## Newsletter

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The Organized Section in Comparative Politics of the American Political Science Association

APSA - C

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# Letter from the Editors

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As editors of this newsletter and on behalf of all of the members of the organized section in comparative politics we wish to extend our deepest gratitude and warmest wishes to Peter Gourevitch who, as president of the section during the past two years, served so well and conscientiously. Peter not only brought intelligence, experience, and energy to the position but. perhaps just as importantly, in all of his suggestions about how to improve and update the section's affairs he faithfully represented the spirit and dedication of its enlightened founders and subsequent presidents. Under his tenure our section continued as the largest section of the American Political Science Association.

We also wish formally to welcome Sue Stokes as the incoming section president. Sue is the John S. Saden Professor of Political Science at Yale University, Director of the Yale Program on Democracy, and current Chair of the Department of Political Science. Her research interests include democratic theory and how democracy functions in developing societies, with a regional focus on Latin America.

She is the co-author of Democracy and the Culture of Skepticism: Political Trust in Argentina and Mexico (Russell Sage, 2006) and her 2001 book, Mandates and Democracy: Neoliberalism by Surprise in Latin America (Cambridge University Press), received prizes from the APSA **Comparative Democratization** section and Society for Comparative Research. Also among of her numerous publications are "Perverse Accountability" in the American Political Science Review, "Endogenous Democratization" with Carles Boix in World Politics, and the 2009 Oxford University Press Handbook of Comparative Politics, co-edited with Carles Boix. Many thanks to Sue for being willing to add the portfolio of Comparative Politics section president to her already heavy professional administrative responsibilities.

## Letter

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# President's Letter The Opportunities and Limits of Field Experiments

Susan Stokes Yale University susan.stokes@yale.edu



How effective are clientelistic campaigns, compared to ones emphasizing national public goods, in mobilizing electoral support? Does the presence of election monitors reduce election-day fraud? Are police officials more likely to solicit

have professional students of poli-

tics outside of the United States -

comparativists - deployed this

research tool. In this president's

letter, I discuss the opportunities

that field experimentation opens

up for comparativists, as well as

incorporate it into our methodolog-

some areas of concern as we

ical toolset.

bribes from poor drivers or

wealthy ones?<sup>1</sup> To answer these and a growing range of questions, scholars of comparative politics are increasingly turning to field experiments. Though social science experimentation is nearly a century old, only relatively recently "Though social science experimentation is nearly a century old, only relatively recently have professional students of politics outside of the United States – comparativists – deployed this research tool."

The hallmark of experimentation is the random assignment of cases to treatments and controls. Treatment means exposure to the presumed cause that we are interested in studying: a particular kind of campaign message, election monitors, income level of those solicited for bribes. Cases – also called "units" – may be individuals, villages, polling stations, or even more highly aggregated phenomena, such as states or ethnic

groups. Control groups are those units that are part of the study but are not exposed to the cause: they are not treated. By randomly assigning a sufficiently large number of cases to treatment and controls, the researcher can be assured that the two groups are basically the

same in all ways except their exposure to treatment. Their distribution on covariates will be the same. Hence, whatever difference the researcher finds between the two groups on the outcome of interest can confidently be attributed to the treatment and not to some other systematic difference between them. If there is less fraud at polling stations visited by monitors, under random assignment we can be confident that it was the monitors, and not (say) location in large cities or a heavy presence of one or another political party that caused the difference. Randomization eases the task of identifying a causal effect.

Ideally, in addition to increasing confidence that the presumed cause is really what lies behind a difference in outcomes and not some unobserved covariate. experimental designs also reduce the risk that the researcher will overlook reverse (or reciprocal) causation. Perhaps international organizations choose to monitor elections in countries where improvements in democracy are already under way, in which case evidence of lower levels of fraud would in fact "cause" international monitoring, rather than the other way around (see Hyde, forthcoming). When the researcher controls the selection process, such possibilities can be largely discounted.

Arguments in favor and against experimentation have been widely aired. Debates have been especially lively among development economists, with some arguing that causal effects can never be identified in the absence of random assignment of units to treatment and controls, and others lamenting what they perceive as a loss of theoretical depth, a narrowing of the scope of the guestions posed, and lack of external validity of economic field experiments.<sup>2</sup> Political scientists increasingly, as well, debate the

"Whatever their discipline, scholars who have embraced experimental methods are not infrequently driven by a sense of the futility of uncovering causal effects with observational data."

merits and perils of field experimentation, comparativists among them.<sup>3</sup>

Whatever their discipline, scholars who have embraced experimental methods are not infrequently driven by a sense of the futility of uncovering causal effects with observational data.<sup>4</sup> Some believe that there is basically always a strong possibility that some other factor, an unobserved covariate, is causing any observed difference in outcomes. To continue the election-monitoring example, let's say that the NGOs choose which polling stations to monitor without using random assignment, and they find lower levels of fraud in the observed ones than in the unobserved ones. Suppose that analysts find less fraud even when they match cases with equivalent levels of urbanism and proximity to the capitol, hence ruling out the possibility that more urban polling stations, or those closer to the capitol, are both more likely to be monitored and (independently) less likely to be fraud-ridden.

Yet for some researchers, such procedures will still be unconvincing. There will always be unobserved covariates out there, they contend, that undermine our ability to draw causal inferences from observational data.

One's tolerance for the possibility (even if just the abstract, hypothetical possibility) of unobserved covariates and hence of spurious causation is just one consideration that shapes social scientists' choice of observational versus experimental designs. Another is the manipulability of variables. Many presumed causes of outcomes that are of critical importance to comparative politics are simply not manipulable by researchers: regime type, ethnic identity, class structure, and rates of economic growth, for example. When we want to assess their causal impact we must either study observational data or seek out plausible natural experiments.

Just as in the history of medical research, ethical concerns rule out experiments aimed at identifying

"Many presumed causes of outcomes that are of critical importance to comparative politics are simply not manipulable by researchers: regime type, ethnic identity, class structure, and rates of economic growth, for example."

## Letter

certain causal effects. One could not randomly assign subjects to smoking treatments and observe their cancer rates grow. For similar reasons one could not, for instance, randomly assign some subjects to poverty and observe their voting behavior or some countries to non-renewable resource wealth and observe them fail to become democracies

(in this last case, both manipula- world, esp bility and ethical concerns make such a design "In casual conversations

such a design ludicrous).

The foregoing comments are relevant for all social scientists. As the use of experimental methods continues to spread among comparativists, certain considerations with colleagues in various institutions, I have found many to be hesitant about any interventions that change outcomes, as experiments are designed to do."

will be especially salient. In casual conversations with colleagues in various institutions, I have found many to be hesitant about any interventions that change outcomes, as experiments are designed to do. Whereas development economics has a long tradition of wedding policy evaluation with basic research in ways that make interventions by researchers standard practice, this has been less true among political scientists and probably much less true among comparativists. Though many of us hope that our research will contribute to the alleviation of suffering and the righting of injustices, these goals often do not translate into research designs

that directly change outcomes. The link between our research and what a friend of mine calls our "world-improvement goals" is less direct.

Our hesitation to design interventionist research is heightened when we are citizens of one country (say, the U.S.) conducting research in another region of the world, especially in developing

> regions or parts of the world in which U.S. governmental involvement has been controversial or unwelcome. Scholars who spend a career trying to reassure professional colleagues, citizens. and authorities in host countries that they are neither

spies nor covert religious missionaries may worry about interventionist research. Wantchekon's much-cited and path-breaking field experiment was carried out in his native Benin; his success in convincing political party officials to take part in the study drew on his own past as a democracy activist in that country, before it democratized. Hyde's studies of election monitoring relied on the cooperation of officials from non-governmental and international organizations, which were already deeply involved in complex relationships with national governments and opposition party leaders in countries where they monitored elections. Comparativists who feel

more distinctly foreign in their research sites may be reluctant to embrace the interventionist, outcome-shifting style of experimental research.

In sum, comparativists have used field experiments creatively to circumvent tricky problems of endogeneity and reverse causation. Yet many questions central to our subfield do not lend themselves to being addressed through experimental designs. For practical as well as ethical and political reasons, field experimentation is unlikely to be as readily embraced by scholars of comparative politics as it has been by those in other subfields and disciplines.

#### Notes

<sup>1</sup> Wantchekon 2003, Hyde forthcoming, and Fried et al. 2009, respectively, designed field experiments to address these questions.

<sup>2</sup> For energetic defenses of experimentation in development economics, see Banerjee and Duflo 2009 and Imbens and Wooldridge 2009. For more critical assessments, see Deaton 2009 and Rodrik 2008.

<sup>3</sup> See Przeworski 2007 and Brady, Collier, and Box-Steffensmeier 2009. <sup>4</sup> By observational data I mean quantitative or qualitative information that is produced in a manner not controlled by the researcher and usually without random assignment of units to treatment and control groups. Natural experiments are ones in which assignment is random (or "as-if" random) even though the researcher does not control assignment. The drawing of administrative borders sometimes produces a natural experiment; see, e.g., Posner 2004. For a helpful discussion of natural experiments by a comparativist, see Dunning 2008.

Complete citations for this issue are online at http://www.nd.edu/~apsacp/ backissues.html.

# Politics and the Brain

### Introduction

Our symposium in this issue surveys the implications of cognitive psychology for comparative politics. This approach is based on the belief that people's minds are differently structured and that it is therefore important to understand cognitive processes. If this belief is correct, it means that all of the explanatory factors that act outside the mind - resources, institutions, social structures; in fact, most of what comparativists study - will take us only so far. To understand political behavior fully, according to this approach, we must get inside actors' heads. To some, this research stream represents a renaissance of the study of political culture; to others, it is a spinoff from the intersection of political psychology and survey research, a borrowing from behavioral economics, a dalliance with brain-scanning technology, or a foray into genetics. There are overlapping research questions here: How do political actors think? What role do emotions play in decision-making? Which cognitive frames or maps do they bring to their understanding of politics? Where do these cognitive orientations come from? How do they change? To what extent are they shared among members of communities? How do they vary across gender or ethnicity and across subcultures, cultures, countries, and world regions?

APSA-CP because it is clear that there is intriguing new research in this area, yet most comparativists have only a vague sense of what it is about or how it might be relevant for them. We invited several researchers working in these areas to address the above questions. We hope you will find them novel, intriguing, and provocative.

In the first essay Peter Hatemi traces the roots of human behavior to our DNA. He notes that there is a genetic basis for human traits that are nearly universal. For example, Adam Martin and Kristen Renwick Monroe report that "prosocial" behaviors such as compassion and altruism are grounded in our sense of self and our ability to employ "theory of mind" to imagine what others are thinking, giving rise to feelings of empathy or disgust. They further report that neuroscientists have traced these human qualities back to specific brain structures such as "mirror neurons" and biochemicals such as the hormone oxytocin. These findings may help us understand human behavior, whether pro-social (e.g. charity and volunteerism) or anti-social (e.g. suicide bombing).

