

RECONCEPTUALIZING DEMOCRACY: HARNESSING SOCIAL COMPLEXITY AT  
THE STATE-SOCIETY INTERFACE

By

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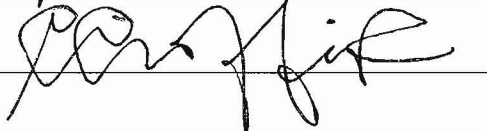
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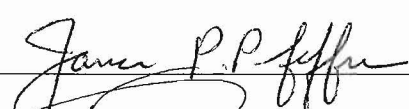
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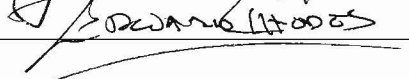
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Interface

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## **Dedication**

To Shannon, and to our two beautiful children, Maia Constance and Wyatt David.

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In the last eight years I have moved seven times and finished three degrees, and I seem to leave debts of gratitude wherever I go. Completing my doctorate has been an enormous undertaking only made possible by the caring support of many others, only some of whom I have space to thank in name. First, I owe a tremendous debt of gratitude to my wife, Shannon, without whom my life would have taken a very different (and much less joyous) turn, and without whom I certainly never would have completed, or even pursued, this project. Thank you for supporting my endeavors, even when it seemed that the thinking-to-writing proportions of my time were approaching the absurd. Thank you, too, for all of the prodding and pushing, and more importantly, faith.

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## Abstract

### RECONCEPTUALIZING DEMOCRACY: HARNESSING SOCIAL COMPLEXITY AT THE STATE-SOCIETY INTERFACE

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Existing governance classifications suffer from underdeveloped conceptual definitions of democracy, dominated traditionally by minimalism and, more recently, liberal millenarianism, which has inspired operationalizations characterized by overspecification and normativism. Using complexity theory, the author offers an alternative conceptualization of democracy, as one among several strategies for managing social complexity. Democracy involves harnessing, rather than suppressing or controlling, the social complexity endemic to human society. This conceptualization is considered historically, offering an evolutionary explanation for democracy's recent emergence and diffusion. The thesis operationalizes this conceptual definition by proposing, testing, and evaluating the *Harnessing Social Complexity Index*, a unique quantitative measure of democracy.

## **Preface**

The direction of my life was irrevocably altered in the autumn of 2002, when, as an intern on Capitol Hill, I witnessed the alignment of political forces in the United States behind the Bush administration's proposed invasion of Iraq, partially justified on the basis of democracy promotion. At the time I was a sophomore at The George Washington University, taking my first courses in comparative politics and political theory, with a budding interest in Asian political history. At the same time that the Bush administration and its advisory neoconservative coalition was arguing that the formation of a new democracy in Iraq would be swift, quickly consolidated, and welcomed by the Iraqis, I was discovering that comparative democracy scholars knew very little about the causal forces behind democratic transitions, and that in the few transitions led by the United States in the past, notably Germany and Japan, which were strong candidates for democratic governance in the first place, with industrialized economies, previous history with democratic institutions, and homogenous cultures, democratic consolidation took years. In Japan nearly a decade passed between the beginning of US nation-building and the country's first national elections. Democratic self-governance in the Federal Republic of Germany took nearly as long. The United States itself only gave its African-American minority the right to participate in politics in the 1960s, women earned suffrage only forty years before that, and we had endured a terrible civil war before settling into

democratic norms. I remember asking my supervisory staffer the obvious question: who were we to go about building democracies in the world, and why should we be focused on doing so quickly? Perhaps not surprisingly, I spent the rest of my semester sorting mail and stuffing envelopes while the US readied itself for war.

Aside from brief forays into the comparative analysis of space policy and public healthcare policy, this unanswered question has driven my research agenda ever since. Indeed, this experience indirectly drives this thesis, in that it confronts the relative dearth of democratic theory, and specifically the tendency to leave democracy out of its historical context. Why does democracy work? Why had a majority of the world's states adopted democratic governance strategies by the early 1990s? How could Frank Fukuyama and Larry Diamond be *so sure* that democracy was universally applicable and a superior form of government, especially in the face of many failed or stalled democratic transitions? Could there be a logical explanation of the same phenomena that does not depend on normative judgment on democracy's moral superiority? As I became interested in the science of measurement and the art of creating and maintaining cross-national datasets, I was intrigued by another question, that I was convinced was related to the others, although for a long time I was unsure of the linkage: why do existing minimalist metric schemes fail to differentiate among industrialized democracies, and particularly among emerging quasi-democracies?

After being exposed to complexity theory, and specifically Axelrod and Cohen's theory of harnessing social complexity, I made an intuitive leap that allowed me to bridge the gulf between these seemingly disparate questions. Liberal milleniarialism and

minimalism both suffer from shockingly underdeveloped conceptual definitions. This has forced Fukuyama and the liberal millenarian school to rely on teleological explanations of democracy's rise, and explains the weakness of operational measures developed by both schools. Particularly, both schools of thought ignore the historical contingency behind democracy's development, and ignore the function of democracy, as one among several forms of governance. Like a disease with multiple symptoms, these measurement and theoretical problems have a common cause, which few have addressed.

This thesis is the culmination of several years of intellectual labor, supported by the brilliant and insightful members of my dissertation committee, to propose an alternative way of conceptualizing democracy, as well as a new operationalization with which to measure it. This thesis offers a unique combination of complexity theory, democratic theory, the theory of measurement, and a historical perspective to make important theoretical and empirical contributions to our understanding of what democracy is, how democracy works, and why it may be a logically preferable form of government to its alternatives. Although this thesis builds on the ideas and contributions of many, any errors are of course my own.

## 1. Introduction

Previous scholars have tried to understand contemporary liberal democracy by tracing its origins in Ancient Greece or by examining its etymological heritage. Others, notably Robert Dahl and Giovanni Sartori, have defined democracy in descriptive and prescriptive terms, treating democracy as a unique system of power distribution, without reference to its historical development. Instead of using the ideas of democracy and liberalism on power distribution as a beginning, this thesis posits a conceptualization of democracy beginning with one of the core functions of all governance forms, namely the mitigation of social conflict in the face of widespread social interaction in relatively dense communities.

Monarchs and dictators have traditionally dealt with this social interaction by minimizing it through strategies of suppression or repression. The totalitarian Soviet state managed social complexity and mitigated conflict by controlling it, merging the state with civil society and remaking society in Stalin's preferred form. As a form of government, democracy must serve the same function of mitigating conflict, but adopts a different strategy, that of *harnessing*, rather than *minimalizing* or *controlling* complexity. Harnessing is a significantly more complicated strategy, because interaction must be freed but regulated, and involves a leap of faith about humanity that leaders of states utilizing the other strategies are unwilling to make: people can interact in politically-

significant ways without killing one another and disrupting society. This strategy is based on the premise that, through harnessing, the information generated by free-but-regulated interaction can be incorporated into policymaking, allowing the state to learn faster, become more flexible, and produce more effective policy outcomes. Harnessing social complexity might also give the state an edge in performing its other core functions, such as preserving territorial sovereignty and managing public policy problems.

Instead of viewing governance as a continuum from autocracy to democracy based on power distribution (i.e. from rule by one to rule by many), we can view government forms as the set of possible strategies for dealing with social complexity. We can thus envision a three-dimensional continuum, with anarchy (no control over social interaction), authoritarianism (minimalization of social interaction), and totalitarianism (near-absolute control over social interaction) at the three extreme. In the middle, delicately poised at a balance between order and chaos, is democracy, characterized by a strategy of harnessing social complexity.

This thesis takes this new conceptualization as its starting point, and argues that the two dominant schools of democratic theory, the minimalists represented by Dahl and Sartori, and liberal millenarians represented by Huntington, Fukuyama, and Diamond, are both inadequate. Minimalism conceives of democracy in terms of a small set of governance tactics, usually a combination of elections and citizen protections, which when operationalized struggles to differentiate among democracies and the emerging class of “illiberal democracies” or “anocracies.” The origins of this school are described in detail in the next chapter.

The liberal millenarian school has more to say about historical development, but relies on normative judgment, teleology, and historical coincidence (i.e. the failure of 1930s fascism and the collapse of the totalitarian Soviet Union) to explain democracy's historical rise and contemporary superiority.<sup>1</sup> In *The End of History?* Fukuyama proposed that humanity, or at least its industrialized western fraction, has reached the last of several stages of ideological development and conflict, with liberal democracy, combined with free market economics, representing the "homogenous state" predicted by Hegel and Kojève to lay at the end of historical development. For Fukuyama, as for his idealist forebears Hegel and Kojève, history is understood teleologically, with distinct stages of history characterized by conflicts over the ideas, problems, and in particular, unsettled debates, of the previous era. Thus, to make his argument that liberal democracy is the end stage, Fukuyama attempts to demonstrate that there remain no "fundamental contradictions in human life that cannot be resolved in the context of modern liberalism." To this end, he identifies fascism and communism as the only major contenders against modern liberalism since the beginning of the nineteenth century, with the former (fascism) being destroyed by both its own internal failures and its material war-time destruction, and the latter being destroyed by the economic inefficiency of state-planning and the massive political discontent that Soviet policies had created by the mid 1980s. The failure of these two systems, combined with an argument that democracies are unlikely to wage war against each other, in part because, for Fukuyama, they agree on the

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<sup>1</sup> "Liberal millenarianism" was coined by Susan Marks, "International Law, Democracy, and the End of History," in *Democratic Governance and International Law*, eds. Gregory Fox and Brad Roth (Cambridge: Cambridge University Press, 2000): 532-66.



only question of importance (i.e. are systems characterized by liberalism morally superior to those of non-liberalism?), means for Fukuyama the beginning of a particularly peaceful period, at least among those who have achieved contemporary liberalism, with economic concerns replacing great power war as the central problem of international relations.

Fukuyama's argument that humanity has reached the end stage of historical development has in many ways defined democratic theory since the time of his writing, inspiring the liberal millenarian school. While some have found it easy to mock or dismiss Fukuyama's ideas, his view point that democracy is both morally superior and universally applicable has come to influence academic writings on democratic transition, democratic peace theory, and democracy promotion, notably in the works of such eminent scholars as Larry Diamond, Marc Plattner, and Bruce Russett.<sup>2</sup> In addition to reintroducing contemporary scholars to the work of Hegel, *The End of History?* breathed new life into comparative politics, initiated important and now-long-standing debates over democratic peace theory and the advisability of international democracy promotion efforts, and helped to spread awareness of the empirical realities that democracies, according to all commonly-used measurements, have come to represent a majority of the world's countries, and that democracy has come to hold a monopoly on legitimacy among

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<sup>2</sup> For example, see: Larry Diamond, *The Spirit of Democracy* (New York: Times Books, 2006); Marc Plattner, *Democracy without Borders? Global Challenges to Liberal Democracy* (New York: Rowman and Littlefield, 2007); Bruce Russett, *Grasping the Democratic Peace: Principles for a Post-Cold War World* (Princeton, NJ: Princeton University Press, 1993). This point is also made here: Christopher Hobson, "Beyond the End of History: The Need for a Radical Historicization of Democracy in International Relations," *Millenium Journal of International Relations* 37 (3) (2009), 636.

governance forms.<sup>3</sup> Although most members of this school do not identify as such, liberal millenarians typically agree on a teleological concept of history, with liberal democracy as the defining telos, and that the universal spread of this form is both positive and inevitable. It is also clearly evident in the foreign policies of the George W. Bush administration.<sup>4</sup> Zizek describes this trend succinctly: “the dominant ethos today is ‘Fukuyamaian,’: liberal-democratic capitalism is accepted as the finally-found formula of the best possible society.”<sup>5</sup>

This “liberal millenarian” view of democracy, however, reflects not only Fukuyama’s morality, but a morality that has been argued to be fairly universal. Indeed, in *Democratic Theory* Sartori abandons a logical proof of the superiority of democracy compared to its alternative forms, and argues instead on normative grounds, that liberal democracy is preferable to autocratic forms because people universally can be expected to prefer liberty over repression and choice in leadership and policies over lack of choice. In more recent formulations, this moral argument has been complemented with empirical findings that liberal democracies are consistently better at protecting human rights, and are associated with higher levels of individual wealth (although causal arguments in this regard remain hotly contested). While this author does not choose to debate democracy’s moral superiority, the use of this moral superiority to explain historical process is worthy

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<sup>3</sup> Larry Diamond, *The Spirit of Democracy* (New York: Times Books, 2006): 32-3.

<sup>4</sup> Tony Smith, *A Pact with the Devil* (New York: Routledge, 2007); Piki Ish-Salom, "The Civilization of Clashes': Misapplying the Democratic Peace in the Middle East," *Political Science Quarterly* 122 (Winter 2008): 533-54. This point is also made in Hobson, "Beyond the End of History...", 636.

<sup>5</sup> Slavoj Zizek, *In Defense of Lost Causes* (London: Verso, 2008), 421; quoted in Hobson, "Beyond the End of History...", 635.

of criticism. According to Fukuyama, liberal, free market, democracy is the end stage in the evolution of political systems in part because it is morally preferable, but particularly because the world's leaders have come to recognize it as morally preferable. Can the moral code of liberal millenarianism, or, even if we assume that superiority of liberal democracy and the free market is universal, the moral code of the majority of the world, explain the spread of democracy as a governance form? Moreover, Fukuyama does not explain the apparent success of democracy using any elements of democracy itself, but rather on the basis of the failure of two prominent alternatives, leaving democracy the ideational victor by default, which would not indicate that the grand historical question of political system has been solved, merely postponed. The argument that democracy won because others failed tells us very little about what democracy does differently, or perhaps better, than its alternatives (other, of course, than being morally right).

Furthermore, dialectic theories of history assume that history has a distinct starting point for the beginning of historical stages, usually in the last two millennia, which ignores archaeological and anthropological evidence of human government systems existing for the last ten thousand years. Fukuyama's theory may be able to explain democracy's recent spread, although his hypothesis cannot be tested empirically, but the rest of history is left unexplained, and the very development of democracy is treated as an exogenous variable: modern liberal democracy, a grand moral and philosophical experiment, apparently sprang forth fully-formed from the 19<sup>th</sup> century like Athena from the head of Zeus. This ignores the consistently negative view of democracy held by scholars even into the late nineteenth century, and echoes the weakness of

contemporary democratic theory, which has generally ignored the historical contingency behind, or path dependence of, contemporary democratic governance.

This lack of historical and theoretical grounding also results in the weaknesses of maximalist, usually normative, extant measurement schemes of democracy, covered in the following chapter, where the influence of liberal millenarian scholars like Fukuyama and Diamond is clearly evident. Moreover, the maximalist schemes inspired by the liberal millenarian school suffer from over-specification and are frequently based on both normative and subjective indicators.

Importantly, both schools of thought on democracy are underdeveloped theoretically. The questions debated by Dahl and Sartori have largely been ignored by more recent scholars, who have been responsible for operationalization, leaving the minimalist conceptual definition without a solid theoretical foundation. While Dahl and Sartori provide their own, quite comprehensive, theories of democracy, operational schemes based on these are limited by their reliance on Joseph Schumpeter's dated advice: to classify elections by the holding of elections. Liberal millenarianism, on the other hand, seems to take pride in requiring no theoretical grounding at all, relying on teleology and democracy's moral superiority where logic is lacking.

This thesis proposes that a complexity-based conceptualization of democracy as a governance strategy can succeed where both dominant schools fail, and that an operationalization based on this conceptual definition will be a more effective classification scheme. The thesis thus responds to two critical failures of the two dominant schools: (1) neither minimalist nor liberal millenarian theories of democracy

can account for the historical emergence of democracy, nor its recent spread and ideological ascendancy; and (2) operationalization schemes based on minimalism and liberal millenarianism struggle to differentiate among liberal democracies, and to classify illiberal electoral and liberal autocratic regimes.

In response to the first problem, chapter two reviews democratic theory, tracing the development of the minimalist school descended from Schumpeter, and popularized by the immensely influential works of Dahl and Sartori, and the maximalist liberal millenarian school represented by Fukuyama and Diamond, and also provides a history of the concepts of democracy and liberty, before addressing the recent proposal of a functional, but normative, definition of democracy by Stan Ringen. Using contributions from complexity theory, chapter three then proposes an alternative conceptualization of democracy, as one among many conflict-mitigation (governance) strategies, unique not for its tactics (e.g. elections, civil liberties) but for its strategy of harnessing, rather than repressing or suppressing, social complexity. Chapter three then justifies that conception by placing it in the context of the evolution of human governance strategies since the Neolithic Revolution. This chapter demonstrates that, unlike either minimalism or liberal millenarianism, the complexity-based conceptualization can be used to account for democracy's historical emergence and recent diffusion.

Having demonstrated that the alternative conceptualization is plausible, chapters four and five then respond to the second problem, focusing on operationalization and measurement of this new conceptual framework. Chapter four reviews existing metrics of governance, examining strengths and weaknesses of six prominent datasets from both

minimalist and maximalist traditions. The study culminates by proposing, detailing, and testing a unique measurement scheme, the *Harnessing Social Complexity Index*, in chapter five. The final chapter reviews the argument, explores the academic and policy ramifications of the proposed conceptual and operational definitions, and outlines paths for further theoretical and empirical research.

## 2. Democracy: From Etymological to Functional Definition

In seeking to develop a new measure of democracy, and governance more generally, it is appropriate to begin with a conceptual definition of the term, before moving on to an operational definition that can be used for assessment purposes. A literal definition of the term, which is a simple translation of the circa fifth-century Greek word *demokratia*, meaning rule by, or power of, of the people, often provides a starting point for those seeking to understand democracy. However, pursuing the meaning of the term etymologically produces more questions than answers. What constitutes “the people?” What “power” do the people have, and over whom? How does “the people” go about ruling or exerting power? An etymological definition provides no clear answers, and also ignores the evolution of the term over the last two millennia. The democracy of the twenty-first century bears little similarity to the democracy of Athens, wherein the concepts of individual rights and popular sovereignty were nonexistent, only a small portion of the populace participated in politics, and where participation meant voting directly on legislation. The Greeks give us the name and the roots of the modern model, but pursuing today’s meaning of democracy in the original meaning of *demokratia* is neither logical nor fruitful. We are not interested in what the word means, so much as the nature of the regime that the word represents.

If consulting a dictionary is not useful, where then do we turn? Ordinarily, an investigator might turn to a major author or a mainstream theory on her topic, but in this case “the towering, single major author on democracy does not exist.”<sup>6</sup> Although discussions of the characteristics and merits of democracy span the history of western political thought, from Pericles to modern times, modern academic discourse rarely addresses the questions considered by historical scholars, and seems to have lost touch with the definition of the term, as it was used even as recently as the mid-nineteenth century. The word itself has also changed considerably, and has become, as Sartori points out, a nearly-universal honorific associated with political regimes. Consider, for example, the quality of democracy in the Democratic People’s Republic of Korea. The use of the word democracy to describe the totalitarian dictatorships associated with the Communist bloc after World War II did serious damage to the epistemic integrity of the word, and the development of terms like “social democracy,” “capitalist democracy,” “economic democracy,” and “industrial democracy” complicate the word even further. Furthermore, contemporary regimes described as democracies are often synonymous with “liberal democracies,” fusing two words that are not only genealogically distinct, but which were, until the mid-1800s, considered antonyms.

In short, we have entered into an age of “confused democracy,”<sup>7</sup> where the meaning of the word democracy has been so hopelessly obfuscated as to lead some scholars, most notably Robert Dahl, to simply develop new words, like “polyarchy,” to

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<sup>6</sup> Giovanni Sartori, *Theory of Democracy Revisited* (Chatham, NJ: Chatham House, 1987), 3.

<sup>7</sup> Ibid.



describe the modern democratic political system. This author, however, sides with Sartori in arguing that the creation of new words to overcome the confusing epistemological evolution of old words is neither sustainable nor desirable.<sup>8</sup> Words matter, as “words are the glove” for which “ideas are the hand,” and we cannot simply abandon one of the most frequently used words in the political science vernacular because it has become confused, nor can we arbitrarily define the term, in order to make our lives easier. Thus, if our goal is the development of a conceptual definition of democracy, to precede an operational definition and assessment, we must begin by discerning the evolutionary path of the *word* in order to understand and assess the *thing*.<sup>9</sup>

### **A Brief Genealogy of Democracy and Liberalism**

Before returning to the problem of defining democracy today, it is necessary to explore the changes in the meaning of the term democracy over time. Also important is a discussion of the evolution of the term “liberalism,” with which, from the late 1800s, democracy has been conceptually linked and (until recently) empirically congruent. Indeed, while the origin of the *word* democracy rests with the Greeks, the origin of the *thing*, as it exists today, rests rather with the concept of liberalism, born of Locke and his contemporaries only as recently in the 17<sup>th</sup> century.

The word democracy is perhaps the most historically reviled in the comparative politics vocabulary. Since the bloody end of the Athenian experiment with democracy, the

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<sup>8</sup> Sartori, *Theory of Democracy Revisited*, 7.

<sup>9</sup> *Ibid.*, 479.

concept underlying the word democracy, the government form, has been considered to be unworkable, chaotic, and either anarchic (each person ruling himself) or tyrannical (with those least capable of ruling exercising power for their own benefit, at the cost of the aristocracy). Indeed, Christopher Hobson notes a frequently forgotten connotation of the Greek *kratia*, which originally held a “forceful and almost violent dimension,” a dimension which, assisted by the contempt of Plato and Aristotle, colored the understanding of democracy throughout antiquity: democracy would lead to a violent tyranny of an uneducated, poor multitude acting in concert to, in all likelihood, force egalitarianism on and seize property from the rich minority.<sup>10</sup>

The lasting influence of these opinions is evident in the writings of the American Founding Fathers, most notably Madison, who sought to portray the American constitution not as constructing a democracy, but a representative “republic,” and indeed actively denied that they were developing a “democracy.”<sup>11</sup> The experience of the Jacobin democracy in France did nothing to improve this understanding of democracy’s instability, and the adoption of Marx and Engels of the term, meaning for them a kind of enforced equality by the proletariat, further obscured its meaning. It was not until after World War I, with Wilson’s idealism as a driving force, that democracy became normatively positive,<sup>12</sup> and by this time it had become wedded, in effect, to liberalism. Still, however, democracy was not universally accepted as normatively positive until after

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<sup>10</sup> Christopher Hobson, “Beyond the End of History,” *Millenium: Journal of International Studies* 37, no. 3 (2009), 647.

<sup>11</sup> *Ibid.*, 648.

<sup>12</sup> *Ibid.*, 650.

World War II. Interestingly, it was during the interwar period that suffrage was extended in the existing liberal democratic states, with Britain assigning all adult males and women over age thirty suffrage in 1918, and the United States federal government guaranteeing women suffrage shortly thereafter.

Liberalism, unfortunately, has an etymology as confusing as democracy. To begin, when this study refers to liberalism, we refer neither to the partisan political position, in the United States or elsewhere, nor to the economic meaning of liberalism, which refers more precisely to the capitalist ideology of Adam Smith and his intellectual descendants. Instead, this discourse means by liberalism the concept that individuals have the right to be free from persecution by the state, and to a set of rights and liberties. This idea emerged from the work of Locke and Montesquieu in the 17<sup>th</sup> century, and was richly developed afterwards, particularly in the work of Kant and his intellectual descendants. The word itself, however, is much younger. The word liberal, of the same lineage that is now used when describing a liberal democracy, was actually coined quite recently, in about 1810 in Spain, and only came into widespread use in European intellectual circles a few years before the revolutions of 1848.<sup>13</sup>

Interestingly, liberalism and democracy were not originally considered congruent and, in fact, formed two sides of a major ideological rift. “The basic relationship between liberalism and democracy is generally rendered... as a relationship between liberty and equality.”<sup>14</sup> Nineteenth century scholars, most notably Alexis de Tocqueville, considered

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<sup>13</sup> Sartori, *Theory of Democracy Revisited*, 370.

<sup>14</sup> *Ibid.*, 383.

liberalism, referring to the concept of an individual's right to be free from government persecution, and to certain sets of rights and liberties, to be incompatible with and antithetical to democracy, which was then understood to mean a forcible leveling of society. In this sense, and in the context of a Europe ravaged by the French Revolution and its aftermath, and guided to some extent by the ideas of Rousseau, democracy had illiberal implications: specifically, that a tyranny of the majority, to use the Madisonian phrase, could easily strip rights from individuals. Or, more harshly, that, by demanding equality, democracy essentially stripped individuals of their individuality, an inherently illiberal idea.

Sartori's history of the term is particularly enlightening at this point, as liberalism and democracy began to take on new meanings when confronted with the development of socialism in the mid-nineteenth century.<sup>15</sup> As late as 1841 Tocqueville is recorded as stating, "I passionately love liberty, the rule of law, and respect for rights, but not democracy,"<sup>16</sup> but only a few years later, in the midst of the 1848 revolution, he had changed his use of the word: "Democracy and socialism are linked by only a word, equality; but the difference must be noted: democracy wants equality in freedom, and socialism wants equality in poverty and slavery."<sup>17</sup> Only a few years before, Tocqueville would likely have described democracy in exactly the same words he was using to describe socialism in 1848. Because of the rise of socialism, where liberties and equality

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<sup>15</sup> Sartori argues that liberalism has been the victim of unfortunate timing in several important circumstances, forcing it to become the homonym for several different conceptual definitions, which are superficially similar enough to seriously confuse the meaning of the word. See *Ibid.*, 372-83.

<sup>16</sup> Quoted in Christopher Hobson, "Beyond the End of History," 639.

<sup>17</sup> Quoted in Sartori, *Theory of Democracy Revisited*, 373.

were incongruent, political theorists began to unite liberalism and democracy. For Tocqueville, liberalism became the end and democracy (meaning equality and representative government) the means. Tocqueville, of course, had spent most of adult life examining the American democracy, which, unlike the democracy of Rousseau, had been founded with at least a nominal goal of protecting and advancing liberty (in the Lockean sense). The European experience, according to Sartori, was the opposite, where democracy was experienced first in the egalitarian barbarism of the French Revolution, only to be augmented by the addition of liberalism in the 1848 revolutions.

The modern, western, democracy, in practice, incorporates both liberalism and democracy, and in most uses the word democracy combines both meanings. Civil liberties protect the citizen from the state, incorporating liberalism, while juridico-political equality allows for citizens to govern the state, through free and fair elections of representatives and/or executive leaders. While liberalism concerns the vertical relationship between the state and the citizen, and in practice limits the power of the state over individuals, democracy concerns the horizontal relationship among citizens, and the distribution of decision-making power.<sup>18</sup>

Rather than continuing to mean only “equality,” the word democracy has come to mean a government inclusive of both elements, albeit with liberty having a more dominant historical and philosophical role. Recently, the rise of illiberal states with electoral mechanisms has given rise to clarifying “democracy” with either “liberal” or “illiberal,” to reflect these different regime types. Far from illiberal democracy being a

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<sup>18</sup> Sartori, *Theory of Democracy Revisited*, 384.

new phenomenon, or an example of a simply deficient democracy, an analysis of the development of these words actually demonstrates that liberalism and democracy were quite distinct in the early 19<sup>th</sup> century, both in concept and in practice.

This genealogy demonstrates that the modern meaning of the word democracy is not at all like the democracy of antiquity, and has come to include the concept of liberalism, indeed to be dominated by the concept of liberalism, in the common vernacular. Although some comparativists now clarify the word “democracy” with varying degrees of “liberalism,” this is still a relatively uncommon practice, and the opposite, liberal autocracy, is rarely encountered in political science discourse at all, despite some notable possible cases, such as Taiwan under Chiang Ching-kuo, or Singapore under Lee Yuan-kew. Rather than the universal honorific the word democracy has become, really in the last one hundred years, democracy has historically been reviled by scholars from Pericles to Tocqueville.

### **Modern Attempts at a Democratic Theory**

Attempts to develop a comprehensive theory of democracy with a strong conceptual definition, capable of explaining democracy in historical context, have been surprisingly rare. This author agrees with Anthony Birch, among others, in confidently claiming that the most comprehensive text on democratic theory ever written is Sartori’s *Theory of Democracy Revisited*, followed by its 1962 antecedent, *Democratic Theory*.<sup>19</sup>

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<sup>19</sup> Anthony Birch, *The Concepts and Theories of Modern Democracy* (London: Routledge, 1993); Giovanni Sartori, *Democratic Theory* (Detroit: Wayne State University Press, 1962); Sartori, *Theory of Democracy Revisited*.

Sartori sets out to define democracy, both in descriptive (how it is) and prescriptive (what is ought to be) terms, arguing that these definitions may be different, but should be related. While the descriptive definition is important for us to understand what democracy “really means,” the prescriptive definition allows us to assess to what extent a democracy is in fact democratic, or the extent to which the “real” approaches the “ideal.” Furthermore, he sets out to “prove democracy,” by which he means to demonstrate that democracy is a superior form of government to its alternatives. Notably, Sartori abandons a logical “proof” of democracy, instead relying on moral superiority: an important foreshadowing of liberal millenarianism.

In both *Democratic Theory* and *Theory of Democracy Revisited* Sartori was primarily responding to the work of Robert Dahl, one of the only other 20<sup>th</sup> century scholars to offer a comprehensive theory of democracy. For Dahl, democracies, which he preferred to term polyarchies, are systems “in which power over officials is widely... shared.”<sup>20</sup> For Dahl, being a polyarchy meant that all members of the political unit, which could range from a small organization to a nation-state, would be given an equal say in the governance of the unit, and he saw this *usually* being fulfilled by voting in elections. But, in so doing, Dahl provides a definition that fuses both descriptive and prescriptive definitions, and also leaves us without a clear definition of democracy, aside from his claim that it is the ideal form of his new term, polyarchy. Furthermore, Dahl’s full definition of polyarchy is quite cumbersome, including some eight requirements, which extend well beyond the core of his polyarchy, a one-person one-vote majority-rule

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<sup>20</sup> Quoted in Sartori, *Theory of Democracy Revisited*, 7.

decision making structure, to include civil liberties such as rights of assembly, speech, and a free media.

Sartori instead argues for three distinct, but related, definitions: *a contrario* (what democracy is *not*), descriptive (what democracy *is*), and prescriptive (what democracy *ought to be*). In terms of what democracy is not, Sartori states that: “a democracy is a system in which no one can choose himself, no one can invest himself with the power to rule and, therefore, no one can abrogate to himself unconditional and unlimited power.”<sup>21</sup> In short, democracy does not refer to a system where all power is held by all, but rather where all power is held by none. He borrows directly from Dahl, describing democracy as an “electoral polyarchy,” or “the byproduct of a competitive method of leadership recruitment,” but making regular elections of leaders, in order to control and influence them, a necessary element, which for Dahl was a secondary consideration, a tactic rather than strategy.<sup>22</sup> Thus, despite creating a truly comprehensive framework for the advancement of democratic theory, Sartori comes to rely, in practice, on elections as the key distinguishing feature between democracies and non-democracies.

Both Dahl and Sartori represent a direct continuation of Joseph Schumpeter’s competitive theory of democracy, and its resurgence in the core of democratic theory is critically important, not least because the work of these two individuals has come to dominate our understanding of what it means to be democratic. Both Dahl and Sartori, despite using fairly broad conceptual definitions of democracy, rely on a single tactic –

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<sup>21</sup> Ibid., 206-07.

<sup>22</sup> Ibid., 152.



elections – as they become more specific about how to differentiate between democracies/polyarchies and non-democracies: “democracy is a procedure and/or a *mechanism* that (a) generates an open polyarchy whose *competition* on the electoral market (b) attributes power to the people and (c) specifically enforces the responsiveness of the leaders to the led.”<sup>23</sup> It may have been true, empirically, that the vast majority of states holding elections in 1962, or in 1921 for Schumpeter, were liberal democracies, but neither scholar makes a convincing case that elections form an appropriate defining characteristic of the governance form. Indeed, reading the works of both could easily lead one to believe that defining the democratic governance form in terms of elections, recognized by both as one among several possible tactics for popular governance, would be erroneously superficial.

While this descriptive definition is important for many reasons, Sartori’s discussion of existing prescriptive definitions also sheds light on contemporary understandings of democracy, where more direct forms of democracy, such as the referendum style practiced in Switzerland, are considered to be more democratic than representative forms. If we take direct democracy as a prescriptive definition, then existing democracies are largely unrelated to the ideal which we expect them to emulate. Concurrently, some believe that democracy, given its genealogy indicating equality, ought to be a government where the leaders are equal to the led, not only in juridico-political terms, but also in terms of governing ability: a government without elites. Possibly for

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<sup>23</sup> Ibid., 156.

this reason, democracies, and more often developing democracies, have frequently fallen prey to anti-system populists.

Instead, Sartori suggests a prescriptive definition based on two elements, which he describes as a reference theory of elites: “a democracy ought to be (a) a selective polyarchy, and (b) a polyarchy of merit.” He suggests we use this tool to assess democratic performance then, on the basis to which (a) elected elites compete, and (b) in which leaders are selected on the basis of their talents, or merit. Thus, rather than a prescriptive definition of democracy which devalues or fears elites, or in which leadership by the “common” person is considered more democratic than leadership by those with demonstrated ability, Sartori’s prescription is that a democracy should be gauged on the basis to which people select talented leaders (elites), and to which elites compete in a polyarchy, such as a legislature, within the larger polity-polyarchy.

While Dahl and Sartori are arguably the titans of twentieth century democratic theory, a few other scholars have attempted to create comprehensive theories of democracy. Peter Bachrach, responding to the elitist theories of democracy offered by Schumpeter and Sartori, proposed a “self-developmental theory of democracy” that argued democracy was dependent on direct participation in politics by the populace, and can be seen as a forerunner of arguments for populist, or deliberative, democracy.<sup>24</sup> However, Bachrach did not extend his theory to the processes by which this could be achieved, and indeed noted the impossibility of removing elites from governance. How citizens can participate, other than through a form of industrial democracy (i.e. self-

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<sup>24</sup> Peter Bachrach, *The Theory of Democratic Elitism* (London: University of London Press, 1969).

government in the workplace), is left unclear. The deliberative-representative argument in democratic theory is notable for being one of the few contemporary debates dealing with the fundamental nature of democracy; most contemporary debates, such as that over sequencing and gradualism, work primarily on small questions around the edges.

Another alternative to the Sartori/Dahl models is the pluralist school, developed by Latham and Truman, which argues that democracy hinges not on elections, but by competition among interest groups and civil society organizations, in which citizens can directly participate.<sup>25</sup> While this emphasis on civil society organizations did represent something new, which was largely missing from the work of Schumpeter, Dahl, and Sartori, defining democracy by these terms exclusively poses a serious problem. If democracy refers to a state of equality, then a system of competition among groups and elites, which have widely different resources and power available, is destined to become more of an aristocracy than a democracy, because the wealthy will be able to form more powerful groups than the poor, which may not have the time or resources to develop groups at all. As Birch notes, the homeless have few organizations with which to combat discriminatory legislation.<sup>26</sup>

Finally, an economic approach to democracy represents an equally comprehensive alternative to the democratic theories of Dahl and Sartori, exploring *why* people participate in politics, and specifically in voting, despite the influence of any given individual being statistically insignificant in the face of national populations numbering

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<sup>25</sup> Earl Latham, *The Group Basis of Politics* (New York: Octagon Books, 1957); David Truman, *The Governmental Process* (New York: Knopf, 1951).

