**Humane Leadership Conference Minutes 2000**

**Toward Understanding Humane Leadership: A Bio-Psychological Approach**

September 15 - 17, 2000
Philadelphia, PA

**Friday, September 15:**

**Judith Rodin**

Dr. Rodin began by discussing the importance of leaders to times of crisis. Using the examples of George Washington and Nelson Mandela, she emphasized the positive effects individual leaders can have in encouraging democracy and reconciliation at critical historical moments. In contrast, she noted that leaders can also be calculating and ruthless.

Dr. Rodin expressed both appreciation for the project's emphasis on the positive elements of leadership as well as optimism about the potential of the project to help predict outcomes like ethnopolitical warfare. She emphasized that better understanding and predictive power could help in attacking the causes of war at the source, which underscores the timeliness and importance of the work contemplated by the conference.

Dr. Rodin closed by noting the fact that scientists have emphasized not only the war-like but also peaceable qualities of human nature. She cited research on the ultimatum game demonstrating the human tendency to "share and play fair" even in an impersonal zero-sum context and noted Steven Pinker's observation that while human conflict is universal, so too are efforts to reduce conflict. She closed with a famous line from the African Queen: "Nature, Mr. Allnut, is what we are put on this earth to rise above."

**Martin Seligman**

Dr. Seligman began by laying out the opportunity and challenge of the project. In short, the project presents a unique opportunity to help illuminate a major real world issue and to conduct foundational science that could be built upon by future researchers, and to do so on a massively interdisciplinary scope.

Dr. Seligman then emphasized some key cautions or caveats. He stressed that initially the group must adopt a stance that is modest and tentative, leading to foundational, and not necessarily sensational, science. He noted that many aspects of the project were likely to generate controversy given the nature of the subject matter. Dr. Seligman also focused on the notion of context and argued that a central challenge of the project will be to illuminate the many levels at which context matters. Finally, Dr. Seligman noted that the project's interdisciplinary scope is unusually broad, a fact which requires that efforts be made to translate disparate professional languages to allow communication across distant fields.

Dr. Seligman next presented some of the results of the smaller meetings held throughout the summer, most of which are summarized in the Progress Report distributed at the conference. In particular, Dr. Seligman discussed in detail the span model for handling interdisciplinary communication, the psychological dimensions that might serve as initial entry points for the study of salient differences in leaders, and the initial group of representative research projects.

Dr. Seligman ended by laying out the mission of the conference attendees. This mission included advising the Senior Independent Advisory Panel on the viability of the framework and projects developed thus far, determining which studies would be most likely to produce useful foundational science, and offering criticisms and creative suggestions.

**Living Political Leaders Panel
- Melvin Konner (chair), Daniel Chirot, Gerard Prunier**

**Daniel Chirot**

Dr. Chirot presented four short stories about Yugoslavia.

The first story involved the personalities of Slobodan Milosevic and his wife Mirjana Markovic. He noted that both of Milosevic's parents had committed suicide, and that Milosevic was known as a youth to be unusually straight-laced and formal. Markovic was the daughter of well-placed communists. After the fall of communism, Milosevic and Markovic switch to ultra-nationalism to ground their political movement.

The second story centered on the cultural self-view of Yugoslavians to help explain how Milosevic and Markovic kept hold of Serbia. Serbians view themselves as a culturally oppressed people who have been repeatedly sold out by their allies throughout history - as a put-upon, tragic people struggling to maintain themselves. Thus, they are deeply mistrustful of the West. Milosevic was able to capitalize on this story, a story that even his domestic opponents do not challenge.

The third story was of homogenization by Western powers. The process was interrupted by the Cold War, but continues after the fall of communism. The West, however, is now in a secure enough position to tolerate multiculturalism, and tries to prevent homogenization in other places.

The fourth story began with a description of a kind of affirmative action program in Yugoslavia intended to bring up certain poorer groups within the country. More-wealthy groups within Yugoslavia resented these efforts. The flow of funds involved in the program eventually came under the control of local ethnic groups. Then, when economic recession came, different groups began fighting for diminishing resources. This situation was not conducive to conciliatory leadership and, indeed, the Croatian leader was in many ways similar to Milosevic.

Dr. Chirot explained that he intended his four stories to represent the different kinds of stories - involving personality, biography, world history, and structural factors - that might plausibly help account for different socio-political situations. He noted that while popular accounts tend to stress the first two kinds of accounts, social scientists (like economists, political scientists, sociologists, etc.) tend to prefer the fourth (and to a lesser extent the third) kind of story.

Dr. Chirot expressed his view that all four kinds of stories are plausible and will probably each play a role in explaining the kinds of phenomena with which the project is concerned. He pointed out that while Mandela seems to have played a large role in directing the course of South Africa, conciliatory leaders in other circumstances have frequently failed or been removed from power. Also, he noted that Yugoslavia has similar neighbors (for example, Romania) where ethnic problems have been handled more peacefully.

Dr. Chirot argued that the conflict database proposal would be particularly promising in helping to integrate the different kinds of perspectives used by different disciplines. It could be useful, for example, in trying to answer the important question of how much individual leaders matter in these situations.

Leda Cosmides: Dr. Cosmides noted that psychology involves not just individual differences, but also universal aspects of human nature, which she said could play into all four kinds of stories.

Robert Sternberg: Dr. Sternberg raised the issue that even if one can say what percentage of the variance the different kinds of stories account for in explaining past phenomena, a percentage-of-variance approach cannot predict individuals or small groups.

Chirot: Drawing an analogy to the models used by economists to advise governments, Dr. Chirot responded that our predictive power for world conflicts does not need to be perfect to be useful.

Richard Nisbett: Dr. Nisbett agreed with Dr. Cosmides that psychology deals not just in individual differences but in universals as well, and he expanded the point by noting that universals can come not just from evolution but also from culture and other sources.