Hatemi also suggests that some politically relevant behavior that is not universal may be partially explained by genetic traits typical of regional or ethnic subpopulations that have evolved in relative isolation from other groups. He also notes that individuals vary

somewhat in their genetic makeup. Nevertheless, the connections between genes and political behaviors are complex, and certainly strongly mediated by the environment, economic resources. family, culture, and social and political institutions. Taking up this theme, John Hibbing urges us to keep an open mind about the possibility of biological explanations for cross-national political differences. There is mounting evidence that individuals whose sympathetic nervous system reacts more strongly to stimuli for fear or disgust tend to be more politically conservative. These individual tendencies, Hibbing argues, could be distributed differently in different national populations, and such differences may well account for some cross-national cultural and attitudinal differences.

The theoretical implications of this research program are potentially revolutionary. Rose McDermott and Yoshiko Herrera refer to findings in the field of neuroimaging to challenge common assumptions in rational choice theory. They report that humans do not actually calculate an optimal choice among equally available and objectively perceived alternatives in the same way. Rather, we are biologically predisposed to pay more attention to some things than to others, and our life experiences color our perceptions of objective circumstances. Different people perceive and process the same information in different ways - and even with

This is an appropriate topic for

different parts of their brains. (They also use the same parts of the brain in different ways, a fact that recommends caution in the interpretation of neuroimages.) McDermott and Herrera believe that models of decision-making that more accurately reflect actual

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cognitive processes would produce better explanations of political phenomena.

Research blending neuroscience and genetics with political science is new and very much open to challenge. Research on crossnational genetic variation that may affect cognitive processes, and therefore comparative political behavior, has barely begun. Nevertheless, the progress reported in this symposium may motivate us to think about the political world, and ourselves, in new ways.

## A Partnership Between Science and Culture Genetic and Neurocognitive Approaches for Comparative Politics

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Over the last half century, theoretical and methodological advances in genetics and cognitive neuroscience have changed the way in which we understand human behavior. As the technology to identify neurological processes involved in decision making and preference formation has become widely available, cognitive, developmental, neuroscientific, and genetic approaches have emerged as the dominant paradigms in exploring behavior. Though humans are remarkably similar, we are all also unique. People's genetic structure, genetic expression, and individual physiological response to stimuli differ; moreover, people's minds are differently structured and function differently. As a result of either genes, hormones, epigenetic processes, neurology, or physiology, we are different from one another and such differences, in combination with what we experience in life are reflected in our different preferences and

behaviors. Understanding the complex interaction of neurobiology and social forces is critical in gaining a more complete understanding of cognition, perception, preferences, and ultimately similarities and differences in behaviors in complex environments. The timing of this newsletter is fortuitous:<sup>1</sup> peruse a copy of Science or Nature to witness the social and life sciences converging in earnest. Almost all aspects of complex social behaviors are being explored with neurobiological techniques; many are directly relevant to political behaviors and the social institutions to which we focus much of our attention, such as risk propensity, social hierarchy, ideology, empathy, trust, cooperation, aggression, affiliation, leadership, punishment, and social organization.

While a paradigm shift had long occurred in most domains of the behavioral sciences, it has only recently been accepted in the main discourse of political science. However, the discipline has ventured into the forefront of this area of research. Explorations include: emotion and political decision making, familial and genetic

sources of individual difference in ideology, attitudes, and voter behavior, gene by environment interactions of life events and attitudes, multivariate genetic models of personality and attitudes, genome wide explorations of ideology, hormonal differences in behavior, such as testosterone levels and political competition, different physiological reactions to threat between those with liberal and conservative orientations. different neural activations patterns across different political orientations, among many others.<sup>2</sup> These are just a few examples recently undertaken by political scientists. and does not include the thousands of explorations outside the discipline. There is enormous promise in cross-disciplinary communication between political scientists and those in the cognitive neurosciences.

One premise of an integrated Genetic, Developmental, Social, and Cognitive Neuroscience approach is that the questions asked by political scientists and those in the neurosciences are not independent or mutually exclusive. Rather, they serve to enrich one another. On the one hand, political

scientists can use genetic and neuroscience methods to explore competing theories of psychological processes underlying various types of social and political behavior. Cognitive neuroscientific knowledge about the systems underlying memory, attention, lanquage, emotion, perception, affect, and other processes are critical in understanding the mechanisms behind preferences and behaviors in ways not possible using expressed behaviors alone. On the other hand, genetic and neurological systems may operate differently for complex political thought, as opposed to nonsocial processes. Humans are DNA with brains and feet. We shape our world as much as the world shapes us. In order to understand behavior we must understand the context in which it is studied. Political scientists are at the very least a combination of anthropologists, economists, psychologists, sociologists, and statisticians. We know a lot about context and expressed behaviors; neurologists and geneticists know a lot about mechanisms behind decision making, and the biology behind the mechanisms. Indeed, the most interesting neurological processes to study are the most socially complex. Such a marriage has already contributed to understanding how individuals are motivated to process information in biased ways in cultural contexts, to include cultural specificity in neurological response to fearful faces,<sup>3</sup> stereotypes and biased attitudes,<sup>4</sup> cognitive dissonance,<sup>5</sup> and the interaction of cognition and emotion.6

The simple diagram above



### Figure 1: From Genes to Behavior: A Developmental Perspective

might prove useful in conceptualizing the processes of how human differences emerge, though more complex time and spatial models are widely available. Most social science training emphasizes the broad environment (e.g., socioeconomic conditions and familial and cultural influences) as the primary determinant of preferences and subsequent behaviors, or takes preference as given, and focuses on self interested rational action to immediate stimuli. Such a view ignores the integration of biology and environment, as well as generational influences regarding how the environment shapes people and people in turn shape their environment. While the range of behaviors available for any species are embedded within a specific social and cultural context, (e.g., one cannot vote in a country that does not have some form of democracy), the preferences or behavior expressed within those confines is shaped by biological mechanisms and dispositions that are influenced and influence their environment over generations.

Starting from the left of the figure, at the most basic level, all human populations developed in a similar manner as our ancestors shared certain evolutionary selection pressures and as such we share certain Universal Similarities (e.g., all healthy humans are bipedal, have two eyes, etc.). However, more localized ancestral environments have led to slightly different developmental patterns across geographic locations (e.g., reacting to sun exposure, domestication of cattle) that are found in specific populations which have led to certain Population Specific similarities (or differences) in genetic, physiological and neurological functions (e.g., skin pigmentation, height, lactose toler-

ance). There is great genetic variation within populations due to a variety of factors (e.g., mate selection, in-migration, etc.). Indeed, ultimately, the most critical ancestral interaction with the environment regarding one's individual genetic disposition is the most immediate one: your parents meeting and mating. And you might be surprised to learn that with whom one mates with is incredibly relevant to their political preferences. In a mate selection study we presented spousal concordance (Table 1) on a number of socially relevant traits. It turns out that while our genes come from our parents, our parents are selecting each other on their politics, which is influenced by their genes!

With the incredibly rare exception, individual "genes" do not have a direct or even modest causal role in any behavior (social or otherwise). However, they are the foundational structure for the endless combination of environmental and

biological stimuli that we encounter from the moment of conception to our ultimate demise. While genes as traditionally viewed do not change over one's life, their expression does. Developmental Changes through

the combination of environment and biology from conception to adolescence proves to be critical to a wide array of genetic, physio-

logical and neurological activity. which in turn leads to long-term differences in Neurological Structure and Function. Perception, cognition, attention, preferences. trust, affiliation and just about everything that makes us "human" and influences

Social and Physical Traits		
Pearson's correlation	Spouse Pairs	
0.714	4950	
0.647	3984	
0.596	4547	
	Pearson's correlation 0.714 0.647	

0.498

0.227

0.164

0.119

0.082

0.005

4957

4964

4985

5019

4991

4739

ior. During certain developmental

and neural periods, preference or

Table 1: Spousal Correlations of

are differentially activated by specific environmental contexts and stimuli, leading to preferences and ultimately behavior. The model is not linear. but interactive, simultaneous, and recursive. with a multitude of pathways to influence any given behav-

our social behavior is formed from the hormones introduced while still in the womb, to the interaction of our genetic disposition with nutrition and care at infancy to all that we experience in late adolescence throughout the remainder of our lives. Developmental changes

Education

Height

Weight

Physique

Neuroticism

Extraversion

"With the incredibly rare exception, individual "genes" do not have a direct or even modest causal role in any behavior (social or otherwise)." the remainder of omental changes are most dynamic in youth but are still present throughout one's life (e.g., menopause, childbirth, or simple aging). Genes are critical to the process which regulates hormones that influence neurologi-

cal and cognitive function, which interacting with environmental stimuli lead to physiological changes; these changes in turn behaviors may change with a changing environment and may receive reinforcing or divergent influences from different neurological and physiological processes (e.g., hormones raging during the teens leading to intense attraction to the opposite sex might conflict with social reward or negative reinforcement mechanisms regarding norms of behavior). One may also select into, or alter, certain environments due to the interaction between environmental and physiological changes, where environmental stimuli are continually assessed and neurological processes modified.9

But what does this approach offer for those who study different cultures and differences between cultures? As a comparativist, how and where does one start to use

it? Below, I provide two examples to introduce the reader to incorporating neurocognitive approaches in understanding behaviors across cultures: one from genetics exploring difference between geographic populations and what use it might serve for political and structural differences and a second from neurology, which explores the impact of the environment on neurological function, and how such functions have long term political ramifications for certain countries and regions.

### A Genetic Approach to Exploring Culture

There are approximately three billion nucleotide base pairs in the human genome.<sup>10</sup> Roughly 0.1-1.0% of DNA varies among individuals.<sup>11</sup> Jorde and Wooding<sup>12</sup> compared the population of three continents (Africa, Asia and Europe) and found that approximately 85-90 percent of genetic variation is found within these continental groups, and only an

"Prehistoric population differences in the development of agriculture were largely based on geographic location, which have led to slightly different genetic distributions, which have a part, however indirect or subtle, in behavior." additional 10-15% of variation is found between them. For the most part populations are remarkably similar. However, the 10% of DNA that does appear to systematically differ between geographic populations might be of great interest to comparativists.

One such "gene" is DRD4, which along with other genetic markers regulates the release of the biogenic hormone dopamine. Ding et al.13 found striking differences in DRD4 frequencies among different world populations based on geographic location. This is significant for cross-regional explorations of political behaviors and institutional development as dopamine influences a wide range of neurological functions related to social behaviors, such as risk taking, reward dependence, stress reduction, attachment, fight or flight responsivity through epinephrine, cognition, personality, attention, working memory, planning, sexual attraction, visual processing, and novelty seeking.14 The strongest relationship found between DRD4 and social behaviors is the 7R allele with attentiondeficit hyperactivity disorder (ADHD).<sup>15</sup> While natural selection would have removed the potential of maladaptive alleles to be common in any population, it is entirely possible that some psychological traits are more adaptive in some locales and time periods even if they are undesirable in others. The 7R allele is common in South American Indians, intermediate in Europeans and Africans, and rare or nonexistent in East Asian populations. They propose that 7R bearers might

"Understanding genetic differences might help provide better means to bring about positive political, educational, and heath programs. Such an exploration might mistakenly be viewed as some form of genetic determinism, but such a view would be both naïve and counterproductive."

have enjoyed a reproductive advantage in male-competitive societies where female farm systems were developed sooner, allowing the males more time for male-competition in which 7R alleles would be reproductively advantageous. ADHD today might be hyper vigilant vesterday: easily distracted behavior would not be as adaptive in environments or societies where more time was needed for food collection and survival versus that of a society where male-male posturing or competition was more encouraged. Prehistoric population differences in the development of agriculture were largely based on geographic location, which have led to slightly different genetic distributions, which have a part, however indirect or subtle, in behavior. If such differences exist, they would inevitably have long-term influences on organization, social structure, institutions, and political culture in a modern world.

