Evolution & Sociology

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We did it!
We are now an official section of the American Sociological Association

Greetings from the Chair

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A Toast to the Success of Our New Section

We did it! We are now a regular ASA section. It has been a long uphill challenge to get the necessary 300 members but we actually–and surprisingly-overshot our target with an additional 36 members this year. Thank you to everyone who helped in recruiting new members. We can now toast to our great success in establishing Evolution and Sociology.

But what of our future? The next few years will be crucial in determining the success of Evolution and Sociology. Now that we are a full-blown ASA session, we need to continue doing what we have done so far, and at all costs, we must avoid the acrimony of those early days in the list-serve chat (or, was it yell and scream?) room. We need to put aside our differences and recognize that above all we are on a mission to bring evolutionary thinking back into sociology.

We must maintain our big open-ended tent because our section is very diverse. If we fail to do so, our membership will decline, and we will soon be out of business as a viable section. In fact, some of our members are currently with us simply to help us out, some joined out of curiosity, and some joined simply because they wanted to bring evolutionary reasoning back into sociology.

Modern Evolutionary theory–also known as the modern synthesis- is the foundation block for all the life sciences. It draws its strength from many disciplines including archaeology,

anthropology, biology, ecology, genetics, paleontology, and primatology. This synthesis of disciplines is reflected in the various perspectives within sociology currently under the umbrella of Evolution and Sociology including neurobiology, evolutionary psychology, sociobiology, stage-model theorizing, world systems dynamics, human ecology, historical sociology, and evolutionary sociology. The challenge before us is not to demonstrate that any of our distinctive approaches is the best way but, instead, to convince the field in general that evolutionary thinking can add to the sociological enterprise. Let us not get bogged down in acrimony and lose the momentum that we have gained by becoming a regular section in ASA.

I ask all of you to reach out and welcome all science oriented sociologists who express an interest in learning more about Evolution and Sociology. Most sociologists know little about modern evolutionary theory. Some still have a 19th Century stereotype of evolution. Some recall (or heard of) E.O. Wilson's statement on integrating sociology with biology and think that biology is out to bury sociology (a rumor passed around by anti-evolutionary sociologists). One thought that I had was to begin offering workshops on evolutionary theory at future meetings. I have a hunch that we will draw young scholars eager to get on the evolutionary bandwagon as well as established sociologists hoping to fire up their sociological imagination. Every few weeks I get a letter from an assistant professor or a graduate student intrigued with evolutionary reasoning but nervous about taking it up because their mentors or colleagues view evolutionary theory as either irrelevant in sociology or, for some, a troublesome menace to the field. These scholars write me to share their ideas and their frustrations because they cannot pursue their interests without possible censure. We need to do whatever it takes to break this long-standing antagonism of mainstream sociologists to evolutionary thinking.

Let me encourage you to submit papers to ASA for one of the two regular sessions allotted to us this year. The first session is titled "Sociology and NeoDarwinism" and is organized by Timothy Crippen at the University of Mary Washington. The second is "Sociology and Neuroscience" and is organized by Douglas Massey at Princeton University. They will make a special effort to include papers that represent our eclectic evolutionary community.

Remember to renew your membership this year and please subsidize some graduate and undergraduate students. Our section roster must have 300 members to be allocated two sessions each year at future ASA meetings.

All Good Wishes
Alexandra

NEW PUBLICATION SERIES

Transaction Publishers of New Brunswick NJ and London England Announces the introduction of a new series ANTHROPOLOGY AND HUMAN NATURE. It will be edited by Lionel Tiger who is the Darwin Professor of Anthropology at Rutgers University.

The publishers are interested in works of social science, history, and General intellection which provide insight and contribution to the growing literature on what may be and may not be "human nature." Transaction also publishes the journal HUMAN NATURE and is receptive to works of interest to scholars and informed persons provoked by a subject matter only recently returned to active scrutiny. Even though Aristotle announced that "man is by nature a political animal," the emphasis on "political" has heretofore overwhelmed attention to "by nature." This the series hopes to remedy by publishing works widely advertised in the scholarly community and maintained in print durably and with care.

Anyone interested in proposing or contemplating a book appropriate to this adventure should contact Lionel Tiger either at ltiger@rci.rutgers.edu or at the Department of Anthropology, Rutgers University, 131 George Street, New Brunswick NJ 08901-1414.