<sup>26</sup> Birch, *Concepts and Theories*, 55.

in the tens of millions. Anthony Downs' *Economic Theory of Democracy*, and the works of those it inspired, such as Baumol, Olson, Buchanan and Tullock, and Barry, offer important theoretical and computational developments in this field.<sup>27</sup> However, their work is largely irrelevant to those who seek to develop a comprehensive understanding of what democracy *is*, and how to assess its presence and quality. Of note, however, is that Downs, despite focusing on the reasons behind political behavior in a democracy, offered a definition of democracy quite similar to that of Schumpeter, Sartori, and Dahl: a polity in which each citizen gets one vote in periodic, majority-rule elections for leaders.<sup>28</sup>

While this review of 20<sup>th</sup> century theoreticians may seem academic, the ideas of Dahl and Sartori, more than any other democratic theorists of the period, have significantly shaped our understanding of what democracy is, what it should be, and, thus, how it should be measured. Although several other schools of thought developed independently of these two scholars, they seem to have had the largest impact on contemporary conceptions of democracy and represent the “mainstream” of democratic political theory. Most democratic theorists in their wake have addressed minor points of debate that these two left unclear. For example, a great body of literature discusses whether representative, deliberative, or discursive democracy would produce “more democratic” results, a question that Sartori deals with in only a single sub-section of a

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<sup>27</sup> Anthony Downs, *An Economic Theory of Democracy* (New York: Harper, 1957); William J. Baumol, *Welfare Economics and the Theory of the State* (Cambridge, MA: Harvard University Press, 1965); James Buchanan and Gordon Tullock, *The Calculus of Consent* (Ann Arbor: The University of Michigan Press, 1962); Brian Barry, *Sociologists, Economists, and Democracy* (London: Collier Macmillan, 1970).

<sup>28</sup> Downs, *An Economic Theory of Democracy*, 23-24.

chapter, totaling four pages.<sup>29</sup> Another contemporary debate, sequencing versus gradualism, regards whether, in a democratic transition, elections or liberties, with their accompanying institutional structures, should be provided first. Again, while this debate has been important and rich, it represents a minute sector of democratic theory, addressed by both Dahl and Sartori as a part of broader singular theories, and as consequences and corollaries of their underlying theses. The entire sequencing/gradualism debate assumes, in the spirit of these theoretical forerunners, that elections, rights and liberties are the only critical factors to democratic development, and that the only issue available for question is timing; never in their analyses do they consider whether this conceptual definition of democracy is complete or valid.

This tendency of democratic theorists to address smaller and smaller questions, leaving macro-level theory behind, is exemplified in Shapiro's 2003 description of the contemporary field, *The State of Democratic Theory*. This text covers several contemporary debates, including those over the comparative benefits of deliberative and competitive democracy, presidential and parliamentary structures, sequentialist versus gradualist transition frameworks, cultural and institutional factors in regime longevity, and economic effects of democracy, among others, but pays no attention to the broader conceptual issues tackled by Dahl and Sartori and largely ignored since. Conceptual definitions are left entirely unchallenged, almost as a matter of form, and indeed, Sartori receives not a single citation in the entire text. Comparative political science has largely

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<sup>29</sup> Concise arguments for both deliberative and discursive democracy can be found in: John Dryzek, *Deliberative Democracy and Beyond* (London: Oxford University Press, 2000); Amy Gutman and Dennis Thompson, *Democracy and Disagreement* (Cambridge: Harvard University Press, 1996); Bruce Ackerman and James Fishkin, "Deliberation Day," *Journal of Political Philosophy* 10: 129-52 (2002).

accepted the theoretical constructs of Sartori and Dahl, leaving their arguments largely unchallenged, and, for the most part, offering no alternatives on a similar scale. As a result, we have come to understand democracy, and approach its measurement, from their conceptual definitions, both of which hinge, in practice, on elections. Ironically, despite Schumpeter's *Capitalism, Socialism, and Democracy* offering a theory of democracy that was, at best, ill-informed on political theory (for example, describing eighteenth-century Utilitarians as developers of the "classical doctrine of democracy" and believers in, rather than opponents of, Rousseau's *volonte generale*),<sup>30</sup> his offhand comment that we should distinguish democracies on the basis of elections continues to dominate our understanding of the concept.

### **Contemporary Definitions of Democracy**

In keeping with Bollen's conventional standards of measurement, our first task is to provide a theoretical (conceptual) definition of democracy. Despite Sartori's well-crafted argument against arbitrary definitions of terms, the word democracy has, in contemporary social science usage, been defined differently by nearly every scholar to take it up. In practice, however, differences among most academic definitions have been slight, with nearly all taking a minimalist focus on elections, or expanding to include a combination of elections (political rights) and a minimum of protections (civil liberties). Of those scholars to move beyond this minimalism, such as Samuel Huntington and Larry Diamond, their major contributions have been adding elements of "democratic culture,"

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<sup>30</sup> Schumpeter, *Capitalism, Socialism and Democracy*, 252.

usually interpreted in terms of popular support for democracy as a government form, and sometimes economic development and the rise of the middle class.<sup>31</sup> Rather than based in theory, however, these seem to be based on inductive reasoning, given correlates between democratic performance and these other areas, and are associated with the normatively-driven liberal millenarian school.

In the case of the former, minimalist camp, democracy is defined more consistently with its pre-twentieth century meaning, describing the exercise of power by a populace comprised of juridico-politically equal citizens. Schumpeter might be seen as the founder of this camp, followed by Downs, Sartori, Dahl, Lipset, and, leading more recent scholars, Adam Przeworski.<sup>32</sup> For these scholars, as Lipset articulates so eloquently, democracy is comprised of two core principles: inclusiveness and contestation,<sup>33</sup> with nearly-universal suffrage (the free of “free and fair”) describing the former, and regular elections wherein people make choices for national executive and legislative positions (the fair of “free and fair”) representing the latter.<sup>34</sup> Including additional concepts, such as liberties, obscures democracy’s meaning, and possibly

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<sup>31</sup> Samuel Huntington, *The Third Wave* (Norman, OK: University of Oklahoma Press); Larry Diamond, *Spirit of Democracy* (New York: Times Books, 2008).

<sup>32</sup> Adam Przeworski, “Minimalist Conception of Democracy: A Defense,” in Ian Shapiro and Casiano Hacker-Cordon, eds., *Democracy’s Value* (Cambridge: Cambridge University Press, 1999).

<sup>33</sup> Dahl also mentions these two dimensions as underlying democracy, as Lipset and Lakin note as their inspiration, but his definition of them is ambiguous, with all eight of his conditions for polyarchy falling under contestation: Robert Dahl, *Polyarchy*, 4.

<sup>34</sup> Seymour Martin Lipset and Jason M. Lakin, *The Democratic Century* (Norman, OK: University of Oklahoma Press, 2004), 19-37. For a much older, more influential, but otherwise very similar, articulation, see Seymour Martin Lipset, “Some Social Requisites of Democracy,” *American Political Science Review* 53 (1959): 69-105.

confounds democracy, as a means, with one or more ends of democracy, depending on the perspective of the researcher.

In the case of the maximalist camp, definitions of democracy reflect the term's evolution to include both democracy and liberalism, with the civil liberties dimension reflecting liberalism. Gastil and Bollen are some of the few academics included in the latter camp, which includes much of the recent discourse on the topic.<sup>35</sup> For this school, democracy is determined not by inclusiveness and contestation, but by multiple dimensions, including as a minimum the popular exercise of power, and by protections of the populace from the state. As with the minimalist school, elections are critical to citizens' exercise of power, but maximalists also require extensive freedoms of the population in the political system, usually including freedoms of speech, organization, assembly, and the press. Some of these scholars, such as Gurr and Bollen, perceive civil liberties as one *means* of democracy, which is defined more broadly, while others, such as Larry Diamond, perceive the provision of liberty as the end of democracy, which should be incorporated into both definition and measurement. Other characteristics of democracy sometimes expected by maximalists include environmental and social justice provision, freedom from war and corruption, rule of law, economic vitality, and high voter turn-out, among others.

An alternative to both of these camps has recently been proposed by Stein Ringen, who argues that democracy should be defined in terms of its purpose: a state is

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<sup>35</sup> For example, see Raymond Gastil, "The New Criteria of Freedom," *Freedom at Issue* 17 (Winter 1973); Kenneth Bollen, "Issues in the Comparative Measurement of Political Democracy," *American Sociological Review* 45 (1979): 370-90; Ted Gurr, *Polity II: Political Structures and Regime Change, 1800-1986* (Boulder, CO: Center for Comparative Politics [producer], 1989. Severn, MD: Center for Systemic Peace [distributor]).



democratic “if its citizens hold the ultimate control over collective decisions in a securely institutionalized manner.”<sup>36</sup> For Ringen, democracy is not in democratic methods, or in democratic outcomes, but rather “deep inside or behind the regime,” that is, in the structure of power governing the polity.<sup>37</sup> Ringen also proposes an alternative way to measure democracy, not in terms of its conceptual definition, but in terms of its function. For Ringen, like Diamond, this is essentially normative, with a “good” democracy delivering and securing freedom for its citizens, while also bearing the capacity to make decisions efficiently.

Ringen’s sentiment that existing minimalist and maximalist definitions, with their associated measurement schemes, are problematic, is persuasive. As he points out, the minimalist Schumpeterian definitions would allow any polity with elected leaders to be considered democratic, even if leaders were not held to be representative to the population, leading effectively to electoral autocracies. And indeed, far from being a theoretical possibility, many of the young democracies of Sub-Saharan Africa have very strong, but elected, presidencies that fall into this category. On the other hand, the maximalist definitions confound common correlates of democracy, such as income and stability, with democracy itself, obscuring the concept and making analysis of democracy’s effects difficult or impossible. It may also be possible that a state would have elections and civil liberties, but still be unable to translate popular will, or the common good, into policy. The government of Belgium has recently been rendered

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<sup>36</sup> Stein Ringen, *What Democracy is For* (Princeton: Princeton University Press, 2007), 25.

<sup>37</sup> *Ibid.*, 26

ineffectual by electoral deadlock, and rapid transitions of power have seriously affected the quality and effectiveness of government in Italy since World War II, the same problem that plagued Weimar Germany.

Despite agreeing with Ringen's criticism, his adoption of a functional definition is based in practice on his sense of morality: provision of freedoms is the right and proper goal of democracy. Although most humans would probably prefer to live in a society where liberty is respected rather than repressed, using a moral code, however universal, to define a particular government type is inappropriate. Democracy is not an alternative to government, but a specific type of government or strategy of governance, historically contingent, and did not come into being as a gift from the heavens. Ringen is correct in arguing that we need a functional definition, an operational definition that gets at the core of what it means to be democratic, going beyond its superficial characteristics, but this theory should also be objective, based on logic rather than Ringen's moral code.

A functional definition of democracy should reflect not only the specific strategy that democracy represents, but also the functions of government in general: important among them, conflict mitigation in the face of widespread interaction among people living in dense communities. Defining democracy in terms of a specific moral code, however universal people may prefer respect to repression of liberty, ignores democracy's context as one among several possible strategies for governing people. Democracy may do the job much more pleasantly for its citizens, but it is nonetheless doing a job, and this purpose, or function, must be represented in any functional definition.

## **Conclusion**

This chapter has reviewed the prevailing theories and definitions of democracy, with an eye towards developing a new conceptual definition of democracy. First, we explored the history of the terms democracy and liberalism, illustrating the historical contingency that has since wedded the words, and analyzing modern divisions of scholars on definitional issues. Then we traced the influence of Schumpeter on the mainstream theories of democracy offered by Dahl and Sartori, exploring alternative theories and discussing the contemporary tendency to focus on smaller pieces of the democratic puzzle, rather than confronting the major philosophical battles fought by these prior theoreticians. This, in turn, led to a discussion of modern attempts to construct conceptual definitions of democracy, often with a goal of operationalizing and measuring the concept, including Ringen's attempt to create a functional definition of democracy.

The following chapter proposes an alternative to Ringen's moral function of democracy, arguing that democracy can be understood in terms of the conflict mitigation function it shares with other governance forms. The basis of this argument is that democracy can be understood as a regime type that adopts a governance strategy of harnessing, rather than suppressing (associated with authoritarian/autocratic regimes) or controlling (associated with totalitarian regimes) politically-significant interaction (i.e. social complexity) in the population, in order to perform its functions. After detailing this theoretical framework, the chapter then uses evolutionary theory to explore the historical emergence and recent diffusion of democracy, testing the plausibility of the new definition, as well as its ability to account for historical contingency.

### **3. An Evolutionary Alternative to Minimalism and Liberal Millenarianism**

The previous chapters detailed the twentieth century development of democratic theory, and the important roles played therein by Schumpeter, Dahl, and Sartori. Recent theoretical work on democracy has strongly reflected their influence, leading to the minimalist governance measurement schemes currently dominating the field. The dominant alternative to their conceptualization of democracy has been the maximalist, often normative, conceptualization provided by scholars such as Larry Diamond. These scholars, part of the liberal millenarian school, have attempted to explain the rise of democracy in the late twentieth century in terms of its moral superiority and universal applicability.

Neither school of thought has provided a conceptual definition of democracy consistent with that governance form's emergence and recent widespread diffusion, and the measurement schemes inspired by both schools have faced significant criticism in recent years, particularly with the development of quasi-democracies. A growing body of scholarship from complexity theory on the evolution of human organizations provides an alternative, objective, and empirically testable construct for understanding the development and widespread diffusion of democracy. Evolutionary theory demands a reconceptualization of democracy in terms of its function, one among many strategies

developed by humans in order “to settle controversies and discipline interpersonal and intergroup relationships.”<sup>38</sup>

The goal of this chapter is to elucidate an alternative conceptualization of democracy that can solve both problems, using the complexity theory concept of harnessing social complexity. This chapter then tests the plausibility of this conceptualization by detailing the history of governance forms in evolutionary perspective, again relying on complexity theory.

The first part of this chapter offers a brief overview of complexity theory, and particularly the application of complexity in the social sciences. Of particular focus is Axelrod and Cohen’s concept of harnessing social complexity, and recent empirical work testing the improved adaptability and performance of organizations that do so effectively. This theory is then used to reconceptualize democracy, and the remainder of this chapter tests the plausibility of this conceptualization by investigating its congruence with the evolutionary origins of democracy.

### **Overview of Complexity Theory**

Despite a rich intellectual history spanning nearly fifty years, complexity theory has only recently been applied to the social sciences, and remains a largely disparate body of empirical and theoretical work, with no single integrative approach or even commonly accepted definition of complexity. Complexity theory characterizes a body of concepts from both the physical and social sciences to explain the behavior of complex systems. In

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<sup>38</sup> Sartori, *Theory of Democracy*, 162.

his seminal 1965 article, “The Architecture of Complexity,” Herbert Simon defined complex systems as those “made up of a large number of parts that interact in a non-simple way,” and where “the whole is more than the sum of the parts, not in an ultimate metaphysical sense, but in the important pragmatic sense that, given the properties of the parts and the laws of interaction, it is not a trivial matter to infer the properties of the whole.”<sup>39</sup> The last element of this definition allows us to distinguish between complex and complicated systems. In a complicated system, the whole is made up of a large number of independent, interacting parts that affect its operation, but which are systematically unrelated. Examples of this type of system include an insurance scheme: while an insurance program may boast millions of members, the actions of which all affect the success of the larger scheme, the members themselves are unrelated, and their actions, on an aggregate scale, can be measured and predicted using simple statistical regression techniques. Similarly, although an electorate is composed of millions of voters, each of which acts independently with unique motives, the unrelated nature of these individual voters allows for the behavior of the aggregate electorate to be readily predicted using statistical techniques.

In contrast to merely complicated systems, in a complex system variables are “related to each other in organic or interdependent ways.”<sup>40</sup> Because traditional statistical methods assume that variables are unrelated, this type of system is inherently resistant to statistical analysis. In systems where variables are systematically related to each other,

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<sup>39</sup> Herbert Simon, 1965, “The Architecture of Complexity,” in L. von Bertalanffy and A. Rapoport, eds., *General Systems Yearbook* vol. 10: p. 63-64.

<sup>40</sup> Todd LaPorte, 1975, “Organized Social Complexity: Explication of a Concept,” in Todd LaPorte, ed., *Organized Social Complexity* (Princeton, NJ: Princeton University Press): 5.

inferring the behavior of the whole from the behavior of an individual part is impossible, and in Simon's words, even inferring this behavior from the behaviors of all of the parts becomes "non-trivial."

Central to our study, however, are systems of organized *social* complexity. In a social example of an organized complex system, members of a social organization must be self-conscious as to their membership and interaction.<sup>41</sup> This self-consciousness forms the interrelated nature of the system, without which analysis of the whole would be no different from analyzing voter behavior or the likelihood of an insurance payout: "interaction... [must] be interdependent and systematic."<sup>42</sup> These self-conscious interactions exist, however, within structures, often unperceived, that increase their interdependence even further. In LaPorte's example, the homeowner may not recognize her dependence on the city sanitation department until the trash is no longer collected, but the dependence exists, and complexifies the city system, even without her recognizance. Complexity in social systems is increased by the presence or emergence of exogenous factors, such as major public health problems (e.g. pandemic viruses), environmental disasters (e.g. floods, climate change), and external threats to security, to which both individuals and the state must respond, with the responses causing second and third-order effects within the system. In short, social complexity consists of the myriad interactions within and among individuals and organizations in society.

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<sup>41</sup> Ibid., 6

<sup>42</sup> Ibid.

Most recent works dealing with complexity have either accepted the ambiguity of Simon's original definition, or provided a similar variant incorporating its principal parts. In their important 1999 work, *Harnessing Complexity*, on which the theory of harnessing social complexity used here is based, Axelrod and Cohen define a complex system as one where "there are strong interactions among its elements, so that current events heavily influence the probabilities of many kinds of later events,"<sup>43</sup> reflecting Simon's requirement of non-simple interaction among component parts, as well as LaPorte's requirement of systematic relationships among variables or components. The density and strength of interaction may also change over time, making interaction dynamic.<sup>44</sup>

The Axelrod and Cohen definition also points to an important characteristic of complex systems: probabilistic rather than deterministic outcomes. This is due to the large number of interactions among the many independently operating but interdependent component pieces of the system, wherein even small changes can reverberate through myriad interconnections to yield unpredicted and unintended effects at the macro-level. This is sometimes known as the "Butterfly Effect," after Edward Lorenz's work modeling weather patterns, where he found that, due to the complex nature of weather systems, minute changes at the micro level (e.g. the flap of a butterfly's wings) result in major

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<sup>43</sup> Robert Axelrod and M.D. Cohen, 1999, *Harnessing Complexity: Organizational Implications of a Scientific Frontier* (New York: Free Press): p. 7.

<sup>44</sup> Paul Cilliers, 2005, "Complexity, Deconstruction, and Relativism," *Theory, Culture, and Society* 22 (5): 255-267.



changes at the aggregate level.<sup>45</sup> Thus, for multiple iterations of a system with equal initial states, an indeterminate number of novel outcomes can occur.<sup>46</sup>

Due to these characteristics, complex systems often exhibit “emergent” properties, or properties of the system exhibited at the macro level that are not properties of the component parts, or that, in Simon’s words, would be “non-trivial” to infer from their interaction. An example from social science is self-organizing segregation: local preferences of individual inhabitants, such as the desire to be close to friends from one’s socioeconomic class or ethnic group, has historically led to massively segregated neighborhoods and even societies along class and/or ethnic lines.<sup>47</sup> This phenomenon is also related to Schelling’s classic example of seating patterns in an auditorium: in any complex system unique and interesting patterns will “emerge” at the macro-level from interactions of independently motivated individuals.<sup>48</sup>

The large number of interconnections among independent but interrelated parts means that small, steady changes at the micro level can result in abrupt transitions at the macro level, just as water steadily saturates soil steady for weeks before resulting in an abrupt and unpredictable (but not unforeseen) landslide, an example of an abrupt phase transition characteristic of non-linear phenomena. Similarly, complex systems often exhibit punctuated equilibria, periods of rapid change alternating with periods of no

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<sup>45</sup> For a history of this concept in the scientific literature, see: Robert Hilborn, 2004, “Sea Gulls, Butterflies, and Grasshoppers: A Brief History of the Butterfly Effect in Nonlinear Dynamics,” *American Journal of Physics* 72: 425-427.

<sup>46</sup> Mitchell Waldrop, 1992, *Complexity: The Emerging Science at the Edge of Order and Chaos* (New York: Simon & Schuster).

<sup>47</sup> J. Urry, 2003, *Global Complexity* (Cambridge: Polity).

<sup>48</sup> Thomas Schelling, 1978, *Micromotives and Macrobehavior* (Toronto: W.W. Norton).

change, such as human conflicts, the periodicity of which has long been documented to follow a power law distribution.<sup>49</sup> Complexity scholars have also found metastability, a state of dynamic equilibrium in which many outcomes are possible simultaneously, to be common among complex systems, for example a democratic polity during an election period, or the international political system during a significant crisis.<sup>50</sup> Thus complexity does not imply chaos, but rather stability absent of equilibrium, or in an equilibrium that is dynamic. Explaining how complex systems organize themselves into these orderly states, overcoming or despite of these properties of non-equilibrium dynamics, has been the principal aim of many complexity theorists.<sup>51</sup>

In this vein Cioffi-Revilla has applied complexity theory to the emergence of social complexity and human government systems in antiquity, providing an explanation for the development of pre-historical government that was previously missing, which is also consistent with archaeological evidence and anthropological theories of the period.<sup>52</sup> Using agent-based modeling, Cioffi-Revilla's found that phase transitions into increasingly complex forms of social organization were likely to occur after repeated

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<sup>49</sup> Lewis Fry Richardson, 1948, "Variation of the Frequency of Fatal Quarrels with Magnitude," *Journal of the American Statistical Association* 43 (244); D.S. Geller and J.D. Singer, 1998, *Nations at War: A Scientific Study of International Conflict* (Cambridge: Cambridge University Press); M.I. Midlarsky, ed., 2000, *Handbook of War Studies II* (Ann Arbor, MI: University of Michigan Press); Claudio Cioffi-Revilla, *Power Laws in the Social Sciences*, Chapter 14.

<sup>50</sup> Hendrik Wagenaar, "Governance, Complexity and Democratic Participation," 9; Claudio Cioffi-Revilla, ed., 2008, *Power Laws in the Social Sciences* (unpublished manuscript).

<sup>51</sup> See, for example, chapters on the emergence of power law properties in Claudio Cioffi-Revilla, ed., *Power Laws in the Social Sciences*.

<sup>52</sup> Claudio Cioffi-Revilla, "A Canonical Theory of Origins and Development of Political Complexity," *Journal of Mathematical Sociology* 29 (Spring 2005): 133-53.

incidents of successful management, through collective decision-making, of external and internal crises. This analysis informs the evolutionary treatment provided in this chapter.

One final critical property of complex *social* systems, in particular, is adaptability. Because complex social systems are dynamic and dependent upon interactions by self-aware individuals, all actors in the system are capable of learning from past and present circumstances, and changing their behaviors to improve their situations in the future.<sup>53</sup> This also means that complex systems are path-dependent, with historical contingency playing an important role in development. Because actors (humans) are capable of learning, the complex social systems we form, from civil society organizations to states, are capable of adaptation and, to a certain extent, anticipation of future events. As a result, states that are organized to harness social complexity can be expected to be adaptable and flexible themselves, which might allow superior performance.

Due to the difficulties modeling complex systems using traditional statistical methods, and due to the high learning curve associated with agent-based modeling, social scientists moving into the complexity field have often adopted a more holistic, qualitative approach to complex systems analysis. This type of approach generally involves recognizing the complexity in the social system under investigation, and exploring which arrangements and systems result in the “best” outcomes, given that complexity. The study of the ways in which democratic systems are able to function has been a common area for these studies. Some of the most influential early, qualitative, studies of political and

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<sup>53</sup> Mitchell Waldrop, *Complexity*, 146-177; Hendrik Wagenaar, “Governance, Complexity and Democratic Participation, 9-10; John H. Miller and Scott Page, 2007, *Complex Adaptive Systems: An Introduction to Computational Models of Social Life* (Princeton: Princeton University Press).

social complexity, with governance in mind, were combined by Todd La Porte in his seminal volume, *Organized Social Complexity*.<sup>54</sup> James Bohman built on these ideas, recognizing the problem of managing social complexity in democracies, and argued that government institutions and democratic procedures were necessary to prevent interactions from overwhelming or “overcomplexifying” the system.<sup>55</sup>

### **Complexity Theory on Evolution: Beyond Metaphor**

Complexity theorists have also produced a substantial body of work explaining the evolution of human organizations, based on studies of both public administration and the physical sciences. Rather than simply posing a metaphor where human organizations are suggested evolve in similar ways as biological organisms and species, complexity theory posits that a framework of evolutionary principles applies to both, directly: “organization and biological evolution are governed by general evolutionary principles operating at different hierarchical levels... the organizational and biological realms constitute two different spheres of operation of a more general evolutionary science.”<sup>56</sup> Rather than simply finding metaphors from biology, complexity theory posits that similar

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<sup>54</sup> La Porte, ed., *Organized Social Complexity*. See especially Chapter IV, by John G. Ruggie, Chapter VI on methodology, by Garry Brewer, and Chapter IX by Harlan Wilson.

<sup>55</sup> James Bohman, 1996, *Public Deliberation* (Cambridge: MIT Press): Chapter 4.

<sup>56</sup> Michael White, Daniel Marin, Deborah Brazeal, and William Friedman, "The Evolution of Organizations: Suggestions from Complexity Theory About the Interplay Between Natural Selection and Adaptation," *Human Relations* 50 (11) (1997), 1388.

fundamental principles apply to the evolution of both biological and social systems, although rules will differ across and within the spheres from micro to macro levels.<sup>57</sup>

Of particular note in the complexity approach to evolutionary science is the move away from a strict Neo-Darwinist approach, wherein natural selection of organizations, like species, by the environment, is the driving force behind evolution. In Neo-Darwinism, organizations undergo random mutations and face demands posed by the environment, which is itself dynamic. Environmental pressure results in some random mutations being favored for reproduction, while others face greater challenges to survival and reproduction.<sup>58</sup> For example, the rise of bipedalism in proto-humans can be conceived as a random mutation, which allowed affected proto-humans to more easily maneuver on the ground. Proto-humans with this mutation were better able to survive and reproduce in their environment, and eventually individuals without the mutation died, or were crowded, out of the evolutionary tree. Organizations also undergo random change, but Neo-Darwinists hold that organizations resist change due to structural inertia.

The opposing view is adaptationist, which argues that both species and organizations can react to stimuli with deliberate, strategic decision-making, the results of which determine the organization's fitness to survive in the environment.<sup>59</sup> Although the

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<sup>57</sup> Ibid.; Stuart Kauffman, *At Home in the Universe: the Search for Laws of Self-Organization and Complexity* (New York: Oxford University Press, 1995).

<sup>58</sup> For a general review of Darwinism and its 20<sup>th</sup> century proponents and critics, see Stephen J. Gould, *Ever Since Darwin: Reflections on Natural History* (New York: W.W. Norton, 1993). For an organizational application, see: M.T. Hannan and J. Freeman, "The Population Ecology of Organizations," *American Journal of Sociology* 82 (1977): 929-964.

<sup>59</sup> J. Child, "Organizational Structure, Environment, and Performance – the Role of Strategic Choice," *Sociology* 6 (January 1972): 1-22; C. Fombrun, "Crafting an Institutionally Informed Ecology of

utility for intent-driven adaptation in studies of organizational evolution is more obvious, this theory is also supported by biological evidence that, at the micro level, organisms will consciously change themselves in response to pressures from the environment, leading to the development of new evolutionary paths.<sup>60</sup>

These two theories are, on the surface, mutually exclusive. Evolutionary scientists have increasingly turned to complexity theory in hope of developing a general theory of evolution that can integrate these two processes.<sup>61</sup> Complexity theory's concept of self-organization provides a framework for the combination of these approaches by allowing for the combination of interplay among multiple evolutionary forces, including both conscious and random adaptation. If one accepts that organizations, like organisms and ecosystems, exhibit characteristics of self-organization and spontaneous order, then random mutation and blind environmental (exogenous) selection cannot account for the order apparent in the world.<sup>62</sup> White, et al., state this well:

*...in the evolution of organizational form, environmental selection does not override organizational choice and... the organization's choice of evolutionary path, perhaps from among several viable in its environment, may be governed by internal evolutionary drivers and directors, which while they do not dominate do constrain the evolutionary effects of natural selection.*<sup>63</sup>

In practical terms, complexity theory argues that for every organization environmental conditions provide and restrict possible evolutionary paths that will be successful,

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Organizations," in G. Carroll, ed., *Ecological Models of Organizations* (Cambridge: Bolinger Books, 1988).

<sup>60</sup> For a review of this evidence, see White et al., "Evolution of Organizations," 1390-93.

<sup>61</sup> Ibid., 1386.

<sup>62</sup> Kaufman, *At Home in the Universe*, xiii.

<sup>63</sup> White et al., "Evolution of Organizations," 1385.

allowing for the co-evolution of organizational forms due to strategic choices made by the inclinations of every organization's internal directors. The environment places pressure on organizations to make choices, and helps to determine those paths that will lead to superior performance, but endogenous choice plays a major role in the path followed. Choice, of course, is complemented by historical accident, which might be seen as the organizational form of random mutation.

Complexity theory, and evolutionary theory more generally, sharply contrasts the concept of "ideological evolution" discussed by Fukuyama. While Fukuyama describes his teleological theory in evolutionary terms, in fact the dialectic concept of historical development utilized by Fukuyama to explain both democratic peace and the spread of democratic regimes is counter to evolutionary theory. Unlike evolutionary theory, a teleological treatment of history requires *a priori* agreement on the nature of the historical path to be followed, or the critical questions that historical processes are resolving. As it turns out, there is considerable disagreement over the driving forces and questions behind historical process. While Fukuyama and Kojève agree on historical path and key questions, Marx understood the world from the same teleological perspective and argued for a very different end stage, because he held a different understanding of the nature of the battle being fought. Rather than ideational, as Fukuyama argues, for Marx the main battles of each era were determined by class conflict, with an end stage characterized by the defeat of liberal regimes, which for him held an internal contradiction between the pursuit of capital and the welfare of labor, and the eventual achievement of a classless society. Kojève's ideal end stage was also very different than

that of Fukuyama, at least in part because free market capitalism had yet to be well-articulated or accepted, and his idea of liberal politics was based on the French republic under Napoleon, hardly a shining example of modern liberal democracy. Huntington adopts a similar teleological perspective in *The Clash of Civilizations*, but for him questions of civilizational identity, which essentially is characterized by religion, will replace questions of political system, and thus the world will be divided by an ideational question that will characterize the next stage of history. For those that accept a teleological view of history, the nature of that history, and of its end state, depend very much on the beliefs and norms of the historian. In short, Fukuyama's end state is liberal democracy because in Fukuyama's belief liberal democracy is the most preferable political system, and political system is the only question of import.

In addition to providing a more empirical treatment of natural and social evolution, complexity theory also serves to explain why some organizations fail to adapt in the face of environmental change, by analyzing the internal structure of the organization. Organizations, as do organisms, sometimes face major changes in the nature of their environment. Those that are more flexible can be expected to be more responsive to environmental change, rearranging internal structures or making strategic choices to better reflect the new fitness landscape. In particular, Axelrod and Cohen have argued that organizations that harness social complexity are more responsive in the face of major environment change, and are likely to make more-informed (although not necessarily better) choices when faced with multiple evolutionary paths.<sup>64</sup> However,

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<sup>64</sup> Axelrod and Cohen, *Harnessing Complexity*.



because organizations' evolutionary paths are path-dependent, the environment could plausibly change beyond organizations' ability to adapt.<sup>65</sup>

Empirical work by Wagenaar (2007) has recently explored this theory of social complexity harnessing in The Netherlands. Arguing that deliberative democracy forms of government organization, because of participatory democratic arrangements, more effectively harness the complexity in the system by improving collaboration between citizens and officials, thus increasing the probability of agents reaching consensus, Wagenaar compared cities with governments experimenting with deliberative democracy institutions to those with strictly representative institutions. He found that the cities that adopted deliberative structures were better able to process information on government policies, specifically crime, and produced more effective policy responses, than cities that rejected the deliberative model.<sup>66</sup>

The difference between too much structure and too little, however, when building or reforming an organization, is subtle. Wagenaar notes that, in order to harness social complexity, organizational structures:

*...need to hover between order and chaos. For complex governance systems to benefit from the broadened knowledge base, they need to be loose enough to let the information freely flow along the nodes and effect the agents, yet structured enough to let the changes and adaptations coalesce into emerging cooperation and system adaptation.*<sup>67</sup>

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<sup>65</sup> Ibid., 1395.

<sup>66</sup> Wagenaar, "Governance, Complexity, and Democratic Participation." See also M. Hajer and H. Wagenaar, eds., 2003, *Deliberative Policy Analysis: Understanding Governance in the Network Society* (Cambridge: Cambridge University Press).

<sup>67</sup> Ibid.

Rigid, hierarchical representation systems offer very little room for interaction, and restrict information flow to the top-down, preventing effective feedback and policy improvement. In contrast, a system with minimal government structure would be so dense with unstructured interaction that information would never have an impact – debate rages endlessly in groups and committees without the structure needed to force a decision or reach consensus in order to move forward as a group.<sup>68</sup> There must be bottom-up organization, but there must also be structure to channel that organization in a non-destructive manner, if the organization is to adapt to environmental changes in a timely fashion.

### **A Brief Review of the Evolution of Governance Strategy**

Complexity theory allows us to trace the evolution of regime types, if we assume that regime types are simply different organizational forms, reflecting different evolutionary pathways. Consistent with similar studies of business organizations and states, we can assume that these pathways were selected historically due to a combination of natural selection and conscious strategic choice on the part of endogenous drivers. Unlike businesses, however, governance forms are not interested with making profit, but rather were created to mitigate conflict that naturally emerges from humans living together in close proximity with different preferences and, often, scarce resources. Government also protects territorial integrity of the polity, and manages endogenous and environmental public policy problems. The historical development of

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<sup>68</sup> Wagenaar, “Governance, Complexity, and Democratic Participation,” 42.

governance forms, and the nature of the evolution of democracy as one example, thus reflects changes in the environment in which governments operate (broadly defined) as well as historical accident and the choices made by endogenous drivers, usually in the form of individuals or groups of leaders. This section traces the evolutionary forces behind changes and innovations in governance forms, in brief, in the style of other studies of the emergence of the state.<sup>69</sup> Our aim is not a detailed investigation of the early days of human social organization – this is not a work of archeological anthropology – but rather to test the plausibility of the conceptualization of democracy explored above in historical context, and to see whether this conceptualization is consistent with existing theories and archaeological evidence of how governance forms emerged in antiquity, and changed and diffused in recent years.