David Winter: Dr. Winter forwarded a fifth possible story, one of a globalizing capitalist system that finds ethnic conflict against its interests and thus moves to intervene.

Chirot: Dr. Chirot argued that Dr. Winter's story would fall under his third category - world historical stories. Dr. Chirot noted that much of the debate occurs within the different types of stories, but that real advances will come through integrating the different levels of analysis.

**Gerard Prunier**

Dr. Prunier began by stressing the extent to which Africa is different from the rest of the world. He then gave a brief history of Africa. In pre-colonial times, Africa had not invented the wheel or writing, had roughly 2,000 different languages, and had no large, durable political powers. African society was collectivist and organized around tribes.

Dr. Prunier then described the period of colonialization, which was marked by violent conquest and institutional racism. African educational and economic systems were designed to produce workers and raw materials appropriate to Africa's lower-level role in the colonial system, and thus lacked substantial higher education and manufacturing. The only exception was South Africa, which received 46% of the money put into Africa.

Dr. Prunier stressed the extent to which Africa lacked the necessary preparations for independence. Not only was the continent lacking appropriate educational and manufacturing infrastructure, but the colonial system had drawn borders that did not reflect local realities; some tribes were split by colonial borders and some enemies were joined. Colonialization, then, broke apart the old structures without building new ones to replace them.

The current democratization movement brings mixed blessings, Dr. Prunier argued. It has served to intensify the struggle for power within state structures borrowed from Leninism. The result is that much of Africa has fallen back to tribe-structure conflict, resulting in no less than 14 wars. The situation, he maintained, is in some ways similar to Europe after the fall of the Roman Empire.

The problem, Dr. Prunier stressed, is not ethnic war or tribalism; for example, the Tutsis and Hutus, as well as the factions in Somaliland, are not separate tribes, but have the same languages and religions. The problem is lack of preparation for democratization and resources. The warring sides are all trying to get to the center of power since those centers are the only places with money, power, and prestige.

Dr. Prunier then addressed the question of whether Africa is, as some have claimed, a "Hopeless Continent." Perhaps. It is going through a process in which its small social units struggle to find their order, a process similar to China in the 3rd century BC. If the point of globalization is economic, then we should "forget about Africa"; however, if the point is human, then we must acknowledge Africa's 600 million people.

Dr. Prunier closed by discussing generally cultures, individuals, and the notion of "gating." He pressed the idea that environments will preselect, but that preselection nonetheless leaves a broad band within the preselected area - for example, culture preselects leaders to a degree (Bill Clinton could no more be the president of an African country than an African leader could be president of the United States) but there remain differences within African and American leaders. We all know that cultures make men and leaders influence cultures; what remains to be done is to look at these issues systematically.

John Tooby: Dr. Tooby noted the usefulness of looking for universal patterns. He also noted that one way to get power is to benefit a small group greatly.

Geoffrey Miller: Dr. Miller noted that men will look for the hierarchy to climb, and that Africa's problem seems in part to be that that there are only hierarchies in ethnopolitical conflict and not in economic competition.

Prunier: Dr. Prunier noted that Africa has an agriculture problem, with many men in the country out of work.

Leda Cosmides: Dr. Cosmides suggested a "third fulcrum": the spread of ideas (how some catch on and other do not). She cited the example of Marxism/Leninism spreading in Africa, because at the time those ideas were popular in universities.

Prunier: Dr. Prunier responded that Africa has been a land of catch-phrases, but that usually the ideas do not connect with the reality on the ground, so little results.

Karen Anderson: Dr. Anderson asked about the role of AIDS and other health issues in the African situation.

Prunier: Dr. Prunier noted that the AIDS epidemic was having a particularly harmful effect in Africa, given the fact that young, educated, urban Africans are especially at risk.

Ian Lustick: Dr. Lustick suggested that perhaps the Thirty Years War was the better analogy to the African situation. He suggested that perhaps that kind of violent stage is a prerequisite to the development of large nations and large markets, but that we intervene nonetheless to avoid the butchery.

Prunier: Dr. Prunier responded that the European parallels are at times strained, because the clashes in Africa might not unite people but break them up further given the brittle nature of African states.
**Saturday, September 16:**

**Evolutionary Psychology Panel
- Dorothy Cheney (chair), Frans de Waal, Martin Daly, Steven Pinker**

**Frans de Waal**

Dr. de Waal discussed dominance styles in primates, focusing primarily on two species of macaques, rhesus and stumptail, as well as chimpanzees.

Dr. de Wall noted that many species of macaques have different dominance styles and reconcile at very different rates. He contrasted the strict hierarchies of rhesus macaques with the tendency of stumptails for subordinates to go against the dominant males more often and for individuals to reconcile more often. The differences depend to a large degree on mutual dependency (for example, competition with other groups, anti-predator defense, and collective knowledge) and exit options.

Dr. de Wall presented research showing that when rhesus and stumptails are mixed, the rhesus monkeys will begin reconciling as much as stumptails, demonstrating the enormous effect of social experience.

Dr. de Wall described dominance as double-layered. On the one hand is formal dominance, which involves special status markers that are unidirectional; he noted that these are very similar across species. On the other hand is dominance style, which is highly variable. He contrasted three dominance styles: despotic, tolerant, and egalitarian.

Dr. de Wall then described chimpanzees. Chimpanzees are characterized by the same formal dominance (unidirectional) displays as in other primates, opportunistic male status competition, high conciliatory tendency, great plasticity, food sharing, and coalitions from below. Chimpanzees form coalitions to get ahead, and also actively prevent other coalitions from forming that would threaten their position.