Principles of Ethology and Sociological Analysis

Timothy Crippen
University of Mary Washington

In contrast to our sister disciplines, especially anthropology and psychology, sociology has been slow to acknowledge and embrace the tremendous theoretical and empirical advances of the past half century in the evolutionary behavioral sciences. The situation is regrettable inasmuch as there are various ways in which conventional sociological explanations of human social behavior may be productively amended by incorporating certain features of neo-Darwinian evolutionary theory. Along these lines, I'd like to focus my brief remarks on one plausible strategy for narrowing the gap between sociology and evolutionary science, a strategy that would encourage sociologists to approach their subject matter in a manner similar to ethological inquiry.

Ethology is the scientific study of animal behavior in natural conditions. The field emerged from the pioneering studies of Konrad Lorenz, Nikolaas Tinbergen, and Karl von Frisch who shared the 1973 Nobel Prize in physiology or medicine "for their discoveries concerning organization and elicitation of individual and social behaviour patterns." Their work, along with several other noteworthy theoretical developments in evolutionary biology since the mid-1960s, continues to inform studies of animal behavior. I'd like to draw special attention to Tinbergen's (1963) famous essay "On the Aims and Methods of Ethology." Therein he outlines four questions that have come to be viewed as the orientating framework for ethological analysis. Each one of these questions has relevance for problems commonly addressed by sociologists. Additionally, they are questions that, knowingly or otherwise, sociologists and other social scientists have at times incorporated into their own work. Such ethologically informed approaches to the study of human social behavior enhance sociology's explanatory potential. Let's consider Tinbergen's four questions briefly and sequentially.

(1) How does the behavior work? What are its proximate mechanisms?

When studying human social behavior, sociologists rarely take into consideration the neuroanatomical structures or neurophysiological processes that underlie its expression. Instead, the focus is almost exclusively on aspects of the social and cultural environment that condition human behavior. No one, of course, denies the significance of such environmental conditioning. Nevertheless, the individuals so influenced are themselves organic beings who enter this world equipped with central nervous and endocrine systems designed over the lengthy course of our species' evolution. This consideration is especially relevant in light of advances that have been taking place in cognitive neuroscience and neuroendocrinology, developments that are informing the work of at least some sociologists (e.g., Turner 2000; Massey 2005). Others, too, have been mindful of certain neurophysiological processes involved in the expression of human social behavior. Both A. Rossi (1977, 1984) and J.R. Udry (1994, 2000), for example, have explored the hormonal mechanisms underlying some aspects of gendered social behavior. Similarly, A. Mazur (1994, 2005; see also Mazur and Booth 1998) has assessed the influence of levels of circulating testosterone on patterns of dominance behavior in human males. In these and other ways, attention to the neuroanatomical and neurophysiological traits that participate in expressions of human social behavior has the potential for enriching our grasp of rich texture of human social behavior.

(2) What is the behavior's ontogeny? How does it develop over the course of the organism's life history?

Sociological and social psychological research over many decades has produced an enormous quantity of descriptive information regarding many aspects of human social behavior. Unfortunately, and in keeping with what L. Cosmides and J. Tooby (1992) have termed the "standard social science model," the behaviors are explained, at best, rather ephemerally as mere products of socialization and cultural conditioning. By contrast, Tinbergen's second question encourages

investigators to probe more deeply by focusing attention on what evolutionary biologists call the interaction principle–that all phenotypic traits, all aspects of an organism's anatomy, physiology, and behavior, are the product of a complex interaction between genetic information and environmental influences (thus, we may dismiss as unwarranted any claim that evolutionary approaches to the study of human social behavior represent naïve forms of "genetic determinism"). Attention to this principle usefully complements sociological and social psychological approaches to the study of any number of human behavioral traits (see Lopreato and Crippen [1999] for an extensive discussion and application of this principle to a wide range to sociological topics). In a similar vein, demographic analyses grounded in a behavioral ecological perspective have made use of life history theory to gain a fuller grasp of fundamental processes such as fertility and mortality patterns across a diverse range of human societies (e.g., Chagnon 1988; Carey and Lopreato 1995; Hill and Hurtado 1996).

(3) What is the behavior's function? What is it for? What is its contribution to the organism's survival and reproductive success?