In this view, social structure led to genetic population differences that in turn influence the development of future social structures, yet to date no one has explored this from a political or institutional perspective. Understanding genetic differences might help provide better means to bring about positive political, educational, and heath programs. Such an exploration might mistakenly be viewed as some form of genetic determinism, but such a view would be both naïve and counterproductive. What might be maladaptive in one format is adaptive in another. For example, children with the DRD4 allele associated with lower dopamine reception efficiency who experienced insensitive mothering or lack of social support display more externalizing problem behaviors than other children, but children with the same lower dopamine reception allele who were raised by sensitive mothers and had stronger social support showed the lowest levels of problem behavior.<sup>16</sup> In other words, the same genetic disposition that is correlated with higher risk in a negative environment is correlated with lower risk in a positive environment. In this view, a positive environmental change will have an even greater positive impact on certain populations. Genetic dispositions can work in many ways depending on the context. Much failure has come from "one size fits all strategies" to bring about positive societal change. Though we are often reminded about cultural differences, seldom are biological differences which emerged from cultural differences

addressed in proscriptions for societal ills or simply understanding culture and the difficulty of change. We have only scratched the surface of this area of research. Along with my colleagues we found that dopamine appears to be clearly related to political preferences. In a genome wide scan, we found significant

"Though we are often reminded about cultural differences, seldom are biological differences which emerged from cultural differences addressed in proscriptions for societal ills or simply understanding culture and the difficulty of change."

linkage signals for regions of the brain that contain glutamate, NMDA, and dopamine receptors.<sup>17</sup> Glutamate, by activating NMDA receptors, in part regulates dopamine release. It is a remarkable finding, in that of the thousands of regions of genes across the genome, genes related to dopamine were the most likely candidates related to individual differences in left-right world views.

## The Environment and Neurological Function

The previous example began from an evolutionary perspective by identifying biological differences emerging from ancestral cultural and geographic differences, then considering modern behavioral differences. However, the process works in many ways. Immediate environmental differences can lead to physiological differences. which have long-term personal and societal implications. The brain is not unchanged by life experiences. Rather, socially relevant neural functions develop during childhood and this development is owed to complex interactions among genes, social and cultural environments, and children's own behavior. In a series of remarkable studies it has been shown that socioemotional deprivation and lack of warmth in infancy and childhood leads to longterm neurocognitive impairment and behavioral abnormalities, as well as attention, cognitive, emotional, empathetic and social deficits.<sup>18</sup> Due to economic crises in Romania in the 1980s over 65.000 children were institutionalized, many from birth, where infants spent 20 hours a day in a crib, unattended. Brain imaging provided evidence of decreased glucose metabolism in these orphan groups, leading to longterm differences in language processing, memory, and affiliative behaviors, among others listed above. A follow-up study<sup>19</sup> identified structural changes in brain pathways that impaired the function of the neural network that promotes communication between different brain regions which affect cognitive, emotional, learning, and behavioral function.

Additional studies provide evidence that pre- and postnatal mal-

nutrition causes permanent brain structure and functional differences. The combination of studies provide an astonishing picture of the potential for population-based differences in neurological function when considering the reduced rates of parental care and nutrition in underdeveloped countries. By and large all human populations have an equal capacity across all domains, but being born into a underdeveloped location or during a time of famine, war, or incredible hostility, such as Somalia or the Sudan, where lack of prenatal, parental care, warmth, support, and nutrition is the norm, it seems quite likely that such forces might lead to large-scale permanent neurological changes. Decades of violence in the Gaza Strip and West Bank will have populationwide neurological implications regarding social structure, political governance, order, leadership, empathy, and just about every facet of society. In all of the comparative research I have been exposed to, while much is directed at the plight of children in underdeveloped countries, none so far have incorporated pre- and postnatal environmental factors for long-term societal implications. The understanding that it will take a multigenerational investment to overcome such ills and consequential disparities, along with a greater focus on health and welfare in youth to ensure healthy neurological development, is critical to long-term success for the overall population. Societies of individuals who, because of the social environment imposed upon them, suffer from permanent neurological deficits, cannot hope to

compete, negotiate, or govern as well as societies that have lower population levels of neurological impairment. I believe this area of research, early neurological devel-

opment with regard to societal support and nutrition, might be one of the most important for comparative research.

Due to advances in genetics and social cognitive and develop-

mental neuroscience, political scientists have been freed from traditional disciplinary constraints and the false choice of "nature vs. nurture." There are no simplistic explanations for the complex interactions between the biological mechanisms of what it is to be human and the complex world we live in. Our bodies and brains are in continual dialogue with the environment. By embracing the complex integration of mind, body, physical environment, social relationships, institutions and largescale social organization, comparativists can begin to undertake research on questions of interest. What are the biological and environmental contributors to risk propensity, and how do they interact with culture to dynamically produce behavior? How do hormonal levels influence social behavior, and how do social environments influence hormone levels? Do these differ either by population, institutional structure, region, or cultural practice? Which contexts, in turn, modulate gene

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vs. nurture."

expression? Which traits are biologically universal, which ones are not? Does knowing more about biology offer better avenues for either policy implementation,

> negotiation, peace, or health? What are the cognitive and emotion processing demands that support social behavior, and what cultural and country specific risks for longterm political strife are present

taking into account biological considerations?

I believe it is critical that comparativists engage in this discussion, as these questions are currently being addressed outside the discipline, thereby excluding those with the in-depth cultural and geographic expertise truly necessary for such cross-disciplinary. behaviorally grounded research that offers understanding at multiple levels of analysis. The integration of science and social science favors a new model of exploring learning and development - one that embraces complexity, employs a "systems theory" approach, and openly listens to the fascinating dialogues taking place among the myriad forces of change.

Complete citations for this issue are online at http://www.nd.edu/~apsacp/ backissues.html.

## Politics and the (Pro) Social Brain Towards a Neuropolitics of Identity and Connection<sup>1</sup>

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Recent studies (Marcus, MacKuen & Neuman 2000, Westen 2007) have underscored the emerging importance of neuroscience and biological approaches to political psychology, a field Alford and Hibbing (2008) have termed "the new empirical biopolitics." Such endeavors have vielded insights into political phenomena such as the psychological processing of political faces, the hormonal influences on decision making, and so on. In this essay we review the present state of research in social and cognitive neuroscience and suggest how it sheds light on the neurobiology of pro-social behaviors and their connections to processes of self-concept and identity. In line with previous theorizing from cognitive linguistics (Lakoff 1999) and evolutionary psychology (Wexler 2006), we posit that these cultural components of identity and sense of self are inscribed in neural structures over the human lifespan, interacting with the interconnected neural representations of the body that

are thought to have given rise to the conscious self (Damasio 1994, 1999, 2003) in the first place. Past research (Monroe 1996, 2001, 2004) has highlighted the importance of the role of sense of self and identity as key for prosocial behaviors such as altruism. The present discussion focuses on the contributions recent neuroscience and biology have made to explicating pro-social behavior, its key ties of identity and self-concept and, critically, the potential ways these biological factors underlie more anti-social behaviors and the sense(s) of self associated with them.

### The Moral Self: Biological Underpinnings of a Moral Sense

Evolutionary pressures have contributed the ingredients for morality in human neurobiology, the extent of which is only now beginning to be fully understood. Human selfhood may well have arisen as a practical tool, serving

"Evolutionary pressures have contributed the ingredients for morality in human neurobiology, the extent of which is only now beginning to be fully understood." as a coordination device for navigating the external environment, rendering what was originally a "motor system ontology" (Metzinger & Gallese 2003) a social "embodied simulation." Individuals mimicked and internalized the actions of others to the extent that the same neurons coding for the appropriate action would fire, whether an individual was acting or observing. This form of action and behavioral mimicking, recent research has suggested, quite possibly depended upon specialized portions of the cortex dubbed "mirror neurons" (Gallese et al. 2004, Iacoboni 2008). The social dynamic resulting from such an adaptation is what Gallese (2006) terms "intentional attunement," the ability to apply "theory of mind" to another individual and simulate their internal states. From this affective toolkit arose a diverse pallet of emotions undergirding moral sentiments and actions, including general empathy (lacoboni et al. 2003, Singer et al. 2004) and more specific feelings like disgust (Wicker and Keysers 2003, Gallese et al. 2003). In particular, findings about the role of the emotions in moral behavior pinpoint the ventromedial prefrontal cortex area (VMPC) (Young & Koenigs 2007).

Meanwhile, other recent research points to a neurological foundation for a human sense of fairness. A recent study revealed that receiving more equitable offers in struc-

tured led individuals to exhibit greater activity in the ventral striatum, the VMPC, and the left amygdala, brain areas known via previous research to be dopamine-releasing "reward centers" (Tabibnia and Lieberman 2007). Indignant emotions at unfairness also are associated with higher skin conductance (van t' Wout et al. 2006). Cooperation can provoke neural reward responses similar to perceptions of equal offers, including the triggering of activity in the ventral striatum, the rostral anterior cinqulate cortex, and the medial orbitofrontal cortex (Rilling et al. 2002). The decision to make charitable donations likewise seems to have its own signature pathways in the cortex, particularly in frontalmesolimbic structures. in which the decision to donate works through two different reward systems. The first serves as a tie between the ventral tegmental area and mesolimbic areas on the one hand, and the ventral striatum on the other. The second system includes activation of the subgenual area (Brodmann's area 25, located near the bottom of the cingulate cortex), key for donating behavior within such games. This is of interest, since the subgenual area is tied to "social attachment and affiliative reward mechanisms in humans and other animals" (2006: 15624). The affective roots of donation appear to draw upon both compassion and anger. Refusing to donate activated a network between the regions of the lateral-orbitofrontal cortex, the anterior insula, and the dorsolateral cortex; some of these regions, particularly the anterior insula,

also appear to be active in experience of disgust (Moll, Krueger et al. 2006).

