and isolated from one another. The sociologist does not see a social and evolutionary process, but rather a static situation where theories remain pure and never develop into dominant paradigms for the science. So for many theory expositions, sociology is divided into at least three paradigms: conflict, functionalism, and symbolic interaction. In this way, we see three different ways of observing the world around us.

There are several strengths in the book:

1. The author links classical theoretical work with contemporary theories. He fails to demonstrate how contemporary theories differ from classical theory, but he does show how contemporary theories utilize the insights of classical theory.

2. The author provides a clear demonstration of how theories differ from generalizations and how theories must build on theories,

3. The focus of the book is on theories and not the social and historical context of the lives and works of the theorists (biography). 4. The author attempts to build skill in theorizing and engage the reader in developing skill in analyzing and constructing theories.
5. The discussions of the individual theories are strong and robust. Each theory is evaluated with thoroughness because of the uniform criteria for evaluation which he develops early in the book.

6. Schneider clearly demonstrates the role of empirical research in the testing, evaluation, and development of scientific theory. His use of generalizations demonstrates that while generalizations do not constitute theory, in a strict sense, they can be used to enhance theory development.

There are several weaknesses in the book: 1. A major weakness in the book is a failure to utilize the evolutionary theory of Spencer to enhance our knowledge of social phenomena. However, in so many areas Schneider demonstrates how classical theories give sociologists fundamental insights. Nevertheless, because these fundamental insights are not mined from some important confluents of social theory (like Spencer's evolutionary theory) his utilization of theories is incomplete. This may be a reflection of the failure of the author to focus on a primary mechanism of the science to unify all theories utilizing that mechanism to explain phenomena. Schneider fails to use perfectly good theories such as Spencer's theory of the struggle for existence and the survival of the fittest (natural selection). He ignores the importance of evolutionary thinking in sociology.

2. Lack of Emphasis on Cumulative Knowledge, instead there is a quest for the one good theory; I guess you throw out all the "bad" theories to get to the good one. Schneider asserts that he is providing the students with a way of evaluating and building theories, but his approach to theories is pretty much the same as the traditional texts in that he lacks a concern for cumulative knowledge.

3. The bridging concepts between theories and empirical research are theoretical models and experiments. The adequacy of theories is demonstrated via these two activities. Schneider fails to use either of these concepts in discussing theories. 4. By focusing on variables, Schneider fails to observe that Marx is not doing political economy or economics, but rather he is developing a scientific theory of society. Schneider also misses the fact that Marx's theory of class struggle utilizes insights that could have come from Spencer's evolutionary theory. Marx describes a primary mechanism of the science of society by describing exploitation. Exploitation requires control over the resources of society (private property in the form of the means of production). The description of the expansion of control over the means of production requires an evolutionary theory which is only sketched by Marx. However, Marx clearly illustrates that expansion of control over the means of production leads to the development of different forms of social organization. Let us examine Marx's theory in relation to Spencer's theory to observe how the theories actually complement and strengthen one another. It is evident that Marx's theory incorporates many of the strengths of Spencer's theory as well as expanding the scope of the theory. However, for many types of problems, such as the growth of societies or competition among laborers or capitalists, Spencer's theory is simpler and still very useful. For more complex problems like the origin of the division of labor, private property, etc., Marx's theory is necessary. The primary mechanism of Marx's theory of society is the exploitation of labor. The capitalist class carries out the exploitation of labor in capitalism, the nobility (lords of estates) in feudalism, the masters and owners of slaves in barbarism, etc. In short, Marx's theory of class struggle accounts for the relations of production in each stage of the development of society. In capitalism, for example, the bourgeoisie exploits labor to extract surplus value, the basis of profit for the bourgeoisie. The same mechanism is used in earlier social formations such as feudalism and barbarism. In feudalism the lords of estates exploit the labor of serfs to produce surplusvalue. Exploitation of labor is especially clear in capitalist societies, because the bourgeoisie make it clear how it uses labor to make a profit. Spencer's theory of the struggle for existence among organisms in society and societies is