Evolutionarily oriented anthropologists and psychologists have already done much fascinating work focusing on questions of this nature. Sociologists potentially have much to gain by exploring similar approaches. For example, in our volume on the Crisis in Sociology: The Need for Darwin, Joseph Lopreato and I attempted to illustrate how studies of family behavior (e.g., mate choices; parental investment in offspring; patterns of marriage, divorce, and remarriage; the household division of labor), of race and ethnic relations (e.g., the deep-seated emotional inclinations to identify strongly with members of the perceived "in group" and to adopt a stance of suspicion and belligerence toward members of the perceived "out group"), and of social stratification (e.g., the forces underlying status striving and the sociocultural conditions governing the structure of inequality) may all make more coherent sense when couched more broadly in terms of the theoretical principles that form the bedrock of the modern evolutionary behavioral sciences (Lopreato and Crippen 1999; see also Crippen 1994a, 1994b). Human social behavior ultimately makes little sense apart from Darwin's (1859, 1871) theories of evolution by means of natural selection and its corollary, the theory of sexual selection, in combination with their more recent and noteworthy amendments–i.e., the theories of kin selection (Hamilton 1964), reciprocity (Trivers 1971), and relative parental investment (Trivers 1972). These tools have the potential for stimulating novel research questions (e.g., Hopcroft 2005), for organizing our discipline's disparate descriptive findings, and for engendering genuinely cumulative sociological knowledge.

(4) How did the behavior evolve in the context of the organism's ancestral environment?

The fourth, and final, question expands the temporal horizon commonly employed by sociologists when investigating aspects of human social behavior. Interest in the social and culture conditions of contemporary, advanced industrial societies is certainly understandable; however, we should not lose sight of the fact that human behavioral inclinations have roots that extend deeply into our species' pre-history. The human organism, in many crucial respects, features anatomical, physiological, and behavioral traits that emerged and persisted largely because they were adaptive in our species' ancestral environment, including aspects of the sociocultural environment of our forager forebears. Ethnographic, archaeological, and comparative-historical evidence can often be marshaled to enhance our appreciation of our discipline's subject matter. To be sure, some sociologists in recent years have been attentive to these facts and have applied their understanding to a broad range of sociological topics (e.g., Maryanski and Turner 1992; Nolan and Lenski 1999; Sanderson 2001; Lenski 2005; Massey 2005; Turner and Maryanski 2005; among others). The trail has been blazed, and we ought to move more eagerly along this path.

Indeed, we have little choice if we are to be a respectable scientific enterprise. I was vividly reminded of this reality while reading the morning edition of The Globe and Mail just hours before our panel session convened in

Montreal. Therein science journalist A. Motluk reviewed L. Brizendine's (2006) new book on The Female Brain. Brizendine is a neuropsychiatrist affiliated with the University of California, San Francisco, and is the founder of the Women's and Teen Girls' Mood and Hormone Clinic located in that city. Her book engagingly reviews the evidence regarding average differences in human male and female neuroanatomy and neurophysiology. I'll not belabor the book's content, though I'd strongly recommend it. Instead, what struck me was the concluding paragraph of Motluk's review and how its content so neatly captures the attitude of far too many sociologists today. To be fair, what she [Brizendine] presents in this book is probably fairly accurate. But it's also pretty incendiary. It's the sort of thing you want to keep under wraps for fear it might fall into the wrong hands–say, an employer's. Brizendine insists that the female brain is not inferior, only different. But in a world where the corporate ladder is still straight and narrow, where working parents are given no breaks, and where raising the next generation doesn't even count as productive economic activity in government account books–in short, in a male-brain world–I wonder sometimes if we're safer just pretending we're all the same. And that we've been socialized differently (Motluk 2006:D3).

Motluk's concluding concern is, to some degree, perfectly understandable. And yet, as social scientists, sticking our heads into the sand, choosing to ignore what many may consider to be inconvenient facts (pretending, as it were, that human social behavior is exclusively the result of socialization and cultural conditioning), merely increases the likelihood that, as a discipline, we will be Missing the Revolution as the apt title of Jerome Barkow's (2006) recent edited volume suggests.

We may avoid this fate, I believe, only if we are able to forge a coherent intellectual alliance between sociology and the evolutionary behavioral sciences. Movement toward this goal will likely follow many distinct avenues. The ethological strategy outlined in these brief remarks represents only one possible approach. Still, however we choose to confront the "second Darwinian revolution" (e.g., Machalek and Martin 2004), I've no doubt that a convergence between sociology and evolutionary biology is necessary to place our craft on surer scientific footing.