Compassion itself has identifiable correlates, but for differing categories, both bodily and psychologically. Immordino-Yang et al. (2009) discovered that compassion for another's physical versus emotional condition was associated with activation in different parts of the cortex. Compassion for another's emotional condition was linked to the inferior/posterior posteriomedial cortices and the ante-

"To feel empathy for others, we may not need to rely only upon our own past repertoire of affective responses; indeed, in social situations of sufficient complexity and novelty (including those of the political variety), such an ability to empathize without prior shared experience of the affects involved may be a necessity."

rior middle cingulate, while compassion for another's "physical" state activated networks tied to the lateral parietal cortices, more responsible for bodily awareness ("musculoskeletal information"). Altruism often has been linked to

empathy, as Batson et al. (2002) have demonstrated. The neural mechanisms of empathy appear to be active in the experience of altruistic feelings. Empathy may have its correlate in activity in the posterior superior temporal cortex, particularly in the right hemisphere. Greater activity in this region has been tied to higher levels of self-reported altruism (Tankersley, Huettel and Stowe 2007). Empathy, defined as perspective-taking, is tied to activity in the "middle insula, aMCC, medial and lateral premotor areas, and selectively in left and right parietal cortices" (Lamm, Batson & Decety 2007: 42).

The phenomenon of empathy in simulation of others' internal experience presents a more interesting phenomenon, however, when a shared frame of reference for the feelings of others is lacking. Danziger, Faillenot, and Peyron (2009) studied the possibility of empathic responses in those "congenital insensitivity to pain (CIP)," and discovered that even in the absence of the ability to feel pain, such individuals showed similar levels of activation in their anterior mid-cingulate cortex and the anterior insula in response to witnessing pain as in healthy controls, and this held true whether the pain expressed was physical or emotional. This presents an interesting corollary to existing theorizing about the role of mirror neurons, attunement, and attachment. To feel empathy for others, we may not need to rely only upon our own past repertoire of affective responses; indeed, in social situations of sufficient com-

plexity and novelty (including those of the political variety), such an ability to empathize without prior shared experience of the affects involved may be a necessity.

The anterior insula is a key region apparently involved in many social behaviors, particularly in the perception of disgust (Wicker et al. 2003). Such disgust not only finds relevance in moral psychology in sensitivity to "purity" violations (Wheatley and Haidt 2005, Rozin et al. 1999, etc.), but also interacting with political ideology and orientation to produce different attitudes towards social groups (Hodson and Costello 2007). In one experiment, viewing individuals from a socially undesirable group that prompt disgust triggered less activation in a viewing subject's medial-prefrontal cortex (Harris and Fiske 2007). The insula itself may contribute to broader social cognition processing beyond such uses. Recent theorizing has suggested a role for disgust sensitivity and the insula in the psychopathology of anxiety disorders (Olatunji et al. 2010), as well as, more specifically, autism spectrum disorders. Di Martino, Ross and colleagues (2009), in a

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recent meta-analysis of neuroimaging studies including both ASD and neurotypical subjects, have discovered that the "right anterior insula, recently linked to social cognition, was more likely to be hypoactivated in ASD in the analyses of social studies" (Di Martino et al. 2009, 63). These findings suggest that the role of brain structures like the anterior insula extend beyond those of disgust to encompass other social (and moral) responses. In particular, responses and practices historically thought to be more socially and morally adaptive may work on precisely such circuits. Lutz et al. (2008) studied meditators undergoing a specific kind of loving-kindness/compassion meditation practice, and when presented with emotional sounds as stimuli, they found "increased pupil diameter and activation of limbic regions (insula and cingulate cortices) during meditation (versus rest). During meditation, activation in insula was greater during presentation of negative sounds than positive or neutral sounds in expert than it was in novice meditators" (Lutz et al. 2008, 1897). In a similar study, Lutz et al. (2009) discovered that such compassion meditation practices correlated strongly with increased BOLD (Blood-oxygen-level dependent,

proxy for neural activity) fMRI signals in the insula and an elevated heart rate. Such results seem, in structured cultural practices to promote compassion and prosocial emotions, greater emotional reactivity and empathy is possible, utilizing the same structures involved in disgust and other such emotions.

Research in the past several years has focused on a variety of affective and cognitive responses that arise within specific moral deliberative and behavioral contexts. When these are personal dilemmas in which danger or moral violation might afflict immediately salient others, the medial frontal gyrus, posterior cingulate gyrus, and the bilateral superior temporal sulcus all show greater activity. More distantly-felt, abstract, impersonal dilemmas recruit more "working memory" segments, such the dorsolateral prefrontal cortex and the parietal cortex (Haidt & Greene 2002).

The superior temporal sulcus may be active in judgments involving concrete, known individuals since it plays an important role in creating internal representations of the "personhood" of others. Certain neuropeptides and hormones also have been found to contribute to

morally-relevant emotions and behavior. One such neuropeptide is oxytocin, which encourages both trust in others (Zak, Kurzban, & Matzner 2005) and generosity (Zak, Stanton, & Ahmadi 2007). Oxytocin can prompt morally relevant emotions in individual actors, but also is a feature of watching the morally "elevating" behavior of others. Haidt & Silvers (2008) discovered that when breastfeeding women saw a morally uplifting video program, they were more likely to nurse their infants. Haidt and Silvers speculated that "moral elevation may involve the release of oxytocin, a hormone affiliated with lactation and affiliation" (2008: 291). However, it remains unclear as to whether oxytocin's importance is solely linked to affiliative and bonding behavior. Recent work by Shamay-Tsoory et al. (2009) suggests that in competitive games, occasions of relative loss and relative gain, producing the emotional responses of envy and gloating (schadenfreude) respectively, administration of oxytocin produced higher rates of both emotions. It appears that oxytocin may be part of a broader social regulatory set of networks in human neurobiology, primed not only to facilitate affiliative emotions and behaviors but also to regulate the behavior of others who deviate from the same. Other neurotransmitters are associated with resentful reactions to unfairness, such that serotoninselective reduction of 5-HT levels in tested subjects made them more ready to "get even" or punish offenders in a structured ultimatum game (Crockett et al.

2008).

## Moral and Political Identity and the Constructed Sense of Self

All of these brain processes underlying the architecture of moral processing are at the root of broader processes of identity, sense of self, and the social bonds they inform. Since so much of morality is affective or automatic and relies upon bodily representations matched between subjects

in various ways, this forms the substrate for a social self. holding values that are viscerally felt and bodily known. Social psychologists (Swann et al. 2009) have recently reported what they call "identity fusion" in subjects across a battery of experiments in which personal and social identities become "functionally

equivalent," resulting in more radical behavior – such that "in particular, fused persons were more willing to fight or die for the group than nonfused persons, especially when their personal or social identities had been activated." (Swann et al. 2009: 995) Thus identity as a "connection with all humanity" (Monroe 1996) represents a particular moral application of this phenomenon, while a restriction of its scope and a strict demarcation of its boundaries resembles the process Juergensmeyer (2003) terms "satanization."

Social processes of great import and identity formation thus draw upon the affective and cognitive repertoire the brain furnishes, alternately augmenting them, enhancing them, and – in the extreme instance – distorting them. Of these, a burgeoning field of research in the neurobiology of religious experience yields key

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ways in which self-processes and social circuitry are recruited and altered, yielding insights into their possible social consequences. Newberg et al. (2003) discovered that meditation and contemplative praver practices were associated with reduced activity in the superior parietal areas - areas known to integrate sensory

information into a unified model of the self in time and space. With this area silenced, the boundaries between self and other are viscerally felt to become more porous, even nonexistent, resulting in a felt sense of union or communion with the object of meditation or prayer. They postulate a penultimate state of Absolute Unitary Being (AUB) in which this felt alteration of the self's boundaries encompasses all that exists. The parietal foundations of such loss-

of-self feelings have been corroborated elsewhere (Johnstone and Glass 2008). The religious forms of this phenomenon are echoes of everyday functions of the parietal area in general, in the maintenance of self-other distinction, as illustrated when "virtual lesions" applied to this region impede the ability to distinguish faces of others from one's own (Uddin et al. 2006). The representation of the bodily self in the brain is a transient and dynamic process, capable of disruption in simulated illusions of bodily ownership of false limbs (Tsakiris et al. 2007), simulated out-of-body experiences (Ehrsson 2007), and the illusion of body-swapping (Petkova & Ehrsson 2008). Such a reorganization of self-processes may be plausibly understood as the biological and psychological antecedent of traditional religious practices and ways of life, ways in which social identities (and their attendant moralities) are shaped.

Religious phenomena, as alterations of the sense of self. also recruit social circuitry in unexpected ways - Newberg et al. (2006) discovered that the phenomena of glossolalia (speaking in tongues) produces diminished activity in the PFC areas but little reduction in parietal lobe activity compared to contemplative practices, while prefrontal activity (as well as that of the left caudate and temporal pole) were markedly reduced, suggesting that a sense of self was retained, but that the individual self had surrendered intentional agency to something else. Similarly, a Danish research team has uncovered the activation of

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social cognition areas during spontaneous prayer, such as "the temporopolar region, the medial prefrontal cortex, the temporoparietal junction and precuneus" (Schjoedt and Stødkilde-Jørgensen 2009). Theory of mind, in other words, was being applied. Subjectivity was being imputed to another hypothesized "self," capable of reciprocating social cognition and, in the limiting case of glossolalia, possibly taking over the operations of one's own. This recruitment of human social circuitry for such purposes follows basic needs of the human motivational system, such that in the absence of social connection. either natural or forced, the social cognition circuitry can ascribe "selfhood" (or at least agency) and its corresponding dignity and individuality - to objects not normally endowed with it, and deny it - and its corresponding dignity and individuality - to those outside the in-group. Epley, Akalis, Waytz, and Cacioppo (2008) term this phenomenon, which they successfully tested and supported in three studies, "inferential reproduction." The lonelier a person is, or is made to be, the likelier they will impute agency (including such descriptions as "a mind of its own," "free will," "intentions," "consciousness," "experienced emotions") to inanimate objects or appliances, to believe in the supernatural, and to anthropomorphize domesticated animals - as well as to perceive faces in ambiguous or unclear drawings. The recruitment of social circuitry to augment (or fabricate) agency might find its mirror image, as Epley et al. (2008) suggest, in how the social circuitry denies "selfhood" of the kind worthy of interaction to outgroups - as Harris and Fiske (2007) showed, viewing faces of radically dehumanized outgroups prompts next to no prefrontal cortex activation while showing activation in the amygdala and insula. The sense of self, both as bodily representation and agentic site of social cognition, is a process deployed both to construct and reify otherwise abstract concepts (such as "nation" or "party" or even "God") as well as to deconstruct the individuality and dignity of other human beings. As such, all neuroscientific studies that bear upon fundamental alterations of the sense of self - in religious ecstasy, in meditation, in phantom limbs, in dissociation, in love or in hate – are germane to discussions of the "political brain," and to the

scientific study of morality as well. If so much of politics and morality depends upon the fundamental processes of self and identity in the brain, with the stakes and consequences viscerally felt and embodied, it is no surprise that those conflicts touching most heavily on questions of self and identity are among the most intractable. Kruglanski et al. (2009) have pointed to the "significance quest" as one of the key drivers of motivation to suicide terrorism where "whether reflecting symbolic immortality and a place in the group's collective memory or concrete immortality as denizens of paradise, paradoxically, the willingness to die in an act

of suicidal terrorism may be motivated by the desire to live forever" (Kruglanski et al. 2009, 336). Suicide terrorism represents a very specific alteration of the sense of self - potentially an extreme example of the kind of "identity fusion" referred to by Swann et al. (2009) – one that must be mediated by specific neurobiological roots such as those elucidated in this review. As such, they represent not just a political but a moral challenge - one in which "sacred values" (Atran & Axelrod 2008) are pursued by "devoted actors" (Atran et al. 2003), less amenable to interestbased description or resolution, and more adequately addressed

by the symbolic, the cultural – the repertoire of identity.