Dr. de Waal noted that the more flexible and egalitarian nature of chimpanzees is related to their equal likelihood to support winners and losers, in contrast to macaques, which support mostly winners. Upon becoming an alpha, a chimpanzee will become more of a loser-supporter, breaking up fights and engaging in pacifying interventions. But, he noted, there are two kinds of chimpanzee alphas: supportive, populist ones, who tend to suppress only immediately subordinate males, and suppressive alphas, who have strong, small power bases.

Dr. de Waal closed by discussing the outlines of research that would be relevant to the leadership project. One study would involve a comparison of policing in macaques. Another would look more closely at chimpanzee leadership styles, focusing on analogous dimensions to the human dimensions.

Robert Wright: Mr. Wright noted the importance of keeping separate individual violent tendencies vs. organizing political violence, and wondered whether individual differences in chimpanzees' violent tendencies relates to their leadership activities.

Leda Cosmides: Dr. Cosmides suggested an addition potential project involving chimpanzees, one involving comparisons between captive populations and natural groups to determine the effects of interactions with rival groups (which natural population experience, but captive groups do not).

de Waal: Dr. de Wall noted that it is difficult to predict what kind of leader a chimpanzee will become upon reaching alpha status from how the individual behaved as a juvenile; chimpanzees change greatly upon becoming the alpha.

Kenneth Kendler: Dr. Kendler suggested that, because pedigrees are usually known in observed chimpanzee populations, studies can be performed to determine the relative influences of genes and environments on these behaviors.

**Steven Pinker**

Dr. Pinker described the "Official Doctrine" that there is no connection between biology and violence - the Noble Savage view. Historically, it is the view expressed by Rousseau, in contrast to the Hobbesian view of natural life as nasty, brutish, and short. The Noble Savage view has been appealing in part because it obviates the need for a domineering Leviathan and views evil as a product of corrupt society.

Dr. Pinker discussed how the Noble Savage view has been pressed in modern scientific versions, for example, in Ashley Montagu's statement in 1950 that biology proves the ethic of universal brotherhood, and most clearly in the Seville Statement, which included the conclusion that war in not natural or genetic. Other manifestations of the Noble Savage view have been the position that violence is a sickness as well as the tendency to treat those who contradict the Noble Savage view as heretics and infidels (for example, the treatment of Wilson, Freeman, Chagnon, and, more recently, Thornhill & Palmer). Nonetheless, the Noble Savage view has withered from the work of biologists (for example, George Williams), ethologists (for example, Donald Brown and Carol Ember), historians, and psychologists.

Dr. Pinker then noted that a recognition of the naturalness of war does not imply that it is good (the naturalistic fallacy). He also argued that it does not imply that we are "condemned to a Hobbesian Hell"; the modular organization of the mind allows for both systems that generate violence and systems that generate peaceable tendencies (citing the work of de Waal, Trivers, and Brown, along with work from history and politics).

Dr. Pinker suggested consideration of a new paradigm, one in which violence is not inevitable, but a default. Defaults can be circumvented by other adaptations. Cooperative motives can arise through nonzero-sum games, as well as through the cognitive and emotional adaptations that form the core of the human "moral sense." But while we may have a fixed moral sense, changes might occur through a "moral escalator" feature (a built-in one-way mechanism) and through the expansion of nonzero sum games by technology. Dr. Pinker discussed the inherent logic of Singer's notion of the "expanding circle."

Dr. Pinker then turned to possible research questions. He suggested trying to illuminate the "defaults" for humans though hunter-gatherer studies, the mechanisms for departing from the defaults through Glover's concept of "moral resources" like sympathy and moral identity, and the conditions under which sympathy is not applied to certain groups. He argued that these studies should be grounded by a new paradigm of complex human nature with multiple motivations.

Francisco Gil-White: Mr. Gil-White suggested that "violence" may not be a suitable scientific category term with which to characterize the human default.

Pinker: Dr. Pinker agreed, suggesting that perhaps "indifference to moral consequences" or "amorality" might be a better characterization.

Paul Rozin: Dr. Rozin noted research showing that people tend to have stronger motivations to stop suffering than to raise people up and get them to thrive.

**Martin Daly**

Dr. Daly discussed evolutionary psychological approaches to conflict and competition. He began by noting that sexual selection works well in explaining competition and violence as well as traits that show large sex differences. Sexual selection involves intrasexual competition. He explained that, because there is more variance in male reproduction than in female reproduction, men take more risks than women, citing evidence that young men are more likely than to die from all causes than young women. He also noted that rates of violence are strongly related to the percentage of the population that are young men, arguing that these kinds of measures should be included in the leadership project's work.

Dr. Daly then discussed research on homicide, arguing that homicide provides a window on competitive conflicts with low reporting bias. He noted that homicides usually involve unrelated men killing each other. Most often these unrelated male-male homicides occur in the context of status conflicts and robberies and their rates of occurrence vary more than other homicides (for example, men killing wives or infanticide). While rates of homicide vary from group to group, the age and sex pattern is robust, that is, it is always men committing the vast majority of homicides, with a peak after puberty and a subsequent falling off.

Dr. Daly noted that while one might expect older men to engage in more risky violence because they have relatively less to lose than young men, the roots of male-male violence in sexual competition explain its predominance in young men. The violence age-curve is largely driven by unmarried men, with marriage leading to reduced homicide rates while subsequently divorced men more closely resemble single men in homicide rates.

Dr. Daly indicated that two factors were especially relevant predictors of group differences in homicide rates: primarily male life expectancy at birth and secondarily income inequality (which helps explain, for example, different violence rates between Canada and the United States).

Dr. Daly closed by discussing possible studies, focusing primarily on the idea of a study of the evolved psychology of status, prestige, and leadership in traditional tribal societies (which are more similar to the environment of evolutionary adaptation than others). He suggested focusing especially on sexually selected attributes (like intelligence, good health, low fluctuating asymmetry, immunocompetence, height, high testosterone, and formidable kindred), noting that many of these attributes overlap with those we seek in our leaders.