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Doing Evolutionary Sociology-Strategies and Tactics

Alexandra Maryanski
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We have much to gain by bringing evolutionary theory into sociology. For openers, an evolutionary approach will open the door to asking questions that nobody has asked in a long time. For example, are humans naturally social? Most sociologists would answer in the affirmative. But is it really true? The primate data suggest that humans, like all primates, require long-term socialization to activate the bundle of genes that control for sociality and, even then, we remain tied to our ape heritage of self-reliance and relatively constrained sociality compared to our highly gregarious monkey cousins.

What is the primal organization for humans? Most sociologists would say the group—the family. But is that true? Emile Durkheim would strongly disagree. He proposed that, in the beginning, humans lived in regional community-based units. Only later did selection favor stable divisions within the human community. This might help explain why our need for "a sense of community" is such a strong and enduring human emotion found throughout the globe.

When it comes to primates, I am partial to the Great Apes–orangutans, gorillas and chimpanzees. As humans' closest living relatives, they can provide us with clues into the nature of those proto-human societies that,

eventually, evolved into hunting and gathering bands. This approach harks back to an old topic—human nature—because my goal is to discover the relational propensities and structural characteristics of hominids and hominid societies. To research this topic, I employ evolutionary theory, cladistic analysis, social network tools and theory along with the fossil record and field data on extant ape social networks to make inferences about the nature of the distant ancestors of humans and contemporary apes. A basic finding that has driven much of my research is that the last common ancestor population of humans and apes (or, closer to home, chimpanzees and humans) evidenced a lack of intergenerational continuity and was structured around mostly weak ties with only a few strong ties that could be utilized by descendant species to build stable and cohesive group structures. Among living apes, orangutans with their near solitary ways best reflect this ancestral relational structure.

If the last common ancestor to both humans and apes had few strong ties, how did early hominid ancestors (near to or on the line to Homo sapiens) survive when they left the forest for a savanna ecology where cohesive group structures would enhance fitness? The short answer is that most ape and hominid species who moved to open grasslands did not survive (while the group-oriented monkey species in savanna niches thrived). Yet, even ape species who stayed in the forest mostly went extinct when competing with monkeys (who are a primate success story in sheer numbers and species). Today our ape relatives who once reigned supreme in the forests (during the Miocene epoch) now constitute but a handful of species; they are, sad to say, considered evolutionary failures, and except for humans, are still on the decline as they have been for millions of years. The verdict is still out for Homo sapiens, although we may be too clever for our own good, and for the rest of the biotic world.

My current work seeks to understand how and when hominids began to forge stronger social bonds. For, the big hurdle in hominid evolution was getting a weakly-tied evolved ape to become better organized. I am close to finishing a book on Durkheim's analysis of religion and, like Durkheim, I am also convinced that the natural unit for humans, as it is for apes and was for the last common ancestor, is a fluid community rather than tightly-knit cliques. In chimpanzee society, up to100 individuals move about their community range alone or cluster together for brief intervals in impromptu parties. Their "sense of community" is well documented and includes shared "cultural" traits (which vary from community to community), greeting rituals when locals cross paths, and a strong defense of community boundaries from incursions by males from other communities. Thus, chimpanzees have a "fission-fusion" organizational structure composed of a shifting collection of weakly-tied apes who prefer individualism and autonomy over collectivism and group subordination. While humans get a good dose of collectivism during childhood socialization that overrides their ape proclivities, we remain at our core an evolved ape who favors freedom of action and individualism. Durkheim found one answer to forming stronger social bonds: symbolizing the group and enacting emotion-arousal rituals toward these symbols. This route to stronger social ties was not only successful in creating stronger social bonds among groups of hunter-gatherers, it represents a preadaptation for macro societies. Large-scale societies do not sustain solidarity through high rates of face-to-face contact among their members but, instead, rely upon commitments to common symbols.

But, the most intriguing question is: how did hominids develop stronger ties at the group level? Commitments to, and rituals directed at, common symbols represent only one of many potential mechanisms for increasing solidarity. The last common ancestor's hominid descendants needed group-level bonding mechanisms to survive. What were these? And when did they emerge in hominid evolution? I am also in the middle of a book with Jonathan Turner, titled On The Origins of Societies by Natural Selection, which addresses these questions. This book explores the weak-tie structure of the primal horde that hominids, as evolved apes, took to the savanna. Then, we try to explain selection processes that generated new bonding mechanisms at the

level of the group as they evolved at different stages of evolution culminating in the first human society—the hunting and gathering band.