#### Note

<sup>1</sup>This article describes some research that previously appeared in Kristen Renwick Monroe, Adam Martin, and Priyanka Ghosh. 2009. "Politics and an Innate Moral Sense: Scientific Evidence for an Old Theory?" *Political Research Quarterly*, 62: 614-634. We appreciate Sage's willingness to allow us to summarize these findings here; we thank Amy Mazur and Cornell Clayton for publishing work that does not fit into the traditional mold in political science.

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## Individual Differences and Comparative Politics

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Every human has a sympathetic nervous system (SNS) that reacts to events in the environment. This system pauses digestion, releases epinephrine, and heightens the senses, all to make possible an appropriate and directed response to a new stimulus. The SNS also thinks ahead and opens sweat glands in order to prevent the body from overheating should the response involve demanding physical activity. Since electricity moves more quickly when moisture is present, skin conductivity is a good measure of SNS activation.

In fact, skin conductivity change is widely accepted as an accurate and accessible indicator of SNS activation.

The presence of an SNS may be universal but their specific nature varies widely from person to person. For some people, little is needed to activate their SNS while, for others, the environmental stimulus must be quite evocative and explicit. More to the point, when activation does occur, the degree is demonstrably different across individuals – and it turns out that, at least in the samples of American adults that have been tested, these SNS variations correlate with political beliefs. More specifically, people whose skin conductance levels increase more than average when presented with

negative stimuli (pictures of human excrement, scary spiders, and houses on fire) tend to support policy positions that are more protective and traditional, positions often labeled as "conservative" in the sense that the term is used in American politics. For example, they tend to oppose foreign aid, gay marriage, and gun control and support capital punishment, warrantless surveillance, and the Iraq War (Smith et al., 2009). In contrast, people whose skin conductance levels increase more than average when presented with positive stimuli (beautiful sunsets, happy children, attractive foodstuffs) tend to take the opposite (i.e., "liberal") positions on these and similar issues.

SNS activation is not the only

physical trait that correlates with political beliefs. A similar pattern is apparent in reflexive reactions that occur much more rapidly than SNS activation. Individuals whose startle blink reflex (subsequent to a sudden, loud noise) registers greater blink amplitude (as measured by electromyography) tend to adopt some of the same "conservative" positions as those with larger skin conductance increases in the face of negative stimuli (Oxley et al., 2009; for more on physiology and politics, see Amodio et al., 2007). Moreover, moving out of the physiological and into the coqnitive realm, in a different sample, individuals who gaze longer at negative images (as measured by an eye-tracker) when presented with a mixed collage also tend to profess some of the same conservative issue positions as those reacting more strongly to negative events. Conversely, those who gaze longer at positive images tend to adopt liberal issue positions in parallel to the physiological patterns (Dodd, Hibbing, and Smith, 2009).

The reasons for these substantial physiological and cognitive variations across political beliefs are uncertain and likely complex. It may be that long-term features of the environment (or features present at particularly formative developmental stages) have shaped physiological and cognitive response patterns (and are differentially present for liberals and conservatives). Or it may be that genetics and/or prenatal biology play a role (Alford, Funk, and Hibbing, 2005; Hatemi et al., 2007; Fowler, Baker, and Dawes,

"Given the apparent uniqueness of individual political settings, it is easy to understand why some scholars initially are dubious of the relevance of biology to politics; but despite the fact that specific issues-of-the-day are culturally elaborated, certain dilemmas pertaining to the organization and conduct of mass-scale social life (that is, politics) are universal."

2008; Fowler and Dawes, 2008). Whatever the causal order, the key point is that at some unspecified stage political attitudes appear to become biologically instantiated.

Research on these matters is relatively recent and to date has taken place entirely in the United States. A crucial next step is to determine whether similar patterns obtain in a wide range of political contexts. Such efforts are in the planning stages and the results of these cross-national experiments could offer much about the nature of politics, attitude formation, and political variation across polities. The guestion I was invited to address in this essay is what, if anything, the findings on physiology, biology, and genetics mean for the field of comparative politics.

This topic could be addressed with more authority if we knew the outcome of the cross-national work alluded to above; still, evidence for the genetic heritability of political attitudes has been found in a variety of (to this point, mostly Western) countries and perhaps it is appropriate at this early stage to speculate on the potential contributions of this new research stream.

How could a connection between biology and politics even be hypothesized? Students of comparative politics are acutely aware that much of politics is culturally and temporally bounded/circumscribed. Issues such as the Iraq War, a military draft, and busing to achieve racial desegregation are only pertinent in certain countries at certain times. It seems implausible that physiological reactions to generic stimuli could be relevant to specific political attitudes in Hungary, Taiwan, and the United States since the issues on the political agenda are so different in these diverse locales. Given the apparent uniqueness of individual political settings, it is easy to understand why some scholars initially are dubious of the relevance of biology to politics; but despite the fact that specific issues-of-the-day are culturally elaborated, certain dilemmas pertaining to the organization and conduct of mass-scale social life (that is, politics) are universal. Every society in every era must deal with resource distribution (and redistribution), the nature of group leadership, punishment of norm violators, protection from external groups, and the extent to

which traditional values rather than flexible moral codes should be governing. The specific frames, labels, issues, and manifestations may be markedly different from place to place but issue conflicts always play out against the backdrop of universal bedrock dilemmas of political life. If the focus is at the level of universal dilemmas, a biological component of the political world becomes believable and even valuable, particularly to the field of comparative politics.

To illustrate with a concrete case, in the years between World War I and World War II, a common stance of conservatives in the United States was isolationism, a belief that the country needed to avoid dangerous foreign entanglements. After World War II and particularly with the onset of the Cold War, conservatives became the strongest advocates of an interventionist foreign policy that aggressively confronted the specter of communism wherever in the world it appeared. Isolationism and interventionism may seem polar opposites, so the fact that they were championed by the same ideological label and sometimes by the same individuals could be taken as an indication of the ability of the environment to shape politics. Missing from this argument, however, is the fact that in both cases the issue position was appealing to a particular type of individual because of the belief that the strategy in question would increase the security of the country – in one case by holing up in fortress America and in the other case by attacking the bad guys

overseas so they would not threaten American soil. The kinds of bedrock preferences that spring from biological sources are more likely to be revealed in people's deeper values and objectives than in their stances on ephemeral issues. In other words, the connection of politics to biology is more likely to be evident in the arguments and frames that are appealing to people than in their

attitudes pertaining to issues-ofthe-day.

In this sense, the key to taking advantage of both the tremendous insights generated by traditional scholarship in comparative politics and the potential of the exciting new biological turn in political science is to identify the benefits of each. Another example may be useful. Opinion polls indicate that support for the death penalty among the French popuences that spring from biological sources are more likely to be revealed in people's deeper values and objectives than in their stances on ephemeral issues. ... the connection of politics to biology is more likely to be evident in the arguments and frames that are appealing to people than in their attitudes pertaining to issues-of-the-day."

lace, though higher than typically thought, is perhaps half that found among the rank-and-file in the United States where, depending upon the specific wording of the item, approximately 80 percent favor it. What explains this difference? Are French and Americans

physiologically, even genetically, different? Do the French on average have relatively modest skin conductance increases when exposed to threatening or disgusting stimuli? Though we cannot say for sure since the necessary empirical tests have not been conducted, these possibilities seem unlikely. And the more important point is that the value of incorporating biology into research on

"The kinds of bedrock prefer-

politics does not hinge on its ability to account for mean national (or group) differences. It is more likely that opposition to the death penalty in France is the product of culturally specific factors such as historical events and France's integration with the other countries of Europe the kinds of variables that are typically employed in comparative politics.

What does this leave for biology to explain?

Mean support for the death penalty may vary widely from country to country but patterns of support at the individual level may still be similar everywhere. Residents of France who support the death penalty or oppose immigration may have relative biological ten-

dencies similar to Americans who share these positions. Empirical tests of these possibilities would say much about the underlying nature of politics and could help to explain the stubborn appearance of a left-right split (to use the labels that have been popular for the last couple of hundred years) in so many different places and during so many different eras (see Bobbio, 1996; Jost, 2006; Schwartz, 2007). The biological and the traditional approaches to politics are each best suited to quite different types of questions.

The argument against incorporating biology into the study of politics is often based on the belief that biological tendencies are illequipped to explain ephemeral events and culturally specific labels, but dismissing biology because it does not explain everything or, worse, by claiming its adherents believe it can explain everything, is counterproductive and inaccurate. Politics in the sense of current events may seem irrelevant to biology and can certainly be studied without reference to it, but this is not the only level at which political scientists can profitably operate. In light of the contrasting demands of different types of questions and the complementary nature of the traditional and the biological approaches, scholarly efforts would be significantly advanced if both were available for use when the situation demands.

An understanding of the culturally unique features of French politics would be substantially enhanced if this understanding were founded on an appreciation of crossnational biological patterns. Perhaps in some countries, people with elevated physiological responses to threatening stimuli are not as motivated to support security-enhancing policies as might be expected on the basis of larger cross-national patterns. Attempts to account for such realities would spur a richer research agenda than simply documenting mean variations in cross-national survey marginals. In sum, biology could be a valuable supplement to ongoing work in comparative poli-

"So many important questions concerning politics remain open that it would be a mistake to rule out potential answers because of hunches or normative preferences."

tics, addressing different kinds of questions and combining with traditional methods to provide different answers.

Although no one denies the importance of environmental factors in explaining politics, the untested and unstated longstanding assumption in political science is that only the environment matters, a conclusion that the movement to incorporate biology seeks to challenge. Is it really true that people are born devoid of any personality trait, physiological tendency, or ideological predispositions related to politics? Is it really true that an individual raised in a communist regime would be politically unrecognizable from that same individual who had instead, and counterfactually, been raised in a capitalist system? Is it really true that political attitudes never at any point in our lives become embedded in biological/physiological being? The answers to these questions may be yes – but the answers also may be no and science moves forward by testing assumptions rather than by falling in love with the convenience and comfort they afford.

So many important questions concerning politics remain open that it would be a mistake to rule out potential answers because of hunches or normative preferences. Social scientists confront a maddening conflation of patterns and exceptions but the proper reaction to this situation is eclecticism. Good scholarship is as poorly served by fixating on paralyzing uniqueness as it is by an infatuation with faux generalizability. Scholarship is best served by using commonalities to better identify the distinctive and by using the distinctive to better identify commonalities. Cultures are different but so are individuals, and the best of comparative politics will incorporate both of these observations.