Geoffrey Miller: Dr. Miller noted that it might also be worth exploring how altruism and sympathy might be sexually selected.

**Dimensions of Leadership Panel
- Geoffrey Miller (chair), Richard Nisbett, Christopher Peterson**

**Richard Nisbett**

Dr. Nisbett discussed his research on "culture of honor," meant in large part to help account for the fact that in the United States the South is more violent than the North. Dr. Nisbett traced the differences to the different cultures of the settler populations in the two regions, with the South founded by animal herders and the North by farmers. In animal-based cultures, usually there is no state and individuals are subject to predation by their neighbors. In such situations, the only solution is to show one's resolve by responding violently to the slightest threat to deter greater harms to one's livelihood.

Dr. Nisbett discussed evidence that the higher murder rates in the South were driven mostly by increased argument-related murders. Individuals in the South and North show attitude differences with regard to self-protection, insults, and child-rearing. He discussed research showing through a variety of evidence (for example, surveys, experiments, cortisol measurements) that Southerners show substantially more serious responses to insults than Northerners.

Dr. Nisbett then discussed the issue of how the culture of honor continues despite the fact that Southerners are no longer herders, arguing that Southerner men believe that their response to insult affects people's judgments of their masculinity and sexual desirability.

Dr. Nisbett closed by discussing the relation of culture of honor to the leadership dimensions discussed in the summer meetings. He stated that a culture of honor perspective might explain some cultural differences in dimensions like peaceableness vs. bellicosity and instrumental aggression vs. unbounded aggression, and might recast some issues (for example, he argued that Southerners are usually very friendly precisely because they are more armed and violent, and thus treat each other with heightened caution).

John Tooby: Dr. Tooby noted that men's prestige variance in traditional societies is based entirely on reputation on a warrior.

Nisbett: Dr. Nisbett noted that in ancient Greece, prestige was based on one's skill as either a warrior or a debater.

Daniel Chirot: Dr. Chirot asked why higher murder rates are seen among African-Americans.

Nisbett: Dr. Nisbett responded that inner-city populations are often subject to predation and lack police protection, similar to herder societies.

Steven Pinker: Dr. Pinker pressed the point of why the culture of honor still exists in the South and asked whether Southern men would really suffer if they didn't respond violently to insults.

Nisbett: Dr. Nisbett reiterated his view that Southern men have integrated their response to insults into the definition of masculinity, but that they probably would not suffer much in the eyes of Southern women if they responded less violently.

**Christopher Peterson**

Dr. Peterson presented a view of how a personality researcher would look at ordinary people in the context of investigating humane leadership. He argued that individual differences are important, but agreed that contextual factors are important as well.

Dr. Peterson argued that studying ordinary people would be valuable. The advantages include being able to connect the project's endeavor to general social science, developing the ability to generalize findings to other domains (for example, business leaders or local politicians), increasing reliability and validity in assessing leaders, obtaining an inexhaustible supply of research participants, developing more nuanced studies of processes (especially biological ones), being able to construct larger studies of women, conducting experimental studies, and conducting twin studies.

Dr. Peterson stated that the questions that this research would seek to answer include how the dimensions of leadership relate to each other, what the consequences of the dimensions are for the conduct of conflict, and what the origins of the dimensions are. These questions would be addressed through a multimethod strategy, using such techniques as self-report questionnaires, informants, Q-sorts, act-frequency records, and content analysis. He stressed that the role of context would be central in these studies.

Dr. Peterson then gave examples of the sort of survey items that might be used in initial tests of the leadership dimensions. Answers to these kinds of questions could then be used to run factor analysis to suggest the underlying structure of the dimensions, grounding a search for the causes, consequences, and correlates of the different dimensions or factors. Work would also proceed to identify possible biological and genetic underpinnings.

Geoffrey Miller: Dr. Miller noted that Sidanius's concept of "social dominance orientation" would likely show up in personality analyses.

Ian Lustick: Dr. Lustick expressed pessimism about whether the leadership dimensions are codable, and said that it should be treated as an open question whether they are codable, real, etc.

Peterson: Dr. Peterson agreed that the items would need to be clearly scrutinized.

Robert Sternberg: Dr. Sternberg suggested that having experts rate leaders might help.

Leda Cosmides: Dr. Cosmides pointed out the "king-making" phenomenon in many primate societies, in which the females control who the leaders are.

Kenneth Kendler: Dr. Kendler asked about sampling strategies.

Peterson: Dr. Peterson responded that his preference would be to start with a convenient sample and escalate quickly to national probability samples.

Martin Daly: Dr. Daly asked about the strategy of using a priori brainstorming to derive the leadership dimensions before any research had begun.

Peterson: Dr. Peterson stated that the process has to begin somewhere.

**Personality and Leadership Panel
- Mihaly Csikszentmihalyi (chair), David Winter, Robert Sternberg**

**David Winter**

Dr. Winter began by stressing that researchers will be limited to using indirect evidence (for example, content analysis) in studying world leaders.

Dr. Winter then drew a distinction "power motive" individuals and "affiliation motive" individuals. He cited evidence from US presidents that power motive is significantly correlated with entry into war and attitudes towards war. He suggested that the proposed database studies could benefit from looking at selected documents and power vs. affiliation correlates.

Dr. Winter emphasized that correlation is not the same as causation, but that correlations nonetheless give useful information. He also noted that power and affiliation were not the only relevant factors, suggesting that wisdom and others will also enter in.

Leda Cosmides: Dr. Cosmides suggested that a conflict-conciliation database should not only look at war vs. peaceful outcomes, because some peaceful outcomes do not resolve the underlying problems but merely push the ultimate conflict back to a later time.