used to explain the unfolding development and progress of society from its early stage with the development of hordes to its later stage with the development of industrial society. In Spencer's view, society once formed has a competitive advantage over the unorganized masses of humanity and societies that are able to develop a division of labor have a competitive advantage over those that do not; the consequence is the extinction of the simpler societies they encounter. At each stage in the progress of society, society becomes larger and more complex. At the industrial stage, the stage comparable to Marx's capitalist society, Spencer sees the development of a society based on contractual relationships. These contractual relationships use the struggle among enterprises to develop the best and most progressive products for exchange among enterprises. Spencer sees these competitive but cooperative relations among enterprises occurring without coercion or force, but rather as a result of conscious voluntarism to organize relations in society to maintain the natural mechanism of society, the strugale for existence.

Marx uses the mechanism of class struggle to explain the same thing. For Marx, societies develop through the establishment of productive relationships; he shows how societies have progressed through the exploitation of labor and at critical points in the development of societies, revolutions in the relations of production become necessary. Both Marx and Spencer use competition (natural selection) to explain changes in society. However, it must be made clear that Marx sees the struggle for existence and the survival of the fittest among laborers and among capitalists taking place within their respective domains (within the capitalist class and within the laboring class) as well as between the laboring class and capitalist class. Spencer sees the struggle for existence (competition) among all workers as though there is a level playing field and everyone competes with everyone else. The end result seems fair in Spencer's view because everyone puts in his best effort and the "The Best One," the superior competitor wins: the Survival of the Fittest. However, Marx sees the competition rigged so that the competition

takes place at the class level: among the Bourgeoisie and among the Proletariat. The competition between the two classes is rigged so the Bourgeoisie will always win.

The two theories are comparable in terms of the criteria of simplicity. Both Marx and Spencer observe a simple mechanism, competition, establishing social order and social change. The theories of society of both Marx and Spencer have wide scope; they can both be used to explain a wide variety of phenomena. Both the theories of Marx and Spencer have spawned lots of research and have been theoretically fertile. In Spencer and Marx the causal mechanisms are clearly identified. In Spencer it is the struggle for existence with the survival of the fittest (natural selection in Darwinian terms). Those societies that are most fit for their environments are able to replace those societies that are least fit. For example, in times of war, militant societies are most fit and in times of peace, industrial societies are most fit. The same mechanism is at work internally in society to advance or extinguish individuals as well. Spencer uses a simple mechanism that has wide applicability and has had a tremendous effect in stimulating research and theory.

Marx's theory of class exploitation is equally simple and is useful in explaining the developments of societies through their various stages of development. Marx's theory has had enormous applicability in research and theory as well as in the practical arena of organizing whole societies. It is clearly a theory that applies to societies of all types. The causal relationship between the mechanism and all other developments in society is clearer and more developed in Marx's theory. What we see here is that each development in the fundamental theory actually complements and explains the same phenomena more accurately. The theoretical models and experiments focus the development of theory on fundamental problems of the science. It is this kind of development Schneider fails to demonstrate.

Marx's main theoretical effort is paradigm shaping. However, he also devoted a great deal of his theoretical efforts in modeling a variety of phenomena in capitalist societies. Marx was both a revolutionary theorist, in Kuhn's sense, and a normal scientist. As such Marx's general theory has been demonstrated as being useful as an explanation of general social phenomena. Many phenomena in capitalist societies are understandable because of his theoretical work and empirical proof. There are several other shortcomings in Schneider's treatment of Marx and Spencer. He emphasizes problem-solving, but fails to present the fundamental problems to be solved by the science of sociology. He fails to focus on a fundamental problem that is solved by social theory-the nature of society. He identifies mechanisms as an important part of theory-building, but fails to see the importance of a primary mechanism for the science of sociology.

5. By failing to utilize a conception of theory which sees theory deriving from a fundamental conception of the primary mechanism of the science, Schneider cannot adequately distinguish applications of the theory from the theory itself. This leads him to observing vague "challenges to the theory" when the challenge is often only to the theoretical model of the fundamental theory (i.e., theoretical models are application of the fundamental theory). An example of this problem is the treatment of suicide which Schneider argues is based on Durkheim's theoretical intuition. However, Durkheim clearly has a theory of society which he has previously developed and which he uses to construct a theoretical model of suicide. It must be emphasized here that the theory of suicide is not a new theory, but rather an application of an old theory of society that Durkheim has used successfully in the past (and many sociologists still use his theory successfully in contemporary sociology). In science, the fundamental theory of society dictates what phenomena should be examined. Clearly, in the case of suicide, individual motives could be examined if they could be demonstrated to be based on the way society is organized, but the most direct link is to show that behaviors (the acts of suicide) are directly based on the fundamental forces operative in societies.