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# Psychological Versus Rational Models of Human Decision-Making

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Rational choice models have significantly influenced, even dominated, many political science arenas. Although such models have been criticized on methodological (Green and Shapiro 1994) and substantive grounds, including accusations regarding their inability to uncover novel findings (Walt 1999), psychological evidence regarding the descriptive inaccuracy of the central assumptions surrounding rationality in human decision-making continues to mount. Such challenges present an important alternative conceptualization of choice, which can generate different, and potentially more accurate, hypotheses concerning the biological basis of political and social beliefs, attitudes, interests, and actions. A key set of findings from modern neuroscientific psychology for established models of political science concerns the structure and function of the human brain. These discoveries overturn some of the established notions of

human cognitive processing upon which rational actor models are founded and suggest that the rational choice characterization of the human brain no longer fits with what we empirically know of how the mind functions. In short, the rational choice model depends on a "mind-as-calculator" metaphor, positing a decisionmaking process based on the serial processing of information whereby individual actors can easily ascertain the universe of options available to them, render judgments regarding the subjective probability and utility of each, and decide which offers maximize utility.

Even when some of the central assumptions are relaxed to allow for the possibility of incomplete information or uncertainty in assessing probability, for example, the foundations of the model still rest on assumptions that current psychological research calls into question. Rational choice models assume that individuals make decisions by first sorting their perceived options into a set of clear, hierarchical preference orderings based on expected utility. Moreover, individuals make choices based on their own rather than the group's or others' utility. Thus choice is a matter of individual, calculative, sequential processing of information. Although there is a large literature going back decades which critiques these

assumptions (e.g. Simon 1978; Kahneman, Slovic, and Tversky 1982), our focus in this short essay is instead on what psychology has to contribute regarding two other assumptions in models of rational decision-making, namely the interpretation of information, or meaning, and the cognitive architecture of the brain.

Rational choice models assume that individuals objectively perceive reality; that is, every actor understands each situation or set of options more or less similarly. For example, given full information every citizen would equally well understand a tax cut or military strike or abortion. The choice of whether to pursue one option over another would depend on the subjective expected utility, i.e. costs and benefits, to the individual, but the underlying meaning of the action would nevertheless be clear and consistent across individuals. In other words, "taste" differs, but "meaning" does not. A second assumption is a "tabula rasa" vision of the human brain. A human brain does not meet enduring challenges (hunger, survival, etc.) in any specific way, but rather is an empty vessel entering the world ready to be filled in by whatever information it confronts in a relatively equivalent manner. Here rationalism and constructivism often share an image of the brain; even if one adopts a constructivist perspective and consid-

ers the forces of culture and socialization, the image of the brain remains one that is both passive and receptive to stimuli and information in an unbiased manner.

Recent research in psychology offers fundamentally different models of how humans process information. Such models rest on a more connectionist model that assumes patternbased recognition and learning through experience-based processing, rather

"...humans do not possess a single general purpose learning mechanism; instead, we have cognitive architecture which allows us to incorporate some aspects of culture ... much more easily and naturally than other aspects."

than serial processing of objective information. In brief, such models suggest that individuals do not so much observe and assess an objective reality, but rather actively participate in creating the perception of reality they experience. In this way, the difference is not so much between serial and parallel processing of objective information, but rather one which assumes a mind that comes into the world differentially prepared to learn some kinds of information and associations more readily than other kinds (Garcia and Koelling 1966; Harlow 1958; Cosmides and Tooby 1992).

In one famous experiment, Harlow (1958) showed that baby monkeys preferred a soft cloth "mother" over a wire one, even when the wire one offered food. This response was particularly pro-

nounced when monkeys were young, or felt threatened. This experiment showed that animals sought comfort which appeared in a particular form, even when that

form did not offer what was objectively more life-sustaining. In another famous sequence of experiments, John Garcia and Robert Koelling (1966) demonstrated that not all stimuli are equally likely to develop conditioned responses. Using rats, Garcia and

Koelling found that taste aversion occurred in response to illness but not other associated stimuli such as light or sound. In this way, he showed that equipotentiality - the proposition that all associations are learned equally easily – does not exist, as would be expected with any objectively rational learning mechanism. In fact, it is not the case that any unconditioned stimulus can be associated equally well and guickly with any unconditional stimulus as behaviorist followers of Pavlov such as Skinner assumed. Rather. it is easier to learn some associations than others and some objects are more easily conditioned to elicit certain responses than others.

In a similar way, humans do not possess a single general purpose learning mechanism; instead, we have cognitive architecture which allows us to incorporate some aspects of culture, such as spoken language, much more easily and naturally than other aspects, such as written language, which takes more enduring effort to master. If this were not so, scholars would need to explain the mechanisms by which humans learn to learn. Once we recognize that humans are born with certain innate brain structures designed to respond to particular challenges in ways which helped our ancestors to survive, it becomes possible to explore the myriad and specific ways in which the universal aspects of human nature interact with an infinite variety of environmental circumstances to create, sustain and change a wide variety of human cultures over time. That is, universal aspects of human nature, interacting with innate individual differences and distinct learning experiences, create a context in which environmental, political and social events and experiences generate a set of shared categories, meanings and interests. The interplay between such individual variance and socially shared cultural features of human political and social environments generates and sustains interpretations of power, gender, class and other critical variables in political science scholarship.

Such scholarship presents a potential basis for a cognitive model of cultural instigation and transformation. As Herrera has argued (2005), schema theory offers one way to approach how various social groups can develop different understandings of material conditions. Different people can

hold different knowledge structures and beliefs about how the world works (Ross and Nisbett, 1991), and these heuristics can explain one of the ways in which different individuals respond differently to the same experience. This can happen, for example, when individuals who espouse different ideologies react differently to same policy platform, or when individuals manifest identical reactions to guite different experiences. For example, some people feel afraid if they have to fly on a plane, while others become fearful if they have to talk in front of a large group of people. The reaction of fear is the same, but the precipitating event differs. What makes one person afraid may not elicit a similar response in someone else, who is nonetheless capable of feeling fear in the face of a different instigating event. Indeed, neuroscience research suggests that emotions are not peripheral, but rather can have a decisive impact on decision-making (McDermott 2004).

These divergent responses occur, at least in part, because people actively engage in constructing the realities they perceive, not just when they assign meaning to those events, but as they understand what literally occurs in the course of a given experience. Humans establish meaning through associations of networks connecting thoughts, feelings, and behaviors which remain as unique and distinct as the individual who experiences them. Functional magnetic resonance imaging (fMRI) shows that different individuals use identical neural networks

to process different tasks, and they often use distinct pathways to solve the same task. Differences in strategy then cannot be explained simply as a function of different brain geography; indeed, one of the significant insights offered by fMRI technology is that knowing where some thought or feeling occurs tells scholars little about why such events are processed in this way. Such insights challenge many foundational elements of rational choice models which assume that humans can accurately ascertain reality and choose among options in a transitive, invariant, and clear manner. Instead, individual human psychology interacts with specific aspects of the environment to establish meaning and generate reason. Reason and rationality do not, and indeed cannot, exist independently of such a creative cognitive architecture. Such learning is how humans come to interpret, assimilate and

"Yet an understanding of human decision-making as a profoundly creative process, in which both options and choices are equally constructed, deviates markedly from traditional interpretations which assume the existence of an objective reality which can be known, measured and manipulated." respond to the world around them.

Yet an understanding of human decision-making as a profoundly creative process, in which both options and choices are equally constructed, deviates markedly from traditional interpretations which assume the existence of an objective reality which can be known, measured and manipulated. Once scholars accept this alternative conceptualization, it calls many of our extant models of causation into question. A psychologically accurate theory of decision-making does not necessarily demand a relativist or radical constructivist view of reality; indeed, the fact that humans participate in the perception of reality in no way implies that all realities remain equally likely. Again, recall that equipotentiality does not hold; humans are biologically disposed to pay more attention to some things, such as sex and dominance, than others, such as race or bureaucracy (Cosmides, Tooby, and Kurzban 2003). Similarly, people see some associations more easily and naturally than others. However, psychological and constructivist models are not necessarily in opposition to one another either. Rather, an accurate model of human decisionmaking demands a reconceptualization of rationality as its foundation. Rationality remains a product, not a producer, of an innately associationist and experiential human decision-making process.

Complete citations for this issue are online at http://www.nd.edu/~apsacp/ backissues.html.

## Feature

# Addendum: Concepts That Hinder Understanding...

**Editors' Note:** During the summer 2009 issue, we published a symposium featuring short articles focused on exposing concepts hindering progress in comparative politics. Errors on our part as well as space constraints meant that we could not include all of the concept articles that we received. Between this issue and the next, we hope to publish the contributions which were not included in the summer 2009 issue.

### Here Comes the "-tion": It's Not Alright\*



Anthony Gill University of Washington tgill@u.washington.edu

One of the most central concepts in the sociology of religion – and by extension in the subfield of religion and politics – is "secularization." Most of us probably know what that means – less religion. Unfortunately, it is a little more complicated and confusing than that. "Secularization" has been defined alternatively as: a loss of personal belief in God by individuals; a decrease in the public participation of religion; or a separation of church and state. Some scholars might only consider one definition of this concept. Others might consider several. And in some cases, scholars might even implicitly begin by examining one definition of the concept and then unknowingly (or

perhaps nefariously) switch to another definition. The problem is that these different definitions (or components of a larger definition) are often at odds with one another. Separation of church and state might well lead to increased public participation in religion but leave the level of belief unchanged. Personal belief may be high in a society, but participation low. But if we only use the term "secularization" to refer to any or all of these possibilities, our analysis becomes unclear at best and contradictory at worse. This is a general problem that besets a number of concepts that end in "-tion": globalization, modernization, democratization, militarization, commodification. These terms are so broad-based and filled with so many competing or contradictory components that their inclusion as either a particular independent or dependent variable makes an analysis utterly useless. A better approach is to think about more specific definitions or analyze only a component part of one of these umbrella concepts. With large, poorly-defined "-tion" concepts, our studies risk quickly falling into tautology. So, if you are considering using any concept that ends in "-tion," here is my advice: shun it. Find a more refined concept. As for the original "-tion" concept, just let it be.\*\*

\* Hat tip to George Harrison.

\*\* Hat tip to Lennon & McCartney.

\*\*\* Sorry Ringo, you'll just have to settle with a photograph.