**Robert Sternberg**

Dr. Sternberg discussed the development and assessment of wisdom and humane leadership. He drew a distinction among different kinds of intelligence. One kind is "successful intelligence," defined as the ability to achieve success in life, given one's personal standards. A closely related concept is practical intelligence, which can be measured by tacit knowledge tests. He noted that practical intelligence does not correlate with g (general intelligence or IQ), and predicts job performance as well as or better than g. Creative intelligence, on the other hand, does correlate with g and is measured by product novelty tests.

Dr. Sternberg then argued that successful intelligence does not predict leadership style, saying that Saddam Hussein and Slobodan Milosevic seem high in successful intelligence. Instead, what these leaders lack is a concern for others.

Dr. Sternberg emphasized his view that the goal of the leadership project should be not only to predict outcomes, but to be able to perform successful interventions as well.

Dr. Sternberg then discussed people's general view of what wisdom is, including problem-solving ability, sagacity and concern for others, the ability to learn from ideas and one's environment, judgment, expeditious use of information, and perspicacity. He suggested a "balance theory" of wisdom: People who are wise apply successful intelligence toward a common good by balancing goals (both long- and short-term), interests, and responses. He stated that wisdom could be measured through judging responses to conflict-resolution problems, moral-judgment problems, and personal-dilemma problems.

Dr. Sternberg closed by proposing a study related to the laboratory studies of context in leadership (Study 5) conceived during the summer meetings. The proposed study would take potential or actual business and political leaders, measure leadership effectiveness (perhaps by giving simulations and rating performance on a theory or through experts, or by having colleagues rate the individuals), look at a broad range of independent predictive measures (like intelligence, personality, demographic variables, etc.), and then conducting a three-group experiment in leadership training. The three groups would include a course based on the findings of the leadership project, a course using traditional leadership material, and a course teaching some non-leadership-relevant topic (like financial management). This would then allow intervention effectiveness to be assessed.

Karen Anderson: Dr. Anderson asked about the role of affect in wisdom.

Sternberg: Dr. Sternberg responded that the balance theory of wisdom also involves balancing emotional and cognitive processes.

Rick McCauley: Dr. McCauley asked who decides what the "common good" is.

**Cognitive Neuroscience and Hormonal Regulation
- Martha Farah (chair), Robert Sapolsky, James Dabbs**

Martha Farah: Before introducing the panel, Dr. Farah noted that cognitive neuroscientific work on the brain was an important element neglected by the conference. She focused in particular on prefrontal cortex and noted that several cognitive neuroscientific categories developed through the study of prefrontal cortex seem relevant to the kinds of psychological dimension discussed. These categories include self-restraint vs. future mindedness, integrative complexity, flexibility, theory of mind, and reflection/metacognition.

**Robert Sapolsky**

Dr. Sapolsky discussed patterns of social stress in baboon groups, which are marked by high levels of male-male violence. In particular, he noted that courtship harassment (where a male will follow closely a consort pair waiting for an opportunity to mate with the female), coalitional partners with frequent defection, and displacement aggression add stress to baboon groups, with low ranking baboons in particular showing many signs of high stress.

Dr. Sapolsky related an unfortunate but interesting event that occurred in a baboon group he was observing, in which a tuberculosis epidemic struck in a way that disproportionately killed the more-aggressive male members of the group. Since the epidemic, the group has engaged in substantially less fighting and more sex, has had a more relaxed dominance hierarchy, and shows lower stress levels (measured by reduced cortisol) in subordinate males.

The particularly interesting point was that the males in the group after the tuberculosis outbreak were not simply left-overs from before the outbreak, but primarily were new males that had entered the group from other groups. The question posed by Dr. Sapolsky was how these new males had come to be less aggressive. He showed evidence that the key difference between the pre-outbreak and post-outbreak group was not in the kinds of males that joined the group, and was also not the treatment of new males by the existing males in the group, but was that the existing females in the group treated the new males better, copulating with them sooner after their arrival to the group, etc.

Francisco Gil-White: Mr. Gil-White wondered why all males did not become affiliative if that style is preferred by the females.

Sapolsky: Dr. Sapolsky noted that affiliative males actually do better reproductively, but that two tracks typically exist: affiliative and dominant.

Geoffrey Miller: Dr. Miller proposed that the effect could be a result of the decreased male-to-female ratio in the post-outbreak group.

**James Dabbs**

Dr. Dabbs discussed research on testosterone. He explained that the primary effects of increased testosterone are to increase boldness and focus.

Dr. Dabbs gave some background information, citing evidence that men high in testosterone are less often married, have more extramarital affairs, and commit more crime and more misbehavior. He noted that farmers and white-collar workers tend to be lower in testosterone while blue-collar workers and the unemployed tend to be higher.

Dr. Dabbs emphasized the point that testosterone must be viewed in conjunction with motive to determine its effects on behavior. Testosterone produces energy and focus that will amplify the effectiveness of either positive or negative motives.

Dr. Dabbs closed by stating that studying testosterone could be part of research on longitudinal development, everyday individuals, looking at motives, use of the midbrain, and making choices.

Kenneth Kendler: Dr. Kendler asked about the heritability of testosterone levels.

Dabbs: Dr. Dabbs responded that heritability was about .4.

**Sunday, September 17**

**The Genetics of Behavior Panel
- Leda Cosmides (chair), Kenneth Kendler, Ralph Greenspan**

Leda Cosmides: Dr. Cosmides began the session by noting that evolutionary biologists generally expect that natural selection will eliminate much of the genetic diversity within a population as fitter genes out-reproduce less fit variants, which leads to the question of why so much diversity nonetheless exists. She suggested that the answer is found in the pathogenic theory of sex, according to which sex evolved to maintain diversity so that slower-reproducing organisms would be less susceptible to faster-reproducing pathogens. Thus, one would expect much of the genetic variation in a population to be noise to defeat pathogens, and not necessarily variation that exists to substantially alter physiology or behavior.