This is my approach to evolutionary sociology. It is one of many perspectives under the umbrella of Evolution and Sociology. We should all remain mindful of Durkheim's words: "Let (sociology) be founded and organized and let it outline its program and specify its method. If there is a real affinity between it and biology, these two sciences, by pursuing their natural development, will surely meet one day." That day has arrived.

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Doing Evolutionary Sociology - Strategies and Tactics

Patrick D. Nolan
University of South Carolina

I prepared only a few comments on the panel session topic, but I would like to take most of my time to comment on what has been said so far.

As a macro-sociologist, I would urge us to recognize the macro level of sociocultural evolution. Too often, I believe, we may give the impression that macro level social phenomena are readily reducible to, or explained by, the micro or genetic substrate of society. I would argue that even if it ultimately is or can be (I am skeptical), maintaining a macro and micro division of labor is a useful research strategy and heuristic.

The problem of "public acceptance" of evolutionary sociology and especially that of biological influences on human behavior and human social organization is certainly real, but it is also ironic and somewhat paradoxical. In my teaching of introductory sociology, I have found students to be especially receptive to the idea that certain forms of human behavior are "natural," many go so far as to posit the existence of human "instincts."

Resistance to micro-evolutionary arguments may be fueled, in part, by "political correctness," one of the most dangerous and anti-scientific thought-forms of our age, rivaled only by "false consciousness" as an enemy of intellectual freedom and scientific inquiry. I have no remedy or simple answer for this, but I would caution that we not collapse in face its challenge.

I have always found evolutionary arguments, or "selectionist" arguments to use Jonathan Turner's apt phrase, very powerful explanatory tools, especially at the macro level. Their greatest shortcoming being their apparent greater ability to "post" than to "pre" - dict. A case in point being the problem that Gerhard Lenski and I have had in making a distinction between "simple" and "advanced" industrial societies comparable to that we have made for horticultural and agrarian societies. I am sure that fifty years from now someone will be able to do so with some confidence and that the division will be firmly rooted in ecological-evolutionary theory.

Finally, I would like to address the issue of evolutionary sociology being "controversial." This is true enough, but aside from the issue of "political correctness" noted earlier, this is not necessarily a weakness or problem. In fact, this could become a great strength of our new ASA section "Evolution and Sociology."

Without question, the all-time intellectual high-point of my participation in ASA came at a plenary session at the 1978 meetings in San Francisco. It featured a debate between Immanuel Wallerstein and the economist Kenneth Boulding on Wallerstein's exciting new macrosocial theory of the "modern world system."

It was everything you could want in an intellectual exchange. It was controversial, humorous, informative, acutely critical and pointedly partisan, though well-mannered and respectful.

Would that our section could juxtapose such luminaries to engage one another on the great controversies facing evolutionary theories. With proper advertising, they could become the highlight of future ASA annual meetings.

In a similar vein, I note with interest Tim Crippen's comments on the controversy surrounding a book just reviewed in the Montreal Globe and Mail on August 12, 2006. I don't think it is surprising that this book is considered controversial, and I don't think it is

wholly, or largely, due to its content. That someone could publish a book with the title "The Female Brain" and not expect controversy would be astonishing! If it had been titled something like "Neurological Sexual Dimorphism in Homo Sapiens sapiens" it would not have attracted controversy, but it would also not have attracted readers.

It strikes me as being similar to what happened when William Julius Wilson, some thirty or so years ago, published a book titled "The Declining Significance of Race." It quite well could have been titled "The Increasing Significance of Class," which clearly captures the crux of its content, but that would have attracted little attention and, despite his considerable gifts and scholarly achievements, might not have brought him to Harvard University.

Controversy can be a good thing. Let's not overly exploit it, but let's not shy away from it either. Let's use it to advance public and scholarly interest in our evolutionary ideas and our research programs.

Postscript

I directed a question to the panel and the audience, after the panelists had spoken, that I would love to see discussed seriously and in some detail. It was spurred, in part, by my being told, by one of his colleagues, that Chris Chase-Dunn has developed a keen interest in the ("world system of?") ants.

In my diverse reading, I have been struck by the fact that, with the possible exception of "religion," virtually all of the patterns of behavior and social institutions that were, at one time or other, thought to be uniquely human (e.g., warfare, tool use, stratification, slavery, plant cultivation, animal domestication, drug use) have a counterpart in ant societies. What are we, as evolutionary sociologists, of one focus or another, to make of this?