### Dataset Announcment Ethnic Power Relations

Lars-Erik Cederman, Brian Min and Andreas Wimmer have launched the new Ethnic Power Relations (EPR) dataset, which they have designed to track major power shifts in ethnic political constellations. Building on recent work in the study of ethnic politics and addressing several major holes in the widely used Minorities at Risk (MAR) dataset, EPR categorizes all Politically Relevant Ethnic Groups (PREG) according to their access to state power, measured by an ethnic group's control over executive power (including presidential, cabinet and senior military posts). The dataset relies on expert advice from nearly 100 country specialists to code over 700 groups in 155 countries from 1945 to 2005. The resulting 6-point scale categorizes ethnic groups' relationships to executive power: from their exercise of a total monopoly on that power, to their total exclusion from it. The dataset includes many different attribute variables describing any country's constellation of ethnic power that ought to prove interesting and helpful for future research, including, for example, sub-variables on the different ways that power-sharing ethnic groups treat other ethnic groups and the varieties of ways in which ethnic groups may be excluded from power. It also includes a wealth of descriptive information on each relevant ethnic group. Although the researchers' primary interest was to analyze questions related to ethnic conflict, the dataset ought to be of use for those interested in the many guestions related to the study of ethnic politics and its consequences. The EPR dataset can be downloaded from: http://dvn.ig.harvard.edu/dvn /dv/epr/

-Michael Dreissen

## **Review: Counting Veto Players**

Nara Pavão University of Notre Dame npavao@nd.edu



This article presents a review of several efforts to count veto players. In order to test empirically Veto Player Theory, two datasets were constructed: one by George Tsebelis and Eunyoung Ha,<sup>1</sup> and the other by Josephine Andrews and Gabriella Montinola.

Can we explain certain political outcomes by looking at the configuration of actors who wield some kind of veto power over them? What difference does it make having few/numerous or more homogeneous/ideologically divergent crucial political players deciding an issue? What kind of impact do these variables have on the incidence of war and peace, or on the kind of welfare spending, or even on the enforcement of rule of law across countries?

These broad and diverse questions can offer a sample of what Veto Players Theory (hereafter VPT) is concerned with. The theory, a result of an extensive body of work led by George Tsebelis (1995a, 1995b, 1999) is ambitious: it claims to be able to take into account the main differences between the institutional settings frequently discussed in the literature and normally studied through controversial and blurred categories (Tsebelis 2002). The debate over presidentialism versus parliamentarism, authoritarian versus democratic regimes, federal versus unitary and so on, if processed through the lens of veto players theory, could be framed in terms of the number of veto players – defined as "individual or collective actors whose agreement is necessary for a change of the status quo" (Tsebelis 1999, 593) - and the ideological distance between them.

The two main variables of VPT are the number of veto players and the ideological distance between them. For the first variable, both institutional and partisan veto players are considered. The former represents the president and number of legislative chambers that are required to consent to pass legislation. Partisan veto players, in turn, are the parties constituting a governing coalition. However, the simple sum of the numbers of institutional and partisan veto players does not generate the actual number of veto players that ought to be considered in analyses. Indeed, this calculation is a bit trickier, due to what Tsebelis labels the "absorption rule." The absorption rule states that institutional veto players - the legislative houses(s) and president – with the same political composition should be counted as only one player (1995). For example, in a federal system, the two legislative chambers should, a priori. be considered as two different institutional veto players. However, if the same party or

coalition holds majority in both houses, the absorption rule is applied and they need to be counted as only one veto player.

The second VPT variable – the ideological distance between veto players – has the power to define the ultimate effect of the number of veto players on policy change. In a system with many veto players, if the ideological distance between them is almost non existent, policy change will be more likely to occur, since it will be easier for the many veto players to agree on the issue under consideration. Similarly, if the ideological distance between a small number of veto players is large, the political system is expected to generate few policy changes due to the difficulty of coordinating very divergent preferences.

Tsebelis and Ha's database includes information on the number of veto players and ideological distance for 18 advanced industrial countries, from 1960 to 2000, with some missing cases due to unavailability of data in the earlier vears. The first indicator was built by adding both institutional and partisan veto players, adopting exactly the same coding procedure defined by VPT. The second indicator, to reflect ideological distance of partisan veto players, is the average of the standardized scores of three well-known measures of ideological location of parties: Castles & Mair (1984), Laver and Hunt (1992) and Huber and Inglehart (1995).

## Datasets

Andrews and Montinola's dataset contains information on veto players for 35 emerging democracies, and the operationalization of the indicators is also guided by VPT. The second explanatory variable of VPT – the ideological distance – was not operationalized by the authors, who justify this limitation by the lack of this sort of information for emerging democracies.

Despite the valuable effort that operationalizing concepts and gathering data represents, both datasets have flaws. The most noticeable is that the data is outdated, with the last observations recorded almost a decade ago. In Tsebelis and Ha's dataset, although the coverage of years is extensive, the profile of the sample is limited, given that only advanced industrialized countries were included, which reduces the usefulness of the data.

Andrews and Montinola's dataset covers a larger and more diverse sample of countries, although it also has limitations. In particular, the lack of a variable reflecting the ideological distance between veto players leaves an important piece of VPT ill-defined, and hampers this dataset's usefulness for validating the theory, in which the ideological position of veto players can neutralize the final count of institutional and partisan veto players.

Additionally, although Andrews and Montinola try to stay as close as possible to Tsebelis' original concept, the coding criteria they adopted differ from Tsebelis's and pose some problems. When faced with governments whose legislative coalitions do not constitute a majority in the legislature (a very common phenomenon in multiparty systems), Andrews and Montinola code the legislature as having no veto players. They justify this criterion by arguing that when the majority of seats is not controlled by any coalition, "the president has no coalition either to work with or to struggle against"

"Generally speaking, building a dataset on Veto Players poses many conceptual and practical problems. Veto Players Theory is clearly more 'parliamentary friendly,' and applying the logic behind it to study presidential systems in all their variations, for instance, can be challenging."

(Andrews and Montinola 2004, 77). However, although this argument might be reasonable when the goal of analysis is to explain policy change (or lack of change), it is likely to overlook some relevant information that can be useful in explaining other kinds of phenomena, as, or example, the need of political actors to interact and negotiate in order to pass legislation. Although it is admittedly difficult to count the veto players in such circumstances, a more detailed analysis of the particular configuration of governments would be a possible - albeit time consuming – way of doing so.<sup>2</sup> lf, on the other hand, the system is extremely fragmented to the extent that the political system is almost ungovernable (no legislation is being passed, for example), then all parties in the legislature should be considered veto players. These criteria would enhance the validity of the indicators, providing a more accurate portrait of the disposition of veto players in highly fragmented political systems.

Generally speaking, building a dataset on Veto Players poses many conceptual and practical problems. Veto Players Theory is clearly more "parliamentary friendly," and applying the logic behind it to study presidential systems in all their variations, for instance, can be challenging.

Despite the prevalence of VPT in political analysis, its empirical applications are surprisingly few. Attempts to test its predictions are inherently circumscribed because the two datasets analyzed here do not seem to have been submitted to systematic reliability checks. On the other hand, to my knowledge no other substantive dataset on veto players has been built. However, some attempts to measure the explanatory power of veto players have relied, instead, on other sources of data, particularly on Witold Henisz's Political Constraint Dataset (POLCONIII).3 The measures of political con-

### Datasets

straints developed by Henisz are an estimation of the feasibility of policy change, defined by him as "the extent to which a change in the preferences of any one actor may lead to a change in government policy" (Henisz 2000). Examples of works that have employed this dataset to apply veto players theoretical concepts are Stasavage and Keefer 2003, Carlin and Love (unpublished), Henisz 2004, Mansfield, Milner and Pevehouse 2007, Henisz and Mansfield 2004.

Although this indicator does not specifically seek to measure the concept of Veto Players as developed by Tsebelis, it nonetheless could potentially serve as a proxy, contingent on the dataset's capacity to capture the effects expected from different veto player configurations. Despite its impressive coverage, the Dataset on Political Constraints is rather business-oriented - since it aims to capture the degree to which the government is committed to not interfering with private property rights (Henisz 2000) - and has its own flaws. In particular, the dataset's indicators appear in this context to be closer to the general notion of Veto Point than to the specific concept of Veto Players as theorized by Tsebelis. While the core of Tsebelis' analysis centers on the players that hold veto power, Henisz focuses on institutions with veto power, which the players inhabit. Additionally, whereas Tsebelis limits his analysis to electorally generated veto players, Henisz includes the Executive, the lower and upper houses of Legislature, the Judiciary, and

sub-federal branches of government, regardless of their actual veto power.

Beyond its broad contribution of providing a very appealing way to measure the impact of institutions. VPT is particularly important for comparative studies, as it simplifies the work of political scientists when comparing political systems along single dimensions. Further improvements to the data on veto players - linked both to coverage and also more appropriate methods to operationalize the concept - would not only be extremely helpful for future empirical research but also for strengthening VPT. These improvements, for instance, could be based as starting point from the recent development of data on government composition and the ideological positions of political parties.

### Notes

<sup>1</sup> The dataset was originally developed by Tsebelis and subsequently updated by Eunyoung Ha. <sup>2</sup> In Mexico, for instance, after PRI lost a majority in the legislature, none of the three parties in the legislature was able to control individually the majority of the seats. According to Andrews and Montinola's criterion, these parties would not add any veto players to the total count. However, according to my criterion, Mexico's legislature after PRI lost a majority in 1997, for instance, had three partisan veto players. Although no party or coalition individually managed to hold a majority, PRI had a coalition formed by PAN and PVEM. Therefore, by looking at the specific dynamics of Mexico's politics, it is possible to code it accurately.

<sup>3</sup> The 2010 release (with data to 2007) is now available at

http://www-management.wharton. upenn.edu/henisz/

Complete citations for this issue are online at http://www.nd.edu/~apsacp/ backissues.html.

### Dataset Announcement Policy Positions of Presidents and Parties in Latin America

During the end of 2006 and the beginning of 2007, Nina Wiesehomeier (Instituto de Ciências Sociais da Universidade de Lisboa) and Kenneth Benoit (Trinity College Dublin) conducted expert surveys measuring policy positions of political parties and presidents in 18 Latin American countries. The resulting data set offers estimates for 146 political parties and 18 presidents on up to 11 primary policy dimensions per country, plus a general left-right dimension. Policy positions were measured on general dimensions such as economic or social policy, but the data also covers positioning on more specific dimensions such as minority rights or the question of security. The data (in Stata format) and additional information such as the questionnaire wording are available at www.wiesehomeier.net. Please direct any questions about the data to

nina.Wiesehomeier@ics.ul.pt.

## **Review: The State Legitimacy Index**

Robert Brathwaite University of Notre Dame rbrathwa@nd.edu



Some have argued that legitimacy is a core concept for understanding the processes of political and social interaction since it deals with issues pertaining to power, authority, and representation. However, others point out that legitimacy is an abstract concept; one difficult, if not impossible, to operationalize because indicators of legitimacy are endogenous to the political outcomes that scholars expect legitimacy to influence. Whichever side of this debate in the literature one embraces, those interested in legitimacy should examine Bruce Gilley's "Meaning and Measure of State Legitimacy: Results for 72 Countries," European Journal of Political Research, no. 45 (2006): 499-525. Gilley constructs an index that measures state legitimacy for 72 countries containing approximately 83% of the world population for the year 2001. The scores are included in Table 3 of the article, and while the dataset is not currently available to download, it is available on request from the author.

Gilley argues that understanding legitimacy is important because political legitimacy conditions the structure and operation of states. Two empirical claims underpin Gilley's conceptualization of legitimacy: 1) illegitimate states are more unstable because they are prone to overthrow or collapse; and 2) illegitimate states are more likely to have fractured ruling elites that accelerate/exacerbate regime instability.