What Schneider fails to observe in Durkheim is a fatal flaw in his theory. Durkheim still sees society as being developed from the actions of human beings. He does not appreciate the full weight of his theory. Society is not tied together by anything. Instead it is together because of inertia. Spencer observed this long ago. He saw that whatever brought human beings together is not what is important, but rather it is the fact of being together that is important. It is being together that brings about cooperation and not cooperation that brings about togetherness. It is being together that brings about what Durkheim identifies as solidarity and not solidarity that brings about togetherness. This fact of being together is what is important, and not collective conscience, not culture, not anything but that brutal fact of togetherness. This togetherness is completely at the mercy of evolutionary forces.

6. In science, all theories of phenomena are applications of a more basic, fundamental theory. Schneider assumed that challenges to the theory (anomalies) somehow disprove theory, demonstrating that underlying Schneider's approach there is an empiricist view of theory. This forces Schneider to misplace his critical evaluation of the theoretical contributions of the founders of the science of sociology. The criterion of robustness which he applies to models of phenomena does not permit an evaluation of the basic theory. To evaluate the effectiveness of a theoretical model it is necessary to uncover and reveal a more basic theory that is used by the theorist in the development of the theoretical model. Durkheim's theory of suicide, for example, demonstrates the need to modify the more fundamental theory of society he used to develop to develop his theoretical model of suicide. He required a more comprehensive vision of the social world than he had. This is also a result that his theory and investigation of the division of labor revealed. What we see is not that his theory of suicide or his theory of the division of labor is wrong, but rather that his basic more fundamental theory, while fruitful, lacks scope; it should enable explanation of all phenomena in

the social universe. A challenge discovered in experiments and observational research does not make the theory wrong; rather it demonstrates where the theory might be improved. All the principles of the basic theory may be correct, but a more basic principle, unobserved prior to that point, may underlie the basic picture of the universe the theory is attempting to describe. Science must always attempt to discover that more basic principle and make the basic theory of the science a universal theory that can be applied to all phenomena. Schneider's approach is not bold enough.

#### **Concluding Remarks**

This is an excellent book in theory and I would recommend its use as a theory text in theory classes, however, I recommend that it be supplemented with a good text in evolutionary sociology. Schneider's approach to the analysis of theory and theory building engage the reader in active theorizing. Nevertheless, his conception of scientific method fails to facilitate the development of the science of sociology, but rather severely restricts the scope of the science and condemns sociology to a fate akin to that of Sisyphus of ancient Greek mythology; sociology is perpetually engaged in wondering about things but never quite able to fully explain them. Sociology is condemned to this fate by the choices sociologists make and not by the nature of things. This is clearly the case when Schneider fails to include discussion of evolutionary theory and research that has been important in the science since its inception with the work of Herbert Spencer. The research method Schneider ascribes to science does not capture the spirit of science, but rather forces sociology to ceaselessly labor to develop new theories rather than expand the scope of the theories we have already developed. In this way, the insights already developed by our scientists in the past are unconnected to the theoretical developments of other scientists (past, present, or future). This is short-sighted. Science is moved forward by building on the theories and insights

of preceding generations of scientists. Science and its most basic theories are built on the shoulders of giants and in sociology our giants are Spencer, Marx, Weber, and Durkheim.