Anthropologists largely agree that humans lived in small groups of thirty to fifty individuals, usually in the form of familial bands, from the time that humans evolved into the modern form, approximately two million years ago, until the Neolithic Revolution beginning in approximately 8,000 BCE. These bands were nomadic with hunter/gatherer economies, moving with the seasonal availability of edible wild flora and fauna, and are believed to have had governance structures similar to those of the remaining band

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<sup>69</sup> Robert Carneiro, “A Theory of the Origin of the State,” *Science* 169 (1970): 733-38; Henry Wright, “Recent Research on the Origin of the State,” *Annual Review of Anthropology* 6 (1977): 379-97; Jared Diamond, *Guns, Germs, and Steel: the fates of human societies* (New York: W.W. Norton, 1997); Cioffi-Revilla, “A Canonical Theory...”; Claudio Cioffi-Revilla, “The Big Collapse: A Brief Cosmology of Globalization,” in B. Gills and W.R. Thompson, eds., *Globalization and Global History* (London: Routledge, 2006);

societies today, such as the Sans Bushmen of Botswana.<sup>70</sup> Bands' power structures are, and probably were, characterized by informal leadership structures. The environment, which includes a general ignorance of agriculture, necessitated hunting and gathering for survival, which in turn favored small groups, as small groups could move more easily, and return to seasonal hunting and gathering grounds without exhausting available resources. Governance form could be relatively simple and informal, because intractable conflicts of interest in such small, kinship-based groups would be less likely, due largely to the smaller number of interacting agents, than in later societal forms.

Tribes, or chiefdoms, represent an intermediate step between bands and more contemporary states, with tribes generally consisting of multiple familial bands loosely organized, and are believed to have been formed by regular meetings among bands for purposes of coordinated hunting or warfare, if bands faced an external security threat. Multiple family bands working in concert, or living in proximity to one another, changed the nature of the environment in which governance organizations worked by placing additional demands on limited resources and increasing the number of people in a given unit, both of which worked to increase interactions among people which, in turn, generated more social conflict than bands experienced when working alone (greater levels of social complexity). Faced with an increased need for coordination, a greater likelihood for interpersonal conflict, and the emergence of crises, consensus and informal conflict management structures began to perform less well, requiring new forms of

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<sup>70</sup> Morton Fried, *The Notion of Tribe* (Menlo Park, CA: Cummings Press, 1975); Ronald Cohen and Elmer Service, *Origins of the State: the Anthropology of Political Evolution* (Philadelphia: Institute for Human Studies, 1978).

collective decision-making. Groups of bands adapted by creating more complex and formalized governance structures in tribal governments. Specifically, human organizations created formal leadership roles in order to make decisions for, and coordinate actions among, bands within the tribe, including such executive positions as chiefs, big men, and formal groups of elders. Tribal governments likely included a great deal of variation within this general category, with some horizontally integrated, remaining highly reflective of consensus, while others were more vertically integrated, with elders suppressing conflict arising from interaction and making decisions. As Cioffi-Revilla demonstrates, these government transitions into more complex forms likely occurred over time for the nascent polities that managed their crises successfully.<sup>71</sup> Those polities that were unable to manage their crises, either because of failure to adapt to the changing internal and external environment, or because of poorly-structured decision-making systems, would have decayed and failed.

These pre-historical governance forms were unable to deal with the dramatic increase in social complexity brought about by the Neolithic Revolution. Archaeological data shows that in four separate locations (West Asia and Mesopotamia, Ancient China, South America, and Mesoamerica), between 8,000 and 5,000 BCE, humans first began domesticating plants and animals, which allowed for human societies to cease nomadic lifestyles needed for hunting and gathering, and become sedentary.<sup>72</sup> Domestication of plants and animals, combined with developments in irrigation and food storage

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<sup>71</sup> Cioffi-Revilla, "A Canonical Theory...".

<sup>72</sup> Cioffi-Revilla, "The Big Collapse...", 81.

technology, allowed humans to produce a surplus of food, which could support specialization of labor, and also resulted in dramatically increased population densities and the first incidents of urbanization.<sup>73</sup> Thousands of people living together in a concentrated space resulted in unprecedented human interaction, with an associated increase in conflict.<sup>74</sup> Such conflict would have been dangerous to these nascent communities, upsetting the cooperation and coordination needed for agriculture and trade, in short for society to function in its newly complex form. This urbanization also presented new crises for government: new diseases emerged, associated with the domestication of animals, and spread quickly among a dense population; environmental changes, such as droughts or insect plagues, had to be managed as they could not simply be fled, as a nomadic society might; and the urban community required defense from external threats, including nomadic bands and also, eventually, neighboring polities. These changes placed unprecedented demands on government.

At the same time, the food surplus changed the nature of the human environment by allowing for evolutionary paths whereby government forms could include specialized leaders and bureaucracies, who could rule society “full-time,” without having to spend exorbitant amounts of time procuring food. Whether because of deliberate choice or historical accident, more formal and organized governance structures, characterized by autocratic or oligarchic decision-making and bureaucratic organization emerged at this

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<sup>73</sup> Charles A. Reed, ed., *The Origins of Agriculture* (Chicago: Aldine, 1977); Christopher Scarre, ed., *The Human past: World Prehistory and the Development of Human Societies* (New York: Thames & Hudson, 2005).

<sup>74</sup> Charles Redman, *The Rise of Civilization: From Early Farmers to Urban Society in the Ancient Near East* (San Francisco: W. H. Freeman, 1978).

time in Neolithic population centers around the world, with political authority often vested on the basis of religious leadership. Although significantly more complex than the bands that preceded them, this new government form was based on a simple strategy: mitigate human conflict by suppressing social complexity and monopolizing decision-making authority, usually on the basis of religious qualification. This basic government form can be seen in the Ancient Sumerian civilization, with authority held by governor-priests or kings, who had strong ties to religious elites, advised by councils of societal elites.<sup>75</sup> Similar governments emerged independently in Ancient China, the Andean and Meso-American civilizations, and evidence suggests this form was copied by nascent polities in the Egyptian, Indus Valley, and Southern European (Sesklo) civilizations.<sup>76</sup>

The theocratic form, with its authoritarian governance strategy, that developed in city-states during this period proved to be highly effective at mitigating human conflict, and remained largely unchanged for millennia despite significant external crises and changes in human technology and society. City-states merged into empires, most notably in West and East Asia, and although the physical scope of government increased, the

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<sup>75</sup> There is limited disagreement on this point. Thorkild Jacobsen argued in 1947, in "Primitive Democracy in Ancient Mesopotamia," *Journal of Near Eastern Studies* 2 (3), that early Sumerian kings were responsive to partially representative councils of men, which system he described as primitive democracy, but this argument has been rejected due to its excessive exaggeration of both the power of the councils and their representative character; for examples of the dominant perspective on Ancient Sumerian government see Mogens Hansen, ed., *A Comparative Study of Thirty City-State Cultures* (Copenhagen: Special-Trykkeriet Viborg, 2000) and Samuel Kramer, *The Sumerians: Their History, Culture and Character* (Chicago: University of Chicago Press, 1963); Gwendolyn Leick, *Mesopotamia: Invention of the City* (London: Penguin, 2002).

<sup>76</sup> Peter Bellwood, *First Farmers: The Origins of Agricultural Societies* (New York: Wiley-Blackwell, 2004); Sigfried J. de Laet, ed., *History of Humanity Volume I: Prehistory and the Beginnings of Civilization* (New York: Routledge, 1994); Wangping Shao, "The Formation of Civilization: The Interaction Sphere of the Longshan Period," in Kwang-chih Chang and Pingfang Xu, eds., *The Formation of Chinese Civilization: An Archaeological Perspective* (New Haven, CT: Yale University Press, 2001): 85-124; Cioffi-Revilla, "The Big Collapse...".

strategy of complexity-suppression and vertically-integrated leadership structures continued to function well under the changing environment, and there seem to have been few changes to this basic structure over time. With little or no education and low levels of literacy, this model worked well for managing public policy problems, protecting territorial integrity, and mitigating social conflict. Although recent scholars have suggested the possibility that democratic states existed in India during the sixth century BCE, this is not generally accepted. To the extent that different forms of government organization co-evolved, these differences were generally minor, with some governments based on economic rather than religious authority, or having codified rather than informal legal systems. These differences might be conceptualized as differences in tactics, with the basic strategy for social complexity management remaining largely the same.

The prehistorical forms of government continued to exist, of course, in areas where the human environment did not undergo the Neolithic Revolution and its changes, such as in the band and tribal governments of isolated peoples in Central and Southern Africa, or where government forms failed to manage the crises confronting them. Among the government forms that adapted, the similarity in government forms among independent civilizations over time may be due to structural inertia, particularly when the environment was not changing in such a way as to pressure internal directors of governments to innovate. Furthermore, although not necessarily predictable, this long period of inertia, following and preceding significant evolutionary changes, is characteristic of punctuated equilibria.



Complicating the development of the early state was the emergence of interstate systems in regions where multiple states developed independently, and then came into contact with one another, increasing the level of complexity in the social system of each, and, consequently, the workload of the state apparatus. Although independent polities in West Asia engaged in trade and warfare beginning circa 5000 BCE, certainly increasing social complexity and, consequently, demands on government, it was not until about 2700 BCE that the first true interstate system formed; four distinct interstate systems emerged between 2700 BCE and 1000 BCE, first in Lower Mesopotamia, then Ancient China, the Peruvian Andes, and, lastly, Mesoamerica.<sup>77</sup> The formation of interstate systems resulted in more complicated governance structures, but anthropological evidence suggests that there were no significant changes in governance strategy associated with these developments, nor would one be expected. In many ways, a vertically-integrated state structure is well-suited for dealing with the threats and opportunities presented by engagement in an international system, and such engagement would not produce significant changes in the nature of intra-state social interaction.

One important change in the human environment towards the end of this premodern period, that did affect the evolution of governance strategy, was the rise of merchant classes, most notably in Ancient Greece and Rome. In both cases conflict between traditional economic elites and the increasingly discontented lower classes produced challenges that the conventional, theocratic government form was unable to overcome. The rise of the merchant class represented a significant increase in the level of

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<sup>77</sup>Cioffi-Revilla, "The Big Collapse...", 82-87.

social complexity in social systems, bringing political awareness and interest, with associated potential for conflicts of interest, to a much larger portion of the population than states had had to deal with in the past. Interestingly, in both cases, at least according to the admittedly questionable historical accounts available, strategic choice on the part of key individuals, Lucius Junius Brutus of the Roman Republic and Solon and Cleisthenes of Athens, resulted in the independent, nearly simultaneous innovations of a new governance form, the republic.

In the Roman form,<sup>78</sup> policymaking authority was devolved from the monarch to representative assemblies and elected magistrates, who enforced the law on advice from the Senate, an aristocratic body of legislators that also was responsible for overseeing public administration and military affairs. Magistrates were able to use force to maintain public order, but citizens had the right to be protected from the state and could, for example, appeal magisterial decisions. Government was structured, at least in part by conscious choice, so as to include the policy preferences of both the upper (patrician) and lower (plebeian) classes, likely in response to the failures of the preceding monarchy. The formation of the Roman Republic thus represented the adoption of a distinct evolutionary pathway, based on a strategy of harnessing, rather than minimizing, social complexity. The state guaranteed political rights and civil liberties in order to allow people to interact in political significant ways, and provided structural pathways (e.g. elections, committee participation) for the bottom-up transmission of popular perceptions of policy problems

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<sup>78</sup> Andrew Lintott, *The Constitution of the Roman Republic* (New York: Oxford University Press, 1999); Harriet Flower, *The Cambridge Companion to the Roman Republic* (London: Cambridge University Press, 2004).

and preferences for policy solutions. Concurrently, however, the state maintained order to prevent conflict from escalating to violence, and institutions limited and structured political interaction, particularly between patricians and plebeians, and multiple levels and bodies of government filtered information as it flowed towards legislators and magistrates at increasingly higher levels of policy-making authority.

Harnessing social complexity became an increasingly challenging task for the Roman Republic during and after the Punic Wars. These wars resulted in territorial growth, but more particularly a significant influx of slaves and wealth, which was concentrated in the ruling elite, represented by the patricians. The governance structure was unable to adapt to the rapidly changing social structure and to the increased tension caused by extreme wealth disparity. In effect, the government ceased harnessing social complexity, and was itself harnessed by demagogical leaders of the emerging political factions. Ultimately the government failed at preventing political violence, and with the executions of the Gracchi Brothers, and the Marius/Sulla civil war, the state apparatus actually became a tool of political violence. The rise of the Caesars, and the consolidation of executive and legislative power into a single emperor, effectively ended the experiment with social complexity harnessing.

The details of the Roman political structure, particularly provisions allowing for dictatorship in time of external crisis, proved to be problematic for social complexity to be harnessed, and the government also proved to be inflexible in the face of rapid social and economic change. The structures of this path dependent system were unable to adapt quickly enough to perform on the new environmental fitness landscape, and were

consciously undermined by the internal directors of the organization. Combined with multiple crises, this set the government system up for failure. Thus, the alternative evolutionary pathway that the Roman Republic represented turned into an evolutionary dead end. In its place there emerged an imperial system, which had a long history as an extant governance structure, with early empires dating from the fourth and fifth millennia BCE. Despite this, however, the Roman Republic served as an important example of an evolutionary alternative for governance innovators nearly two thousand years later.

The Athenian experiment with democracy<sup>79</sup> developed out of a similar period of economic conflict, but was structured dramatically differently than that of the Roman Republic. The Greek democracy was characterized by direct voting on legislation by citizen-participants, rather than the representative structure adopted in Rome. Participation in Athenian democracy was substantially limited (estimates range from ten to twenty percent of the total population prior to the Peloponnesian War) but, importantly, the group of citizens allowed to participate spanned geographic areas and economic class. Citizens participated directly in the three main bodies of the government, the assembly, council, and courts, with the assembly the most significant site of power, in which citizens, by simple majority, made executive decisions, elected government officials, legislated, and conducted political trials.

As with Rome, the notion that government based on popular will could function reflected a new strategy: social complexity, in the form of politically-significant social

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<sup>79</sup> J. Thorley, *Athenian Democracy* (New York: Routledge, 1996); E.W. Robinson, *Ancient Greek Democracy: Readings and Sources* (New York: Blackwell, 2003); J. Ober, *Democracy and Knowledge: Innovation and Learning in Classical Athens* (Princeton: Princeton University Press, 2008).

and organizational interaction, would be harnessed for policymaking purposes, rather than simply suppressed. In contrast to Rome, however, the Athenian model contained very few ways of structuring or filtering information from the bottom-up, aside from tightly constrained citizenship rules. In an assembly of citizens where quorum was set at six thousand individuals, it is difficult to imagine any single member getting his voice heard, despite the government's basis being *Ho boulomenos* (he who wishes). Power in this system was probably not in voting, but in having the political network to convince a majority of fellow citizens to support one's proposal prior to the meeting. In this sense, the political system allowed societal factors, such as wealth, fame, and respect, to filter information and constrain popular will. Interestingly, as time went on the Athenian democratic structures also changed, with more legislative power shifting to the courts, a significantly smaller body of appointed citizens.

Eventually, however, the Athenian government succumbed to a combination of internal pressure, both from coups and the development of anti-democratic attitudes, notably in the writings of Plato and Aristotle, and external conflicts, particularly its rivalry with Sparta, invasions by Persia, the invasion and forceful unification of Greece by Phillip II and Alexander, and finally by Roman invasion. Unlike the Roman Republic, which was unable to harness social complexity because of victory in war, due to changing social and economic structures, Athens failed, in essence, because it lost its wars, against Sparta, Macedon, and eventually the nascent Roman Empire. This series of conflicts weakened the state's institutions and drained its coffers, adding further to popular discontent with the city's governance system. The state structures that allowed for the

management of social conflict proved unable to handle the state's other critical functions, specifically the protection of territorial integrity and maintenance of a strong economy.

As with the Roman Republic, the failure of the Athenian democracy made its government form an evolutionary dead-end, but its nature would inform later leaders, when faced with their own environmental changes, about alternative evolutionary pathways. In particular, the intellectual backlash against Athenian democracy, which continued to carry strong negative connotations as late as the nineteenth century, significantly informed the political thinkers behind the American government system in the late eighteenth century. Perhaps most notably, Madison refused to characterize the American political system as a democracy, and *The Federalist* demonstrates his fear of the American system becoming a tyranny of the poorer classes, much as Plato argued had happened to Athens's democracy under Pericles. Indeed, the United States constitution is modeled much more closely after the Roman republic than the Athenian democracy.

The failures of the harnessing social complexity strategy in Rome and Athens also point to the importance of the state's functions managing emergent public policy problems and interacting with other states. In both cases, the government structures created by the state to manage social complexity proved unable to deal with changing circumstances. In Athens' case, the state apparatus struggled to deal with the international system, with the state losing multiple armed conflicts against other states, ultimately losing territorial integrity as well as the support of its population. In the case of Rome, the state was unable to deal with the public policy problems created by victory in armed conflict against other states, including increased population and extreme economic

polarization. As these cases demonstrate, harnessing social complexity may help states mitigate social conflict, but if state structures inhibit the ability of the state to engage in its other core functions then the political system is unlikely to endure.

The evolution of government form continued along the primary autocratic line after the collapse of the Roman and Greek experiments. Although this period saw significant increases in the scope of government, with the Roman Empire, for example, spanning a continent, the dominant government form was autocratic or oligarchic, usually based on hereditary monarchy (with or without religious authority bestowed on the autocrat), which, regardless of minor variations, continued to employ a strategy of minimizing social complexity and utilizing a vertically integrated political system. Decentralization of government power, especially among the larger political units, was common, leading eventually to the feudal structure of medieval Europe, but the conflict mitigation strategy remained consistent with autocratic norms: suppress social complexity, particularly in the form of politically-significant interaction. This strategy would be well-suited for an organization frequently under threat of attack from external sources, or, in the case of the Roman Empire, frequently making war abroad, because it would allow rapid decision-making and enforcement through vertical integration.

A notable exception to this trend was the government of the Iroquois people of North America who, according to Weatherford, created a republican form of government that lasted for several hundred years, beginning sometime between 1000 and 1450 CE and ending with the United States government's forced westward migrations of American

indigenous peoples.<sup>80</sup> Although his argument is still contested, Weatherford claims that this government informed the founders of the United States, and may have served, with the Roman and Greek examples, of alternative evolutionary pathways.

Although governance forms did not experience any wholesale innovations in prevailing strategy until the 18<sup>th</sup> century, several important, but minor, changes (a mixture of historical accidents and innovations) allowed and informed the major governance innovations of the contemporary period. The Christian Church has long employed a system of election for the Papal seat, and until the seventh century directly elected its bishops. Parliamentary forms existed in Iceland and Scandinavia for much of the medieval period, with authority shared by a king and partially-representative assemblies. In medieval Ireland regional assemblies known as *tuatha* made policy for their regions and elected a king from among a selection of hereditary heirs. City states of medieval Italy also allowed for some limited political participation, including elections.

The *Curia Regis* in feudal England also served as a forerunner to a legislative body, exercising judicial and executive authority for the king, with its members eventually developing hereditary rights to participate, turning into the House of Lords. Perhaps most famously, the Magna Carta placed restrictions on the authority of the monarch in England in 1215, which was followed by the election of a proto-parliament in 1265, albeit with extremely limited powers (generally restricted to control over the king's revenue) until after the English Civil War, when the modern bicameral Parliament first

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<sup>80</sup> Jack Weatherford, *Indian Givers: How the Indians of the Americas Transformed the World* (New York: Crown, 1989); Jack Weatherford, *Native Roots: How the Indians Enriched America* (New York: Crown, 1992)



appeared, and particularly after the Glorious Revolution of 1688, when Parliament dramatically expanded its powers. Even then, however, the English monarch retained a dominant position within the policymaking structure until the 19<sup>th</sup> century, with Parliamentary authority generally restricted to taxation and spending, impeachment of the king's ministers, and legislative supremacy. It was not until the 19<sup>th</sup> century, with the addition of Irish parliamentary members and the passage of the suffrage-expanding Great Reform Bill of 1832, that membership of the House of Commons expanded beyond the landed elite, effectively allowing for popular participation in governance and effecting a shift in governance strategy, creating an alternative pathway of evolution.

Long before the English shift, however, the human environment had undergone significant changes that necessarily affected government. The development of the printing press and the subsequent spread of knowledge and literacy, followed by the Protestant Reformation, Renaissance and Enlightenment, produced new, widely circulated ideas about human liberty (although not described as such), popular sovereignty, and the proper role of government, in addition to innovations in art and music, warfare, and government administration (particularly in the efficiency of taxation). In addition, the state apparatus had taken on a form similar to the contemporary version, including the enlargement of the bureaucracy, formal systems of taxation, development of standing militaries and diplomatic corps, development of sovereignty, territorial lines becoming fixed, and international relations taking on its contemporary characteristics. Moreover, the scope of human interaction expanded with the increase in international trade, the formation and expansion of international non-governmental organizations, such

as guilds and scientific organizations like the Royal Society, and the dramatic global expansion of European colonization. States were required to engage in the Westphalian interstate system, dramatically increasing the workload of the state apparatus, and also began facing increasing numbers of emergent public policy problems, such as epidemics, associated with intense urbanization and increased international travel. Importantly, the spread of literacy allowed large populations to engage in discussion about contemporary political events, public policy problems, and preferred policy solutions. The dramatic increase in popular interest in their government systems, combined with interaction among these systems internationally, represented a significant increase in social complexity in these systems, placing enormous demands on government structures.

England's early experience with both the Renaissance and the Industrial Revolution gave it significant exposure to these intensifying environmental pressures on governance, generating such important thinkers as John Locke. The English government adapted by beginning to harness the increased productivity of the Industrial Revolution, but was slowed by structural inertia in the form of a monarchy and dominant landed elite, as well as entrenched social stratification. England's American colonies, however, gained the benefit of England's experiences without its structural inertia, opening up an opportunity window for the innovation and implementation of an alternative governance strategy. Indeed, by all accounts the Founders of the United States were well-informed about the English adaptations, as well as the ultimately-failed innovations of the Roman, Athenian, and possibly Native American governance strategies, and were thus particularly well-positioned to make a strategic choice away from the prevailing strategy

of social complexity suppression. They also had first-hand knowledge of representative, majority-rule legislatures in some of their own colonies, with the colony of Pennsylvania also guaranteeing liberal freedoms to its citizens. In the face of the many changes to the human environment, and with knowledge of the possibility of an alternative evolutionary pathway, the Founders made a strategic choice to adopt the alternative: a government strategy based on harnessing, rather than suppressing, social complexity.

Just as in the Athenian and Roman innovations, harnessing social complexity required the constitutional framers to cultivate two sociopolitical forces: (1) allowing politically-significant interaction to occur and expand, while (2) restricting interaction to maintain order and filtering the information generated by interaction in order to process it. Unlike Athens and Rome, however, the framers needed to create a system that could adapt to changes in both internal and external environments, while also performing the core function of the state, particularly the protection of territorial integrity and the management of emergent public policy problems. The American system thus codified the rights of its citizens, specifically encouraging politically-significant interaction through the elections of national representatives and executives, freedoms of speech and assembly, and explicitly protecting citizens from state authority. Like the Roman system, the US Constitution also created various ways of constraining interaction and filtering information generated by that interaction through the use of institutions, including a federal structure with significant power devolved to the state governments, a bicameral legislature with an initially appointed upper house, an independent, appointed, judiciary, and the extensive use of appointments within the executive branch.

This represented the first significant branch in the evolutionary line of governance strategy since the Athenian and Roman experiments, and is directly traceable to changing environmental pressures and possibilities, as well as to informed strategic choices by internal innovators/directors. The strategy of harnessing social complexity, utilized by the American founders in what would later be described as a democratic governance form, did not spring into the world fully-formed, nor was it handed down to humans as a morally superior gift, but evolved naturally in the face of environmental changes and intentional decision-making. In fact, the American system was not initially described as democratic, because it was different from the Athenian version, and because, as previously discussed, the word democracy carried significant negative connotations, and implied primarily equality, rather than liberty.

This argument, of course, begs the question whether the founders of the American republic set out to harness social complexity, rather than simply to provide for the freedom of citizens and experiment with elections, improve their economic status, defend against each other's ambitions, or some other set of goals. Even if we could verify their "real" motives, however, their motives are irrelevant to this study. Whatever their goals, they nonetheless designed a system that, in effect, harnessed rather than suppressed social complexity, creating a new, alternative pathway for the evolution of governance strategy.

The formation of a new governance system in the United States was quickly overshadowed by anti-aristocratic movements in Europe, and particularly by the French Revolution. During this period, however, Polish leaders chose to adopt the same governance strategy as the United States, promulgating the Polish Constitution in 1791.

Despite Fukuyama's reading of Kojève indicating recognition of modern liberal democracy, the French Revolution created nothing of the sort. In fact, the system birthed by the French Revolution brought a great deal of liberty, at least initially, with little of the control needed to effectively translate information generated by popular interaction into policymaking, and few structures to mitigate conflict. Regardless, the creation of the Napoleonic Empire, followed by the restoration of the monarchy, effectively killed whatever evolutionary pathway the French might have pursued. Whatever Kojève saw in 1806, it was certainly not the birth of a new, history-ending governance strategy.

Widespread adoption of the strategy of harnessing social complexity, and its growth as a realistic alternative to monarchy, gradually began in Great Britain following the French Revolution, and surged after the Revolutions of 1848. Here we see several forces at work. First, environmental changes, specifically the Industrial Revolution and its consequent demographic changes, including the rise of a tax-paying middle class with disposable income and high literacy rates, put pressure on the old system and began instigating socioeconomic conflict. Importantly, however, the failure of the United States to dissolve into anarchy, combined with gradual increases in suffrage and popular participation in government in Great Britain, provided European civic leaders with a realistic alternative to the aristocratic monarchical form. This combination of environmental pressure and strategic choice based in part on imitation, which has been empirically demonstrated to have an important affect on the spread of regime types across states, led to constitutions in Denmark, the Netherlands, and France that effectively embraced the harnessing social complexity strategy. From the mid-nineteenth century

forward, two clear lines of evolution in governance exist, based on differentiation by governance strategy: (1) suppress social complexity and make policy on the basis of autocracy; (2) harness social complexity and make policy on the basis of information generated by popular, politically-significant interaction across the state-society interface.

The new strategy applied to social conflict mitigation, but also to the management of emergent public policy problems, with representative legislatures empowered to legislate on public policy issues, as well as to international engagement, albeit with more, although not unchecked, power usually granted to the executive on foreign policy issues. This reflects part of the lesson learned from the failures of Athens and Rome: the state must be able to make foreign policy decisions, and engage in warfare, swiftly and without major structural obstacles, if it is to survive. However, executive power to make war and engage the international environment must also be informed by social complexity harnessing, and checked by representatives of popular interest, in order to prevent the executive from turning the military against the state, if the political system is to survive.

The autocratic line of governance evolution continued to be predominant into the twentieth century, although the losses suffered by the Triple Entente in World War I, and the increase in independent states associated with the collapse of the empires that the Great War shattered, led to a surge in the adoption of democratic systems by both established and newly-independent states. This is temporally associated with the victory of the Triple Alliance, whose members were democratic, in the sense that they utilized a strategy of harnessing social complexity. Whether they won because they were democratic is unclear, although complexity theory does suggest that organizations that

harness social complexity are more likely to be adaptable in situations of changing environmental conditions, which was certainly the case in the pre-war period, particularly in terms of economic industrialization and its associated demographic changes, and in terms of military technology. Regardless, it was likely perceived by civic and political leaders in newly independent states faced with choices about governance systems, that the liberal democratic form, whether in its European or American varieties, represented a realistic and apparently superior governance strategy. While the American Revolution had demonstrated that less autocratic states could defeat more autocratic states, if those states were weakened and distant, World War I demonstrated that democratic states could defeat autocratic states, technological equals, in even the most extreme military confrontation.

The Great Depression changed the global environment again, placing significant pressure on state structures, many of which proved unable to deal with the devastating economic and social changes of the 1930s. During this period, it is not surprising that dictatorships, a new variety of the primary autocratic governance pathway, began to increase in number. This process is perhaps most observable in Weimar-era Germany, which initially bought into the liberal democratic system of government, but which collapsed into a dictatorship in the face of hyperinflation, popular disappointment with the performance of the democratic system, and electoral rules that favored extreme parties. The structures of the state, while oriented around harnessing social complexity, particularly in terms of guaranteeing transmission of popular views (even the most extreme) from the populace to government, were ineffectual at solving public policy problems, and were inhibited by international conditions. A similar experience is evident

in the collapse of the Taisho-period democratic structures in Japan, which also gave way to fascism, a variant of the autocratic governance strategy.

World War II, caused in part by the rise and militancy of fascist states in Europe and Asia, brought about further changes to the human environment. In addition to significant technological developments and an end to the Great Depression, the war also hastened the collapse of the European colonial empires, leaving dozens of newly independent states, which faced their own government choices. The victory of the Allied powers, which were led by several consolidated democracies, demonstrated that democratic regimes were capable of defeating autocratic regimes in all-out war. Indeed, the Allied victory suggested to newly independent states that democracy might be a superior form of government, based on the sound defeat of the fascist states.

Missing from this picture, however, is a new evolutionary pathway that was created, either by conscious design or historical accident, by Josef Stalin in the Soviet Union. When faced with either harnessing social complexity, a form of which Lenin had designed (i.e. New Economic Policy) and Trotsky had supported, or suppressing social complexity, which had been the Czarist practice, Stalin identified a third choice, made possible by recent inventions of inexpensive mass communication and transportation, as well as developments in weapons technology, which allowed him to effectively isolate the internal dynamics of the state from the international system. Whereas Hitler and the fascists had adopted a (particularly nasty) variant of the traditional strategy of eliminating independent and dissonant political interaction, Stalin used new technology to adopt a strategy of controlling political interaction. Rather than encourage civil society, as is done



in harnessing social complexity, or repress civil society, as monarchs and dictators had done for millennia, Stalin used the new tools provided by the changing human environment to recreate civil society in his preferred image. He effectively merged civil society with the state, eliminating the need to constrain or filter it, informing it with state propaganda, and using state police and military forces to ensure compliance, choosing a new pathway we describe as totalitarianism. This strategy was quickly implemented by many states under the Soviet Union's immediate military sphere of influence in Eastern Europe, which might be considered a historical accident in evolutionary terms, but also by conscious choice on the part of leaders in Latin America, notably Cuba, as well as Africa and East Asia.

By the 1950s, through a combination of changes in the human environment, historical accident, and conscious choice on the part of internal directors, three governance strategies had co-evolved to deal with the basic problem of managing social complexity and its associated goal of mitigating conflict: suppression/repression of social complexity, harnessing of social complexity, and controlling social complexity. Each of these strategies also had associated tactics that, in many ways, have come to define the regime types in the popular consciousness, as well as in academic conceptual definitions. Importantly, an evolutionary perspective demonstrates that these government strategies did not spontaneously appear, and were not predestined in accordance with any particular scholar's teleological perspective, but rather emerged organically, in fits and starts, consistent with findings of punctuated equilibriums in evolutionary studies of both biological and social organization.

## **Governance Strategies in the Contemporary Period**

States that manage social complexity through suppression or repression, commonly described as authoritarian, make policy from the top, and suppress or repress political participation by relying on military or bureaucratic enforcement of government policy, and tight restrictions on freedoms of speech, assembly, and organization. States that harness social complexity have a more challenging task, with more complicated tactics, in order to both encourage social complexity, in the form of politically significant interaction, while also maintaining order and filtering information generated by that interaction in order to produce policy that reflects popular will. Thus, the tactics of this type of state have been two fold. In order to encourage state-society interaction, tactics have historically included elections to policymaking office, on the basis that citizens will vote for representatives who share their views about problems and preferences. Such tactics also include sets of political rights and civil liberties, the right to meet with government officials, support (legal and financial) for non-governmental organizations, policies that allow and encourage participation in and by political parties, and particularly incorporation of multiple levels of participation into the overarching governance structure. This last tactic is important because most interaction across the state-society interface necessarily occurs at the local level, where citizens regularly meet police officers, are likely to know and have a greater role in the select of political leaders, and where popular views on politically-significant issues are regularly consulted for policymaking advice. A state need not have all of these tactics in order to ensure open and free participation, nor is this an exhaustive list of tactics to develop participation.

On the other hand, these states must also limit interaction, to prevent liberty from turning into license, which is required for the maintenance of public order, and also to filter and process public views and the information generated by increased political interaction. These tactics include the organization of multiple levels (e.g. local, regional, national) of government structures, with effective law enforcement, including enforcement of limitations on rights and liberties, the maintenance of appointed and indirectly elected government positions, particularly within the bureaucracy, and formal rules for lobbying government officials and rules on donations to political causes and election campaigns. Without this second set of tactics, democracy would not be possible because popular views could not be translated into public policy, particularly as studies have found that elections are a poor vehicle for the communication of policy preferences. Together, these two sets of tactics can allow government to harness social complexity.

The last strategy of governance is characterized by a different set of tactics, albeit overlapping considerably with the suppressive/repressive strategy. This strategy is unique for the state's utilization of propaganda to indoctrinate the citizenry in a particular ideology, usually through mass communication, and particularly the use of coercion, to exert state control over individuals' economic and social lives. In this strategy order is certainly maintained by law enforcement, but more importantly, order is maintained by ensuring that conflict is limited from the beginning. If the state controls popular interaction and establishes popular preferences, with stiff penalties for dissonance, then conflict should be minimal, and use of force to maintain order should be limited. This

strategy is necessarily costly, which may be part of the reason, in addition to economic inefficiency, that the governments utilizing it during the Cold War ultimately failed.

The collapse of the Soviet Union and the economic liberalization of China represented the effective end of this evolutionary pathway, with few states continuing to utilize this strategy. The “third wave of democratization” also occurred at about this time, with many of the states formerly under totalitarian and authoritarian regimes adopting democratic institutions. For the third time in a century, the democratic form of government was perceived by world leaders to have achieved victory over another, and imitation abounded. By the end of the twentieth century, states described as democracies by existing measurement schemes had come to represent a majority of the world’s countries, inspiring Fukuyama to draft *The End of History*.