**Kenneth Kendler**

Dr. Kendler began with an overview of the genetics of complex behavior. He described the two central paradigms - genetic epidemiology (for example, using family, twin, and adoption studies) and gene-finding methods. The strengths of genetic epidemiology include that it allows estimates of the aggregate effects of all gene and environmental effects and that it employs sophisticated statistical methods; its weaknesses include the need for very large sample sizes and certain statistical assumptions, the fact that its explanations are at the latent level (that is, it cannot directly determine the biologic mechanisms), and the increased possibility of hidden biases given the absence of experiments. The strengths of gene-finding methods include its tremendous explanatory power and ability to determine risk directly; its weaknesses include that it is still unclear which data collection and statistical methods are best, that large sample sizes are needed, and that few genuine success stories exist.

Dr. Kendler then discussed psychiatric genetics. He noted that existing studies have found that certain things have less genetic influence (for example, phobias) while others have more (for example, height, bipolar disorder, schizophrenia, weight, and drug and alcohol abuse). Two complicating issue are gene-environment interaction and gene-environment correlation. Gene-environment interactions are found, for example, when genes amplify the effects of various environmental risk factors. Gene-environment correlations are found when traits under high genetic influence (for example, attractiveness) influence important environmental factors (for example, parental affection).

Dr. Kendler closed by discussing the ways in which genetic epidemiology could be useful in studying humane leadership. These include helping to determine the relative contributions of genetic, environmental, and unique factors, helping to study gender effects, clarifying the mechanisms of parent-offspring transmission, and creating links to relevant neuropsychological and biological measures.

Martin Seligman: Dr. Seligman drew an analogy between genetic models positing that multiple genes are involved in producing complex traits and the diagnosis of major depression, which requires that five of nine variables be present. He noted that the same logical structure was present in humane leadership, which involves the co-occurrence of several factors among a larger list of factors.

Seligman and Kendler: Dr. Seligman and Dr. Kendler engaged in an exchange involving the idea that individuals might have leadership capacities that are never called into service by their environments, which might make the method of testing ordinary individuals on leadership scenarios a useful one.

Robert Sternberg: Dr. Sternberg asked about that the implications of genetic epidemiology for social policy and action.

Kendler: Dr. Kendler responded that genetic epidemiology provides information about mechanisms, covariation, etc., on which social planning depends.

**Ralph Greenspan**

Dr. Greenspan began by noting that research on the genetics of flies is relevant to humans in that it can provide information about how specific genes work, and that flies and humans have several similar cellular mechanisms and complex behaviors (for example, the similar cellular mechanisms involved in circadian rhythms and the similar molecular mechanisms involved in certain kinds of learning and memory). Fly research cannot say much about human leadership, but it can illuminate general points about how genes affect behavior.

Dr. Greenspan stressed the importance of context in understanding genetic action. Environmental context matters because the same gene can have different effects in different environments. Genetic context matters because the same gene can have different effects in combination with different genes. He noted that selection carries baggage because most genes affect more than one trait, and that selection for a specific gene is hard to prove.

Dr. Greenspan summarized by stating that the relationship of genes to behavior is complex, such that one can never really say that a given gene is for a given trait. The complexity is driven by the highly interactive nature of genes and nervous systems, both of which are sensitive to genetic and environmental context.

Dr. Greenspan closed by discussing some implications of genetic research for humans. He argued that there has not been much functional selection over recorded history, because that requires stable environments for several generations. He also noted that many traits are not selected for, but simply carried along with other selected traits.

John Tooby: Dr. Tooby asked about the virtues and vices of using different animals and techniques.

Greenspan: Dr. Greenspan noted that one of the virtues of studying flies, given that genomes are highly interactive systems, is that one can manipulate the whole system.

Margo Wilson: Dr. Wilson noted that information seemed to be lacking about the real-world behavior of these flies (for example, mating behavior).

Greenspan: Dr. Greenspan responded that there are researchers who study flies in the wild and that much is known.

**Ethnopolitical Conflict and Conciliation Panel
- Margo Wilson (chair), Ian Lustick, Rick McCauley, John Reed**

**Ian Lustick**

Dr. Lustick discussed research on the causes of war and how the proposed conflict-conciliation database could significantly add to current research. He began by discussing the different levels of analysis involved in determining the causes of war, and how context helps to solve the problems involved in the analysis.

Dr. Lustick discussed in detail the eightfold categorization of the outcomes of ethnic conflict proposed by McGarry and O'Leary. These are divided into methods for eliminating differences (genocide, expulsion, partition, and integration/assimilation) and methods for managing differences (federalization/cantonization, hegemonic control, arbitration, and consociation and power sharing). He gave examples of each of the categories.

Dr. Lustick noted two existing databases that are related to the leadership project - the Correlates of War Database and the Minorities at Risk Database. He argued that the database project proposed by the summer meeting participants could allow further psychologically relevant variables to be investigated, for example, variables from identity theory, Rozin's contamination work, the minimum group literature, work on conformity, and work on risk-taking. Two notions worth emphasizing are identity redeployment and the notion that individuals select from a host of alternatives.

Ralph Greenspan: Dr. Greenspan asked about the level of selection here.

Lustick: Dr. Lustick responded that it is difficult to privilege one level at this point, but that he preferred the memetic level.

Karen Anderson: Dr. Anderson suggested another method of eliminating ethnic conflict: finding a third common enemy.

Lustick: Dr. Lustick responded that that could be a motive for integration/assimilation.