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Evolutionary Sociologists & Strategies for Doing Evolutionary Sociology

Stephen K. Sanderson
Boulder, Colorado

In this talk I first want to look at sociologists who are evolutionists and see what kinds of work they have been doing, and then I want to outline for you the strategy for doing evolutionary sociology that I recommend.

Evolutionary Sociologists

The lead was clearly taken by Edward Westermarck around the turn of the twentieth century. Westermarck was a Finnish sociologist who became a major figure in British intellectual life. In the second volume of The History of Human Marriage, Westermarck developed the hypothesis on the origin of incest avoidance and exogamy for which he is today most famous. Westermarck argued that children brought up in close physical contact with each other in the early years of life would develop a sexual aversion to each other, an emotion that had evolved by natural selection. Westermarck was also keenly interested in the source of moral concepts and judgments, and used natural selectionist reasoning to argue that moral concepts are objectifications of the moral emotions that have evolved by natural selection because they promote the interests of the individuals who feel them.

Westermarck established a major reputation, but this reputation declined in the 1920s as the tide was turning in sociology toward a cultural determinist position. It was not until the 1970s that Darwinian ideas would come to be revived. Leading the revival was Pierre van den Berghe. Van den Berghe identified a set of human biological predispositions that he called Anlagen: aggression, hierarchy, male domination, mother-infant bonding, territoriality, and incest avoidance. Van den Berghe's work preceded sociobiology proper, but once that came to be established after 1975 he readily adopted it and used it as a guiding interpretive framework for a great deal of work. Van den Berghe has studied incest avoidance, ethnic attachments,

reproductive strategies, and other social phenomena from an evolutionary perspective. Joseph Lopreato was another sociologist to accept Darwinian thinking from an early point. In his book Human Nature and Biocultural Evolution, Lopreato identified a set of four human biological predispositions, those of self-enhancement, sociality, variation, and selection. To his credit, Lopreato situated these various predispositions, or at least most of them, within the context of the reigning sociobiological paradigm, the main principle of which he called the maximization principle: People act so as to maximize the representation of their genes in future generations.

Lee Ellis has written several articles lamenting the extremely limited use of biosocial thinking in sociology, but he has also done a good deal of empirical research on homosexuality, dominance and reproductive success in a wide range of animal species, and stratification and crime.

In the early 1970s, Steven Goldberg attempted to explain why men everywhere monopolize the political leadership and high-status positions of their societies. Goldberg concentrated on hormone differences between the sexes. Testosterone is known to be closely linked to aggression and to dominance and competitive behaviors. According to Goldberg, women are at a natural disadvantage in the competition for positions of leadership and high status.

In 1983 Alice Rossi, as ASA president, made her presidential address an exercise in the application of biosocial thinking to gender. Rossi gave us some excellent criteria for determining the likelihood of a behavior pattern having a biological basis. Using these criteria, Rossi concluded that there are important biological dimensions to gender differences. But despite this promising start, Rossi has since disappeared off the radar screen as far as pursuing a biosocial understanding of human behavior. To the best of my knowledge, she has never followed up on any of this early work.

An important study of how both biological predispositions and socialization contribute to gender differences has recently been carried out by J. Richard Udry. Udry studied a sample of pregnant women from whom blood samples were taken between 1960 and 1969. He found that prenatal levels of sex hormone binding globulin (SHBG) had a strong effect on the pregnant women's daughters' levels of femininity or masculinity when they were adults. Women who had low prenatal SHBG levels were significantly more masculine in their orientations and behavior than women with high SHBG levels.

In their book The Social Cage: Human Nature and the Evolution of Society, Jonathan Turner and Alexandra Maryanski sought to characterize human nature by way of a detailed analysis of hominoid and hominid evolution. Later Turner, by himself, wrote a book on the sociology of emotions in which he argued that emotions have a deep neurobiological substrate. The most recent contribution by Turner and Maryanski is their book on the incest taboo. The authors develop a coevolutionary theory that is sort of a combination of Westermarck's theory and the old functionalist theory. Incest taboos emerged partly because of an innate aversion and partly because they were necessary to maintain the integrity of the nuclear family.