By this same time, however, discourse on democracy and democracy promotion had left the isolated realm of political theory and scholars, and had entered the mainstream of political science and, indeed, of popular discourse. Schumpeter’s influence on Dahl and Sartori, and their own influence on succeeding generations of political scientists, caused both academics and government designers of the time to focus on one half of the tactics required to effectively harness social complexity, specifically the side characterized by elections, political rights, and civil liberties. Sartori in particular is notable for arguing for two elements of democracy: demos-protection and demos-power, leaving out entirely the second half of the equation: demos-control. Many of the Third Wave democratization experiences thus neglected institutions and structures to limit interaction and filter information. Others focused on elections while heavily restricting

other forms of political participation, with leaders essentially becoming elected dictators, with varying degrees of checks on their power. In practice, these states represented new variants of the traditional autocratic line, having simply adopted an electoral means of executive recruitment, usually only partially competitive, rather than using the hereditary succession or self-selection mechanisms historically associated this strategy. A few states, which have generally not been classified as democracies, created constrain/filter structures while limiting rights and liberties, often while holding elections with limited competition, suffrage, and/or participation. Singapore, Malaysia, and Taiwan, for example, developed extensive institutions to process and filter popular views on policy problems and solutions, while delaying universal suffrage and competitive elections. Indeed, Singapore and Malaysia continue to limit electoral participation to a single party, although there is evidence of substantial political participation in other forms and venues.

### **Reconceptualizing Democracy**

The evolutionary perspective on the emergence of the democratic system offers an alternative conceptualization of governance form to both the minimalist concept and the liberal millenarian concept. Rather than elections, or a combination of elections, rights and liberties, or a maximalist set of characteristics with normative justifications, an evolutionary perspective makes the state's strategy for managing social complexity the defining characteristic. It details the historical contingency behind the development of the harnessing-social-complexity strategy, incorporating evolutionary principles of both natural selection and intentional choice, and also explains why democracies have spread

and gained an apparent monopoly on legitimacy in governance. And, although outside of the scope of this work, this perspective may also account for democracies' apparently superior economic performance. States learning to harness social complexity might be expected to have higher rates of economic growth, resulting in high levels of wealth and stable, but relatively low, rates of economic growth once states maximize the efficiency of social complexity harnessing. This conceptualization could also be used to explain superior policy performance in other core functions of the state, such as managing emergent public policy problems (e.g. Wagenaar's study of crime mitigation in the Netherlands) or engaging with the international system.

This evolutionary story demonstrates that the development of democracy can be understood in terms of simple evolutionary rules, if we accept the proposed reconceptualization of democracy in terms of a governance strategy of harnessing social complexity. An explanation of democracy's historical emergence and recent diffusion does not require teleology, nor resort to its normativism, but rather the application of evolutionary theory to empirical evidence, coupled with a theory-informed conceptual definition of democracy. This story also has important implications for the study of democracy in the global system, as it may provide the logical "proof" of democracy sought in vain by Sartori, as well as the liberal millenarians. The governance strategy that democracy represents may be superior to its autocratic and totalitarian alternatives not because of moral superiority, but because of measurably better performance on the environmental fitness landscape, in performing the core functions of the state.

This reconceptualization of democracy also has significant implications for models of democratic transition. Traditionally, the democratic transition process has been divided into the development of political institutions and democratic culture, and the implementation of elections. Models differ on the timing of these developments, with gradualists arguing elections and institution development should occur simultaneously, and sequentialists arguing that elections should be postponed until institutions are created and consolidated, and a democratic culture is present. Both theories betray a superficial conceptualization of democracy, based on its structural components, or tactics. The reconceptualization proposed here suggests that democratic transition is only occurring if the state has adopted, or is moving towards, a strategy of harnessing social complexity, rather than suppressing or repressing that complexity, regardless of the specific tactic(s) the state is implementing. While China has certainly not adopted wholesale a strategy of harnessing social complexity, the recent implementation of local elections and the gradual improvement of rule of law and jurido-political equality are tactics consistent with this strategy. In other words, China could be making slow but substantive progress towards democratic governance (harnessing social complexity), without adopting the tactics either gradualists or sequentialists would expect to see.

The complexity/evolutionary perspective explored in this chapter confirms the plausibility and explanatory power of a reconceptualization of governance in terms of its strategy for conflict mitigation, and democracy in terms of whether, and to what degree, the state *harnesses* social complexity. This means that we must move away from minimalist conceptualization of democracy, and its associated operationalizations, which

simply assess the limited set of tactics that Schumpeter believed to be critical: elections in particular. Elections may be a commonly-used tactic supporting the democratic strategy, for good reason, but they neither comprise the strategy nor the system, but rather serve as one, among many, mechanisms for the strategy and the system to function. Elections could conceivably be complemented or possibly replaced by other forms of political participation, such as deliberative forums or referenda, and as long as political interaction still occurred, and popular views were translated into policy, then the system would continue to be democratic, in the sense that social complexity is harnessed. Moreover, elections, variable in competitiveness, are currently being used by many autocratic states as an executive recruitment mechanism, unaccompanied by significant civil liberties or jurido-political equality; such states have adopted a democratic tactic, not the strategy.

We must also resist the pull of maximalist operationalization schemes. While these schemes capture more of the harnessing social complexity strategy by including multiple sets of freedoms and control mechanisms, these schemes often include democracy's many correlates, and are frequently driven by a normative understanding of democracy. The liberal millenarian school may be correct about the superiority of democracy, but their argument is based on moral judgment and their resulting schemes measure not only democracy, but everything they hope democracy will produce.

The alternative conceptualization outlined in this chapter provides, indeed demands, an alternative framework for operationalization. As outlined here, as well as in the theoretical work of Axelrod and Cohen, and empirical work by Wagenaar, harnessing social complexity can be broken down into three general components, or sets of tactics.



In order to harness social complexity a state must strike a delicate balance between (1) allowing social interaction to occur and self-organize, (2) regulating interaction short of violence and maintain order, and (3) structuring interaction across the state-society interface to allow for the filtration and processing of information generated by social interaction. This operationalization has the potential to account for the emerging variants of apparently democratic governments, and also has the benefit of being grounded in theory, which not only accounts for democratic institutions, but also for the development of governance forms over the course of history. Before a new operationalization is created, however, existing measurement schemes must be evaluated. The next chapter reviews existing measurements of democracy, with a particular focus on conceptual definitions.

#### **4. Conceptual and Operational Problems with Existing Cross-National Governance Metrics**

Chapters two and three outlined the need for a new conceptualization of democracy, and proposed such a reconceptualization by combining complexity theory with traditional democratic theory. Chapter three demonstrated the plausibility of this new conceptualization, where democracy represents a governance strategy of harnessing social complexity, by tracing the historical emergence and recent diffusion of the democratic political system. The remainder of this thesis deals with operationalizing this conceptual definition. This chapter reviews six of the major measurement and classification schemes of democracy, from both minimalist and liberal millenarian (maximalist) schools of thought. This is necessary in order to avoid repeating important mistakes and recreating what already exists, a tendency Sartori sums up eloquently:

*Many people think themselves original just because they are ignorant. Thus, unwittingly, they discover what has already been discovered, invent what has already been invented, and attempt what has already been attempted, thereby repeating old mistakes and perennially unsuccessful undertakings.<sup>81</sup>*

Armed with knowledge of the strengths and weaknesses of existing datasets, with a particular focus on underlying conceptual definitions, chapter five proposes and tests a new operationalization: the Harnessing Social Complexity Index.

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<sup>81</sup> Sartori, *Theory of Democracy*, 465-66.

## Concerning Cross-National Measurement of Governance Quality

As studies of democracy have entered the mainstream of comparative political analysis, they have also come to use the sophisticated statistical methods preferred by the political science community. As with much political science quantitative analysis, however, popular methods generally far outstrip the available data in terms of accuracy and reliability. Despite increased attention, including a largely ignored call at the 2009 American Political Science Association meeting to create a new section on cross-national dataset management issues, the problems associated with classifying governance strategies and measuring democracy have received relatively little attention.

Although the first cross-national datasets on governance appeared shortly after the “second wave” of democratization in the 1950s, concurrent with the behavioral revolution in political science, interest in measuring democracy remained relatively low. The bias toward studying autocratic governance strategies during this period is particularly notable in the Polity dataset, where significantly more variation is seen on the autocratic compared to the democratic spectrum. The end of the Cold War shifted this bias, in part due to the rise in the number of democracies in the international system, combined with renewed interest in democratic peace theory, spurred in part by high-profile scholarly work such as Huntington’s *The Third Wave* and Fukuyama’s *End of History*. At the same time, the information revolution and the development of the Internet spurred public demand for readily consumable quantitative information on social and political phenomena, indices in particular.

Public demand combined with policy relevance generated renewed scholarly interest in measuring, classifying, and indexing characteristics of governance, and democracy in particular. Although many indices have been proposed in recent years, most of which are highly correlated with each other, only a few datasets have become regularly used in mainstream academic and policy discourse. Following Munck and Verkuilen (2002) and Munck (2003), this analysis describes the six most commonly-used large-n (i.e. at least 125 countries over at least twenty-five years) governance measurement/classification schemes in comparative politics, paying attention to similarities and differences in conceptualization, validity, and common problems of confounding governance with its consequences or concomitants (e.g. economic development, income inequality) and usage of subjective indicators.<sup>82</sup> Because we are specifically interested in those datasets that purport to measure or classify regimes, datasets like the Database of Political Institutions, that are commonly-used and record invaluable facts about governance characteristics, but that do not measure or classify democracy or regime type, are not considered. Although most of the datasets included here are academic, two (Freedom House's "Freedom in the World," and *The Economist's* "Democracy Index") are produced primarily for mass consumption, but are commonly-used in policy circles, think tanks, and the media. It is also important to note that while the datasets included are arguably the most prominent, they build on previous datasets that are perhaps more influential. Measurement schemes developed by Lipset, Bollen,

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<sup>82</sup> Gerardo L. Munck and Jay Verkuilen, 2002, "Conceptualizing and Measuring Democracy: Evaluating Alternative Indices," *Comparative Political Studies* 35 (1).

Muller, and Coppedge & Reinicke, for example, have significantly informed the creation and development of most of the datasets included herein.<sup>83</sup>

Table 1 summarizes the six datasets described in this chapter, including the primary phenomena each seeks to measure or classify, the core components that inform the measurement or classification, whether component data is available, and the nature of the measurement or classification scheme proposed (i.e. continuous, ordinal, categorical). Although each dataset included here is concerned with measuring or classifying regime type, and specifically the presence and/or quality of democratic governance, the specific concept each dataset professes to measure reflects the conceptual definition used by its authors.

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<sup>83</sup> Lipset, *Some Social Requisites...*, 1959; Kenneth Bollen, "Issues in the comparative measurement of political democracy," *American Sociological Review* 45: 370-390 (1980); Edward Muller, "Democracy, Economic Development, and Income Inequality," *American Sociological Review* 53: 50-68 (1988); Michael Coppedge and Wolfgang Reinicke, "Measuring Polyarchy," *Studies in Comparative International Development* 25: 51-72 (1990).

Table 1. Commonly-Used Governance Datasets

| <b>Dataset Name<br/>(Investigators)</b>  | <b>Phenomena<br/>Measured</b>       | <b>Core Components</b>   | <b>Component<br/>data?</b>                     | <b>Measure<br/>Type</b> |
|--|-------------------------------------|--|--|-------------------------|
| Political Regimes Index [PRI]<br>(Alvarez, Cheibub, Limongi, Przeworski)                     | Democracy                           | Executive elections<br>Legislative elections<br>Presence/power rotation of parties   | available                                      | categorical-dichotomous |
| Polity IV<br>(Marshall and Jaggers)  | Democracy<br>Autocracy              | Regulation of executive recruitment<br>Competitiveness of exec. Recruitment<br>Openness of executive recruitment<br>Executive constraints<br>Competitiveness of participation<br>Regulation of participation   | available                                      | ordinal<br>categorical  |
| Polyarchy Dataset<br>(Vanhanen)  | Polyarchy                           | Electoral competition<br>Electoral participation   | available                                      | continuous              |
| Freedom in the World<br>(Freedom House)  | Political Rights<br>Civil Liberties | Electoral quality: legislative, executive<br>Electoral process<br>Effective power of elected officials<br>Freedom from domination by elites<br>Autonomy of minority groups<br>Right to form political parties<br>Power of political parties<br>Freedoms of media, religion, assembly<br>Rule of law<br>Independent judiciary<br>Freedom from war, terror, torture<br>Freedom from corruption<br>Freedom of speech, privacy<br>Freedom of travel, residence<br>Economic/business freedom<br>Equality of opportunity | available at secondary, but not primary, level | ordinal                 |
| World Governance Indicators: Voice & Accountability Index<br>(Kaufman, Kraay, and Mastruzzi) | Voice and Accountability            | Government repression<br>Democratic accountability<br>Human rights<br>Civil and political liberties<br>Freedom of press, participation, assoc.<br>Government censorship<br>Orderly change in government<br>Role of military in politics  | available for most components                  | continuous              |
| Democracy Index<br>( <i>The Economist</i> )  | Democracy                           | Electoral process and pluralism<br>Civil liberties<br>Government functionality<br>Political participation<br>Political culture   | not available                                  | continuous              |

Conceptualization is the most important stage of the measurement process, and a particularly difficult one for democracy because of the myriad attributes we associate with democratic regimes. Adopting a definition with many attributes (maximalism) raises the risk of weakening epistemic correlation, reducing the possibility of finding empirical matches to the theoretical construct, and eliminating avenues for future research by incorporating related factors (particularly causes or effects) into the definition (confounding). The opposite tendency, minimalism, however, is also problematic, because including only the most basic elements will lead to the classification of non-democratic regimes as democracies, or will create a category so broad as to be almost meaningless. Most academic datasets are characterized by minimalism, largely based on conceptual definitions similar to those provided by Dahl and Sartori, where electoral quality plays a major, if not the defining, role in classification and measurement. In contrast, the three prominent private sector schemes are characterized by maximalism, where multiple factors, many of which are arguably only tangentially related to democracy, or which are correlates of democracy, (e.g. Freedom House's *freedom from war* component), are included in the operational definition.

### **Political Regimes Index<sup>84</sup>**

Alvarez, Cheibub, Limongi and Przeworski announced the Political Regimes Index (PRI) in 1996, in an effort to improve classification of regime type by: (1) incorporating more democratic theory, by which they seem to mean the work of

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<sup>84</sup> Mike Alvarez, Jose Cheibub, Fernando Limongi, and Adam Przeworski, "Classifying Political Regimes," *Studies in Comparative International Development* 31: 3-36 (Summer 1996).

Schumpeter; (2) utilizing objective rather than subjective measurements, in direct response to the measurement schemes of Bollen and Coppedge & Reinicke, which included subjective coding decisions of electoral fraud; (3) expanding coverage beyond rival schemes to cover 140 countries for forty years; and (4) by carefully accounting for systemic and random error in their measurement scheme. The PRI is characterized by minimalism, and adopts a conceptual definition based on Schumpeter: “democracy, for us, is thus a regime in which some governmental offices are filled as a consequence of contested elections,” and where contestation means that incumbents do, in practice, lose elections.<sup>85</sup> The coding rules for the PRI reflect this simple definition, and include only three core rules, paraphrased as follows: (1) the chief executive must be elected; (2) the legislature must be elected; and (3) there must be more than one party, which parties must alternate power due to elections.

Based on these rules, the PRI categorizes regimes as either democratic (the rules are met) or non-democratic, with provisions for further classifying both types of regimes. Democracies are coded as either presidential or parliamentary, and non-democracies are coded in terms of several qualitative characteristics. This design is unique among contemporary measurement schemes for its sole reliance on elections as the defining aspect of democracy, rejecting even Dahl’s demand for evidence of popular participation. The authors intentionally exclude suffrage requirements, participation thresholds, the role of the military in politics, and checks on the executive, all common to most minimalist schemes, in addition to excluding the broader set of requirements included by the

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<sup>85</sup> Ibid., 4.



maximalist schemes, such as political rights and civil liberties. In part, the authors' rationale for this choice was a desire to study the relationship between election-holding and other common correlates and oft-cited requirements of and for democracy.

The PRI's resulting dichotomy owes both its strengths and weaknesses to its extremely simplistic conceptual definition of democracy. Despite its extreme simplicity, the PRI is strongly correlated with the other, more complex, measurement schemes, with the Polity index predicting 91% of the PRI classifications at the time of its publication, and remaining strong since that time. The weakness of the PRI, as with the other minimalist schemes, is the increasing amount of error introduced by the rule set in the face of an increasingly number of illiberal, but electoral, regimes, as well as regimes that are liberal, but not electoral, such as Taiwan during the early 1980s, or Singapore and Malaysia today. In terms of illiberal democracies, many of the nascent Sub-Saharan African democracies have elected chief executives, with elected legislatures and parties that do, in fact, rotate power, but where the chief executive dominates politics and political participation is highly suppressed. Zimbabwe, for example, would be coded as a democracy today, in the light of the victory of the Movement for Democratic Change in the 2008 parliamentary elections, because the electoral victor, Tsvangirai, became prime minister. In practice, however, President Robert Mugabe maintains tight control over opposition activities and political participation at large, and severely limits the power of both the legislature and the prime minister. Zimbabwe may have had an election in which power shifted among parties, but it is far from democratic by most standards, and has certainly not adopted a strategy of social complexity harnessing.

The PRI can also be seriously challenged on the conceptual level. It is unclear from any reading of democratic theory, unless one only reads Schumpeter, that democracy is equivalent to the holding and transfer of power due to elections. Both Dahl and Sartori included a requirement of political participation in their definitions of democracy, and most theorists since have adopted even more maximal definitions. Democratic political theorists, from Plato to Madison and forward, have maintained a fear of exactly what the PRI proposes: democracy without liberty. An elected dictator is still a dictator, and defining democracy in terms that reflect the modern conception of democracy as liberal-democracy requires at least one additional component: protections of the populace from the state (Sartori's demos-protection).

### **Polity IV<sup>86</sup>**

Polity IV is the fourth iteration of the Polity project and dataset, originally designed by Ted Robert Gurr in 1975, currently managed and updated by Monty G. Marshall and Keith Jagers, of the Center for Systemic Peace, and one of the most commonly used datasets in quantitative comparative politics. Although classified here as minimalist, largely in contrast to the maximalist schemes, Polity IV is significantly different from most other minimalist schemes. In sharp contrast to the PRI, Gurr designed Polity to measure autocracy and democracy as coexisting scalar elements in any given polity, and to allow for differentiation among types of governance strategies within the

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<sup>86</sup> Monty G. Marshall and Keith Jagers, 2001, *Polity IV Project: Political Regime Characteristics and Transitions 1800-2007. The Polity IV Dataset*. Online, available at: <http://www.systemicpeace.org/polity/polity4.htm>

broad autocratic and democratic categories. Polity IV measures governance on the basis of three major concepts: executive recruitment (defined in terms of competitiveness, regulation and openness), constraints on the executive, and political competition (defined in terms of competitiveness and regulation of participation). The measurement level for each component is ordinal, although sub-component indicators are nominal, and the major indices (i.e. *democracy*, *autocracy*, *polity*) are also ordinal. Polity IV has been subject to extensive peer review and its disaggregate data is freely available.

Unlike most minimalist democracy metrics, Polity does not give particular preference to elections in its coding scheme, but instead gives the heaviest weight to executive constraints, with election quality and competitiveness of participation as secondary concerns. Polity is thus unique and particularly strong among the academic datasets in that a country could have weak or no elections, but still score in the democratic end of the governance spectrum (7 on a 1 – 10 scale) if the executive was heavily constrained and political participation was competitive, although in practice this does not occur within the Polity data, probably because competitiveness of participation tends to be coded in the context of electoral participation.<sup>87</sup>

Polity's strongest point is the degree to which the dataset has been used, reviewed, and revised by the academic community, which, combined with annual reviews and data updates, has led to a very high degree of reliability. Another strength of the Polity IV

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<sup>87</sup> Robert H. Bates, et al., 2003, *Political Instability Task Force Report: Phase IV Findings* (McLean, VA: SAIC); Monty G. Marshall and Benjamin R. Cole, 2008, "Revised Macro-Comparative Analysis of the Problem of Factionalism in Emerging Democracies," paper presented at the 2008 Annual Meeting of the American Political Science Association, Boston, MA.

scheme is its combination of large-n data with a series of qualitative country reports, one for every country coded, describing historical trends and explaining any recent changes.

One of the greatest weaknesses of Polity is that the scheme was developed during the 1970s when autocracies were the global norm and were thus the regime type of primary academic interest. While the autocracy and democracy scales have an equal amount of possible variation in theory, in practice Polity shows significantly more variation among autocracies than among democracies, especially at the upper end of the democratic spectrum. For example, Polity codes Botswana and France both as 9 out of 10 on the *democracy* index, despite the fact that Botswana has only had a single party in power since independence, and has never had a change in executive directly due to an election. Polity does not attempt to differentiate between types of party systems, provided multiple political parties compete at a basic level, or different types of legislatures, and struggles when dealing with illiberal democracies because of its predominant focus on government actions and policies, and its de facto focus on electoral politics when coding for regulation and competitiveness of political participation. Elections are a critical time for states, when the entire polity mobilizes and political fractures become readily apparent, but in many transitioning states important changes in social and political organization and activity occur well before elections are held, which changes are not captured by Polity coding practices.

Due to the different variation at different ends of the scale, and to the additive nature of the Polity components, it is not appropriate to use Polity linearly, which is often cited as another weakness in its design. Treating the Polity data linearly ignores the cases

in the middle of the Polity scale where autocratic and democratic elements mix to produce, in Gurr and Marshall's terms, anocracies; these cases are some of the most interesting in terms of democracy's relationships with political stability, economic development, and conflict dynamics. Thus, for the purposes of quantitative analysis Polity is better converted into a three or five-category measure, ranging from autocracy (-10 – -6), to anocracy (-5 – 5), and democracy (6 – 10).<sup>88</sup> That said, this problem is also one of Polity's greatest strengths: component variables hold important independent meaning for researchers and are frequently used independently of the *democracy* or *polity* indices.<sup>89</sup>

### **Vanhanen/Polyarchy Dataset<sup>90</sup>**

Tatu Vanhanen's Polyarchy dataset adds two levels of complication to the PRI, adding an index of political participation in order to measure Dahl's concept of polyarchy, while also conceiving and operationalizing democracy as continuous rather than dichotomous. Vanhanen measures degree of competition by using the percentage of votes won by the smaller parties in any given election, and participation by voter turnout rates (i.e. number of votes cast divided by the total population of the country). Combined by multiplication, these yield the democracy index.

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<sup>88</sup> Monty G. Marshall, et. al, 2002, "Polity IV, 1800-1999: Comments on Munck and Verkuilen," *Comparative Political Studies* 35 (1): 40-45.

<sup>89</sup> Ibid.

<sup>90</sup> Tatu Vanhanen, "A New Dataset for Measuring Democracy, 1810 - 1998" *Journal of Peace Research* 37: 251-265 (March 2000).

As with much data work the devil in Vanhanen's work is in the details. Because Vanhanen uses party vote/seat shares to determine level of competitiveness, he ignores entirely non-partisan forms of electoral competition, despite such systems being no obviously less democratic than party-based systems. Iraq's 2006 elections, for example, expressly prohibited political parties, and would thus be coded as being completely uncompetitive. Similarly, this measure of competitiveness would ignore the gradually increasing opposition share of Taiwan's parliament during the period of KMT rule from the 1960s to 1980s, because opposition politicians were required to run as independents (*tangwai*). While these are unusual examples, the competitiveness measure also creates a bias against the much more common single-member-district or plurality-based electoral systems, as proportional electoral systems tend to have a larger number of parties, with the largest party often holding a relatively small share of the vote and ruling in coalition. While Vanhanen imposes a maximum cap of 70% for competitiveness, this does not account for the bias against two-party systems, whose competitiveness relative to multi-party systems remains hotly contested. For example, there is no clear evidence that Israel's purely proportional elections are any more competitive than the plurality-based electoral system of the UK, which calls into question the very assumption that electoral vote or seat share of political parties reflects competitiveness of the political system.

Vanhanen's measure of political participation is also questionable, because it focuses only on electoral participation, and because the index is strictly a count, offering no information on the quality of electoral participation.

Although the focus on electoral participation is consistent with his conceptual definition, based on Dahl's polyarchy, the conceptual definition here should be questioned. As previously noted, there are many forms of political participation that serve to communicate popular will across the state-society interface, from referenda to civil society strength to formal lobbying organizations, which electoral data does not capture. Electoral participation could be high due to a strong get-out-the-vote effort on the part of one or more parties competing, or because of simple coercion, while general participation in political society could be quite low, or of a particularly sectarian, factional, or coerced nature. Alternatively, electoral participation could be low, because of suffrage restrictions or an electoral boycott, but political participation in general could be quite high. This method also does not capture changes in political participation between election years.

There is also evidence that the expansion of suffrage has historically, in general, not resulted in changes to electoral results over time, indicating that popular views are being accurately expressed without voting, through some other (unmeasured) means.<sup>91</sup> By using the total population as the denominator, the participation index is also heavily biased against countries with restrictions on suffrage, and does not allow the analysis of cases where significant groups are excluded from the polity, even if they are living within its borders. The government of South Africa under apartheid, for example, was highly democratic, provided you were white-skinned, among the minority allowed to participate in the polity. While certainly not democratic for the entire country, the experience with competitive elections and the growth of democratic institutions during the apartheid era

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<sup>91</sup>Alvarez et al., "Classifying Political Regimes...", 1996.

arguably made the post-apartheid transition, wherein suffrage and political participation was extended to the entire adult population, significantly easier than in many other democratic transition cases.

Particular strengths of Vanhanen's Democracy Index include its parsimony, with which it predicts similar levels of democracy as Polity and Freedom House despite vastly simpler coding rules and, indeed, only two variables, as well as its transparent procedures. While replicating Polity data requires significant training time and socialization to the dataset and its rules, in addition to carrying out hours of primary and secondary document research, replicating Vanhanen's Democracy Index can be quickly done with a calculator after consulting any of the several data sources on election results.

### **Freedom in the World<sup>92</sup>**

Freedom House adopts a maximalist definition of democracy, with some twenty-five indicators, but incorporates these indicators into only two aggregate concepts, which it labels *civil liberties* and *political rights* indices. The civil liberties score is composed of fifteen elements that comprise four sub-concepts: "freedom of expression and belief," "associational and organizational rights," "rule of law," and "personal autonomy and individual rights." The political rights score is composed of ten elements that comprise three sub-concepts: "electoral process," "political pluralism and participation," and "functioning of government." While certainly encompassing more of what it means to be democratic than the minimalist schemes, the Freedom House scale confounds democracy,

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<sup>92</sup>Freedom House, 2009, *Freedom in the World*. Online, available at: <http://www.freedomhouse.org>.



a governance strategy, with its consequences, causes, and concomitants. For example, the *civil liberties index* includes such elements as economic exploitation, equality of economic opportunity, free market capitalism, discrimination, “freedom from war,” presence of trade unions and collective bargaining, and academic freedom. In political rights, Freedom House includes such as elements as: “changing the ethnic composition of a country or territory,” government operating with transparency and openness, and freedom from corruption. Although many of these concepts are certainly related to democracy, and could be correlates and perhaps even effects of democracy, it is not clear that they belong in the definition of democracy, even if we are seeking to measure ends rather than means. A country may be democratic and yet be unable to guarantee “freedom from war,” with the United States and the United Kingdom as prime examples, and it is far from clear that democracies are, either theoretically or empirically, free from corruption. At the very least, this type of measurement scheme effectively confounds democracy with its frequent correlates, rendering any analysis of the relationships thereof both improper and potentially fruitless.

The end result of the Freedom House coding scheme is a 1 – 7 ordinal scale purportedly measuring civil liberties and political rights, independently, where 1 indicates maximum freedom, and 7 indicates maximum restriction. While these concepts are measured separately, their high degree of correlation (.944) is notable, and suggests that in practice they either measure the same phenomena, or that respect for political rights and civil liberties are nearly perfectly correlated in practice. Countries are also coded categorically as free, not free, or partly free, based in part on the civil liberties and

political rights scores. Freedom House also allows for “electoral democracies,” or those states hold, at a minimum, competitive elections, but where other rights and liberties may or may not generally be respected. Despite their widely different definitions and weighting schemes Freedom House’s indices are highly correlated with the other major measurement schemes; when compared to Polity, correlation coefficients equal -.891 for Political Rights, -.837 for Civil Liberties, and -.881 for an average of the two.<sup>93</sup>

### **World Governance Indicators: Voice & Accountability<sup>94</sup>**

Under the direction of The World Bank, Kaufman, Kraay, and Mastruzzi developed the World Governance Indicators (WGI) in 2002, and have produced annual updates since that time. In recent years the WGI have become increasingly prominent measures of government, being widely used in policy circles and garnering significant (mostly negative) attention from the academic community. Included in the most recent (2009) version of the WGI are six indices: Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption, with the last the most commonly-used, according to its authors. Of the six indices, Voice and Accountability is the closest conceptually to democracy, purporting to capture “perceptions of the extent to which a country’s citizens are able to participate in selecting their government, as well as freedom of expression,

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<sup>93</sup> Analysis conducted on 2007 Polity2 variable and Freedom House 2008 civil liberties and political rights scores (n = 162). The correlation coefficient is negative because the variables are treated in their original form, where higher numbers in Freedom House indicates less freedom, while higher numbers in the Polity scale indicate more democratic institutions.

<sup>94</sup> Daniel Kaufman, Aart Kraay, and Massimo Mastruzzi, "Governance Matters VIII: Governance Indicators for 1996-2008," *World Bank Policy Research Working Paper No. 4978* (June 2009).

freedom of association, and a free media.” The indices are derived from component analysis of weighted averages of hundreds of indicators, drawn from thirty-five data sources, generally utilizing expert and public opinion. In addition to other sources, the Voice and Accountability index includes the Economic Intelligence Unit’s *Democracy Index*, as well as scores from that indicator’s component variables, raising serious questions about the utility of comparing the two indices.

Although several authors have described various weaknesses in the WGI, two are particularly serious. First, as described in detail by Melissa Thomas, the WGI lack proof of construct and convergent validity, meaning that, in the case of the former, the indices are not informed by previous theoretical work, and in the latter that the indices do not correlate with other phenomena consistently with current expectations.<sup>95</sup> Kaufman, Kraay, and Mastruzzi have responded to this criticism by denying the need for construct and convergent validity when developing measures.<sup>96</sup> To paraphrase their argument, if data is to be used empirically to test theories, why would one base the development of a data source on the theory to be tested? Similarly, they argue that the failure of an indicator to co-vary with a theorized correlate does not necessarily mean the indicator is flawed, as it could just as easily mean that the theoretical expectations, or the operationalization of the correlate, is flawed. While it is true that one develops measures to test theories, one does not develop a measure of a concept to test the relationship

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<sup>95</sup> Melissa Thomas, "What do the Worldwide Governance Indicators Measures?" Unpublished manuscript, Johns Hopkins University; quoted in Daniel Kaufmann, Art Kraay, and Massimo Mastruzzi, "The Worldwide Governance Indicators Project: Answering the Critics," *World Bank Policy Research Working Paper 4149* (March 2007).

<sup>96</sup> Kaufman et al., "... Answering the Critics," 2007.

between the concept and the measure. One develops a measure of a concept to test relationships between that concept and other, possibly related, concepts. As such, a measure *must* have construct validity, or epistemic correlation between the measurement and the concept, or it cannot be reliably used to study the concept. If Voice and Accountability is being used as a measure of democracy, but it actually measures something else entirely, and without theoretical grounding this epistemic correlation cannot be assumed, then any analysis of democracy using Voice and Accountability can produce only unclear results.

Thomas's argument also points to a bigger methodological weakness: overspecification of the variables due to a lack of theoretical grounding. When factor analysis of four hundred eleven individual variables is used to construct only six indices, it is reasonable to assume that the developers have simply conducted an exercise in data mining, rather than beginning with a concept to measure and operationalizing it with the goal of maintaining epistemic correlation. Although the result of the factor analysis may be a list of components that do seem to logically comprise Voice and Accountability, it is entirely unclear how many of these variables actually contribute significantly to the measurement, or how they should theoretically work to form the concept.

A second major weakness of the WGI is that of all of the six indices are tightly correlated. Bivariate correlation coefficients range from .657 for *Voice and Accountability* and *Political Stability* to .944 for *Rule of Law* and *Control of Corruption*. While the correlation coefficients for *Voice and Accountability* and the other indices are comparatively low, under .800, the other indicators are so tightly correlated that, for all

practical purposes, they measure the same phenomena. *Government Effectiveness*, for example, is correlated at  $r > .925$  for *Regulatory Quality*, *Rule of Law*, and *Control of Corruption*. While there is certainly reason to believe that governments with low government effectiveness also have problems with rule of law, corruption, and regulation, it is difficult to believe that they are nearly identical on all four fronts and, if they are, what is the value of developing four separate measures?

Lastly, because the WGI's measurement of *Voice and Accountability* is constructed from a mix of public and expert perceptions, its comparability to the other datasets, and its utility as a measure of democratic quality, is questionable. For public opinion polls, perception of democracy in another country is necessarily founded on one's own understanding of democracy, which may be quite different from one culture to the next. Indeed, analysis of the World Values Survey shows that in many countries support for democracy is quite high at the same time that a majority of citizens support the return of autocratic governance, especially when economic development is stagnant or public perceptions of corruption are high. This indicates a different understanding of democracy than in most western democracies, where support for autocratic rule is consistently low, even during economic recessions. Furthermore, the use of expert perceptions of democratic quality is also a questionable practice. Academics build their careers on unique contributions to their disciplines, becoming well-respected primarily for having different opinions than their predecessors and colleagues. There is little reason to believe that an average of experts' opinions on democratic performance is a better measure of democracy than can be gained through the utilization of observable evidence,

such as election quality, constitutional structures and institutions, and the nature of political participation. It is entirely unclear how experts can reliably gauge the level of corruption, for example, when by its very nature corruption is generally unobservable and immeasurable. At the very least, it is presumptuous to convert such pools of expert and public perceptions into an index measured on a continuous scale with precision to the hundredths place.

Despite also being a weakness, the continuous nature of the *Voice and Accountability* index makes it one of few governance indicators that can be utilized in multivariate OLS regression, which allows for sophisticated analysis of the relationship between democracy and economic development, for example, albeit with a level of precision unwarranted by the reliability of the underlying data. Also, the *Voice and Accountability* index does correlate well with the other commonly-used governance datasets, suggesting the very convergence validity questioned by Thomas.

### **The Democracy Index<sup>97</sup>**

*The Economist's* Economist Intelligence Unit (EIU) developed the *Democracy Index* in 2007. The EIU explicitly adopted a maximalist definition to account for a broader conceptualization of democracy than used by either the academic datasets or Freedom House, which in their words “do not encompass sufficiently or at all some features that determine how substantive democracy is or its quality.... the elements of political participation and functioning of government are taken into account only in a

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<sup>97</sup> The Economist Intelligence Unit, "The Economist Intelligence Unit's Index of Democracy 2008," *The Economist* (2009).

marginal way.”<sup>98</sup> The Democracy Index is calculated by averaging the scores of its five core components: electoral process and pluralism, the functioning of government, political participation, civil liberties, and political culture, which range on a continuous scale from zero to ten. In addition to the Democracy Index, the EIU also categorizes countries as “full democracies,” “flawed democracies,” “hybrid regimes,” or “authoritarian.”