\*\*\*\*\*\*\*\*

Section News: New Program at UC-Riverside New Program on Evolutionary Sociology at U. C. Riverside

The faculty of the department of sociology at U.C. Riverside recently voted to add a new specialization to its graduate program: Evolutionary Sociology. This specialization views evolution in its broadest sense, including: (1) the long-term evolution of societies and inter-societal systems, (2) human ecology, (3) the biological basis of human behavior, interaction, and organization; and (3) the comparative analysis of human and nonhuman primates. Students who enter the graduate program will be able to specialize in these three areas, but all must initially acquire knowledge of the full range of evolutionary dynamics affecting human behavior, interaction, and social organization. Core scholars at UCR participating in the new specialization are Christopher Chase-Dunn, Steven K. Sanderson, Alexandra Maryanski, and Jonathan Turner.

1

# 7<sup>th</sup> Annual Symposium on Family Issues October 8-9, 2009 The Pennsylvania State University

#### Biosocial Research Contributions to Understanding Family Processes and Problems

Conceptual shifts and technological breakthroughs have placed new emphasis on the importance of combining nature and nurture to understand family processes and problems. The link between biology and behavior is no longer regarded as a simple, unidirectional, cause and effect process. Today's researchers emphasize bi-directional relations between physiological processes and behavior, processes that operate in the context of previous experience and the demands of a multi-layered ecology. Biological factors mediate and moderate behavioral adaptation to a range of environmental challenges. At the same time, environmental challenges and behavioral responses affect biological processes. Family relationships are at the intersection of many biological and environmental influences.

The goal of this symposium is to stimulate conversation among scholars who construct and use biosocial models, as well as among those who want to know more about biosocial processes. Researchers interested in both biological and social/environmental influences on behavior, health, and development will be represented, including researchers whose work emphasizes behavioral endocrinology, behavior genetics, neuroscience, evolutionary psychology, sociology, demography, anthropology, economics, and psychology. At this symposium, presenters will consider physiological and environmental influences, starting within the context of the family, on parenting and early childhood development, followed by adolescent adjustment, and then mate selection, family formation, and fertility in young adulthood. Finally, factors that influence

how families adapt to social inequalities will be examined.

#### Thursday, October 8, 2009

#### 9:00 am - 12:00 pm

#### How do physiological and social environmental factors within the family influence parenting and early childhood behavior and development?

Although all phases of development are important, physiologically-linked parenting behavior and the family context after birth have immense immediate and long-term consequences for child development. Eve contact, touching, holding, feeding, talking, heightened arousal, and declines in risk behavior are linked to endocrine, genetic, and other physiological processes that interact with the contextual influences. These biosocial processes have evolutionary roots and are important for fathers as well as for mothers. In turn, the context of parenting, defined both by support and adversity, affects offspring selfregulation and ability to cope with stress and establish secure relationships.

Lead speaker: Alison Fleming, University of Toronto at Mississauga

Discussants: Anne Story, *Memorial University at Newfoundland* 

Susan Calkins, University of North Carolina, Greensboro

Jay Belsky, *Birkbeck University of London* 

#### 1:30 – 4:30 pm

#### How do physiological and social environmental factors within the family influence development and adjustment in adolescence?

Adolescence is a period of dramatic transformation including biological, social, and cognitive changes. It is a period when youth gain autonomy and cultivate peer relationships. Many youth develop romantic relationships, and some become involved in risky and delinquent behavior. It is also a period of greater gender differentiation. Genetic factors, physiological processes, and shifts in social environmental influences are integral to understanding adolescent development.

Lead speaker: Jenae Neiderhiser, *Penn State* 

Discussants: S. Alexandra Burt, *Michigan State University* 

Sheri Berenbaum, *Penn State* Sally Powers, *University of Massachusetts at Amherst* 

#### Friday, October 9, 2009

8:30 – 11:30 am

#### How do physiological and social environment factors in the developed world influence mate selection, family formation, and fertility?

In traditional foraging societies, onset of fecundability, initiation of sexual activity, and reproduction tended to co-occur within a few years. The total fertility rate of women was often substantial. These patterns stand in sharp contrast to those in contemporary developed countries, where physiological maturation occurs even earlier than in the past, but entry into stable unions and parenthood occur much later. This trend is dramatic in some developed countries, where delayed reproduction is coupled with belowreplacement fertility. Women's opportunities in the work force, delayed marriage, effective birth control methods, and shifts in cultural values account for much of the recent fertility decline and delay. Women have many more reproductive options, leading some scholars to suggest that genetic influences on fertilityespecially its timing-are likely to be greater. What are the implications for mate selection and family formation in the developed world? What are the implications for fertility and for the processes underlying reproduction?