In 1999 Lopreato reappeared on the scene, this time with his former student Timothy Crippen, in their book Crisis in Sociology: The Need for Darwin. Lopreato and Crippen identified a major crisis in sociology, saying that what sociology needs is a general unifying paradigm, and they believe that sociobiology is it. They then proceeded to show how this paradigm can make much sense of sex and gender, social stratification, and ethnicity.

Satoshi Kanazawa is a sociologist who has taken to evolutionary thinking like a duck to water. Kanazawa has studied crime, polygyny, and numerous other phenomena. However, Kanazawa now teaches in the School of Management at LSE and has dropped his ASA membership and turned his back on sociology.

Jeremy Freese is another sociologist interested in the intersection of biology and society. Early on Freese was highly critical of sociobiology. With Brian Powell he attempted to test the well-known Trivers-Willard hypothesis that parental investment in children of a particular sex varies by social status. Their

research findings for the contemporary United States, they argued, disconfirm the hypothesis. More recently, Freese has seemed more receptive to Darwinian thinking, even recommending that sociologists pay attention to the work of behavior geneticists.

Rosemary Hopcroft is another one of the younger generation of biosocial sociologists. She has carried out her own test of the Trivers-Willard hypothesis for American society, claiming to find support for it. Hopcroft has also studied the relationship between social status and reproductive success in one industrial society, the United States.

I have only enough time to briefly mention other sociologists who have taken biology seriously in one way or another. There is Penny Anthon Green, who has written on the biological foundations of revolution and class circulation; Ullica Segerstrale, who has written an important book, Defenders of the Truth: The Battle for Science in the Sociobiology Debate and Beyond; Michael Hammond, who has done some provocative work on what he calls "arouser depreciation" and its relationship to social inequality, as well as on the neurological roots of Durkheimian solidarity; Richard Machalek, who has studied expropriative crime, social exploitation, and the formation of macrosocieties from a biosocial perspective; and Francois Nielsen, who has started to do work on the genetic contribution to social mobility. Of course there is also my own work, in particular my Darwinian conflict theory, which I developed in my The Evolution of Human Sociality. And I apologize if I have left anybody out that I should have included.

The Still Unfriendly Reception of Sociobiology by Sociologists

Despite the excellent work of these and other sociologists, Darwinian thinking has still made very limited headway in sociology. What are its current and future prospects? This is a difficult question to answer, but I am not especially optimistic. Of course, we now have an official Evolution & Sociology section of the ASA, which is great, but many of our 300+ members are not committed and are not likely to stay with us. I remain unconvinced that sociology is a good discipline for doing Darwinian work. Progress has been slow, and most sociologists range from being either indifferent to Darwinism or downright hostile to it. There is no doubt that sociologists have remained more opposed to sociobiology than the members of our closely related sister disciplines, anthropology and psychology. Darwinian approaches have become much more vigorous and widespread in these disciplines. And it cannot be overlooked that a number of the sociologists discussed earlier do not participate in our section and no longer even attend ASA. These are not encouraging signs.

However, despite my pessimism, for better or worse sociology is the field that I chose over 40 years ago and that I still identify with. And much the same is true for the rest of you. So as sociologists we ought to do our best to move sociology in a more Darwinian direction. The question, which is the key question for this session is, How to do it? In psychology and anthropology, they are doing it in terms of a full-blown application of Darwinian natural selection theory. For many of these scholars, the basic orienting principle is the principle of inclusive fitness, Lopreato's maximization principle. For others, who think that modern environments are too artificial for producing maximizing behavior – these are the strict evolutionary psychologists – the problem is to figure out how the brain evolved to produce behaviors that in the ancestral environment were adaptive, even if these behaviors are no longer adaptive in the modern world.

The work of the evolutionary sociologists I previously identified is by and large of very high quality, but how many of them, and how many other evolutionary sociologists, have adopted either of these two approaches? Unfortunately, only a minority. Most biologically oriented sociologists continue to avoid the classical neo-Darwinian paradigm. Even those who may not strongly resist the classical paradigm do not really make much use of it. They go off in their own directions.

But in my view the best way forward is through the classical neo-Darwinian framework, the maximization principle. Work based on this principle has led to enormous intellectual progress in our sister disciplines psychology and anthropology. To do

evolutionary sociology optimally, we have to get beyond sociology and become much more interdisciplinary. Evolutionary psychologists founded the major scientific society for neo-Darwinian social science in the world today, the Human Behavior and Evolution Society (HBES). This organization is composed mostly of psychologists and anthropologists, and only a tiny number of sociologists attend its meetings (I am one of those few). I urge sociologists to get involved in this organization and to learn from what its members are doing. The HBES folks have hold of a great theoretical principle, one that is producing, and will continue to produce, cumulative knowledge. Sociologists also have much to learn from the behavior geneticists. Incorporating genetic variables into sociological research, especially research on stratification and mobility, is likely to produce very interesting and very important findings.