Calculating the component indices is done by an instrument composed of two- or three-choice questions, which are coded by relying on public opinion surveys, with the World Values Survey in particular being heavily relied upon. Countries for which survey data is missing are coded by using survey results for “similar countries” and, if these are unavailable, expert assessments. The basis for judging similarity among countries is left unclear, but the practice of replacing missing data with another country’s survey results is highly dubious. The identities of the experts used to assess the performance of countries for which survey data, or data on “similar” countries, is unavailable, is also not disclosed. The problems associated with these methods notwithstanding, the very use of survey data to inform a measurement of democracy is questionable, as they measure perceptions of rights, freedoms, corruption, etc., rather than those phenomena themselves. A large majority of the American population, for example, has little confidence in its legislature at present, but this does not imply that the US legislature is corrupt, untrustworthy or ineffectual, especially when compared to legislatures from other countries with similar levels of distrust, to say nothing of the temporally dynamic nature of such perceptions.

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<sup>98</sup> Lasa Kekic, "The Economic Intelligence Unit's index of democracy," in *The World in 2007* (London: *The Economist*, 2007), 2.

Similarly, in terms of human rights, using public opinion on the country's respect for human rights may not account for human rights abuses against minorities, or those systematically underrepresented in surveys. The World Values Survey's sample bias towards industrialized countries and urban areas means that rural areas, in particular, are neglected. One can easily imagine a significant majority of US citizens in the 1950s agreeing that human rights were well-respected in their country, despite the systematic persecution and maltreatment of minorities and African-Americans in particular. Public perceptions may reflect, to a degree, the nature of a phenomenon observed by the sample of the population being interviewed, but cannot reliably be used to measure that phenomenon for the population.

The Democracy Index also suffers from a highly subjective and questionable set of coding weights. For example, under "democratic political culture," countries lose democratic points if more than 50% of the population claims it would be "very or fairly good to have experts, not government, make decisions for the country." The notion that government should rely on expert opinions, especially in the contemporary era where policy problems are often highly complex and technical, is not necessarily a sign of poor or non-democratic culture. Similarly, countries are less democratic in the index if more than thirty percent of the population agrees that "democracies are not good at maintaining order." Democracies, especially young democracies, have repeatedly been linked with increased political instability, likelihood of adverse regime change, and political factionalism, frequently associated with significant political unrest and disorder. In fact, democracies are generally less able to maintain public order than their authoritarian



counterparts until they are fully consolidated.<sup>99</sup> Thus, the very theoretical basis for this subjective measurement is flawed. Other questionable measures of democratic political culture include popular belief that democracy benefits economic performance, the empirical relationship underlying which claim remains hotly contested, and a strong tradition of the separation of church and state. In some cases, notably France, the separation of church and state has actually been used to discriminate against and persecute minorities.

Despite serious weaknesses, a complete lack of peer review among them, the Democracy Index has some important strengths. Although its maximal conceptual definition and highly subjective measures are problematic, they do reflect a much broader conception of political participation and pluralism than the other commonly-used datasets, with the possible exception of Freedom House. While Polity, Polyarchy, and the PRI primarily measure political participation in the context of national elections and electoral politics, the Democracy Index takes a more holistic view, including participation in civil society organizations, participation in lawful demonstrations, popular interest in the news and readership of the news media, among others. This reflects the much broader array of avenues the population has for engaging with government in a democratic society. The Democracy Index is also notable for including a measure of electoral quality at the municipal level, which the other available indices do not. Whereas most interaction across the state-society interface can be expected to occur at the local level, where citizens regularly interact with police officers, military personnel, tax officials, and

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<sup>99</sup> Monty G. Marshall and Benjamin Cole, "Global Report on Conflict, Governance, and State Fragility 2009," (Severn, MD: Center for Systemic Peace, 2009).

political leaders, participation at this level, whether through voting or other means, is critical to a valid measure of democracy.

## Summary

The strengths and weaknesses of these commonly-used databases, representative of the broader set available, raise fundamental questions about how we conceptualize, define, and measure democracy. The two main schools of thought on this matter choose working definitions of democracy that are either much more simple than the construct of democracy in the mind, usually focused on, and often only on, elections, or so all-encompassing as to far exceed any reasonable definition of democracy as a governance strategy. In short, we have come to define democracy either consistently with the Schumpeterian tradition of electoral quality, or in similarly minimalist terms of its institutions, or in maximalist terms of the myriad correlates of successful democratic governance, often with highly subjective coding rules. Sartori is somewhat prophetic in *Theory of Democracy* (1962), summing up this tendency well, despite referring to scholars struggling to classify democracies in 1910:

*Their mistake lies in using a static technique of appraisal, that is, in appraising the degree of democracy within a political system by a correspondence test with a model that has no alter ego, instead of looking at democracy as a chain-reaction to be judged dynamically. They seek democracy in structures instead of interactions. That want to find it immobilized in, within something, instead of seeking it between, as a dynamic relationship among groups and organizations. To put it briefly, their mistake lies in looking for life in a body that is already dead, in searching for democracy where it no longer exists.*<sup>100</sup>

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<sup>100</sup> Sartori, *Theory of Democracy*, 123.

Although Sartori's emphasis here is on political participation and his focus on minimalism, his critique applies to both minimalist and maximalist conceptions. Both attempt to measure democracy based on its most immediately observable components (e.g. elections, legal protections of rights and liberties, structural constraints on the executive), when none of these elements are unique to democracy. Autocratic leaders could be, and often have been, elected, authoritarian states sometimes provide populations with civil liberties and some political rights, and even the most personalistic dictators are constrained by military leaders, party officials, courtiers, or bureaucrats. What makes democracy unique is its goal, the nature of its strategy for managing social complexity: the incorporation of public problem perceptions and policy preferences into the policymaking process. This harnessing of social complexity certainly includes the mechanisms existing conceptualizations use to operationalize democracy, but many other mechanisms could be used to complement or replace those most-commonly cited.

Of particular importance in assessing the degree to which interaction occurs across the state-society interface is the quality of civil society in a state. Civil society dynamics are largely missing from democratic conceptualizations and measures, although many, including Freedom House and Polity, measure conditions that make civil society more likely to flourish. The Democracy Index is unique in including some aspects of non-electoral civil society dynamics in its measures, but a lack of transparency renders its model unclear. Moreover, although civil society is conspicuously absent from most lists of causes of democratic transition, its emergence and development are clearly implied in each of the general causes cited in many schools of thought on the topic. Any movement

towards an alternative operationalization of democracy, especially one that adopts a functional, rather than minimal or maximal, angle, thus requires review and possible incorporation of the existing cross-national civil society measures.

### **Cross-National Civil Society Measures**

Culture and religion offer organizational experience, meeting areas for discussion of both religion and politics, and provide, in many cases, leadership of emergent popular movements. Economic development, by educating the populace, increasing the size of the middle class, increasing incentives for popular participation in government, and creating transportation and communication networks, encourages NGO growth, which in turn encourage the development of a democratic political culture. Pre-existing institutions protect civil society leaders and NGOs from repression, and provide legal avenues for participation in civic dialogues and local politics. Finally, international pressure and support is often focused in the NGO sector, and both people and NGOs learn lessons from their neighbors' experiences, strengthening civil society domestically. In short, this author proposes that most theories of democratic transition can be distilled into whether and to what degree civil society is allowed to flourish, and whether and to what degree information generated by civil society activity (social complexity) crosses the state-society interface and is incorporated into policymaking.

Despite the important role of civil society in democratization, few have systematically investigated civil society as the primary cause of democratization outcomes. Among those that have, including Putnam, Taylor, Victor Perez-Diaz, Hannan

Rose, Laurence Whitehead, Michael Bernhard, Thomas Carothers, and Graeme Gill,<sup>101</sup> among others, none have investigated this relationship macro-comparatively, or using large-n statistical analyses, in part because of the difficulties in defining and measuring civil society on a cross-national basis.

Two groups in particular have set out to measure civil society systematically. Civicus, a Johannesburg-based INGO, launched the pilot phase of its Civil Society Index (CSI) in 2000.<sup>102</sup> It has since completed its Phase I data collection project, and its Phase II project began in 2008. The second major effort towards a civil society index has been led by Helmut Anheier and Sally Stares, who proposed their Global Civil Society Index (GCSI) in 2002.<sup>103</sup>

Civicus' CSI is an assessment of four dimensions: "(1) the **structure** of civil society, (2) the external **environment** in which civil society exists and functions, (3) the **values** held and advocated in the civil society arena, and (4) the **impact** of activities pursued by civil society actors."<sup>104</sup> Each dimension is composed of several sub-dimensions, each of which is measured using multiple indicators. The CSI is assessed on

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<sup>101</sup> Michael Bernhard, 1993, "Civil Society and Democratic Transition in East Central Europe," *Political Science Quarterly* 108 (2); Thomas Carothers, 1999, *Assisting Democracy Abroad: the Learning Curve* (Washington, DC: Carnegie Endowment for International Peace); Graeme Gill, *The Dynamics of Democratization*; Hannan Rose, 1993, "From Command to Free Politics," *Political Quarterly* 64 (2); Laurence Whitehead, 1993, "'Reform of State' and 'Regulation of the Market,'" *World Development* 21 (8).

<sup>102</sup> Civicus, 2003, *Summary of Conceptual Framework and Research Methodology* (Johannesburg: Civicus). See also both 2007 and 2008 volumes of Civicus, *The Global State of Civil Society* (Bloomfield, CT: Kumarian Press).

<sup>103</sup> Helmut Anheier and Sally Stares, 2002, "Introducing the Global Civil Society Index," in Mary Kaldor and Helmut Anheier, eds., *Global Civil Society 2002* (New York: Oxford University Press): 240-254.

<sup>104</sup> Civicus, *Summary of Conceptual Framework*.

a country-by-country basis by teams of field researchers, who analyze each country's performance on each indicator using community stakeholder interviews, surveys, news combing, and "fact-finding" studies.<sup>105</sup> Unlike other indices, CSI is not aggregated into a standardized score, but is rather presented with each dimension distinct on a four-axis "civil society diamond" in its qualitative country reports.

The Civicus model is laudable for embracing complexity by preserving a balance between cross-national reliability, by using a common and transparent methodology for scoring information on common dimensions, and country-specific validity, using detailed qualitative country reports. This method ensures that findings are accurate at both micro- and macro- levels, allowing the complexity of civil society dynamics to come through. Although the comparability could be improved with an aggregate index, without sacrificing detail, the basic structure of the model is strong.

The strength of the conceptual design of the CSI is undermined by the multitude of sub-dimensional indicators, some of which are different from case-to-case, which necessarily reduces comparability. More importantly, the coding scheme is normative for many of its indicators, "scaling them from 'most negative' to 'most positive,'" based on Civicus' values.<sup>106</sup> This is problematic because Civicus, as with most of the world today, associates democracy with more "positive" characteristics. They thus unintentionally confound democracy and democratic motives with their measurements of civil society quality, in addition to adding subjectivity into their measurement process, rendering

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<sup>105</sup> Ibid., 2.

<sup>106</sup> Ibid., 13.

analysis of the effects of civil society on democratization problematic. Theoretically, a more autocratic state can actually have a more vibrant civil society than a democratic state. A reliable measurement of civil society must take this into account.

Empirically, an average of the CSI components, which currently cover thirty-three countries, including developing and industrialized economies, is highly correlated with both Freedom House indicators (Political Rights:  $r = -.624$ ; Civil Liberties:  $r = -.707$ ), and is significantly, but more weakly, correlated with the Polity democracy ( $r = .503$ ) score. Looking at the individual CSI components, there are strong relationships between *Environment* and the democracy indicators, with weaker significant relationships between the democracy indicators and *Impact* and *Values*, and no statistically significant relationship between *Structure* and the democracy indicators. Table 2 shows a correlation matrix for these indicators.

Table 2. CSI & Democracy Correlation Coefficient Matrix<sup>107</sup>

| <i>N</i> = 37 | CSI:<br>Struc | CSI:<br>Enviro. | CSI:<br>Impact | CSI:<br>Values | CSI:<br>Avg. | FH:<br>PR | FH:<br>CL | POL:<br>Pol | POL:<br>Dem. |
|---------------|---------------|-----------------|----------------|----------------|--------------|-----------|-----------|-------------|--------------|
| Structure     | 1.0           |                 |                |                |              |           |           |             |              |
| Environ.      | .423*         | 1.0             |                |                |              |           |           |             |              |
| Impact        | .431*         | .549**          | 1.0            |                |              |           |           |             |              |
| Values        | .416          | .668**          | .705**         | 1.0            |              |           |           |             |              |
| CSI Avg.      | .670*         | .847**          | .839**         | .860**         | 1.0          |           |           |             |              |
| FH: PR        | -.183         | -.644**         | -.496*         | -.632**        | -.624**      | 1.0       |           |             |              |
| FH: CL        | -.294         | -.751**         | -.534*         | -.640**        | -.707**      | .944**    | 1.0       |             |              |
| POL: Pol      | .176          | .522*           | .379           | .450*          | .488*        | -.845**   | -.836**   | 1.0         |              |
| POL: Dem      | .160          | .561**          | .370           | .474*          | .502*        | -.845**   | -.847**   | .979**      | 1.0          |

<sup>107</sup> Significance based on two-tailed t tests: \*  $p < .01$ ; \*\*  $p < .001$

Unlike Civicus, Anheier and Stares set out to create an aggregate, standardized index measuring civil society, paying less attention to maintaining micro-level validity. The GCSI focuses on individuals and organizations as distinct units, each with its own dimensions. For individuals, GCSI uses two dimensions: “participation,” a measure of citizens’ political activity and membership in “global civil society organizations,” and “civility,” a measurement of tolerance and hospitality towards community members. Organizations have one dimension, “organizational infrastructure,” which is a measure of density of organizations and associations over a given population.<sup>108</sup> Each of these dimensions is measured using from one to four variables, all of which are from survey data, with the exception of the organizational infrastructure measure, and these variables are weighted and combined into sub-indices.

Although the GSCI does not embrace complexity as actively as Civicus, they do maintain objectivity in their measurement design, and keeping the number of indicators small and consistent allows for much greater reliability across cases. Unfortunately, the GCSI relies heavily on surveys conducted primarily in the industrialized world, reducing its applicability in the developing world, where the need for knowledge on civil society is much greater. Also, reflecting its mandate, the GCSI uses only *international* organizational density to measure organizational infrastructure, when there is no evidence to suggest that international NGOs are more important than domestic NGOs for civil society measurement. The authors probably chose this route because of data availability issues – local, regional, and even national domestic NGOs are largely uncounted,

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<sup>108</sup> Anheier and Stares, “Introducing the GCSI,” 243.



especially in the developing world, while international organizations are carefully counted and monitored. The authors chose to include no developing countries in their cases; Argentina, Mexico, and Chile are the only non-European cases in the sample. Scholars are in intense disagreement over whether international NGOs might be harmful for civil society development, as the self-organizing and emergent aspects of NGOs are critical, and are predominantly found in home-grown grassroots or community organizations. Having a local bowling league, to borrow from Putnam, may be more important in the development of civil society than having a national Oxfam chapter.

Interestingly, the GCSI is not significantly correlated with the Polity democracy score ( $r = .334$ ), due in part to the uniformly high Polity democracy scores for all of the countries covered by the GCSI. The GCSI is only weakly correlated with Freedom House indicators, with correlation coefficients of  $-.416$  for Civil Liberties and  $-.361$  for Political Rights. Comparing GCSI to the Civicus CSI indicators, only one component indicator of the CSI, *Environment*, is significantly correlated with the GCSI score, with a correlation coefficient of  $.882$ . However, the number of common cases between the two civil society datasets is only thirteen, prohibiting meaningful comparative analysis.

## **Conclusion**

Existing measures of both governance and civil society fall short of the demands pressed by the reconceptualization of democracy proposed here. Minimalist and maximalist conceptualizations produce measures of governance that are focused on one example of the means by which democracy is enacted (i.e. elections), in the case of the

former, or confound the democratic governance strategy with its causes, effects, and correlates, in the latter. Although, as discussed previously, Ringen proposes a functional definition that bypasses these conceptual traps, his measure is subjective, purposely confounding the democratic governance strategy with the effects that we commonly expect democracy to achieve (e.g. improvements in quality of life, economic development, human rights protections). Despite nominally seeking to measure what democracy “is for,” Ringen effectively measures the means that *he* wants democracies to employ. Minimalist, maximalist, and existing functionalist conceptualizations and their associated measurement schemes ignore democracy’s role as one among many governance strategies. In terms of civil society, which is critical for an understanding of the degree to which people in society are interacting and communicating in politically meaningful ways, Civicus’ CSI operationally links civil society to democratic performance through democracy-favoring normative standards, and the GSCI is inapplicable in the developing world.

Over the last ten millennia humans have developed various governance strategies to manage and minimize conflict endemic to human society, particularly in the face of urbanization, population growth, and resource scarcity. Just as tribal bands, feudal structures, and monarchies evolved to solve this problem, so democracy has emerged as an alternative governance strategy. If conceptualized as such, rather than as a grand philosophical experiment or moral promise, operationalizing democracy becomes a very different exercise, with measurement focusing not on one tactic, or on its myriad correlates, but rather on the way in which democracy performs the functions of the state.

In order to solve public policy problems, engage with the international environment, and manage social conflict short of violence, the democratic governance strategy employs a strategy of harnessing social complexity, rather than suppressing, repressing, or controlling that complexity. The next chapter operationalizes this conceptual definition, proposing and evaluating a new cross-national measurement scheme, the Harnessing Social Complexity Index.

## **5. The Harnessing Social Complexity Index: Concept, Application & Assessment**

Chapters one and two addressed recent trends in the scholarship of democratic theory and reviewed the dominant conceptualizations of democracy, minimalism, rooted in the work of Dahl and Sartori and heavily informed by Schumpeter, and liberal millenarianism, pioneered by Fukuyama and including the works of Diamond and Huntington. The underlying argument of these chapters was that these schools utilized definitions of democracy that were conceptually underdeveloped and without strong theoretical foundations, leading to two problems, one of explanatory power and one of measurement. For the former, neither theoretical perspective on democracy can account for democracy's historical emergence and recent diffusion, without resorting to normative reasoning or teleology. For the latter, minimalist schemes' exclusive focus on elections has rendered them unable to capture differences among liberal democracies, or to reliably distinguish illiberal democracies from liberal autocracies, and maximalist schemes are overspecified and utilize subjective and normative coding rules.

The first problem, which is one of conceptualization, was addressed in chapter three with the proposal of an alternative conceptualization of governance, and democracy in particular, utilizing the complexity theory concept of harnessing social complexity. This conceptualization treated democracy as one among several governance strategies to mitigate the conflict that arises naturally from complex human interaction (i.e. social

complexity), and for the state to perform its other core functions. What we commonly understand as democracy is thus a particular type of government strategy that attempts to harness social complexity, rather than minimize or exert complete control over it, as do authoritarian and totalitarian regimes, respectively. An evolutionary explanation of the development of government forms since the Neolithic Revolution demonstrated that this alternative conception is plausible and consistent with anthropological theories and archaeological evidence of how human polities developed in antiquity, unlike liberal millenarianism, which treated democracy's emergence as part of a teleology, or minimalism, which has largely ignored its historical path dependence..

This chapter is concerned with operationalizing this new conceptualization. It begins by reviewing the harnessing social complexity construct, adding detail to this conceptual definition, explaining what, in practical terms, harnessing social complexity entails and how we should look for it. The chapter then moves beyond theory to construct a new cross-national operationalization of governance based on this conceptual definition, the Harnessing Social Complexity Index (HSCI), which is then applied to twenty-five cases. The chapter includes an evaluation of the index's face and convergent validity, before concluding with an actor-level qualitative examination of five cases in the sample: Malaysia, Mexico, Argentina, Indonesia, and Germany.

### **Harnessing Social Complexity: Review of the Construct**

Axelrod and Cohen proposed the notion that organizations could harness social complexity in 1999, building on decades of work by other complexity scholars. They

argue that social complexity, defined as the myriad interactions among interdependent agents in a population, produces information about agents and the environment which organizations can, in theory, utilize. In order to harness complexity, an organization needs to allow interaction to occur, in order for information to be generated, but it must also regulate the interaction, to prevent the interaction from becoming too chaotic, and possess the decentralized structures necessary to receive, filter, and process the information generated. Harnessing complexity requires organizations to structure themselves with eye towards achieving a “the goldilocks point,”<sup>109</sup> where interaction is vibrant but not chaotic, and where information informs, but does not overwhelm, organizational processes and directors. Theoretically, organizations that harness complexity can make use of the information generated by agent interaction in order to produce better policies, and are believed to be more flexible and adaptable, due to the organization’s ease of acquiring information about changing environmental conditions.

Government is ideally suited for application of Axelrod and Cohen’s theory, because it is a form of organization that evolved for, among a few other core functions, the management of social complexity, as detailed in chapter three. One of the core primary functions of government has historically been the mitigation of conflict arising from human interaction, which for most of human history was achieved through the suppression or repression of that interaction. How the state performs its other functions, such as providing for territorial security and managing emergent public policy problems, such as environmental disasters or epidemics, is related to its social complexity

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<sup>109</sup> Miller and Page, *Complex Adaptive Systems*, 235.

management strategy, in that the structures created to deal with the latter are used to perform its other function, and the performance of these functions contributes to increased levels of complexity in society because of second- and third-order effects.

Changes in human society and the environment over the last few centuries opened the doors to two alternative strategies: controlling human interaction, a strategy known as totalitarianism, and harnessing social complexity, associated with modern liberal democracy. As with physical systems and other social organizations, harnessing social complexity by the state requires delicate balancing of three distinct forces: (1) allowing self-organizing interaction among agents to occur; (2) regulating interaction among agents short of chaos (e.g. physical violence); and (3) structuring interaction and filtering information flow across the state-society interface. In contrast, traditional “authoritarian” systems simply minimize interaction among agents, and totalitarian regimes adopt a strategy of directing interaction among agents.

Development of these ideas, especially in terms of complex *social* systems, has been largely theoretical. One important empirical application was by Wagenaar, who tested Axelrod and Cohen’s hypothesis that strategies of harnessing social complexity produced better outcomes for organizations than alternative strategies, using governments as case studies, in 2008. He argued that cities with deliberative democratic processes were better able to harness social complexity than those with representative processes, because the decentralized deliberative forums involved were better suited for the filtration and processing of information from the bottom-up than electoral representation. Interestingly, he found support for his hypothesis, noting that cities that adopted

deliberative democratic systems, that is, those that more effectively harnessed social complexity, experienced reduced rates of crime compared to their representative counterparts. Although this study cannot be replicated cross-nationally because of the complicated nature of cross-national public policy problems, it does shed light on the apparent rise in the number of democracies in recent years. Democracies could be performing better (e.g. emerging victorious from two world wars and the Cold War) because they have adopted strategies of harnessing social complexity that allow them to be more adaptive to changing environmental conditions, and good performers are likely to be imitated. While not tested here, this hypothesis, among the others suggested in chapter three, is an intriguing line of research that requires, first, operationalizing the concept and then measuring the degree to which states harness social complexity.

### **Operationalization**

Operationalizing the concept of harnessing social complexity first requires breaking the construct into its three components, the degree to which: (1) self-organizing politically-significant interaction occurs in a population; (2) the state regulates that interaction; and (3) state structures decentralize policymaking and permit and filter information flow from the population to the central government.

The author followed Marshall and Goldstone in creating an additive index based on categorization, coding, and weighting of extant indicators, except where, as in the case



of civil society, satisfactory indicators are unavailable.<sup>110</sup> Constructing the index required substantial exploration and comparison of available data sources, but also intense scrutiny of the indicators finally selected, particularly in terms of construct validity. Using available sources also meant significant limitations on the cases available for study, particularly as some measures, such as civil society measures or Schneider's decentralization indices, have very limited (and rarely overlapping) coverage. The final sample of twenty-five cases reflects the overlap of coverage between Schneider's decentralization indices, which would be nearly impossible to replicate without extensive field work, and the World Values Survey, which was required in order to measure civil society. Data from 2007 was utilized, which was the most recent common year available for most indicators, with Schneider's *decentralization indices* from 2004. Table 3 summarizes the operational make-up of the Harnessing Social Complexity Index (HSCI).

Each of the three core components is measured on a seven-point scale ranging from zero to six, with six representing the most optimal point for that component's contribution to harnessing social complexity, and zero representing the least optimal point. When added together, these components create a nineteen-point scale, ranging from zero to eighteen, where eighteen represents maximal harnessing of social complexity and zero represents minimal harnessing of social complexity. A multiplicative combination, which includes interaction effects among the components, is also explored. Both indices use equal weights for each of the components, but researchers should weight these components and compute new indices as they see fit.

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<sup>110</sup> Monty G. Marshall and Jack A. Goldstone, "Global Report 2007: Conflict, Governance and State Fragility," *Foreign Policy Bulletin* (Winter 2007).

Table 3. Operationalization of the Harnessing Social Complexity Index

| Name      | Description  | Data sources  | Orig. Value   | Add                       | Characteristics of Key Points in Range  |
|-----------|--|---|---|---------------------------|---|
| civsoc    | Size, strength, and nature of civil society                | (1) Author: <i>polint</i>                           | $x > .77$   | +2                        | 6: Civil society is strong, vibrant and pluralistic. NGOs are plentiful, widely participated in, and actively engage the political system. Individual participation in politics is open and frequent.<br><br>3: Participation in NGOs is uncommon, and organizations are scarce or restricted in activity. Individual participation in politics is open but uncommon, and may not be competitive in practice.<br><br>0: Civil society is minimal or state-coerced.  |
|           |  | (2) Author: <i>trust</i>                            | $x > 0$   | +1                        |   |
|           |  | (3) Author: <i>civility</i>                         | $x > .32$   | +1                        |   |
|           |  | (4) Author: <i>orgactive</i>                        | $x > 1.0$<br>$0 \leq x \leq 1.0$                                  | +2<br>+1                  |   |
|           |  | (5) Polity <i>parcomp</i>                           | $x = 5$<br>$x = 4$<br>$x = 2, 3$<br>$x = 1$                       | +2<br>+1<br>+0<br>-6      |   |
| Regulate  | Regulation of civil society by the state                   | (1) Polity <i>parreg</i>                            | $x = 5$<br>$x = 2, 3$<br>$x = 4$<br>$x = 1$                       | +2<br>+1<br>0<br>-2       | 6: Civil society is institutionalized and regulated by the state with the rule of law. Civil liberties are generally respected,<br><br>3: State regulation is either weak or slightly restrictive and/or coercive. Lapses in civil liberties protections are not uncommon. Rule of law is weak.<br><br>0: State regulation is repressive or nonexistent. Civil society is either entirely uninstitutionalized, or is actively repressed/controlled by the state.  |
|           |  | (2) FH <i>rule of law</i>                           | $x \geq 14$<br>$9 \leq x \leq 13$                                 | +2<br>+1                  |   |
|           |  | (3) Gibney <i>amnesty + state</i> (arith. Mean)     | $x < 2$<br>$2.0 \leq x < 3.0$<br>$3.0 \leq x < 4.0$<br>$x \geq 4$ | +2<br>+1<br>0<br>-3       |   |
| Structure | Presence and quality of state-society interface structures | (1) Polity <i>exec</i>                              | $x = 8$<br>$x = 7$  | +2<br>+1                  | 6: State-society interaction is highly structured, with information flow and filtration across multiple levels of government, including competitive national elections. Executive is meaningfully constrained.<br><br>3: State-society interaction is loosely structured; citizens/NGOs may struggle to communicate with government; executive constraints are weak.<br><br>0: The state-society interface is either entirely unstructured or is structured to permit dictatorship of policy, with no publicly accessible mechanisms for information transmission. Executive constraints are nonexistent or irrelevant. |
|           |  | (2) FH <i>electoral process</i>                     | $x \geq 14$<br>$9 \leq x < 14$                                    | +2<br>+1                  |   |
|           |  | (3) Schneider decentralization index (complex mean) | $x > .5$<br>$.3 \leq x \leq .5$                                   | +2<br>+1                  |   |
|           |  | (4) Polity <i>exconst</i>                           | $x = 1$<br>$x = 2, 3$<br>$x = 4$<br>$x = 5$<br>$x = 6, 7$         | -5<br>-3<br>-1<br>0<br>+1 |   |

Component one, *civsoc*, is conceptually identical to common sociological definitions of civil society, which focus on some combination of political interest and involvement, interpersonal trust, civility and tolerance, and the presence and vitality of organizations, which both permit and structure human interaction, and which also help to transmit information to state leadership.<sup>111</sup> While measuring civil society captures the amount of interaction, it indicates little about the nature of that interaction. Given that coerced or state-directed interaction forms the core of the totalitarian strategy, we also need to include a measure of the openness and competitiveness of politically-significant interaction. This component thus overlaps slightly with the regulation component, in that state control over interaction needs to be accounted for. Theoretically, a measure of this component should range from minimal or state-directed participation at one extreme to another extreme where interaction, in the form of political participation by individuals and organizations, is vibrant, pluralistic, and self-organized.

This component is measured using five indicators, each of which contributes to the component's six-point scale additively. Four of these indicators were created by the author from World Values Survey data, due to poor data coverage in the existing measurement schemes by Civicus and Anheier/Stares, described in chapter three. Based on a combination of the two existing schemes, and on a theoretical grounding in civil society, the author constructed a five-component model of civil society, including political interest and engagement (*polint*), interpersonal trust (*trust*), civility (*civility*), organizational membership and participation (*orgactive*), and feelings of citizenship

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<sup>111</sup> See civil society metric discussion in chapter four.

(*citizen*). The measure of civility was based on the GCSI, and the other indicators, with the exception of citizenship, were loosely based on the Civicus model, although it utilized objective rather than normative (i.e. pro-democracy) measures. These were measured using data from the 2005 wave of the World Values Survey. Conceptual component make-up was verified and the five civil society indices were generated by confirmatory factor analysis.<sup>112</sup> Of the five, political interest and engagement, interpersonal trust, civility, and organizational membership and participation were the most conceptually related to the *civsoc* component, while feelings-of-citizenship was largely irrelevant, and was therefore excluded.

Each of the four civil society indicators was coded differently, based on relative theoretical importance to the component, size and strength of civil society. *Polint* and *orgactive*, being more direct measures of political participation, were given more weight (up to two points) than *trust* and *civility* (maximum of one point), which was coded on a binary basis. Cutoff points for the coding rules were determined initially by performance above or below the sample mean and, in the case of two point codings, the uppermost quartile, and were adjusted based on further review and to reflect a broader population size.<sup>113</sup> These four indicators contribute up to six points to *civsoc*.

The fifth indicator behind *civsoc*, Polity's competitiveness of participation (*parcomp*), provides a nominal categorization of the nature of political participation.

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<sup>112</sup> See Appendix A for details on WVS questions and factor analysis.

<sup>113</sup> The sample mean and quartiles were based on the original sample, that is the complete sample of the World Values Survey for which Wave 5 data on the relevant questions was available, *not* the more limited sample included in the HSCI matrix. This allows for a more representative set of values than the HSCI, which includes few non-democracies, as categorized in other measurement schemes.

*Parcomp* values four and five correspond to transitional and competitive patterns of political participation, and are assigned one and two additive points, respectively. *Parcomp* values two and three correspond to suppressed and factional patterns of political participation, respectively, and are assigned zero additive points, but which also do not detract from the *civsoc* score. Category one indicates a repressed pattern of participation, where significant political participation, outside of the regime elite and/or ruling party, is prohibited. If a state is coded *parcomp* value one, then the *civsoc* score converts to zero. This allows for the accounting of totalitarian regimes, which permit, but staunchly control and actively direct, popular political participation. Assuming *parcomp* is not coded repressive, *civsoc* is calculated by adding the five sets of additive points, reducing any totals of seven or eight to the maximum value of six.<sup>114</sup> This coding scheme is constructed in order to allow multiple possible combinations of indicators to reach, or exceed, the maximum, in order to account for cultural variations of civil society participation.

Component two, *regulate*, the degree to which the state regulates interaction, also captures two distinct but related functions, namely the degrees to which the state (a) can maintain public order and (b) regulate political participation while still respecting civil liberties. Regulation could thus range from none at all, evoking the classical image of Hobbes' state of nature, to the repression of civil liberties and direct control of interaction by the state, consistent with a totalitarian strategy. Thus, the optimum point for harnessing social complexity is not at an end of the scale of regulation, but in the middle.

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<sup>114</sup> No *civsoc* scores reached higher than five, in practice.

This component is constructed using indicators from three data sources: Polity, Freedom House, and Gibney's Political Terror Scale.<sup>115</sup> Polity's regulation of participation (*parreg*) variable provides a nominal categorization of the degree to which the state regulates political participation in civil society, and forms one-third of the value of *regulate*. Category one ("uninstitutionalized") indicates that participation is unregulated, and detracts two points from *regulate*. Category four describes a "restricted" pattern of participation regulation, where significant portions of society are excluded from participation, and is assigned zero additive points. Categories two and three indicate "multiple identity" and "sectarian," patterns, and are assigned an additive value of one point, while category five ("regulated") is assigned the maximum of two additive points.

This measure is complemented by data from Gibney's Political Terror Scale (PTS), which codes human rights reports from Amnesty International and the US State Department to measure cross-national respect for human rights. This is used as part of *regulate* in order to capture the degree to which the state respects the rights and liberties of its citizens, which are required for meaningful independent political interaction. The PTS assigns each state a value ranging from one, where rights are systematically respected, to five, where rights are heavily repressed. In practice, there is a significantly greater conceptual distance between points three and four on the PTS scale than elsewhere in the scale, such that categories four and five indicate quite repressive regimes, while categories one through three are all significantly less repressive; significant movement occurs amongst the three lower categories, while few countries

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<sup>115</sup> Marshall and Jaggers, *Polity IV...*; Freedom House, *Freedom in the World*; Mark Gibney, *Political Terror Scale*, database online, available at: <http://www.politicalterror scale.org>.

cross between categories three and four. After averaging the (highly correlated) Amnesty and State Department PTS scores, values ranging less than two are assigned two additive points, values between two and three are assigned one additive point, values equal to or greater than three but less than four are assigned zero additive points, and values ranging from four to five detract three points from the *regulate* scale.

The final indicator included in *regulate* is Freedom House's *rule of law* indicator, a sixteen-point scale measuring respect for rule of law in the state, with sixteen representing maximum respect for the law, and one no respect for rule of law. This is included in *regulate* in order to capture the degree to which the state maintains order among the population, but more specifically the degree to which the state relies on law, rather than personal or religious authority, in order to do so. Rule of law additive values were calculated using cutoffs based, initially, on performance above the sample median (value nine – one additive point) and upper quartile (value fourteen – two additive points). The upper category was lowered \ to value thirteen upon review of the data. Scores below value nine received no additive points. After calculating the values for each indicator, *regulate* is calculated by taking their sum. Values below zero are increased to zero, the minimum for the scale.