Leda Cosmides: Dr. Cosmides noted that it is easy to underestimate the human cognitive machinery of social violence, or, in general, the complexity of universal human nature. There are crucial difference between interpersonal violence and socially organized violence. Focusing on organized violence, it may be that the complex universal contingency-driven cognitive mechanisms can produce diversity.

Geoffrey Miller: Dr. Miller noted that in war males tend to be killed and women assimilated. Thus, how the opposition is framed affects how people respond (for example, if the opposition is portrayed as all young men, people are more likely to want to kill them).

**Rick McCauley**

Dr. McCauley began by stressing the importance of context in understanding political outcomes. He used the example of Buyoya in Burundi vs. de Klerk in South Africa. In Burundi, a coup followed democratization while in South Africa it did not; knowing the personalities and motives of the leaders will not explain the whole story.

Dr. McCauley then described the Minorities at Risk (MAR) Database. The MAR Database contains information about minorities that are or might be a risk to the state, looking at information like antigovernment protest and rebellion. The database contains about 900 predictor variables, falling into about 90 conceptually distinct groups, many of which are consistent with relative deprivation theory. The good predictors of rebellion from the database are government repression (which is not very enlightening), territorial concentration, group organization, and antigovernment protest.

Returning to his earlier point about context, Dr. McCauley noted that the MAR data cannot help determine the different outcomes in Burundi and South Africa. The MAR Database has several limitations, including that it does not do a good job with intragroup conflict, it does not contain information on "quiet" groups for purposes of comparison, and it does not provide information on the economic, social, and cultural context of the conflicts.

Dr. McCauley then described some of the factors that he thinks might be relevant in a database project, including the repertoire of identities available, items relating to economic development, items about culture (religion, culture of honor, etc.), access to media, and history. He also proposed as a potential project one that would investigate the dimensions of political context that constrain leader differences - related to the notion of "gating" that the group had discussed on the project's listserv.

Donald Horowitz: Dr. Horowitz described some other factors that might have been relevant in South Africa's transition, including the fact that Afrikaners were embarrassed by apartheid when they traveled abroad as well as de Klerk's farsightedness. He also said that researchers should be cautious about creating databases for purposes of fishing expeditions.

**John Reed**

Dr. Reed discussed the American South. He noted that the race transition in the South in the 1960s was unusual both for the low number of casualties and for the fact that almost everyone now agrees that it was the right outcome.

Dr. Reed noted that after both the Civil War and the civil rights movement the South was quick to get over the defeat. He argued that this was due in part to the fact that the winning leaders (Lincoln and King) used conciliatory language, and also to the fact that the goals in these conflicts were discrete, with clear grievances, clear solutions, and little harsh reparations.

Dr. Reed concluded that reconciliation in these cases was largely a function of the winners' behavior. Also important is the rhetoric of the losers, why they were fighting, and what they blame the loss on. Finally, another relevant factor in post-conflict conciliation is the decisiveness of the victory.

Karen Anderson: Dr. Anderson asked about the role of women in these reconciliations.

Reed: Dr. Reed responded that women did not play a distinctive role relative to men.

Lustick: Dr. Lustick emphasized the importance of overwhelming force, arguing that compromise is harder than accepting a decisive defeat. He cited evidence that people in a weak position tend to compromise while those in a strong position tend to become more greedy.

James Dabbs: Dr. Dabbs noted that in duels, the point usually is not to kill but just to defeat one's opponent to settle the issue.

Frans de Waal: Dr. de Waal noted that fights among non-human primates are similar.

Leda Cosmides: Dr. Cosmides expressed appreciation for Dr. Reed's focus on psychology and motivation, emphasizing the difference leaders can make.

**Political Psychology Panel
- Paul Verkuil (chair), Donald Horowitz, Peter Suedfeld, Robert Wright**

Paul Verkuil: Dean Verkuil began with some brief comments about the role of law. He noted that law reflects but does not determine American values. He also noted that rule of law correlates positively with nations' economic success (but that democracy does not).

**Donald Horowitz**

Dr. Horowitz began with some concerns meant to clarify the project's normative concern and research goal. He stated that we should not assume that leaders matter to conflict. They might, but it is probably within a context - for example, a humane leader who wants to pursue a certain path might be rejected, leading to further division.

Dr. Horowitz argued that there are good reasons to expect that Singer's circle will not always be expanding; for example, we often define ourselves by who we are not, and group size can play a role with respect to the notion of minimum winning coalitions. Thus, divided societies are likely to remain divided, though they need not go to war. But even the pursuit of conflict is sometimes better than conciliation, even though we agree that most violent conflicts do not fit this circumstance.

Dr. Horowitz stated that we should focus on context as well as leaders and that we should have better characterizations of leaders (for example, some may be forward-looking but not altruistic). We should look as much to institutions as impulses.

Dr. Horowitz closed by commenting on the proposed studies. He argued that in general we might not want to specify studies in detail, but to just conceptualize problems and let the researchers determine the details of the studies. He suggested some areas worth studying, including the relation of reason and emotion, the nature of hatred, and the institutional setting in which leaders operate (for example, investigating whether we can structure institutions to promote far-sightedness).

Robert Sternberg: Dr. Sternberg stated that aspects of hatred could be folded into the proposed laboratory studies of context in leadership (Study 5), for example, by seeing if some people have hates that prevent them from learning human leadership skills or by looking for the characteristics of haters.

Geoffrey Miller: Dr. Miller stated that systematic incentive and constraint restructuring is particularly promising, perhaps more so than trying to adjust personalities.

**Peter Suedfeld**

Dr. Suedfeld began with some observations and questions. He noted the distinction between "great-man" theories and "structural determinant" theories, agreeing with the other speakers that both person and environment have to be relevant. He then asked how we can recognize what is "humane" when we see it; is it about short-term outcomes, long-term outcomes, or what? He noted that some seem to view "humaneness" as a personality trait, but that it surely has both state and trait characteristics along with environmental characteristics.