Lead Speaker: Steven Gangestad, University of New Mexico

Discussants: Brian D'Onofrio, *Indiana University* 

David Schmitt, *Bradley University* S. Philip Morgan, *Duke University* 

#### 1:00 - 4:00 pm

# How do physiological and social factors influence family adaptations to resource disparities?

Social inequality influences parenting practices, the quality of family relationships, and the behavior, health and development of family members. Resource disparities also increase the chances of conflict and instability at the community level, which in turn elevate stress and further erode family well-being. Inequality exerts its effects, in part, through its impacts on physiological processes: Harsh environments lead to physiological and behavioral adaptations to stress that increase the chances of survival. For example, activation of the HPA axis provides for adaptive reactions to proximal stressors, though long term activation comes at a cost of poor health. In addition, early child rearing practices may be harsher among disadvantaged mothers, thereby disposing children to surviving in a challenging environment, but these harsh strategies may come at a cost. Parents also may adapt to challenging circumstances by channeling scarce resources to offspring with the best potential for success, but their differential investments may undermine the well-being of other offspring.

Lead Speaker: Guang Guo, University of North Carolina, Chapel Hill

Discussants: Mark Flinn, *University of Missouri* Gary Evans, *Cornell University* Dalton Conley, *New York University* 

\*\*\*\*\*\*

# Section Sessions 2009 ASA

# Title: Genetically-Informed Sociology: Promises, Pitfalls, and Current Realities

Organizer and Presider: Michael J. Shanahan, University of North Carolina at Chapel Hill, <u>mjshan@unc.edu</u>

#### Time: Sat, Aug 8 - 2:30pm - 4:10pm Place: Hilton San Francisco

Temporal Evidence for Increasing Heritability of Autism, Ka-yuet Liu, Columbia University, kayuet@gmail.com; Noam Zerubavel, Columbia University, nz2104@columbia.edu; Marissa D. King, Columbia University, mdk2101@columbia.edu; Peter S. Bearman, Columbia University, psb17@columbia.edu;

Genetic proximity and body mass Jason D. Boardman, University of Colorado, boardman@colorado.edu; Casey Blalock, University of Colorado at Boulder, casey.blalock@colorado.edu; Samuel Field, University of North Carolina at Chapel Hill, field@mail.fpg.unc.edu;

The genetic basis of social context: a molecular, life course study Shawn Bauldry, University of North Carolina at Chapel Hill, sbauldry@email.unc.edu; Jason Freeman, University of North Carolina at Chapel Hill, jafreema@email.unc.edu;

Environments Affecting Genes: Neighborhoods, Neurons, and Beyond Kristin Jacobson, University of Chicago, kjacobso@bsd.uchicago.edu;

Discussant: Jeremy Freese, Northwestern University,jfreese@northwestern.edu;

# Title: Evaluating and Testing Evolutionary Arguments

Organizer and Presider: Patrick Nolan, University of South Carolina Time: **Sat, Aug 8 - 4:30pm - 5:30pm** Place: **Hilton San Francisco**  Marion Blute, University of Toronto-Mississauga, "Issues in Testing Theories of Selection: Nomothetic or Idiographic? History and Necessity?"

Rosemary Hopcroft, University of North Carolina-Charlotte "Issues and Challenges of Testing Evolutionary Hypotheses Using Existing Survey Data."

Alexandra Maryanski, University of California-Riverside, "Confronting the Limitations of Evolutionary Biology for Explaining Socio-Cultural Evolution."

Mark Simes, Institute for the Advancement of Social Science, "Evaluating and Testing Evolutionary Theories in Social Neuroscience."

Stephen Sanderson, Institute for Research on World-Systems, University of California-Riverside, Discussant.