Component three, *structure*, assesses whether, and to what degree, citizens are able to communicate with government, and also to what degree the state is able to “make sense” of that communication through filtration mechanisms. This component thus includes the presence and quality of elections, which are one common mode of communication across the state-society interface, but must also include other aspects,

particularly decentralization (particularly important given the relative importance of local politics and the greater likelihood of local state-society interaction), and constraints on central executive authority, which allows for control over the policymaking process by non-executive actors, such as a legislature, political parties, local and regional governments, and/or a judiciary. As with *regulate*, the resulting scale for this component also ranges from a completely unstructured pole, characterized by anarchy and the absence of institutions, to the opposite pole where structures are designed primarily for ease of policy enforcement, with no publicly-accessible state-society interface and minimal executive constraints. In the middle of this continuum is the “goldilocks” point necessary for social complexity harnessing, where state-society interaction occurs but is structured, information flows but is filtered, and executive authority is meaningfully constrained.

The *structure* component includes two variables from Polity (executive recruitment: *exec*; executive constraints: *exconst*), one variable from Freedom House (*electoral process*) and a complex average derived from Schneider’s indices of decentralization.<sup>116</sup> *Exec* and *electoral process* were included in order to capture the presence and quality of elections and electoral procedures, which are important, if not essential, institutions for the communication of information from the public to the central government. *Exec* values of eight and seven, reflecting fully open and competitive elections, and transitional elections, respectively, are assigned additive values of two and one. Additive values for *electoral process* were calculated similarly to *rule of law*, on the

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<sup>116</sup> Aaron Schneider, "Decentralization: Conceptualization and Measurement," *Studies in Comparative International Development* 38 (Fall 2003): 32-56.



basis of the sample median (nine – one additive point) and upper quartile (fourteen – two additive points), but were left unaltered after review.

Decentralization forms the second major aspect of *structure*, and is measured using the decentralization indices developed by Schneider. Schneider developed three quantitative measures of decentralization, including political decentralization (i.e. the extent to which municipal and regional governments are elected), fiscal decentralization (i.e. the extent to which municipal and regional governments maintain authority over spending and taxation), and administrative decentralization (i.e. the extent to which municipal and regional governments play key roles in legislation and law-enforcement).<sup>117</sup> Each is measured on a continuous zero to one scale, where one represents maximal decentralization and zero represents complete central government control, or no elected subnational government, in the case of political decentralization. Schneider's measures have been peer reviewed and are extensively used in economics. Whereas the purposes of *structure* we are primarily interested in whether local and regional governments are elected and, if so, whether they *also* have policymaking authority. Thus, fiscal and administrative decentralization indices were each combined geometrically with the political decentralization index, in order to measure their interaction. After taking the mean of the two resulting products, up to two additive points were assigned on the basis of performance above the mean and uppermost quartile, with adjustment after review.

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<sup>117</sup> Ibid.

Polity's *exconst* was included to capture the effects of an unconstrained executive on the ability of the state to rule without regard for information coming from the bottom-up. Additive values for this indicator range from a deduction of five points, for *exconst* value one (no constraints on the executive) to one additive point for *exconst* values six and seven, indicating heavy constraints. This allows for negative adjustment of the *structure* score based on the executive's ability to act unilaterally. Only a highly constrained executive contributes positive points towards the *structure* component.

Table 4 demonstrates the resulting index and data matrix, arranged in descending order of HSCI (arithmetic) score, with values ranging from sixteen (Canada) to four (Malaysia), out of a possible score of eighteen. States that share a value are listed in ascending alphabetical order. The HSCI provides an overall picture of the degree to which the state harnesses social complexity, while the components allow a more nuanced analysis of where a state could improve its ability to do so. The HSCI (geometric) score is calculated by multiplying the component values and converting the product into a zero-to-one scale. While the arithmetic HSCI allows a state to boast some progress towards harnessing social complexity in at least one component, the geometric HSCI requires some progress in all components in order to achieve a score higher than zero. Furthermore, a low score in any category will negatively affect the overall geometric index much more significantly than the additive index.

Table 4. The Harnessing Social Complexity Index & Matrix

| Country       | HSCI (arith) | HSCI (mult) | civsoc | regulate | structure |
|---------------|--------------|-------------|--------|----------|-----------|
| Canada        | 16           | 0.67        | 4      | 6        | 6         |
| Australia     | 15           | 0.56        | 4      | 6        | 5         |
| Finland       | 15           | 0.56        | 5      | 6        | 4         |
| Norway        | 15           | 0.56        | 4      | 6        | 5         |
| Sweden        | 15           | 0.56        | 4      | 6        | 5         |
| Switzerland   | 15           | 0.56        | 4      | 5        | 6         |
| Argentina     | 14           | 0.42        | 5      | 3        | 6         |
| Germany       | 14           | 0.33        | 2      | 6        | 6         |
| Italy         | 14           | 0.46        | 5      | 4        | 5         |
| Slovenia      | 14           | 0.44        | 4      | 6        | 4         |
| United States | 14           | 0.44        | 4      | 4        | 6         |
| Poland        | 13           | 0.37        | 4      | 5        | 4         |
| Trinidad      | 12           | 0.3         | 4      | 4        | 4         |
| Chile         | 11           | 0.22        | 3      | 4        | 4         |
| Mexico        | 11           | 0.11        | 4      | 1        | 6         |
| Bulgaria      | 10           | 0.14        | 2      | 3        | 5         |
| South Africa  | 10           | 0.15        | 4      | 2        | 4         |
| Brazil        | 9            | 0           | 3      | 0        | 6         |
| Romania       | 9            | 0.11        | 3      | 2        | 4         |
| Indonesia     | 8            | 0.06        | 3      | 1        | 4         |
| Moldova       | 8            | 0.07        | 2      | 2        | 4         |
| India         | 6            | 0           | 2      | 0        | 4         |
| Thailand      | 6            | 0.03        | 2      | 1        | 3         |
| Georgia       | 4            | 0.01        | 1      | 1        | 2         |
| Malaysia      | 4            | 0           | 2      | 2        | 0         |

## Analysis

The HSCI shows a significant amount of variation throughout the length of its range in both additive and multiplicative versions, with cases ranging from highly democratic to non-democratic in other schemes represented where one might expect, at high and low ends of the spectrum, respectively. The additive index does not follow any particular distribution pattern, although it has a high mean (11.28;  $\sigma = 3.7$ ) and median (12), while the geometric index does exhibit an interesting inverted normal curve due to its multiplicative nature, with higher numbers of cases in the extremes (24% > .5; 28% < .1) than in the center. Canada and the Scandinavian states are rated the best at harnessing social complexity, just as they are often among the top states in existing democracy measures, and Malaysia, which is not generally considered to be democratic, is at the bottom of the index, although it does exhibit mid-range scores in civil society strength and regulation. This is consistent with Malaysia's politics, where elections and other institutional structures, such as decentralized democratic institutions, for popular will transmission are noncompetitive or nonexistent, but where social and economic forms of political participation (i.e. participation that does not directly challenge the ruling party) is relatively competitive and even encouraged by the state.

Component scores exhibit similar variation across their ranges, with the notable exception of *civsoc*, which reaches neither its minimum nor maximum scores. This might indicate a weakness in the coding model, but whereas each of the sub-dimensional scores underlying *civsoc* ran the gamut of possibilities, the component coding scheme was not altered. In practice, it seems that the maximum was not attained because every country in

the sample is weak in at least one area of civil society vitality. The minimum was not expected to be reached, as none of the sample cases are known to be totalitarian or harshly repressive of civil society dynamics. The component scores also seem to measure distinctly different concepts, as they vary significantly from one another, especially in cases where the variance is expected. India, Mexico, and Brazil, for example, each exhibit a wide range of component scores, with low *regulate* scores in common. Correlation coefficients among the components range from  $r = .315$ , between *structure* and *regulate*, to  $r = .529$  between *civsoc* and *regulate*, where a higher correlation was theoretically expected to due some conceptual overlap. This is the only statistically significant bivariate correlation among the components, with  $p < .01$ . This indicates a high level of discriminate validity among the components.

Not surprisingly, bivariate correlations between the components and the indices are statistically significant and substantially higher, ranging from  $r = .506$  (*structure* ~ HSCI[geom]) to  $r = .910$  (*regulate* ~ HSCI[geom]). The relationship between *regulate* and the multiplicative HSCI is particularly high because of the higher frequencies of extreme low values in that category, which had a significant effect when multiplied across the other, generally more moderate, components.

While the components seem to measure distinct concepts, are the components and the aggregate indices actually measuring what they purport to be measuring? Assessing the quality of a new metric in the social sciences is challenging because, unlike the physical sciences, we cannot easily observe the phenomenon we are attempting to measure. Because we are measuring by proxy, the quality of a metric must be determined

by assessing its face validity, that is whether the measure appears to capture all theoretical dimensions of the concept, and its convergent validity, that is whether the measure statistically correlates with other measures of the same concepts. Whereas there is no other extant measure of harnessing social complexity, convergent validity must be assessed by statistical comparison with theoretical correlates of harnessing social complexity, such as existing measures of democracy and measures of gross domestic product (reflecting both the strong relationship between democracy and GDP, as well as the theoretical relationship between harnessing social complexity and superior public policy performance).

In terms of face validity, the construct of harnessing social complexity is derived from complexity theoretical and empirical literature, explored previously in this study. In order to harness complexity, an organization must allow complexity to self-organize and occur, while also regulating that complexity short of chaos. In a complex social system, this means allowing social interaction to self-organize and occur, while regulating that interaction short of chaos, which in the social world means violence. However, in order to harness complexity, the information created by that complexity must also be able to be filtered and processed, lest the interaction simply result in white noise, not useable by organizational directors. This metric is consistent with this conceptual definition of harnessing social complexity, in that it attempts to measure all three dimensions of the concept, and each of the components was created with similar theoretical grounding, indicating face validity for them as well. The metric was created deductively, beginning with a theoretical construct, breaking the construct into its core and sub-dimensions, and

operationalizing those dimensions on the basis of available and reliable data. I believe that this metric “passes the giggle test,” to use the words of a mentor, but assessing the face validity of the measure is really a job for other scholars, at least in part because face validity itself refers to the degree to which, on its face (i.e. in the eyes of its users and reviewers) it measures what it purports to measure.

Convergence validity, whether the metric is similar to other metrics for theoretically-related concepts, is easier to assess. In this case, harnessing social complexity has been conceptualized as a governance strategy used by democracies, so it is reasonable to compare the HSCI to existing measures of democratic quality. Convergent validity is tested here through bivariate correlations with the combined Freedom House score and Polity’s democracy (*democ*) variable, which are included because of their frequent use in the field, as well as the WGI’s *voice and accountability* measure and The Economist’s *democracy index*, which are included because, unlike Polity and Freedom House, no variables from either are included in the HSCI component makeup. Economic development level is also included, and is measured using World Bank data for each state’s 2009 per capita gross domestic product.<sup>118</sup> Table 5 exhibits the bivariate correlation coefficients for these comparisons, which are consistently quite high, indicating that both indices are, in fact, measuring something that is, at the very least, closely related to democratic governance.

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<sup>118</sup> The World Bank, *World Development Indicators 2009*, database online; available at <http://www.worldbank.org/data>; accessed 10 June 2010.

Table 5. HSCI & Comparators: Bivariate Correlation Coefficient Matrix<sup>119</sup>

|   | HSCI<br>(arith) | HSCI<br>(mult) | Polity<br><i>demo</i><br><i>c</i> | Freedom<br>House<br>(combined<br>index 1-7) | Economist<br><i>democracy</i><br><i>index</i> | WGI<br><i>voice &amp;</i><br><i>accountability</i> | World Bank<br>log ( <i>gdp per</i><br><i>capita</i> ) |
|---|-----------------|----------------|-----------------------------------|---|---|--|---|
| HSCI<br>(arith)                                       | 1               |                |                                   |   |   |  |   |
| HSCI<br>(geom)  | .937            | 1              |                                   |   |   |  |   |
| Polity<br><i>democ</i>                                | .764            | .687           | 1                                 |   |   |  |   |
| Freedom House<br>(combined<br>index 1-7)              | -.848           | -.785          | -.785                             | 1   |   |  |   |
| The Economist<br><i>democracy</i><br><i>index</i>     | .792            | .788           | .697                              | -.792                                       | 1   |  |   |
| WGI<br><i>voice &amp;</i><br><i>accountability</i>    | .881            | .855           | .784                              | -.885                                       | .899  | 1  |   |
| World Bank<br>log ( <i>gdp per</i><br><i>capita</i> ) | .858            | .877           | .540                              | -.750                                       | .774  | .801   | 1   |

Interestingly, the arithmetic HSCI is the most closely correlated with the WGI *voice and accountability* measure, at  $r = .881$ , which has been the most criticized in academic literature for its lack of construct validity. It would appear that whatever the WGI are measuring, they seem to be measuring something that co-varies strongly with harnessing social complexity. The relationship between the arithmetic HSCI and the combined

<sup>119</sup> Calculations performed by author.



Freedom House measure is also quite high, and when broken into its components (not shown in the table), the Freedom House *civil liberties* index is even more highly correlated with the HSCI, at  $r = -.877$ , compared to  $r = -.758$  for *political rights*. Associations with measures from The Economist and Polity were also strong, but less so. The multiplicative HSCI had slightly weaker correlations with all four measures, but all were remarkably strong, with the Polity correlation the weakest at  $r = .687$ . The weak correlation of both indices with Polity's *democ* variable is probably due to that variable's low variation among industrialized democracies, with twelve of the twenty-five cases coded *democ* value 10, the maximum for democratic quality. Only two cases of the sample are *not* coded democratic (i.e.  $democ < 8$ ) by Polity.

Per capita gross domestic product (GDP), logarithmically transformed, is also highly correlated with both versions of the HSCI. This correlation, also demonstrated in the scatterplot in Figure 1, indicates a stronger correlation between wealth and the harnessing of social complexity than between wealth and the alternative measures of democracy, which certainly lends support to convergence validity in the HSCI, but also indicates that, even among what are generally considered to be fairly democratic states, there is a strong positive correlation between economic performance and degree of harnessing social complexity. This provides limited support for Wagenaar's thesis that governments that harness social complexity more effectively will also produce better-performing public policy than their comparators.

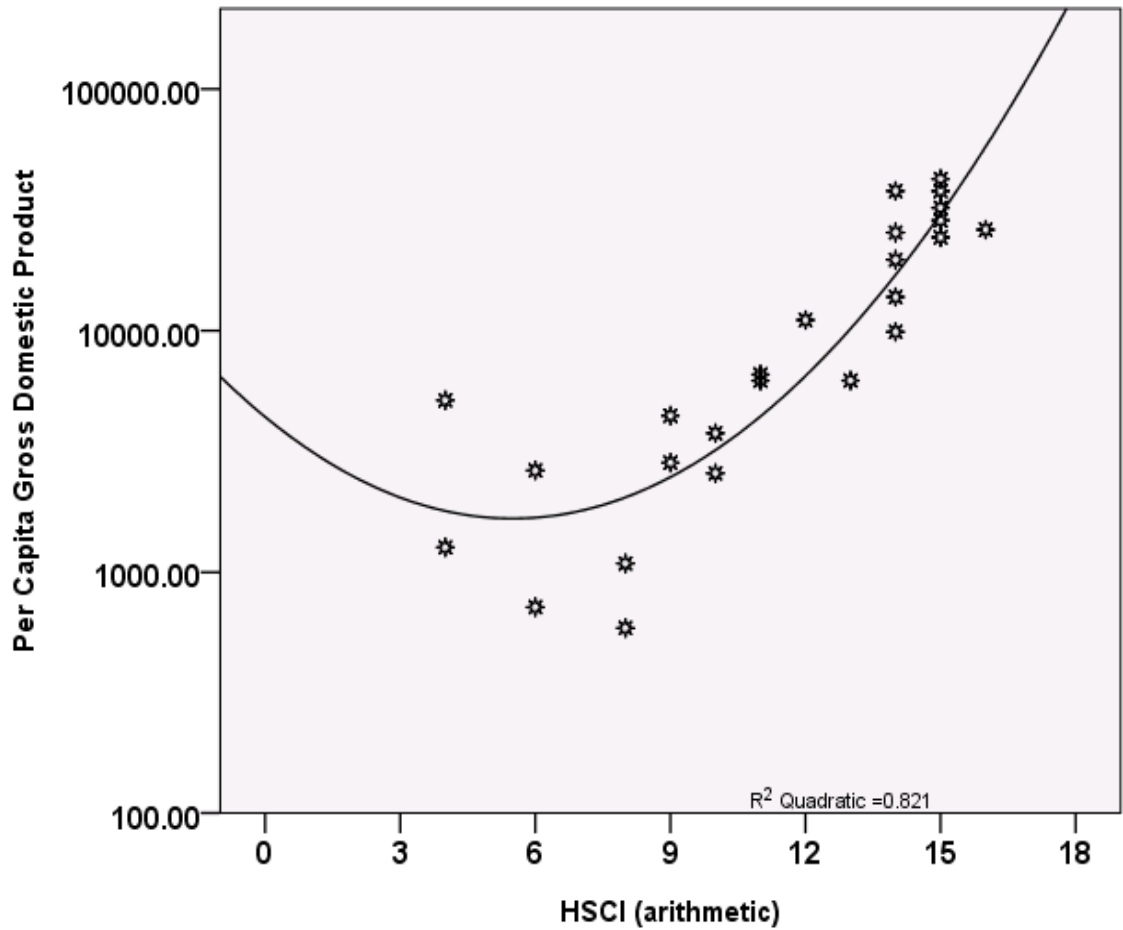


Figure 1. Scatterplot of HSCI and GDP Per Capita

These correlation coefficients are as strong, or stronger, than correlations among these democracy indicators themselves, and between the democracy indicators and gdp per capita. This provides support for convergence validity for the HSCI, but bivariate correlations only scratch the surface of the relationship between HSCI and the comparator measures. Multivariate regression of the HSCI components on the continuous, normally-distributed, comparator indices (i.e. WGI *voice and accountability*, Economist *democracy index*) allows the exploration of the relationship between the

tactics involved in the strategy of harnessing social complexity and the existing measures of democracy. Regression results for both models are highly significant and strong, with adjusted R-square values of .790 for *voice and accountability* and .610 for the *democracy index*.<sup>120</sup> Looking deeper, these regressions demonstrate the importance of rights and liberties in these two measures, with *regulate* highly significant and accounting for a substantial amount of variance in both models. For every one unit increase in *regulate*, the WGI increases by .693 standard deviations ( $se = .035$ ), and the *democracy index* increases by .633 standard deviations ( $se = .089$ ) all other things being equal. *Structure* was weakly significant in both models, and *civsoc* was not a significant predictor of either model. These indices seem to be largely driven by the regulation and restriction of rights and liberties, with less attention to decentralization and executive constraints, and almost no attention paid to civil society dynamics.

Bivariate correlations with democracy indicators, and multivariate regressions of these indicators using the component variables, combined with theoretical grounding and apparent face validity, support the validity of the HSCI model. This combination of findings could mean, as I argue, that the essence of democracy *is* the harnessing social complexity, and academic (minimalist) measures, with which the HSCI is less strongly correlated, have gotten off track largely by becoming overly focused on the combination of elections and civil liberties, at the expense of equally-required dimensions of regulation and structure. It is telling in this regard that the private sector, maximalist,

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<sup>120</sup> Note the small sample size. See Appendix A for statistical details.

indices of democracy are the most correlated with the HSCI, which can explain much of their variance (at least for this sample) using only thirteen indicators.

While support from quantitative analysis is invaluable, qualitative examination of select cases can provide a more nuanced analysis of the HSCI's validity and reliability, as well as that of its components, allowing us to identify more specific strengths and weaknesses. The following section analyzes five cases in order to assess different, conceptually important, points on the HSCI range, and to highlight differences among states with different component scores but similar HSCI aggregate scores. These five cases include Malaysia, Mexico, Indonesia, Argentina, and Germany, which were selected through information-oriented sampling. Malaysia is included as an extreme case, because it scores the lowest on the index and also because of its Singapore-like one-party electoral system, unique in the sample. Existing measures of democracy have struggled to classify Malaysia, which makes the case particularly important to review in the context of this paper. Mexico and Indonesia are included as paradigmatic examples of middle-income states that are also placed mid-range on the HSCI, despite significant cultural and geopolitical differences between them. Germany and Argentina are included as examples of industrialized countries, commonly coded democratic by existing measures, which reached the same HSCI score (14) with very different combinations of component values. Germany is included specifically for being a deviant case, having scored quite weakly on *civsoc*, the lowest among industrialized democracies.

Figure 2 exhibits these five cases graphically, with each component forming an axis of the HSCI triad, a graphic “radar” style design, which was inspired by the Civicus

“civil society diamond.” This graphical design allows for simultaneous comparison among cases, observation of the aggregate whole by the size of the two-dimensional shape formed by each case, and observation of performance in each component by the nature of the shape formed. Following Figure 2, each case is considered in detail. Each case study begins with a brief overview of the case’s political system and recent political history, followed by a comparison of the scores of each component to available information about the country’s actual performance therein.

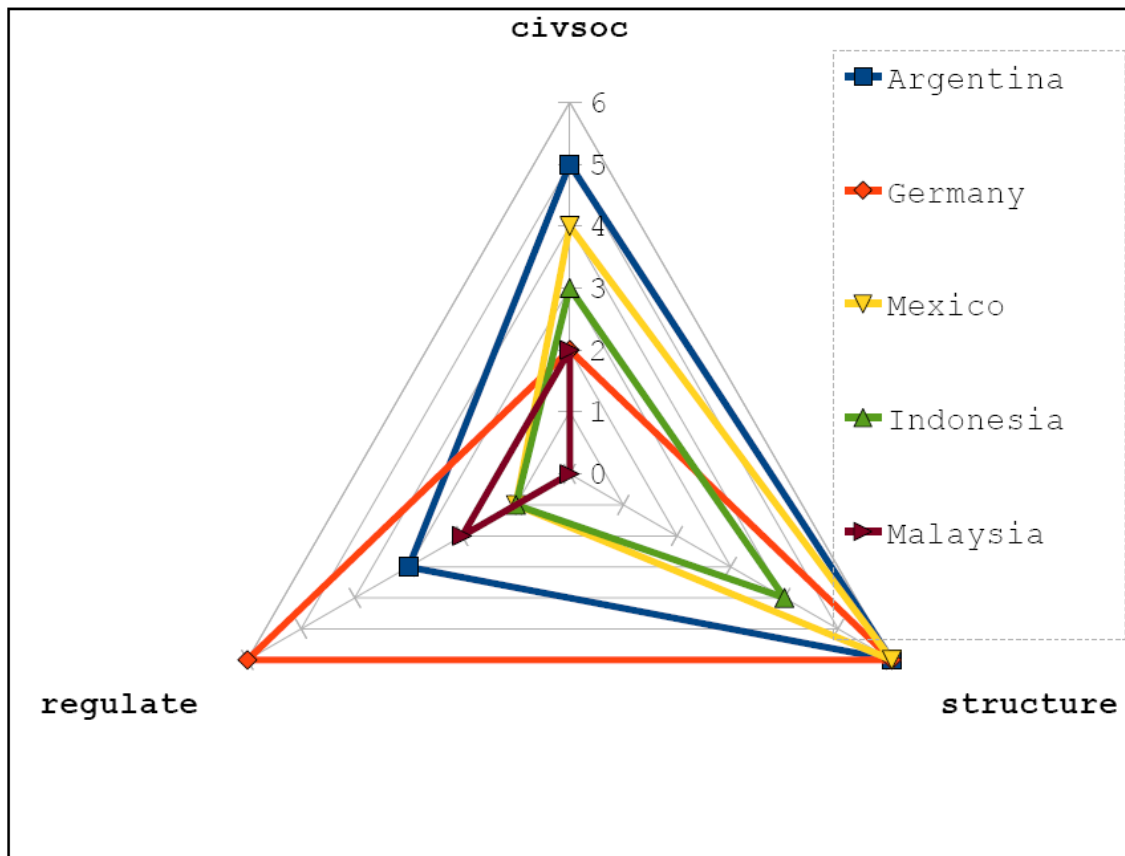


Figure 2. HSCI Triad: Argentina, Germany, Mexico, Indonesia, Malaysia

## **Case Study: Malaysia**

Malaysia gained its independence from the United Kingdom in 1963, adopting a constitution specifying a parliamentary form of government, with executive power vested in the country's prime minister, and with a king, elected by a council of hereditary sultans, acting as ceremonial head of state. The country's political system is dominated by ethnic Malays, which form about 60% of the population, who have generally coexisted peacefully with the country's large ethnic-Chinese minority (26%), who represent the country's economic elite, as well as smaller minority ethnic groups, notably ethnic Indians (8%). Since 1971 the United Malays National Organization (UMNO) and its National Front coalition have maintained hegemonic control over politics, using the central government to suppress dissident and opposition groups, and to promote the Malay language and Islamic religion, to which most Malays adhere. Due in part to UMNO's use of discrimination and limits on civil liberties, as well as the use of political trials against opposition leaders, the National Front managed to hold a two-thirds majority of Parliament from 1971 until 2008, when its hold was reduced to a simple majority, preventing the party from unilaterally altering the constitution.<sup>121</sup>

Malaysia scored a two on civil society dynamics, a moderate value on the zero-to-six scale, which should indicate a mixed pattern in civil society, where self-organizing participation, direct and through organizations, occurs, but where significant restrictions exist on that participation, or on its competitiveness. This score includes one point from

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<sup>121</sup> Center for Systemic Peace, "Malaysia," *Polity IV: Country Reports 2008*, available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.

the political interest (*polint*) factor and one point from interpersonal trust (*trust*); Malaysia scored a zero on the *civility*, *orgactive*, and *parcomp* indicators.

This coding aligns well with the reality of civil society dynamics in Malaysia. Political opposition and dissident groups exist in Malaysia, and in 2008 were able to win significant portions of Parliament and control over some regional governments, but coalitions of these groups are fractious and short-lived, indicating either a lack of trust or a lack of common objectives among opposition groups. Although elections seem to be free, they are not fair in practice, with opposition parties unable to conduct political rallies or access public funds, in addition to facing systematic positive discrimination towards Malays and other National Front members by the state.<sup>122</sup> Although recently the country has seen an upsurge in political demonstrations by dissident and opposition groups, these have often been violently dispersed by state authorities.<sup>123</sup> Thus, while civil society exists, a significant share of the population faces significant restrictions when attempting to interact in politically-significant ways.

Malaysia is coded two on *regulate*, indicating a combination of restrictive or coercive regulation of civil society dynamics by the state, frequent violations of civil liberties and/or a weak rule of law. In terms of this component's subdimensions, Malaysia received one point from Polity's *parreg* and one point from Gibney's *political terror scale*, while scoring zero points on the Freedom House *rule of law* indicator. The original coding of *parreg* is three, indicating sectarian political participation, and the original

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<sup>122</sup> Ibid.

<sup>123</sup> Ibid.

*political terror scale* coding is two, indicating relatively light levels of government repression (for reference, Switzerland is also currently coded a two).

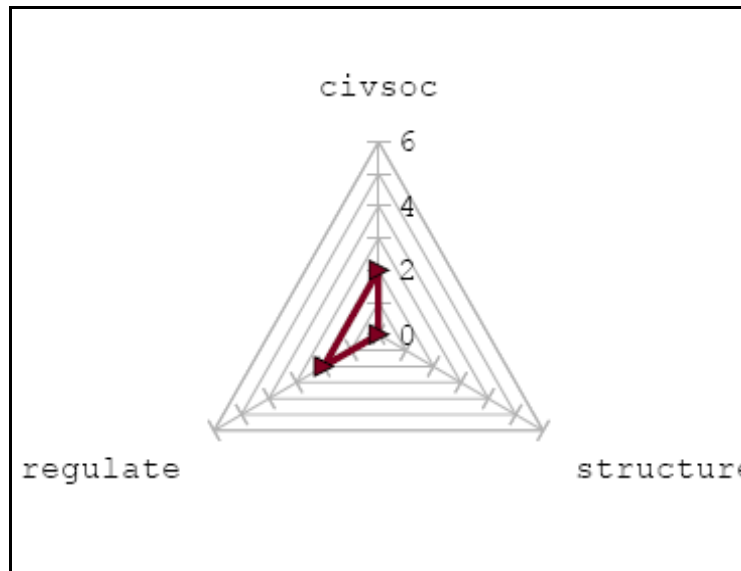


Figure 3. Malaysia

As with *civsoc*, *regulate* appears to effectively capture the current nature of government regulation of civil society in Malaysia. The state generally allows self-organizing interaction to occur, but places significant limits on that interaction when it challenges the ruling party. Although violent repression of human rights is uncommon, the state places significant limits on political rights and civil liberties for certain groups, particularly political dissidents and opposition party leaders. To the extent that individual participation is limited, this has generally been through violent dispersal of demonstrations and through the withholding of public assembly permits to opposition political parties. While the state restricts opposition participation significantly, it also



encourages Malay civil society participation, conducting systematic positive economic and political discrimination in favor of that group. Rule of law in the country is weak, with the judicial system subject to significant influence by the executive, who has directed the use of trials to harass and embarrass opposition leaders in the recent past.<sup>124</sup> Police are also used by the state for political purposes, which seriously diminishes the state's effectiveness at maintaining the rule of law.

Malaysia scored a zero on *structure*, indicating a nearly complete lack of publicly accessible mechanisms for information transmission across the state-society interface, such as elections, deliberative fora, or decentralized political institutions, with insubstantial constraints on the executive. This score of zero reflects an *exec* score of seven (transitional elections), which corresponds to one additive point for *regulate*, but this score was adjusted downward one point because of an *exconst* score of four, while scores on the Freedom House *electoral process* indicator and the *decentralization index* were well below the cutoff for an additive point. The low value of the *decentralization index* reflected not so much the degree of decentralization of fiscal or administrative authority, both of which are moderate, but the low political decentralization, indicating little popular control over decentralized political structures.

This variable also seems to match reasonably well with reality. Although there exist several structures to process and filter information from the populace, such as national and regional elections, in practice the government manipulates these institutions to such an extent that they are no longer capable of accurately transmitting information

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<sup>124</sup> Ibid.

from the bottom up. Despite representing only sixty percent of the population, ethnic Malays have managed to control nearly seventy percent of the country's parliamentary seats for most of the last forty years, which has given them the ability to rewrite the constitution and pass and enforce laws without reference to the views of the minority. The prime minister has, in practice, used his position to harass the political opposition without facing significant constraints and, until 2003, a single prime minister ruled for twenty-two consecutive years. Although UMNO's poor performance in 2008 may have changed this relationship, with the administration taking a more conciliatory attitude toward opposition perspectives, this is not reflected in the data, and the direction of UMNO's policies remains unclear in practice. Similarly, although the opposition secured several regional governments in 2008, this is not reflected in the data, nor particularly relevant given the weak authority given to this level of government by the state in practice.

Holistically, the arithmetic HSCI seems to describe Malaysia well. Of the sample it should be the least successful at harnessing social complexity, but it does have some strengths, which are reflected in the HSCI score of four. Although the multiplicative version reduces Malaysia's score to zero, eliminating these strengths from the picture, this measure more accurately reflects the interaction of the three dimensions, which is critical if social complexity is to be harnessed.

### **Case Study: Mexico**

Mexico's current constitution, creating a federal structure with three branches, modeled after the US system, was promulgated in 1917, although the most important

characteristic of politics for most of Mexico's recent history was the domination of politics by the Institutional Revolutionary Party (PRI) between 1929 and 2000. During this period the PRI controlled the presidency as well as an absolute majority of the legislature. Although opposition parties performed better in local and regional elections, the tide did not begin to turn against the PRI until midterm elections in 1997, when the PRI lost its majority in the legislature's lower house. The collapse of PRI hegemony finally occurred in 2000, when Vicente Fox Quesada of the opposition National Action Party (PAN) won the presidency. Fox was succeeded by Felipe Calderon, of the same party, following a close election in 2006. Calderon's opponent, populist candidate Andres Manuel Lopez Obrador, claimed the election had been fraudulent (a claim rejected by international observers) and initiated a legal challenge and a populist movement in support of invalidating the results, resulting in widespread unrest, particularly among the poor in Mexico City. The social unrest generated by this election dispute was quickly overshadowed, however, by the newly-inaugurated President Calderon's prosecution of drug cartels and corrupt municipal and regional government officials in northern Mexico, which has resulted in massive violence, including more than sixteen thousand deaths, in the last five years.<sup>125</sup> The scope of this violence, and the degree to which drug cartels have infiltrated and corrupted government officials, poses a serious challenge to both the capacity and legitimacy of the Mexican government.

Mexico scored a four on *civsoc*, indicating a moderately vibrant civil society, with substantial self-organized interaction occurring amongst the population. Political

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<sup>125</sup> Center for Systemic Peace, "Mexico," *Polity IV: Country Reports 2008*, available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.

participation, directly and/or through non-governmental organizations is frequent but not universal, and civil society dynamics are strong overall, but with some weaknesses. This score of four consists of one point from *polint*, one point from *orgactive*, one point from *trust*, and one point from Polity's *parcomp*. Mexico scored below average on *civility*, and received zero points from that indicator. Since the collapse of the PRI hegemony in 2000, Mexico has had, in practice, a civil society in transition. Political interaction is open, competitive, and reasonably widespread, but political interest and engagement is still largely restricted to the political extremes. Although there is widespread, competitive participation in direct national elections, with voting compulsory for all citizens over eighteen, and peaceful demonstrations are not uncommon, the surge of populism that sparked the recent 2006 demonstrations is troubling, and reflects the transitional nature of Mexico's civil society patterns. This populist movement has helped to repolarize Mexican politics, delaying the country's gradual transition away from factional forms of participation, where political alignment is rigid and parallel political cleavages reduce meaningful political interaction.<sup>126</sup> Thus, from a holistic perspective, the *civsoc* score seems to be well-correlated with the reality of Mexico's civil society dynamics, which are in a transitional state, gradually becoming more pluralistic and widespread.

Mexico scores only a one on *regulate*, indicating some combination of intense restriction of political activity, widespread repression of civil liberties and political rights and/or a weak of rule of law. Mexico earned one point from Polity's *parreg* indicator, zero

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<sup>126</sup> Ibid.

points from the Freedom House *rule of law* indicator, and zero points from the *political terror scale*.