Gilley claims that "a state is more legitimate the more that it is treated by its citizens as rightfully holding and exercising political power." Legitimacy is conceptualized as a continuous variable that accounts for citizens' preferences regarding the rightful exercise of political power. He also argues that legitimacy is a multi-dimensional concept with three distinct dimensions: views of legality; views of justification; and acts of consent. He bases his concept on constitutive factors on the assumption that the three dimensions he identifies are the lower-order indicators of the underlying concept of legitimacy. Researchers interested in legitimacy should take heed of Gilley's discussion on whether legitimacy is best operationalized based upon constitutive or substitutive (effect) indicators since this can have significant implications for measurement.

"Views of Legality" measures whether the state exercises political authority within a legal framework that citizens expect. Gilley identifies three indicators, all of which are derived from the World Values Survey 1999-2002 (WVS). The first indicator measures the level of respect for individual human rights (WVS Question 173). The second indicator asks about the level of confidence in the police forces (WVS Question 152), and the last indicator asks about the level of confidence in the civil service (WVS Question 156). All of these indicators are coded on a four-point ordinal scale.

"Views of justification" captures how citizens respond to the moral justification that the state uses in the exercise of political authority, and whether that justification operates within the framework of shared values and principles prevalent in society. There are four indicators for this dimension. The first indicator asks about the level of satisfaction with democratic development (WVS Question 168), and is coded on a four-point ordinal scale. The next indicator asks respondents to evaluate the current political system (WVS Question 163A), and is coded on a ten-point ordinal scale. The third indicator comes from the Global. Regional and Euro-Barometer and Candidate Surveys 2001-2002, and asks about the level of satisfaction with the operation of democracy. This indicator is coded on a four-point ordinal scale. This dimension's final indicator measures the percentage of civil protests that have incidences of violence. This indicator is taken from the World Handbook of Political and Social Indicators IV, 1996-2000.

"Acts of consent" measures the level of affirmation for the state

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exercising political authority by citizens. Gilley identifies two indicators for this dimension consisting of the level of voter turnout (taken from the International Institute for Democracy and Electoral Assistance, 1996-2002), and the level of quasi-voluntary taxes as a percentage of total central government revenues (taken from the International Monetary Fund, Government Finance Yearbook, 1996-2002).

Gilley aggregates his indicators into a ten-point legitimacy score. The aggregation rule is not discussed in the article, but is available on request by the author. Gilley creates a weighting based on the correlation coefficients between the three dimensions of legitimacy and political stability scores (taken from the World Bank Institute for 2002). "Views of Justification" is weighted as 50% of the underlying concept, and the other dimensions 25% each. Three issues that arise from Gilley's State Legitimacy Index should be addressed for this dataset to be of more practical use to a wider audience. Gilley conceptualizes legitimacy from a strictly domestic perspective, which does not account for two important aspects of the underlying concept. First, legitimacy operates in the international as well as in the domestic context. International developments involving international institutions, conflict, treaty violations, etc. have an impact on the how legitimate a state is perceived by both international and domestic audiences. Gilley's focus on citizens' attitudes towards the state does not capture this aspect of legitimacy. Second, efforts to conceptualize legitimacy should account for material factors such as state capacity or institutional configuration, not just attitudes regarding the normative factors associated with rightful authority. Brooks and Wohlforth (2008) have noted that the constraining effects of legitimacy may be contingent on material factors such as power or capabilities, which should be reflected in any conceptualization of legitimacy.

The next issue this index generates concerns the appropriateness of the indicators to measure the different dimensions of legitimacy, and the entwined nature of democratic regime type and the underlying concept. The indicators for acts of consent consist of voter turnout and paying quasi-voluntary taxes. The theoretical justification for their use is that if citizens think the state legitimate then they will vote in elections and pay their taxes, signaling their affirmation of the state. This would imply that those who do not vote or evade quasi-voluntary taxes believe the state is illegitimate. Using this theoretical justification the low voter turnout in US local elections. where turnout is less than 25%, and EU Parliamentary elections would thus be interpreted as indicating that a large segment of these two polities believe them to be illegitimate. This is a good illustration of the potential measurement validity problem that certain indicators may entail, and suggests that using them may not be theoretically appropriate.

A similar concern involves the indicators for "views of justification." Two of the indicators are questions about the satisfaction of democratic development and satisfaction with the operation of democracy. This implies that legitimacy is related to the representativeness of the political system. On first glance this relationship seems intuitively and theoretically justified. However, by using indicators of democratic development and satisfaction, Gilley is making an empirical claim about the relationship between state legitimacy and democratic regime type. The implication of this claim is that if legitimacy is tied to levels of democratic satisfaction and development then autocratic regimes must be illegitimate since these attributes are not present. This issue also brings into question Gilley's weighting scheme. Gilley weights "views of justification" at 50% of the underlying concept because he argues that the moral justification the state uses to exercises political authority underpins social and economic interactions. However, this is based upon the correlation coefficients these different dimensions have with political stability. This implies that a consequence of legitimacy is political stability.

Since autocratic regime types are missing democratic openness and satisfaction then by consequence they should be less stable. Prezeworski et al. (2000: 211-213) found some empirical support for this assumption with the finding that dictatorships were more prone to war, but they also found that dictatorship were less likely to experience other elements of

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socio-political unrest (riots, strikes, and anti-government protests). I would argue that given the qualified nature of this relationship that more empirical support would be needed for this to be the basis for measurement. While Gilley's weighting of his indicators based upon an empirical relationship is in principle a good practice for research design, more research is needed to establish the causal arrow between legitimacy and democracy before we could accept Gilley's current conceptualization.

In conclusion, the extent to which this dataset is useful in measuring legitimacy or in exploring the political outcomes that legitimacy should influence will depend on one's notion of how legitimacy should be conceptualized. Those who believe that legitimacy is best operationalized from a normative and domestic context will find Gilley's index very useful. Those who view legitimacy in a broader sense as accounting for domestic, normative, and international sources will find the index less useful for reasons discussed here. Nevertheless, scholars interested in the topic of legitimacy would be well served by examining Bruce Gilley's State Legitimacy Index as he identifies the conceptual and methodological issues involved in measuring and operationalizing this important concept.

Complete citations for this issue are online at http://www.nd.edu/~apsacp/ backissues.html.

## APSA Comparative Politics Section, 2009-10 Nominations and Awards Committees

### Luebbert Book Award

The committee will award the Gregory Luebbert award for the best book published in comparative politics in 2008-9. Nominations made by the Press will ONLY be considered for this Award. One copy of the nominated book should be submitted to each committee member by February 15, 2010.

Committee membership: Stephan Haggard, University of California, San Diego, Chair (shaggard@ucsd.edu) Raymond M. Duch, University of Oxford, Nuffield College, (raymond.duch@nuffield.ox.ac.uk) Randall A. Hansen, University of Toronto, (r.hansen@utoronto.ca)

### Luebbert Article Award

The committee will award the Gregory Luebbert award for the best article published in comparative politics in the last year. Nominations should be sent by March 1, 2010.

Committee membership: Ruth Collier, University of California, Berkeley, Chair (rcollier@berkeley.edu) Robert Pekkanen, University of Washington (pekkanen@u.washington.edu) Lily Tsai, Massachusetts Institute of Technology (I tsai@mit.edu)

### Sage Best APSA Paper Award

The award, supported by Sage Publications, is for the best APSA paper presented at the 2008 APSA meetings. Nominations should be sent by March 1, 2010.

Committee membership: Dorothy J. Solinger, University of California, Irvine, Chair (dorjsoli@uci.edu) Matthew Adam Kocher, Yale University (matthew.kocher@yale.edu) Daniel Ziblatt, Harvard University (dziblatt@fas.harvard.edu)

### Lijphart, Przeworski, and Verba Data Prize

The Data Set Award for a publicly available data set that has made an important contribution to the field of comparative politics. Nominations should be sent by March 1, 2010.

Committee membership: Bo Rothstein, University of Gothenburg, Chair (bo.rothstein@pol.gu.se) Jose Cheibub, University of Illinois (cheibub@illinois.edu) David Cingranelli (davidc@binghamton.edu)

# Call for Bids to Edit APSA-CP

Bids are now open for the editorship of APSA-CP, the newsletter of the Comparative Politics Section of the APSA. The newsletter is the major public face of the Section and includes symposia, debates, review articles, news of the subfield, and data on PhDs in comparative politics. All members, supported by their Universities, are encouraged to submit a bid. Here are the guidelines for submitting bids, for the running of the newsletter, and for the responsibilities of the bidding institution, adapted from those used in 2001 and 2005:

#### General:

1. The editorship of the newsletter will be for a four-year term and may be renewed for a second four-year term.

2. The next term will begin in the fall of 2010 with responsibility for the winter issue of 2011.

3. The deadline for submitting a bid for the editorship is March 15, 2010.

4. A three-person committee, to be appointed by the president of the Section, will decide on the winning bid.

5. The selection committee's decision will be announced by April 1, 2010.

#### The selection committee will use the following criteria to evaluate bids:

1. Responsibilities of the editorial team include identifying and developing themes, contacting potential contributors, selecting and editing submissions, and overall oversight of the production and mailing process. 2 The editor or co-editors must be able to commit an estimated working time of 2-3 weeks per issue, spread out over a longer period of time.

3. An assistant editor is expected to be appointed to handle layouts, convert email submissions, arrange for printing and production, and manage a web site. Estimated time spent by the assistant editor is four weeks per issue. Compensation for this position comes from the bidding institution.

### The Bidding Institution:

1. Should have a comparative politics faculty sufficiently large to support an editor or co-editors and an assistant editor, and have a pool of possible replacements.

2. Should be prepared to provide office space, computer equipment, copying, and phone support.

3. Should have a pool of graduate students from which to support an assistant editor.

4. Release time for faculty will be taken into account but is not a requirement.

### Financial Arrangements:

1. Section dues will pay for production and mailing expenses up to \$5000 per year.

2. Other expenses should be covered by the proposing institution, including compensation for the assistant editor and any other student assistance employed.

3. The current plan is to allow Section members to choose whether they would like to receive a printed copy or only have access to the electronic version online. However, proposed budgets should include the possibility that most of the 1600 members will continue to receive the printed version.

### Proposals should include:

1. Names and CVs of proposed editor or editors;

2. A prospective budget;

3. A statement of administrative support from the proposing institution;

4. Possible themes, directions, special topics and other ideas of the bidding editors for the Newsletter may be proposed and will be taken into account by the seletion committee.

### The selection committee consists of:

Michael Coppedge, University of Notre Dame (coppedge.1@nd.edu) Catherine Boone, University of Texas, Austin (cboone@austin.utexas.edu) Miriam Golden, University of California, Los Angeles (golden@ucla.edu)

Correspondence should be sent to Michael Coppedge.

Susan Stokes President (susan.stokes@yale.edu)

### **APSA-CP Newsletter**

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