Evolution, Biology and Society Section Business Meeting

Time: Sat, Aug 8 - 5:30pm - 6:10pm Place: Hilton San Francisco

\*\*\*\*\*

# New Publications of Section Members

Bell, Edward, Julie Aitken Schermer and Philip A. Vernon. "The Origins of Political Attitudes and Behaviours: An Analysis Using Twins." Forthcoming in the *Canadian Journal of Political Science.* 

Diderach, Monique, Ph.D. Sibling Relationships in Step-families: A Sociological Study. Lewiston, NY: Mellen Press

Franks, David D. 2008. "The Controversy of Mind over Matter: Mead's Solution and

- Kardulias, P. Nick and Thomas D. Hall. 2008. "Archaeology and World-Systems Analysis." World Archaeology: Debates in World Archaeology 40:4:572-583.
- Sanderson, Stephen K. 2009. "The evolution of religion in its socioecological contexts." Pp. 3-17 in Jay Feierman, ed., *The Biology of Religion*, Praeger.
- Sanderson, Stephen K. 2008. "Prolgomenon to a theoretical unification of the social and natural sciences." *Sociologica,* Issue 3/2008 (online).
- Sanderson, Stephen K and Wesley W. Roberts, "The evolutionary forms of the religious life: A cross-cultural, quantitative study." *American Anthropologist* 110:454-466, 2008.
- Sanderson, Stephen K. 2008. "The impact of Darwinism on sociology: An historical and critical overview." Pp. 9-25 in H.-J. Niedenzu, T. Meleghy, and P. Meyer, eds., *The New Evolutionary Social Science*, Paradigm, 2008.

# **Presentations and Other**

Franks, David D. Virginia Commonwealth University, "The Political Manipulation of the Unconscious and Symbolic Interaction" presented at the SSSI meetings; Session on *Testing the Edges*. Presider: Kieran Bonner St. Jeromes University in the University of Waterloo, Canada. Sunday, August 3, 2008 (17 pages.)

Franks, David D. and Jeff Davis. 2009. Proposal for Didactic seminar, ASA meetings 2010.

Hage, Jerry. 2009. "The Evolution of Knowledge: A new socio-economic paradigm of social change". Paper presented at the University of California—Riverside April 2, 2009

Hiroko Inoue, Jake Apkarian, Jesse Fletcher, Robert A. Hanneman, Kirk Lawrence and Christopher Chase-Dunn. "The Human Demographic Regulator" University of California-Riverside. presented at the annual meeting of the International Studies Association, New York, February 16, 2009. This is IROWS Working Paper #41 available at http://irows.ucr.edu/papers/irows41/irows41.ht m

Find the Complete Works of Charles Darwin on-line at http://darwin-online.org.uk/

# *The New Evolutionary Social Science: Human Nature, Social Behavior, and Social Change*

Heinz-Jurgen Niedenzu Tamás Meleghy Peter Meyer (Editors)

For a long period of time, social scientists declared their autonomy from the life sciences, thereby neglecting important biological constraints on human nature. Many sociological theories suggest a nearly complete malleability of patterns of social life. Recently, however, Stephen K. Sanderson's "Darwinian conflict theory" set out to synthesize sociological theories with key findings from biology into an overarching scientific paradigm. Configuring and expanding this groundbreaking theory, the contributors to this volume are well-known European and American experts in evolutionary science. They develop in this book new bases for understanding social change and the world's

978-1-59451-396-1 (Hardcover) \$81.00 \$68.85 June 2008 224 pp. <u>http://www.paradigmpublishers.com/Books/</u> BookDetail.aspx?productID=151521

future through a better integration of the life

sciences and social sciences

Heinz-Jürgen Niedenzu is Associate Professor of Sociology at the University of Innsbruck, Austria. Tamas Meleghy is Professor of Sociology at the University of Innsbruck, Austria. Peter Meyer is Professor of Sociology at the University of Augsburg, Germany. *Free exam copies available for professors* 

# New 11<sup>th</sup> Edition Human Societies An Introduction to Macrosociology

Patrick Nolan and Gerhard Lenski

This classic text has been fully revised, updated with new data, and refreshed in design for student-friendly reading.

# On the Origins of Gender Inequality

Joan Huber

Joan Huber challenges feminists toward a richer understanding of biological origins of inequality-knowledge that can help women achieve greater equality today.

Visit our Website and click on "Order an Exam Copy" www.paradigmpublishers.com