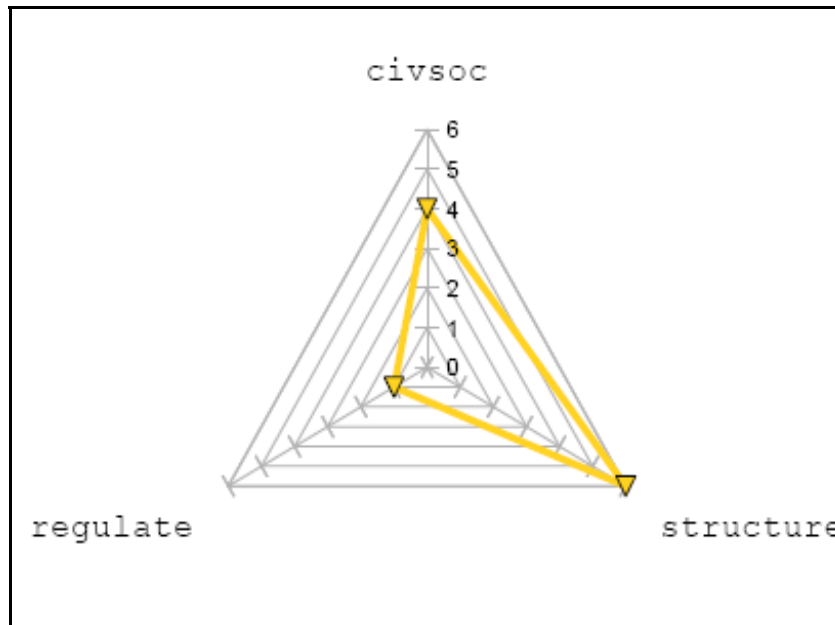


Figure 4: Mexico

This very low score does not accurately represent the reality of civil society regulation in Mexico, and is likely an artifact caused by the recent drug war. Although rule of law is challenged, in particular, by an overworked judicial system, which has few resources and a backlog of cases, Mexico's low score on the Freedom House *rule of law* indicator also reflects the corruption of police and government officials in the few northern provinces involved in the ongoing drug war, which does not (we hope) represent the state of Mexico's rule of law in general. Mexico's score on the *political terror scale* is also adversely affected by the drug war, as well as the central government's recent

suppression of a violent leftist movement in Oaxaca, one of the southern states affected by the separatist Zapatista movement.<sup>127</sup> This also does not reflect a national phenomenon, but nonetheless counts heavily against Mexico's *regulate* score. In practice, except for these geographically and politically-isolated issues, the government generally respects political rights and civil liberties, and regulation of participation is moderate, such as through laws restricting private contributions to politicians. While these issues, and particularly the handicapped judiciary, should not be ignored in an analysis of the state's regulatory status, they seem to be over-represented in this case.

*Structure* is where Mexico has made the most progress towards harnessing social complexity, reaching the maximum score of six. This includes two points from Polity's *exec*, indicating competitive elections for the national executive, one point from the Freedom House *electoral process* indicator, demonstrating an above-average score in the original coding, two points from the *decentralization indices*, indicating a high degree of decentralized (and electoral) authority, and one point from Polity's *exconst*, reflecting powerful constraints on executive power.

The *structure* category reflects reality much better in Mexico than does the *regulate* category. In practice Mexico devolves significant fiscal and administrative authority to its thirty-one states, all of which have elected legislatures and executives, which themselves grant substantial authority to elected municipal governments, usually for the provision of public services and law enforcement. Elected officials at local and regional levels, with substantial policymaking authority, provides citizens with multiple

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<sup>127</sup> Ibid.

ways to communicate information across the state-society interface, and also provides government with multiple points for the filtration and processing of information from the bottom-up. National elections also serve in this capacity, and the 2006 election was considered free and fair by international observers, the media, and most political figures, although not, notably, by the losing candidate. Although the presidency is dominant over the national legislative and judicial branches, regional governments regularly and successfully resist executive directives on the basis of their own sovereignty, justifying Polity's assessment of strong executive constraints.<sup>128</sup>

Mexico's overall HSCI score of eleven seems reasonable at face value, especially when placed in the context of similar countries. Mexico ranks the same as Chile, although due to very different component scores, which is a reasonable comparator. If the measure is reliable, then Mexico should be less effective at harnessing social complexity than the United States (fourteen) and Poland (thirteen) and more effective than South Africa (ten) and Romania (nine), which seems reasonable based on face value.

### **Case Study: Argentina**

Argentina's political system was plagued by military interference in politics, coups and countercoups, and harshly repressive governments between the 1930s until the end of the twentieth century. For most of this period the country's political system was dominated by the Peronist movement, loosely affiliated with the policies of the 1940s

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<sup>128</sup> Ibid.

ruler Juan Peron.<sup>129</sup> Rather than a unified political party, the Peronist movement is "like a political club with a diverse membership and decentralized centers of political loyalties,"<sup>130</sup> which has long been internally divided between policy orientations, family dynasties, and personalistic factions. In 1983, after fifty years of military rule, the Peronist President Alfonsín was elected, returning civilian control of government and regular, free elections to Argentina, although the period continued to be marked by attempted coups and military uprisings. Carlos Menem took over the presidency in 1989 representing the Peronist Justicialist Party (PJ), and enacted constitutional reforms that allowed him to remain in office for a second term. Menem proved to be a domineering executive, often ruling by decree, bypassing the legislature, and packing the courts with his supports.<sup>131</sup>

Although Argentina's electoral institutions were strengthened when Menem willingly relinquished power to electoral victor Fernando de la Rúa, of the Alianza Party, in 1999, two years later the country's economy collapsed, resulting in the resignation of de la Rúa, a constitutional crisis over succession to the presidency involving multiple interim presidents, and widespread social upheaval and violence. Despite the crisis, however, the military remained outside of politics, marking a significant change in historical patterns. Eventually the legislature appointed Eduardo Duhalde (PJ), to the presidency, who organized elections in 2003, which were contested by Menem and

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<sup>129</sup> Center for Systemic Peace, "Argentina," *Polity IV: Country Reports 2008*, available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.

<sup>130</sup> *Ibid.*, 3.

<sup>131</sup> *Ibid.*



Nestor Kirchner, both representing factions of the Peronist JP party, which had fragmented following the collapse of the opposition Radical Civil Union (UCR).<sup>132</sup> In 2007 Kirchner's term expired, and his wife, Christina de Kirchner, who had taken over nominal leadership of his personal political party, the Front for Victory, was elected to replace him in the face of only limited opposition. Ms. Kirchner has been less successful at maintaining the power of the executive than her husband, and in 2009 midterm elections their party lost control of the legislature.

Argentina attained a score of five on *civsoc*, indicating a strong, vibrant and pluralistic pattern to self-organized political interaction in society, with meaningful, independent participation both directly and through organizations, although with some weaknesses. Argentina performed above-average in all four of the civil society dimensions, with indicators *orgactive*, *polint*, *civility* and *trust* all contributing one point to *civsoc*, and this was supplemented by one point derived from Polity's *parcomp*.

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<sup>132</sup> Ibid.

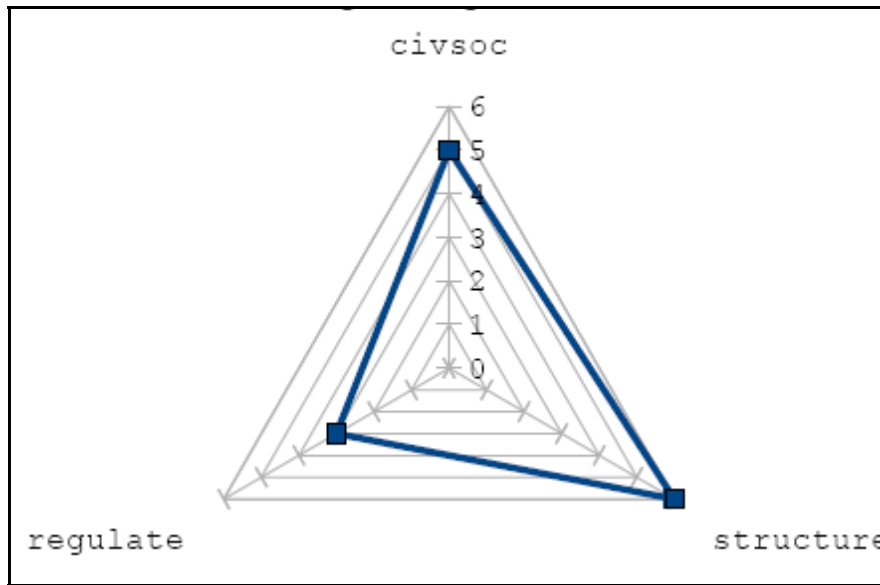


Figure 5. Argentina

The *civsoc* score reflects the reality of civil society dynamics in Argentina quite well. There are many non-governmental organizations active across society, with widespread active membership, and these organizations proved invaluable during the economic crisis of 2001-02, providing public services and addressing needs of the population, for whom government was no longer effectual.<sup>133</sup> In the aftermath of that crisis the government created new coordination initiatives to work with NGOs at the local level, expanding citizen engagement. Political participation has increased dramatically in recent years, and was especially inspired by Menem's authoritarian tendencies.<sup>134</sup> Participation in elections is generally high, but the patterns of political rivalries within the Peronist party, and the presence of longstanding family dynasties in many of the country's

<sup>133</sup> Civicus, "Executive Summary - CSI Argentina," *CSI Country Reports*, available online at [http://www.civicus.org/media/CSI\\_Argentina\\_Executive\\_Summary.pdf](http://www.civicus.org/media/CSI_Argentina_Executive_Summary.pdf); accessed 1 September 2010.

<sup>134</sup> *Ibid.*

provinces, are significant challenges to the robustness of civil society and political participation. In addition, Civicus reports that civil society organizations are consistently short-funded, due in part to government depriving organizations of resources, and in part to continued nationwide poverty, to such an extent that participation and interaction is effectively restricted.<sup>135</sup>

Argentina scored three on *regulate*, indicating a combination of restrictions on political rights and civil liberties, existent but weak rule of law, and some lapses in human rights protections. This score included one point from Polity's *parreg*, one point from the Freedom House rule of law index, and one point from the PTS, reflecting an original PTS code of two.

In practice this measurement of Argentina's regulation of civil society and political participation seems accurate. The Peronist movement is a dominant force in the country's political and social worlds due in part to its tactics of suppressing opposition forces and denying opposition parties and politicians access to critical resources. While divisions within the Peronist movement may have challenged the government's ability to restrict the opposition, anti-Peronist opposition has nonetheless been unable to develop a national organization or popular support, and there is reason to suspect some degree of government involvement, at least in terms of denial of resources to opposition organizations, harassment of opposition and anti-government journalists, and positive discrimination on behalf of Peronists, through government funding of favorable media coverage. The existence of family dynasties in many provinces also restricts the ability of

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<sup>135</sup> Ibid.

civil society to organize and act freely. Rule of law is challenged by low public confidence in government and law enforcement, and corruption is considered to be a significant problem by most international measures.<sup>136</sup> This combination of generally respected rights and liberties with weak rule of law and systematic positive discrimination, which led Civicus to describe Argentina's government as having a "somewhat enabling" political environment for civil society," is consistent with the mid-range score of three on the *regulate* scale.

Argentina scored the highest on *structure*, where it was coded six, the maximum value for the scale. This included two points from Polity's *exec*, indicating fully competitive elections, one point from Freedom House's *electoral process*, indicating above average performance in that area, two points on the *decentralization index*, and one point from Polity's *exconst*, corresponding to executive constraints that are "near parity."

This variable aligns well with the reality of Argentina's state-society interface structures. Argentina's constitution devolves significant fiscal and administrative authority to regional and municipal governments. Local and provincial governments have the ability to collect and spend taxes, seek loans from domestic banks and the central government, and are largely autonomous in terms of spending decisions. These decentralized governments are also elected, giving people a direct, local connection to government, and giving the central government a natural filtration mechanism for information about policy problems and preferences. That said, family dynasties have in

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<sup>136</sup> Civicus, "Argentina," *CSI Country Reports*, available online at [http://www.civicus.org/media/CSI\\_Argentina\\_Executive\\_Summary.pdf](http://www.civicus.org/media/CSI_Argentina_Executive_Summary.pdf); accessed 1 September 2010, 32-33.

several provinces maintained a hold on government for decades, significantly restricting the ability of people to use these levels to communicate with government.

National elections to the legislature and executive office are free and fair with universal adult suffrage. Observers have reported minimal fraud in every election since the return to electoral civilian control in the 1980s, although in practice positive discrimination by a series of Peronist governments has given that party a significant edge over the opposition. Although civilian control has been maintained, the executive has, until recently, been a domineering force in the central government. Especially under President Menem, the presidency held substantial influence over the legislature and judiciary, and frequently ruled by decree, bypassing them entirely. This has changed dramatically in recent years, and especially since Mrs. Kirchner was elected to the office, with the power of the executive declining substantially to the benefit of the legislature, allowing for greater incorporation of information processed from the local and regional levels. The judiciary has also become increasingly independent in recent years, even going so far as to challenge the military by repealing amnesty laws and prosecuting soldiers accused of Dirty War-era war crimes.<sup>137</sup>

In sum, the HSCI score, totally fourteen, tells a story of Argentina quite similar to reality. The country has multiple structures for citizens' concerns and preferences to be communicated, filtered, and processed, at local, regional, and national levels, with executive power constrained substantially. Although the state generally respects rights and liberties, having left behind the tools of repression that made its military governments

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<sup>137</sup> Center for Systemic Peace, "*Argentina*," 3.

infamous, weak rule of law, corruption, and discrimination place significant restrictions on the freedom and vibrancy of civil society organizations, and particularly anti-Peronist groups. Civil society is quite strong, but its scope is limited by the availability of resources. Overall, the country is well positioned for the harnessing of social complexity, and it ranks quite highly on the scale, at the same additive value as the United States and Germany, and between Poland and the United States on the multiplicative index.

### **Case Study: Indonesia**

Indonesia is generally considered to be in the process of democratic transition, a process which has recently been quite rocky. After significant constitutional reforms following her election, President Megawati Sukuarnoputri, daughter of the former President Sukarno, the country had its first direct elections to the presidency, and to a newly-created representative legislature, in 2004. Megawati lost this election to former military leader Susilo Yudhoyono in a runoff election for the presidency. Although President Yudhoyono's *Democratic Party* has had a fairly small proportion of legislative seats, he formed a political alliance with Jusuf Kalla, leader of the *Golkar* party, which has traditionally been the largest party in the legislature, by appointing him vice president. Kalla's power base gave Yudhoyono the ability to pass legislation through the congress, but it has also led to speculation of rivalry between the two leaders. After reelection in 2009, Yudhoyono orchestrated a formal merger of *Golkar* with his political coalition, thus giving his coalition 421 of 560 seats in the legislature. Despite initial success, however, Yudhoyono has faced popular discontent in the last year, culminating

in widespread urban demonstrations on the 100th day of his second term, due to perceptions that he has failed to live up to his campaign promises of changing the political structure and eliminating corruption.<sup>138</sup>

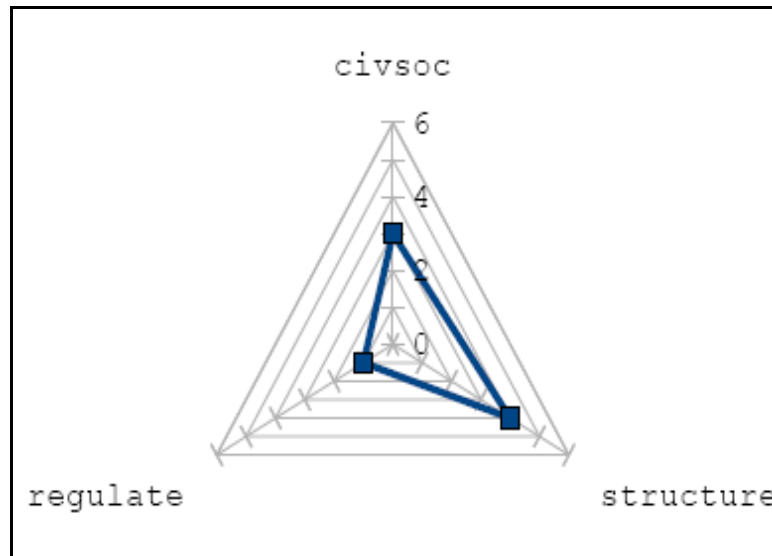


Figure 6. Indonesia

Indonesia is coded a mid-range value of three on *civsoc*, indicating a mixed pattern of civil society and political participation dynamics, with a combination of weak civil society, uncommon or uncompetitive participation, narrowly-focused or rare organizational activity, and/or limited organizational membership in the population. This score consists of one point each from *polint* and *orgactive*, reflecting above-average political interest and organizational membership activity, and one point from Polity's *parcomp*, which was a value four on the original scale, indicating a transitional participation dynamic.

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<sup>138</sup> Center for Systemic Peace, "Indonesia," *Polity IV: Country Reports 2008*, available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.

This mid-range coding seems to be consistent with Indonesia's civil society, which is growing and continuing to adapt to the constitutional, political, and economic changes wrought in recent years, but which continues to face significant challenges in the aftermath of Suharto's regime, which utilized widespread repression and military power to minimize dissent. Despite the young nature of open participation, many Indonesians are interested in politics and participate in civil society organizations, ranging from religious groups to academic associations and labor unions, but the resources of organizations are extremely limited due to the country's economic woes, with organizations largely dependent on foreign aid for their operating costs.<sup>139</sup> Civicus reports that organizations also have traditionally not been open with their financial records, and have generally not expanded beyond urban areas, contributing to general distrust of organizations amongst the majority-rural population.<sup>140</sup> The quality of direct participation has been described as parochial, with the country's many ethnic groups pursuing narrowly-defined self-interest in the political system, with not uncommon acts of political violence between rival ethnicities, which also weakens civil society dynamics.<sup>141</sup>

Indonesia scores a one on *regulate*, indicating government policies that significantly suppress civil society and restrict rights and liberties, as well as a weak rule of law. This score includes one point from Polity's *parreg*, and zero points from both PTS, with an original code of three, and Freedom House's *rule of law* index.

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<sup>139</sup> Civicus, "Indonesia," *CSI Country Reports*, available online at [http://www.civicus.org/media/CSI\\_Indonesia\\_Country\\_Report.pdf](http://www.civicus.org/media/CSI_Indonesia_Country_Report.pdf); accessed 1 September 2010, 7-9.

<sup>140</sup> Ibid.

<sup>141</sup> Center for Systemic Peace, "Indonesia," 4.



Although civil society in Indonesia does face restrictions by the state, this very low score on *regulate* likely exaggerates these restrictions. The government's greatest weakness with regard to social complexity harnessing is in the poor state of rule of law, which is practically nonexistent. Indonesia is described by Civicus as the most corrupt government in the world, based on assessments by multiple international organizations, and the government's lack of transparency and accountability seems to have worked itself into the very fabric of Indonesian civil society, with NGOs engaging in many of the same corrupt practices as government. Survey data also suggests that law enforcement is unfairly and inconsistently applied, with significant public distrust of police and the courts.<sup>142</sup>

Indonesia earns its minimum score in *rule of law*, but rights and liberties are generally respected in the country, and public dissent in the media and through active participation, both electoral and in the form of demonstrations, is tolerated in practice. The *regulate* score is brought down due to the PTS (original coding scale) value of three, indicating moderate repression of a small proportion of the population, which probably accounts for excessive use of force by the military units operating in separatist regions, which adds zero points to the *regulate* scale. Although the situation has improved since that time, the military's willingness to use repressive tactics during East Timor's revolt continues to be a problem in the country. That said, human rights are respected for the majority of the population; to the extent that civil society faces restrictions on its activities, these tend to be more economic than political, although corruption and weak

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<sup>142</sup> Civicus, "Indonesia," 43.

rule of law remain significant restrictive forces. This reality is not reflected in the *regulate* score, which would be more accurate if coded value two.

*Structure* is rated four for Indonesia, indicating the presence of multiple venues for interaction across the state-society interface, but offset by a combination of low decentralization, weak constraints on the executive, and/or electoral processes that are not free and/or fair. Indonesia's score is based on two points from Polity's *exec*, indicating open and competitive executive elections at the national level, one point from Freedom House's *electoral process*, indicating above-average performance on that indicator, one point from executive constraints, indicating a highly constrained executive, and zero points from the *decentralization index*.

The *structure* index accurately portrays reality in Indonesian politics. Although regional and local governments are elected by popular vote, this only began in 2001 for regional governments and 2005 for local governments. This recent development has left subnational governments with little political authority, with most fiscal and administrative power remaining highly centralized, except for the few separatist regions (e.g. Ache, Papua) recently granted political autonomy.<sup>143</sup> Devolution of power to local and regional governments may continue to increase over time, but at present these government levels do not play a significant role in processing, filtering, or transmitting information from the populace to the national level. While normally local and regional governments play an important role in public interaction through taxation and law enforcement activities, in practice public distrust of these institutions is so high, and

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<sup>143</sup> Ibid., 45.

perceptions of corruption to widespread, that they primarily function to transmit information downwards, from the state to the population, with little information flow in the opposite direction.

Since constitutional reform at the turn of the century, constraints on the executive have been strong and multifaceted. The judicial branch, although charged with corrupt practices, is independent of presidential authority and influence, and the legislature has proved to be largely independent of the executive as well. Political parties, and especially the dominant Golkar party, have proven to be particularly problematic for both President Megawati and President Yudhoyono, who has faced additional constraint by his vice president, Jusuf Kalla of Golkar. The president thus cannot unilaterally dictate policies against the will of other actors designed to transmit and represent popular views, and the president is held accountable by multiple agencies.

In addition, elections to both the legislature and executive office in Indonesia are direct, with universal adult suffrage, and have been largely free and fair since Megawati passed constitutional reform. Electoral process is considered by international observers to be sound at the national level, with few irregularities in the 2004 and 2009 elections, but at the local level elections are partially indirect: candidates must be nominated by political parties with significant vote shares, and there is no mechanism for independent (non-partisan) candidacy.<sup>144</sup> This process introduces a great deal of private money into

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<sup>144</sup> Center for Systemic Peace, "Indonesia," 2.

local elections, as candidates must have partisan support, and wage a sophisticated campaign, in order to even have their names on local ballots.<sup>145</sup>

In sum, elections exist and have been confirmed as free, fair, and honest, providing several important points for interaction at the state-society interface, especially in the provincial and national legislatures. Decentralization of authority, however, is minimal, and so elections at local and regional levels are ineffective mechanisms for transmitting popular policy information from the bottom-up. The result is a mixture of strong and weak institutions for structuring social complexity and filtering the information it generates, which is accurately captured in *structure* code four.

Holistically, Indonesia's *HSCI* value of eight, and the multiplicative value of .06, seem reasonable. The country has some strong areas, notably in elections and civil society strength, and particularly in terms of political interest and organizational membership, but significant areas require substantial improvement in order for social complexity to be harnessed, and at present the weaknesses outweigh, and negatively affect, the country's strengths. Its position vis-a-vis other countries also seems reasonable at face value, being better positioned for the harnessing of social complexity than Thailand (*HSCI* = 6) and Malaysia (*HSCI* = 4), and less effective at doing so than South Africa (*HSCI* = 10) and Brazil (*HSCI* = 9).

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<sup>145</sup> Civicus, "Indonesia," 42.

## **Case Study: Germany**

Germany is a fully-industrialized country, governed by a constitution known as the Basic Law, which defines a parliamentary system, with a directly-elected lower house (Bundestag) and an upper house (Bundesrat) appointed by regional governments, which are themselves directly elected. The executive is the chancellor, who is elected by Parliament, and the largely-ceremonial head of state is the president, who is directly elected. The chancellorship has rotated among the country's two centrist parties, the Christian Democratic Union (CDU) and Social Democratic Party (SPD), often ruling in coalition with smaller parties. In 2002 the CDU under Chancellor Kohl, one of the driving forces behind the country's 1989 reunification, was defeated by the left-of-center SPD, led by Gerhard Schroeder. Kohl had grown unpopular due to continued high unemployment rates, particularly in the east, which have plagued the country since reunification. Schroeder was himself defeated in 2005, after initiating a no-confidence motion against himself in a bid to increase SPD membership in the Bundestag backfired, but the SPD, which won the election, did not win a simple majority of seats and neither party was able to form a coalition with its usual partners. After an extended period of deadlock Schroeder and CDU leader Angela Merkel negotiated a grand coalition between the CDU and SPD, with Merkel as Germany's first female chancellor. The grand coalition was replaced by a coalition of the CDU and the fiscally conservative Free Democratic Party (FDP) after elections in 2009 increased the pair's seat threshold beyond fifty percent, with Merkel staying on as chancellor. The unemployment problem has been complicated in recent years by an increase in the Turkish population, which faces

systematic economic and social discrimination, accompanied by increased xenophobia, particularly against Muslims.

Germany is a unique case in the HSCI as the only industrialized European country with a low *civsoc* value of two. This score includes two points from Polity's *parcomp* and no points from any of the civil society indices constructed for this study. Germany scored in the bottom one-third of the sample on political interest, the bottom quartile on organizational activity and membership, and significantly below average on trust. On civility Germany performed above average, but just below the threshold for an additive point.

Although it may raise an eyebrow, this coding should not be surprising to a student of German culture, who would recognize the significant difference between political participation norms and venues in Germany and the operationalization of civil society underlying the measure. In particular, the *civsoc* measure places significant weight on participation in civil society organizations, and particularly non-governmental organizations, in an attempt to capture the self-organized nature of political participation. Germany, however, has a corporatist structure whereby the state finances most civil society organizations and gives them formal and regulated access to government. Membership in such organizations is low in Germany society, while individual partisan political participation tends to be high. Unlike the United States, and contrary to the model of civil society used here and supported in the literature, NGO membership is

simply not a common method of socio-political interaction in Germany.<sup>146</sup> Furthermore, Civicus's research confirms that non-partisan political activity is low in Germany, partially accounting for low scores on both *polint* and *orgactive*. Civicus also confirms that interpersonal trust levels in Germany are quite low, with less than one-third of respondents in the World Values Survey indicating that "most people could be trusted," and tolerance of minority groups is also low, which may reflect increasing fear of Muslims and associations between immigration and high unemployment. Although organizational membership is not an important characteristic of German politics, which partially explains why Germany society is not measured well by *civsoc*, the low levels of trust and tolerance are less easily explained away. It is possible that low levels of trust are due to the legacy of communist repression in East Germany, or to the country's common history, indelibly marked by Nazism. Both of these factors may also explain the low levels of reported political interest in the country. It is easy to understand why the German population may have become disenchanted with politics, particularly in the face of continuing very high unemployment in the eastern half of the country.

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<sup>146</sup> Civicus, "Germany," *CSI Country Reports*, available online at [http://www.civicus.org/media/CSI\\_Argentina\\_Executive\\_Summary.pdf](http://www.civicus.org/media/CSI_Argentina_Executive_Summary.pdf); accessed 1 September 2010, 32-33.

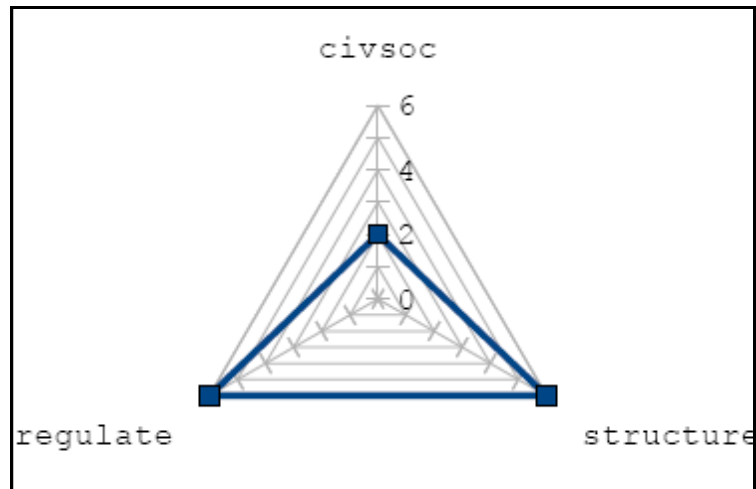


Figure 7. Germany

In short, the *civsoc* operational scheme is poorly-suited for measuring civil society dynamics in Germany. The country lost two points for low organizational membership and non-partisan political activity, when political participation simply manifests itself in different ways according to Germany cultural norms. Two points were also lost for low points for political interest and engagement, which is also culturally sensitive. The low trust level may deserve the one point deduction awarded here, but the *civility* score, which reflects low tolerance, was only slightly below the threshold for an additive point.

In terms of both *regulate* and *structure* Germany achieved the maximum additive score of six, and these values closely mirror reality in the country. In terms of regulation, the full spectra of political rights and civil liberties are well-respected in Germany. Rule of law is strong and systematic, with a strong record of human rights respect by law enforcement and political leaders, and an independent judiciary. Order is maintained



through effective law enforcement and regulation, and political competition is fully institutionalized.<sup>147</sup>

In terms of structure, the right to vote is universal and respected, with national elections free and fair since reunification, and in West Germany since the formation of the Basic Law in the 1950s. The chancellor is significantly constrained through the parliamentary process, whereby a majority of the Bundestag can remove the chancellor by a constructive vote of no confidence, and in practice the chancellor also faces significant constraints in the governing party and coalition members. The country's politics are also quite decentralized. Local and regional governments (*lander*) are also elected. The Basic Law devolves significant authority to the *lander*, which maintain fiscal and administrative authority, including complete authority over education (primary, secondary, and tertiary levels) and law enforcement. Moreover, because *lander* nominees comprise the Bundesrat, which holds significant power in the country's national legislature, changes to the partisan make-up of regional governments, which are on a staggered election cycle, can be extremely influential in national politics, allowing parties that have a minority in the Bundestag to effectively block the chancellor's legislation. In practice these elections act as a barometer of public support for their policies, providing a significant edge as the government attempts to process information from the population about policy problems and preferences. The *lander* provide a natural, low-level interface for state-society interaction.

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<sup>147</sup> Ibid., 27-29.

The holistic picture of Germany provided by the HSCI, in both additive and multiplicative formats, falls slightly short of reality due to the failure of the *civsoc* coding scheme to accurately reflect Germany cultural norms about political participation, and the government's unique corporatist structure for NGO management. At HSCI value fourteen, Germany shares its rank with Italy and the United States, is superior to Poland and South Africa, and is ranked behind Switzerland, the Scandinavian countries, and Canada. While not shockingly unrealistic, the civil society measure, in particular, would need tweaking in order to accurately capture German civil society dynamics.

### **Assessment**

The goal of this chapter, and the larger goal of the dissertation, was to develop a measure of harnessing social complexity, the governance strategy underlying democracy, that would be objectively coded, easily replicated, contain minimal random and systemic error, and which would be grounded in political theory. The HSCI was thus developed deductively, beginning with the theory of harnessing social complexity developed by Axelrod and Cohen, and empirically tested by Wagenaar. This theoretical construct was refined into a conceptual definition based on the construct's three core components, which were then operationalized using twelve indicators (four of which were derived through confirmatory factor analysis) from publicly-available data sources. After extensive analysis of each indicator, the relationships between the indicators, and the epistemic relationship between each indicator, and group of indicators, and the conceptual components, coding rules were established that were objective, theoretically

grounded, and logical. These coding rules were then applied to the common pool of twenty-five cases covered by the twelve indicators, resulting in the HSCI indices and data matrix.

This process reflects some of the greatest strengths of the HSCI, in that it is easily replicated, coding rules are clearly stated and require no subjective judgment, and the underlying indicators are few, well-respected, and have been thoroughly reviewed in academic literature. Although content validity can only be determined by expert review, the HSCI is strong in terms of face validity, ranking countries as expected, with more institutionalized democracies having higher levels of harnessing social complexity than democracies in transition, or non-electoral states like Malaysia.

The HSCI is also quite strong in terms of convergent validity, although a larger sample, preferably including a larger proportion of non-electoral states, is needed for a decisive analysis. The HSCI predicts nearly ninety percent of the variance in the WGI's *voice and accountability* measure using only twelve indicators, compared to dozens by the WGI. Correlations with other existing measures of democracy were quite high, higher in many cases than correlations among the other measures of democracy themselves, and the HSCI, in both additive and multiplicative forms, has a strong correlation with economic development, as expected.

The five case studies demonstrated the strengths and weaknesses of the component coding schemes, particularly useful for identifying sources of systemic error, and also helped to confirm face validity of the HSCI. The cases of Mexico and Indonesia demonstrate that the regulation component is particularly sensitive to government

restriction of rights and liberties, even to small groups within the population, which causes lower scores for countries dealing with separatist struggles, for example, where government use of coercion is more frequently applied. This is an important source of systemic error, which might be minimized through subjective coding and adjustment of cases, or through readjustment of the coding scheme, although neither is undertaken here.

The *civsoc* component was created specifically to account for multiple variations of civil society, by including additive indicators that could theoretically reach a sum of eight, two points above the maximum component score of six, but this was not culturally sensitive enough to capture civil society dynamics in Germany. Although certainly a weakness, Germany was the only case of the sample that experienced this much error, which is essentially systemic in nature. The structure variable worked remarkably well across cases, accounting for multiple variations of state-society interaction at local, regional, and national interface levels; no significant random or systemic error was identified.

The greatest strength of the HSCI is that it accounts for variation among institutionalized democracies where existing minimalist measures do not. It does this without subjective coding and while using substantially fewer indicators than maximalist measures. The components of the HSCI can also be easily weighted for future research, in both additive and multiplicative indices. The greatest weakness of the HSCI is its reliance on indicators with limited cross-national data coverage, especially in civil society (i.e. World Values Survey questions) and decentralization metrics. This limitation defined the twenty-five case sample used here, which includes no non-electoral states,

introducing sample bias into the pilot study. This problem may be solved by expanding data coverage on the part of Civicus, which uses similar measures of civil society to those used here, and also includes assessment of political decentralization. Whereas Civicus is currently in its second phase of research, this expanded data coverage could become a reality in the near future, allowing expansion of the HSCI data. Expanded data coverage would also allow expansion of the dataset across time, allowing for a living dataset, which would be able to measure the effects of changes in social complexity harnessing, and would also allow for a more nuanced model of social complexity harnessing transitions and dynamics.

## 6. Conclusion

This thesis offers an alternative conceptualization of governance, where regime type is based on the state's underlying strategy for managing social complexity and performing its other core functions. This conceptualization was derived from theoretical and empirical work in complexity theory, and chapter three demonstrated its consistency with the historical evolution of governance forms. This chapter also provoked some intriguing hypotheses for future research. If a state harnesses social complexity more effectively, then does it perform better in the public policy arena? Do certain types of structures for harnessing social complexity allow the state to perform its core functions better than other types of structures? Can we use the dynamics of harnessing social complexity to better model democratic transitions, and generate a less bloody path to democracy for those countries interested in transitioning away from the autocratic governance strategy?

Whereas pursuing these questions, or any other line of empirical analysis, would require a measure of harnessing social complexity first, the primary goal of the dissertation was the operationalization of such a measure, which was accomplished in chapter five. This measure, the *Harnessing Social Complexity Index*, was demonstrated to be convergent with existing measures of democracy, and was shown to be highly correlated with national wealth, a known correlate of existing democracy measures. Five

brief case studies identified strengths and weaknesses of the component variables of the HSCI, and helped to distinguish random from systemic sources of error in the data.