I will end this talk with four recommendations to my fellow sociologists:

1. Join HBES. Present papers at its annual meeting, and attend the many highly stimulating sessions that are on tap at every meeting. Learn from HBES members, and get them to learn from us. (HBES members can be narrow in terms of the topics they study, and more participation by sociologists would help to broaden these topics.)
2. Consider also joining ISHE, the International Society for Human Ethology, whose conferences are held every other year.
3. Regularly read such journals as Evolution and Human Behavior, Human Nature, and Behavioral and Brain Sciences. The best Darwinian-oriented research is published in these journals, and sociologists need to be familiar with it.
4. Use the maximization principle as the core element of the best available research strategy for evolutionary sociology. Some sociologists are using this, but I urge more to do so.

In short, let's be real Darwinians, rigorous scientists, who, armed with a great scientific principle, can produce genuine cumulative knowledge that will go far toward elevating the low (and apparently declining) status of sociology departments in most of today's universities.

The Biosociology of Dominance and Deference

Rowman and Littlefield will send free exam copies of the book by Allan Mazur, *The Biosociology of Dominance and Deference*, to everyone who requests one for possible class use.

Requests for exam copies (for professors considering adopting the book) go to Renee Legatt in Rowman & Littlefield's college marketing department. Her email address is rlegatt@rowman.com.

Two Evolution & Sociology Paper Sessions at the 2007 Annual Meetings of the American Sociological Association

"Sociology & Neuroscience" and "Sociology & Neo-Darwinism"

The Evolution & Sociology section has been allocated two paper sessions for the annual ASA meetings to be held in New York in August, 2007. One session on "Sociology & Neuroscience" will be organized by Douglas Massey at Princeton University. The other session on "Sociology & Neo-Darwinism" will be organized by Timothy Crippen at the University of Mary Washington.

The general themes for the two paper sessions illustrate, at least in part, the broad range of interests exhibited among our members and the variety of ways in which sociologists may approach their subject matter from an evolutionary perspective. We're hopeful that the sessions will attract considerable interest and will be able to feature several fascinating papers.

Those interested in submitting papers to either of these refereed paper sessions should feel free to contact the organizers. Formal submissions, of course, must be made online through the ASA's 2007 Annual Meeting Website once the "call for papers" has been announced later this fall.

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The **2006 Student Paper Award** went to Jerry Cullum, University of Wyoming, for his paper entitled: "Selection Pressures on Cultural Content: The Role of Social Learning, Evolutionary Psychology and Dynamic Social Impact in Accounting for the Evolution of Culture."

Abstract:
The present paper utilizes broad evolutionary thinking and theories of social learning and social influence to build a bridge from individual level social cognition to interpersonal communication, and finally to the emergence of culture at the macro-level. The paper discusses evidence in support of an evolved psychology for acquiring useful knowledge at low cost from social sources (i.e., biased social learning). Adaptive decision rules for the individual to attend to social source characteristics such as status and the number of social sources conveying information result in interpersonal biases in information exchange which in turn account for the pattern of cultural formation, stability, and change at the macro-level. This biased social learning process also imposes selection pressures on the content of information communicated interpersonally, allowing for some information to proliferate and persist longer within a culture. The paper proposes and discusses evidence in support of three distinct selection pressures that biased social learning imposes upon would-be cultural information: attentional, memorability, and observability. Finally, the paper discusses the advantages of combining evolutionary, social learning, and social influence theories to the study of cultural evolution, suggesting that psychological and macro-level approaches to culture are not incompatible or irreconcilable.

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New Publications of Section Members

Hopcroft, Rosemary L. and Dana Burr Bradley. Forthcoming. "The Sex Difference in Depression across 29 countries." *Social Forces.*

Sanderson, Stephen K. *Evolutionism and Its Critics: Deconstructing and Reconstructing an Evolutionary Interpretation of Human Society*. Paradigm Publishers, October 2006. 374 pp. 1-59451-301-5 (hardbound), $74.00; 1-59451-302-3 (paperback), $32.95.