Dr. Suedfeld then commented on some of the proposed studies. He noted that one problem with the proposed leadership database (Study 2) is that we often do not know much about leaders before they became leaders. For the study of the psychobiology of the dimensions of humane leadership (Study 4), he suggested that a good subject pool might be military officers, and he argued that personality measures should be chosen based on theory. He also noted that the study of coalitional psychology is a good idea.

Dr. Suedfeld closed by noting that flexibility is not always preferable in leaders; rigid responses can be economical and flexible responses can be expensive. We might look then at leaders who are complex when they should be.

Francisco Gil-White: Mr. Gil-White suggested that we might focus on acts, because we cannot really define "humane leadership" (for example, "fanning the flames" vs. "not fanning the flames").

John Tooby: Dr. Tooby suggested that perhaps another relevant factor is what leaders are willing to do to achieve their aims.

**Robert Wright**

Mr. Wright stated that evolution tells you that Milosevic is not a pathology; he is status-seeking, and we do not know that Mandela would not have done the same in a similar situation.

Mr. Wright then discussed some gaps he saw in the conference. One gap is seratonin, which is central in governing and status-related behaviors, with low seratonin being correlated with impulsive aggression (this emphasizes the need to distinguish between individual and organized violence).

Another gap is the human conscience, in particular the need to know how the contents of conscience get programmed in and how stable they are over time. He argued that the human conscience can be conceived of as an evolved mental organ, perhaps to remind individuals of kin investment concerns. Understanding the human conscience might help us understand its role in fighting addictions (including, perhaps, addictions to power, moderated by seratonin).

A related gap, according to Mr. Wright, is religion, its role in programming morals, and in particular the relevance of the conversion experience. Religion is especially important because it seems to exacerbate both good and bad drives.

Mr. Wright then discussed the expanding circle, relating his argument that increasingly people have nonzero-sum interactions (mostly economic transactions) with people far away from themselves. He suggested that a potential study might look at the relationship between economic interdependence and expanded moral circle (both between and within cultures). He stated that the direction of history is making inter-state conflict less likely, but may make intra-state conflict more likely.

Rick McCauley: Dr. McCauley pointed out that the drug Ecstasy seems to make people come together, so perhaps its mechanisms should be investigated.

Dennis McCarthy: Mr. McCarthy suggested that we should pay more attention to the role of wisdom and effectiveness.

Daniel Chirot: Dr. Chirot, speaking to Mr. Wright's general comments about not avoiding controversy, stated that we should also be willing to expose nonsense when we find it.

**Closing comments**

Martin Seligman: Dr. Seligman opened the discussion for general comments.

Leda Cosmides: Dr. Cosmides commented that a leader is a leader of a group of people in a cooperative relationship. She also stressed the biology is not just genes and hormones, but evolution as well. She argued that we need models of the cognitive machinery that handles cooperative behaviors, and that evolutionary social psychology and economics have a large literature on which these efforts could build.

Robert Sternberg: Dr. Sternberg noted the importance of wisdom and successful intelligence.

Ralph Greenspan: Dr. Greenspan discussed the notion of "value." He explained that a Darwinian system requires three elements: repertoire, selector, and criteria for selection (or values).

Martin Daly: Dr. Daly commented on effective database development, and noted that including living people may be more difficult.

John Tooby: Dr. Tooby argued that we need theories to guide the leadership database, and indeed all the research, as opposed to relying on blind empiricism.

Geoffrey Miller: Dr. Miller commented that evolutionary psychology is involved with determining the psychologically salient context for various decisions. He suggested that the relevant interventions for leaders might hinge on economic interventions and the like, while interventions for followers might involve areas like health and mating.

Frans de Waal: Dr. de Waal noted that leadership would not exist without a power motive (dominance). He also stressed the importance of understanding the role of women. In addition, he commented in relation to values that reconciliation can be viewed as maintaining cooperative relationships that benefit the parties.

Karen Anderson: Dr. Anderson stressed the importance of talking about women. She also suggested that economists should play a larger role in the project.

Ian Lustick: Dr. Lustick questioned whether the project should be centered on "leadership"; he noted that while our interventions will only realistically be on leaders, much of what we need to know is not about leaders.

Margo Wilson: Dr. Wilson noted that personal psychotherapy is tremendously inefficient, and that interventions will really be about institutions and incentives.

Robert Wright: Mr. Wright expressed optimism for the project as a whole, noting that there are efficiencies and interrelationships to be gained from a project of this size that will not arise from separate studies.

Rick McCauley: Dr. McCauley argued that existing theories should not be used to build the database projects. He also noted that economic interest is not always the bottom line; sometimes ethnic or cultural factors trump. On the issue of values, he noted that moral arguments are used to get people to do things that are against their interests.

Daly: Dr. Daly argued that while it may look like ethnic conflicts are really over moral issues, the moral talk is just a label or excuse for conflicts that have some other significance. He also noted that "wise" should not be equated with "nice."

Peter Suedfeld: Dr. Suedfeld argued that the extent to which people are rational actors is greatly overestimated.

Richard Nisbett: Dr. Nisbett noted that people really do use the word "wise" to include acting for the public good.

Melvin Konner: Dr. Konner stressed the need to investigate demographic factors.

Cosmides: Dr. Cosmides noted that while cross-cultural work has high start-up costs, once the initial contacts are in place it is not very expensive work. She argued that universal mechanisms diversely responding to environments are likely to be the source of much of the supposed uniqueness emphasized by anthropologists.

Daniel Chirot: Dr. Chirot expressed the gratitude of the conference participants for the hard work of Dr. Seligman in organizing the conference.