This thesis thus offers two new contributions to our understanding of democracy, and how democracy is measured, one theoretical and one empirical. Conceiving of democracy in terms of its underlying governance strategy allows us to approach its study from a new perspective. Many pages of academic journals focus on democratic transition have been devoted to a debate between sequencing and gradualism, with the former arguing that in a democratic transition elections should be delayed until institutions are constructed, and the latter arguing that elections can be undertaken immediately. Both sides cite successful and failed transitions as evidence for their views. If we conceive of democratic transition as the shift (gradual or otherwise) from a strategy of minimizing social complexity, which is fairly straightforward, to a strategy of harnessing social complexity, we can understand this process with much greater subtlety. If a state simply ceases to suppress civil society and holds elections, effectively opening the flood gates, without building structures to filter and process the resulting flow of information, or, worse, without maintaining adequate law enforcement, citizens will get little benefit from the increased freedom of political participation. Indeed, the likely result will be a chaotic and factional society, as the state would have little ability to regulate or control the resulting interaction. The sequentialist approach of building the structures and regulatory systems first, without increasing freedoms for civil society dynamics, is also problematic, particularly as it relies on the presence of a benevolent dictator to oversee the transition.

In short, both sequencing and gradualism focus on the timing of elections, and thus provide only a superficial explanation and model of the democratic transition process.

By turning the focus away from elections, we can understand democratic transition as a multifaceted process of moving from one strategy to another, which process can be more or less stable depending on the policies of the transitioning government, internal social and political dynamics, and the speed at which the transition occurs. The quintessential sequentialist example might make significant progress towards developing structures to filter and process information, and in rule of law, while making no significant progress in the holding of elections or in allowing social complexity to organize into political parties to challenge the ruling elite. While the state is moving towards the democratic strategy, no "democracy" has been "gained," because there is still no social complexity to harness. These states might, however, have an easier time once they release the participatory floodgates. Another case might make significant progress towards liberalizing society, but if the state lacks the structures necessary to process and filter information, and national elections alone do not serve this purpose because once in office an executive is effectively free of popular control, then little benefit will be gained: without a yoke, the ox moves and leaves the cart behind.

An alternative solution might be making progress towards civil society liberalization in non-political forms, such as through freedoms of movement, practice of religion, and assembly, but with restrictions on political dissent and without completing freeing participation through the holding of elections, until structures and regulatory systems are in place. Taiwan and South Korea followed this type of democratic transition



path during the 1980s, where economic and social organization and rights were generally permitted, allowing economic wealth to build and public interest in controlling government to increase, but where political dissent and anti-government activity was restricted (sometimes quite harshly), to maintain order. After processing and filtration structures and regulatory systems were in place, then the state opened the doors to complete, competitive participation, and the two cases have done well.

This new conceptualization could also be applied to the ongoing debate between scholars over the merits of deliberative democracy, which is based on Rousseau's notion that people can only discover the common good through discussion and deliberation. Wagenaar argued that deliberative democracy structures are better able to harness social complexity than representative structures, because they bring community members into direct contact with government officials for group deliberations over policy problems and preferences. In theory, this type of deliberative system does allow for greater information processing and filtration by government, but it has several problems. First, the organization managing the deliberative program has a powerful role in framing the problem being discussed and providing, and filtering, the information about the problem that participants receive. There is no guarantee that the managing organization will frame the issue objectively, and the information provided can in many cases decide the issue. In most important policy debates there is disagreement not only on interpretation, but also on the validity of the available data. No one group has a monopoly on truth, which deliberative democracy, in practice, suggests. Also, in a deliberative democracy system the government is receiving information from only those citizens and organizations who

participate. While ideally these will be chosen to accurately represent the demographics of the population, in practice one might expect that more politically extreme individuals will try to attend, in order to make their voices heard. While five percent of the population will easily be drowned out in a national election, in a room only one hundred people those five can have a much easier time getting their voices heard, and persuading their peers. Deliberative democracy may harness social complexity more effectively in theory, but in practice, and especially on any scale larger than a local community, it is simply impractical, and the areas of impracticality could actually impede complexity harnessing.

While the policy implications of the theoretical construct are significant, the most substantial contribution offered by this study is the *Harnessing Social Complexity Index*, an objective, empirical measure of the degree to which states harness social complexity. This measure can be used as an alternative to existing measurement schemes, and has significant advantages over the prevailing minimalist and maximalist alternatives. Unlike minimalist schemes, such as Polity, the Polyarchy dataset, or the PRI, this measure can differentiate among industrialized democracies, and identifies and provides useful information about emerging political regimes, like Malaysia, that straddle the traditional lines between democratic and autocratic regimes. Unlike measures from Freedom House, the World Bank, or the Economist, this measure does not rely on subjective judgment, normative coding, or the use of dozens of indicators. Indeed, the measure is tightly correlated with all three despite using only twelve indicators. This measure could be used on its own or in its component forms in quantitative analyses, or could be used to

supplement existing minimalist schemes, like Polity, where variation among the industrialized democracies is minimal.

These two contributions both demand further research. Empirical testing on the relationship between harnessing social complexity and policy performance, similar to work comparing cities' control of crime rates in The Netherlands by Wagenaar, can now be undertaken cross-nationally for the limited sample for which HSCI data is currently available, although management of crime is probably too complicated an issue for this type of testing. This new theoretical perspective should also be systematically applied to existing models of democratic transition, debates over the relative merits of parliamentary and presidential systems, and could shed new light on the failure of Soviet-style communism. Empirically, the HSCI needs expert review for content validity, and requires expansion beyond the twenty-five case sample used here, which may become possible in 2011 with the conclusion of Civicus' second phase of cross-national civil society research and measurement. Expansion backwards in time is also critical, in order to assess changes in social complexity harnessing, and how those changes are related to economic, social, and political changes in the polity. Once expansion is complete, further validity tests will be needed and sources of error should be systematically identified and corrected. Further study of the HSCI may also suggest the need for a weighting scheme for the component variables, which could constitute the next immediate stage of empirical refinement.

## Appendix A: Factor Analysis and Generation of Civil Society Factors

The *civsoc* component includes four variables created by the author (*trust*, *orgactive*, *civility*, *polint*) based on twenty-one questions from the fifth wave of the World Values Survey, determined through a combination of theoretical value, data availability, and analysis of their frequency distributions, question wording and scaling, and other characteristics. The final selection of these questions included the following:

*V16. Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five! (Code five mentions at the maximum): Tolerance and respect for other people.*

*-5 'Missing; Unknown'*

*-4 'Not asked'*

*-3 'Not applicable'*

*-2 'No answer'*

*-1 'Don't know'*

*1 'mentioned'*

*2 'Not mentioned'*

*V23. Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (Code one answer):*

*1 Most people can be trusted.*

*2 Need to be very careful.*

*V 24-33. Now I am going to read off a list of voluntary organizations. For each one, could you tell me whether you are an active member, an inactive member or not a member of that type of organization? (Read out and code one answer for each organization):*

|  | <i>Active</i> | <i>Inactive</i> | <i>Don't belong</i> |
|--|---------------|-----------------|---------------------|
| <i>V24. Church or religious organization</i>   | <i>2</i>      | <i>1</i>        | <i>0</i>            |
| <i>V25. Sport or recreational organization</i> | <i>2</i>      | <i>1</i>        | <i>0</i>            |

|   |   |   |   |
|---|---|---|---|
| V26. Art, music or educational organization | 2 | 1 | 0 |
| V27. Labor Union                            | 2 | 1 | 0 |
| V28. Political party                        | 2 | 1 | 0 |
| V29. Environmental organization             | 2 | 1 | 0 |
| V30. Professional association               | 2 | 1 | 0 |
| V31. Humanitarian/charitable organization   | 2 | 1 | 0 |
| V32. Consumer organization                  | 2 | 1 | 0 |
| V33. Any other (write in): _____            | 2 | 1 | 0 |

V95. How interested would you say you are in politics? Are you (read out and code one answer):

- 1 Very interested
- 2 Somewhat interested
- 3 Not very interested
- 4 Not at all interested

V. 96 – 99. I'm going to read out some forms of political action that people can take, and I'd like you to tell me, for each one, whether you have done any of these things, whether you might do it or would never under any circumstances do it (read out and code one answer for each action):

|  | Have done | Might do | Would never do |
|--|-----------|----------|----------------|
| V96. Signing a petition                | 1         | 2        | 3              |
| V97. Joining in boycotts               | 1         | 2        | 3              |
| V98. Attending peaceful demonstrations | 1         | 2        | 3              |
| V99. Other (write in): _____           | 1         | 2        | 3              |

VI26. I'd like to ask you how much you trust people from various groups. Could you tell me for each whether you trust people from this group completely, somewhat, not very much or not at all? (Read out and code one answer for each):

|                         |                  |                |                        |                     |
|-------------------------|------------------|----------------|------------------------|---------------------|
| VI26. Your neighborhood | 1                | 2              | 3                      | 4                   |
|                         | Trust completely | Trust somewhat | Do not trust very much | Do not trust at all |

V211: People have different views about themselves and how they relate to the world. Using this card, would you tell me how strongly you agree or disagree with each of the following statements about how you see yourself? (Read out and code one answer for each statement):

I see myself as part of my local community.

- 5 'Missing; Unknown'
- 4 'Not asked'
- 3 'Not applicable'
- 2 'No answer'
- 1 'Don't know'

- 1 'Strongly agree'
- 2 'Agree'
- 3 'Disagree'
- 4 'Strongly disagree'

V212. *People have different views about themselves and how they relate to the world. Using this card, would you tell me how strongly you agree or disagree with each of the following statements about how you see yourself? (Read out and code one answer for each statement): I see myself as part of the [French]\* nation.*

*\* [Substitute your country's nationality for "French"]*

- 5 'Missing; Unknown'
- 4 'Not asked'
- 3 'Not applicable'
- 2 'No answer'
- 1 'Don't know'
- 1 'Strongly agree'
- 2 'Agree'
- 3 'Disagree'
- 4 'Strongly disagree'

V234. *Did you vote in your country's recent elections to the national parliament? (Code one answer):*

- 5 'Missing; Unknown'
- 4 'Not asked'
- 3 'Not applicable'
- 2 'No answer'
- 1 'Don't know'
- 1 'yes'
- 2 'no'

Question sets 24-33 and 96-99 were each merged into new variables. For questions 24-33, the responses were recoded to create two new dummy variables: "Active member in at least one organization," indicating whether the respondent reported being an active member in at least one of the group types described, or in the other category, and "Not a member in any organization," indicating that the respondent reported being "not a member" in all of the group types. Questions 96-99 were recoded to create a dummy variable "Has recently joined a petition, joined a boycott, or has attended a

lawful/peace demonstration,” indicating that the respondent responded that he/she had recently engaged in one of the four types of political action “recently.”

The author theorized that the questions would combine into five components, identification with society/citizenship, political activity/interest, tolerance/civility, trust, and organizational membership, as follows:

Table A1. Theoretical Civil Society Factor Loadings

|  | Identification with Society | Political Activity and Interest | Tolerance | Trust    | Organizational Membership |
|--|-----------------------------|---------------------------------|-----------|----------|---------------------------|
| I see myself as citizen of the [country] nation  | <b>X</b>                    |                                 |           |          |                           |
| I see myself as member of my local community   | <b>X</b>                    |                                 |           |          |                           |
| Voted in recent parliament elections   |                             | <b>X</b>                        |           |          |                           |
| Has recently signed a petition, joined a boycott, or has attended a lawful/peace demonstration |                             | <b>X</b>                        |           |          |                           |
| Most people can be trusted   |                             |                                 |           | <b>X</b> |                           |
| Trust: Your neighborhood   |                             |                                 |           | <b>X</b> |                           |
| Active member in at least one NGO  |                             |                                 |           |          | <b>X</b>                  |
| Not a member in any NGO  |                             |                                 |           |          | <b>X</b>                  |
| Important child qualities: tolerance and respect for other people                              |                             |                                 | <b>X</b>  |          |                           |
| Interest in politics   |                             | <b>X</b>                        |           |          |                           |
| Important in life: Politics  |                             | <b>X</b>                        |           |          |                           |

These questions were then analyzed using confirmatory factor analysis, producing the eigenvalues shown in the following chart and scree plot.

Table A2. Factor Analysis: Eigenvalues

| Factor | Initial Eigenvalues |               |              |
|--------|---------------------|---------------|--------------|
|        | Total               | % of Variance | Cumulative % |
| 1      | 2.158               | 19.6          | 19.6         |
| 2      | 1.540               | 13.9          | 33.6         |
| 3      | 1.281               | 11.6          | 45.3         |
| 4      | 1.114               | 10.1          | 55.4         |
| 5      | 1.001               | 9.1           | 64.5         |
| 6      | .903                | 8.2           | 72.7         |
| 7      | .820                | 7.4           | 80.2         |
| 8      | .740                | 6.7           | 86.9         |
| 9      | .533                | 4.8           | 91.7         |
| 10     | .497                | 4.5           | 96.3         |
| 11     | .412                | 3.7           | 100.000      |

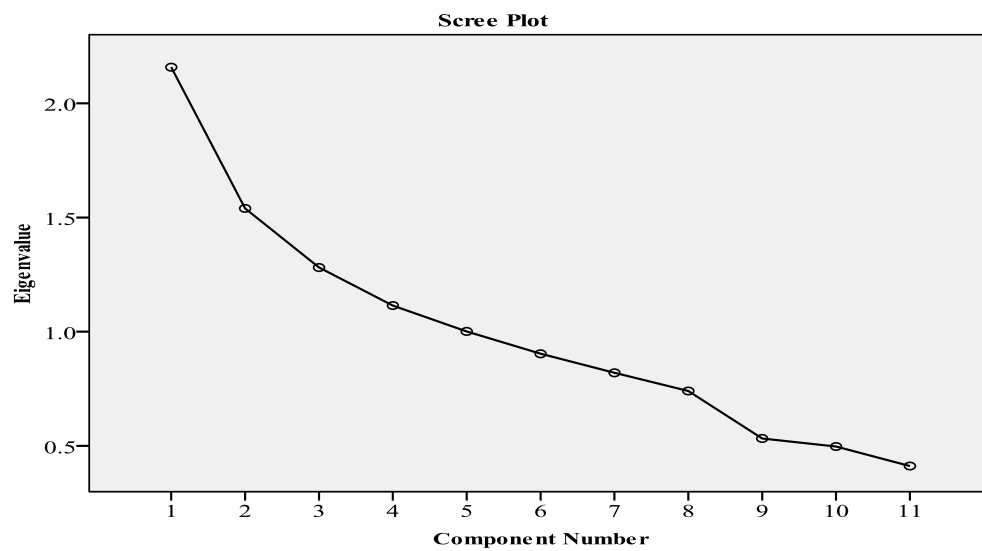


Figure A1. Factor Analysis: Scree Plot



Based on analysis of these Eigenvalues and the scree plot the first five components were selected for inclusion in the factor analysis. Together they represent 65% of the variance among the questions, and while not as high as desired, five components is consistent with the theoretical factor loading of the questions, and also meets the common standard of selecting components with Eigenvalues greater than 1.0. The following table depicts the factor loadings for each component, using an orthogonal rotation method.

Table A3. Rotated Factor Loadings

|   | 1           | 2            | 3           | 4           | 5           |
|---|-------------|--------------|-------------|-------------|-------------|
| <b>I see myself as citizen of the [country] nation</b>  | .043        | -.033        | <b>.846</b> | .018        | -.020       |
| <b>I see myself as member of my local community</b>   | .050        | -.037        | <b>.848</b> | .068        | .010        |
| <b>Voted in recent parliament elections</b>   | -.421       | .120         | -.029       | -.125       | -.058       |
| <b>Has recently signed a petition, joined a boycott, or has attended a lawful/peace demonstration</b> | -.250       | .390         | .193        | -.095       | .415        |
| <b>Most people can be trusted</b>   | .088        | -.110        | -.091       | <b>.790</b> | -.113       |
| <b>Trust: Your neighborhood</b>   | .091        | .095         | .192        | <b>.729</b> | .091        |
| <b>Active member in at least one NGO</b>  | -.100       | <b>.830</b>  | -.031       | -.018       | .050        |
| <b>Not a member in any NGO</b>  | .102        | <b>-.818</b> | .077        | -.027       | .067        |
| <b>Important child qualities: tolerance and respect</b>   | .073        | -.035        | -.064       | .012        | <b>.925</b> |
| <b>Interest in politics</b>   | <b>.865</b> | -.059        | .025        | .019        | -.057       |
| <b>Important in life: Politics</b>  | <b>.853</b> | -.021        | .033        | -.020       | -.013       |

These factor loadings confirmed the theoretical component makeup, with nine of the eleven variables having very strong loadings on individual components, and the remaining two (voting, non-electoral direct political participation) being theoretically critical to civil society and so retained despite mixed factor loadings. The resulting five factors were re-labeled Political Interest and Engagement (*polint*), Organizational Membership and Activity (*orgactive*), Identification with Society (*citizen*), Interpersonal Trust (*trust*), and Civility and Tolerance (*civility*). *Citizen* was not included in construction of *civsoc* because it had no theoretical relationship to the vibrance of civil society dynamics, vis-à-vis political participation.

These factors were generated using all cases in the World Value Survey fifth wave for which there was data available on all questions, including more than forty countries and nearly fifty thousand respondents. When combined with the other datasets, this sample was reduced to twenty-five cases. The scores of these twenty-five cases are shown below, followed by a table detailing descriptive statistics of each factor, and histograms depicting distribution with normal curves for comparison.

Table A4. Cross-national Civil Society Factor Scores

|                      | <b>polint</b> | <b>orgactive</b> | <b>Trust</b> | <b>civility</b> |
|----------------------|---------------|------------------|--------------|-----------------|
| <b>Argentina</b>     | 0.414         | 0.009            | 0.409        | 0.7             |
| <b>Australia</b>     | -0.303        | 0.443            | -0.414       | 0.694           |
| <b>Brazil</b>        | -0.112        | 0.817            | 0.581        | -0.136          |
| <b>Bulgaria</b>      | 0.271         | -0.692           | -0.008       | -0.348          |
| <b>Canada</b>        | -0.077        | 0.205            | -0.417       | 0.503           |
| <b>Chile</b>         | 0.577         | -0.143           | 0.38         | 0.209           |
| <b>Finland</b>       | 0.3           | 0.28             | -0.759       | 0.375           |
| <b>Georgia</b>       | -0.363        | -1.048           | -0.09        | 0.062           |
| <b>Germany</b>       | -0.216        | -0.211           | -0.151       | 0.246           |
| <b>India</b>         | -0.062        | 0.397            | -0.196       | -0.373          |
| <b>Indonesia</b>     | 0.047         | 0.179            | -0.302       | -0.348          |
| <b>Italy</b>         | 0.049         | 0.107            | 0.006        | 0.051           |
| <b>Malaysia</b>      | 0.206         | -0.134           | 0.27         | -0.149          |
| <b>Mexico</b>        | 0.167         | 0.005            | 0.476        | 0.211           |
| <b>Moldova</b>       | 0.256         | -0.477           | 0.367        | -0.004          |
| <b>Norway</b>        | -0.388        | 0.143            | -1.033       | 0.675           |
| <b>Poland</b>        | 0.238         | -0.575           | 0.104        | 0.291           |
| <b>Romania</b>       | 0.27          | -0.751           | 0.356        | -0.261          |
| <b>Slovenia</b>      | 0.346         | -0.205           | 0.205        | 0.149           |
| <b>South Africa</b>  | 0.067         | 0.681            | 0.254        | -0.054          |
| <b>Sweden</b>        | -0.364        | 0.444            | -0.897       | 0.718           |
| <b>Switzerland</b>   | -0.321        | 0.803            | -0.463       | 0.603           |
| <b>Thailand</b>      | -0.769        | -0.039           | 0.557        | 0.218           |
| <b>Trinidad</b>      | 0.332         | -0.039           | 0.557        | 0.218           |
| <b>United States</b> | -0.234        | 0.809            | -0.209       | 0.364           |

Table A5. Descriptive Statistics of Civil Society Factors

|                                   | <b>polint</b> | <b>orgactive</b> | <b>trust</b> | <b>civility</b> |
|-----------------------------------|---------------|------------------|--------------|-----------------|
| <b>N</b>                          | 25            | 25               | 25           | 25              |
| <b>Mean</b>                       | .013          | .040             | -0.017       | .185            |
| <b>Std. Deviation</b>             | .322          | .498             | .463         | .343            |
| <b>Minimum</b>                    | -.769         | -1.048           | -1.033       | -.373           |
| <b>Maximum</b>                    | .577          | .817             | .581         | .718            |
| <b>25<sup>th</sup> Percentile</b> | -.268         | -.208            | -.358        | -.095           |
| <b>50<sup>th</sup> Percentile</b> | .049          | .009             | .006         | .211            |
| <b>75<sup>th</sup> Percentile</b> | .270          | .420             | .374         | .439            |

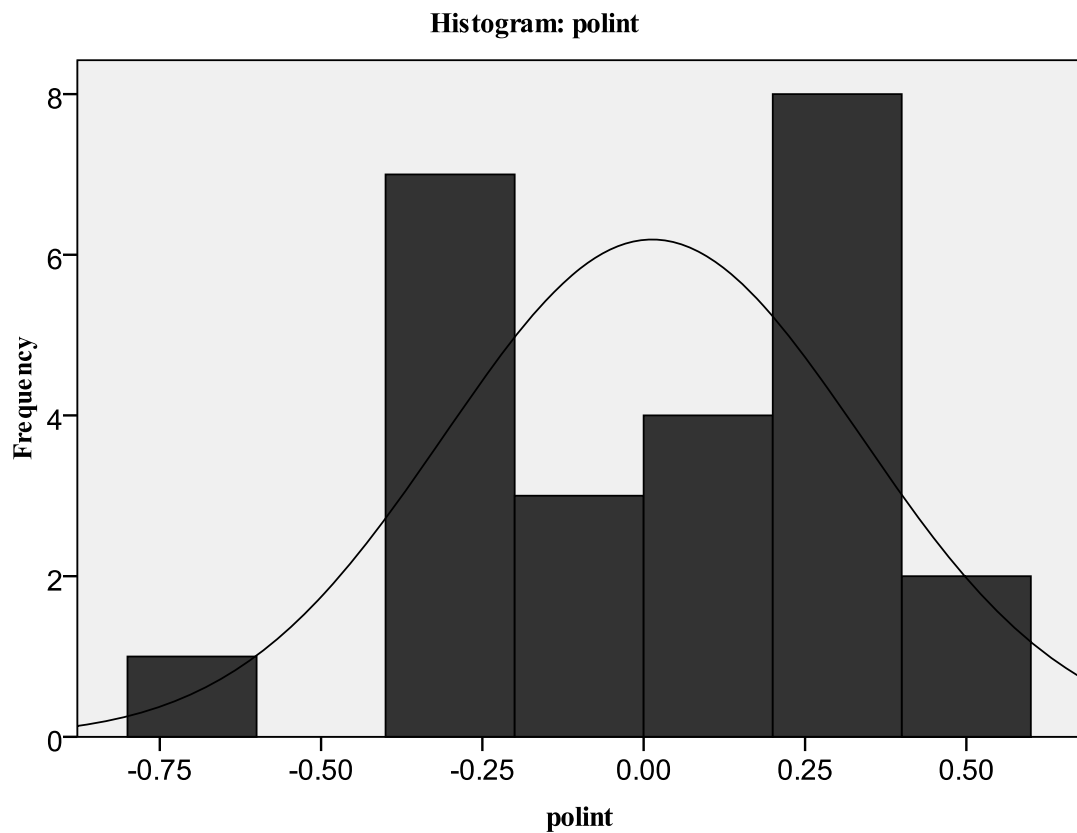


Figure A2. Political Interest Frequency Distribution Histogram

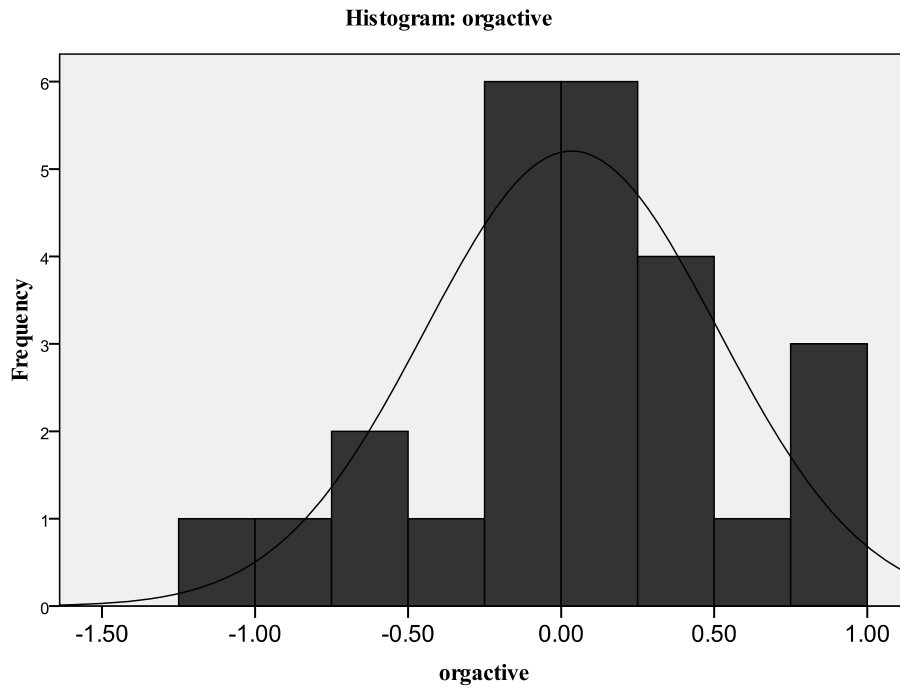


Figure A3. Organizational Activity Frequency Distribution Histogram

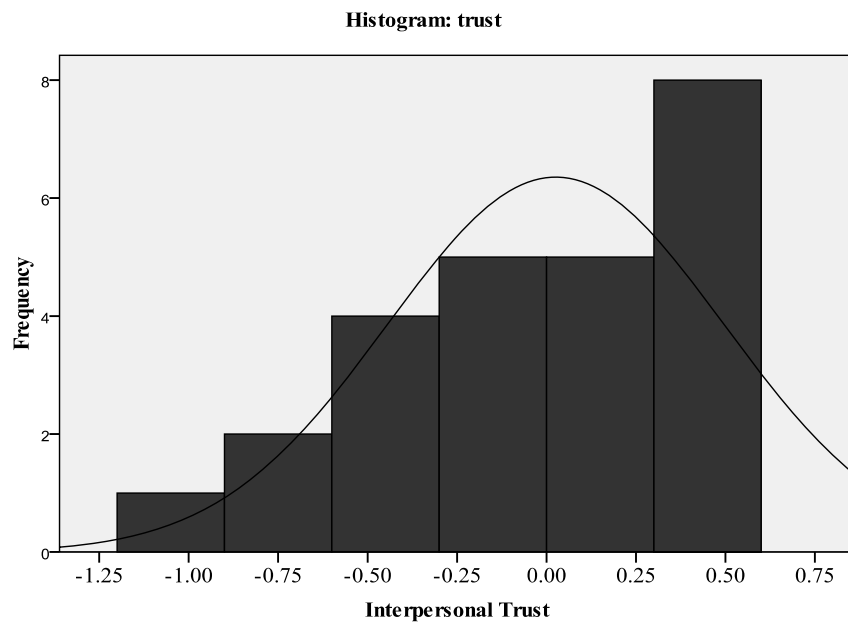


Figure A4. Interpersonal Trust Frequency Distribution Histogram

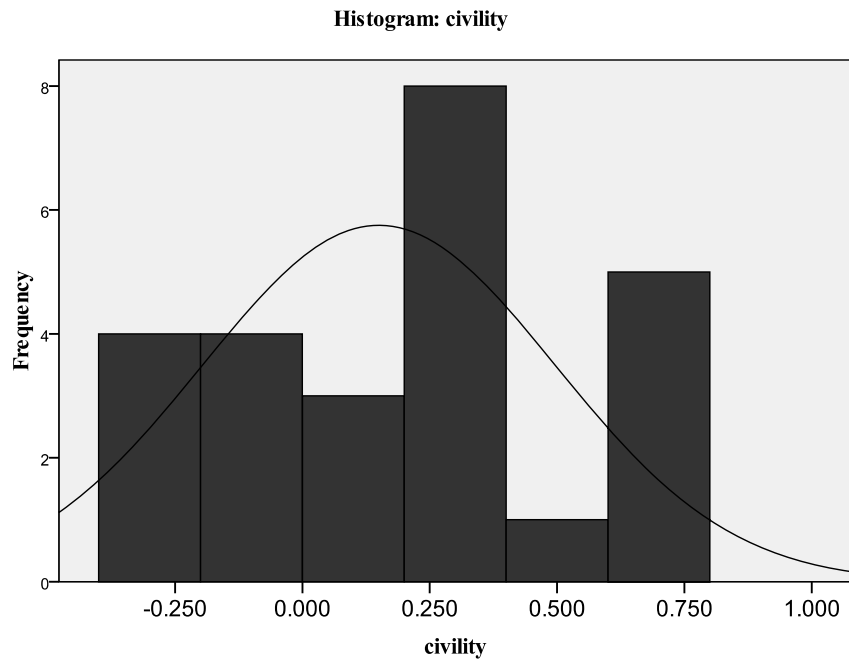


Figure A4. Civility Frequency Distribution Histogram

## Appendix B. Analysis of HSCI Components and other Democracy Measures

Assessment of the validity of HSCI and its components included multivariate OLS regression of the components on the two continuous measures of democracy: The Economist's *democracy index* and the *voice and accountability* measure from the Worldwide Governance Indicators. This appendix provides the statistical details for these two regression models.

Table B1. Multivariate OLS Regression: Components on Democracy Measures

|               | Y = democracy index | Y = voice and accountability |
|---------------|---------------------|------------------------------|
| R Square      | .659                | .816                         |
| Adj. R Square | .610                | .791                         |
| Std. Error    | .780                | .308                         |
| F             | 13.511***           | 31.018***                    |
| N             | 25                  | 25                           |
| B(civsoc)     | .075                | .025                         |
| B(regulate)   | .373***             | .219***                      |
| B(structure)  | .246*               | .172**                       |

## **Works Cited**



## Works Cited

- Ackerman, Bruce and James Fishkin. "Deliberation Day." *Journal of Political Philosophy* 10 (2002): 129-52.
- Alvarez, Mike, Jose Cheibub, Fernando Limongi, and Adam Przeworski. "Classifying Political Regimes." *Studies in Comparative International Development* 31 (Summer 1996): 3-36.
- Anheier, Helmut and Sally Stares. "Introducing the Global Civil Society Index." In *Global Civil Society 2002*, ed. Mary Kaldor and Helmut Anheier, 240-54. New York: Oxford University Press, 2002.
- Axelrod, Robert and M.D. Cohen. *Harnessing Complexity: Organizational Implications of a Scientific Frontier*. New York: Free Press, 1995.
- Bachrach, Peter. *The Theory of Democratic Elitism*. London: University of London Press, 1969.
- Barry, Brian. *Sociologists, Economists, and Democracy*. London: Collier Macmillan, 1970.
- Bates, Robert H. *Political Instability Task Force Report: Phase IV Findings*. McLean, VA: SAIC, 2003.
- Baumol, William J. *Welfare Economics and the Theory of the State*. Cambridge, MA: Harvard University Press, 1965.
- Bellwood, Peter. *First Farmers: The Origins of Agricultural Societies*. New York: Wiley-Blackwell, 2004.
- Bernhard, Michael. "Civil Society and Democratic Transition in East Central Europe." *Political Science Quarterly* 108, no. 2 (1993).
- Birch, Anthony. *The Concepts and Theories of Modern Democracy*. London: Routledge, 1993.
- Bohman, James. *Public Deliberation*. Cambridge: MIT Press, 1996.

- Bollen, Kenneth. "Issues in the Comparative Measurement of Political Democracy." *American Sociological Review* 45 (1979): 370-90.
- Buchanan, James and Gordon Tullock. *The Calculus of Consent*. Ann Arbor: The University of Michigan Press, 1962.
- Carneiro, Robert. "A Theory of the Origin of the State." *Science* 169 (1970): 733-38.
- Carothers, Thomas. *Assisting Democracy Abroad: the Learning Curve*. Washington, DC: Carnegie Endowment for International Peace, 1999.
- Center for Systemic Peace. "Argentina." *Polity IV: Country Reports 2008*. Available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.
- \_\_\_\_\_. "Indonesia." *Polity IV: Country Reports 2008*. Available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.
- \_\_\_\_\_. "Malaysia." *Polity IV: Country Reports 2008*. Available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.
- \_\_\_\_\_. "Mexico." *Polity IV: Country Reports 2008*. Available online at <http://www.systemicpeace.org/polity>; accessed 1 September 2010.
- Child, J. "Organizational Structure, Environment, and Performance – the Role of Strategic Choice." *Sociology* 6 (January 1972): 1-22.
- Cilliers, Paul. "Complexity, Deconstruction, and Relativism." *Theory, Culture, and Society* 22, no. 5 (2005): 255-267.
- Claudi Cioffi-Revilla, "A Canonical Theory of Origins and Development of Political Complexity," *Journal of Mathematical Sociology* 29 (Spring 2005): 133-53;
- \_\_\_\_\_. "The Big Collapse: A Brief Cosmology of Globalization." In B. Gills and W.R. Thompson, eds. *Globalization and Global History*. London: Routledge, 2006.
- \_\_\_\_\_, ed. *Power Laws in the Social Sciences*. Unpublished Manuscript, 2008.
- Civicus. *Summary of Conceptual Framework and Research Methodology*. Johannesburg: Civicus, 2003.
- \_\_\_\_\_. *The Global State of Civil Society 2007*. Bloomfield, CT: Kumarian Press, 2007.

- \_\_\_\_\_. *The Global State of Civil Society 2008*. Bloomfield, CT: Kumarian Press, 2008.
- \_\_\_\_\_. "Argentina." *CSI Country Reports*. Available online at [http://www.civicus.org/media/CSI\\_Argentina\\_Executive\\_Summary.pdf](http://www.civicus.org/media/CSI_Argentina_Executive_Summary.pdf); accessed 1 September 2010.
- \_\_\_\_\_. "Executive Summary - CSI Argentina." *CSI Country Reports*. Available online at [http://www.civicus.org/media/CSI\\_Argentina\\_Executive\\_Summary.pdf](http://www.civicus.org/media/CSI_Argentina_Executive_Summary.pdf); accessed 1 September 2010.
- \_\_\_\_\_. "Germany." *CSI Country Reports*. Available online at [http://www.civicus.org/media/CSI\\_Argentina\\_Executive\\_Summary.pdf](http://www.civicus.org/media/CSI_Argentina_Executive_Summary.pdf); accessed 1 September 2010.
- \_\_\_\_\_. "Indonesia." *CSI Country Reports*. Available online at [http://www.civicus.org/media/CSI\\_Indonesia\\_Country\\_Report.pdf](http://www.civicus.org/media/CSI_Indonesia_Country_Report.pdf); accessed 1 September 2010.
- Cohen, Ronald and Elmer Service. *Origins of the State: the Anthropology of Political Evolution*. Philadelphia: Institute for Human Studies, 1978.
- Coppedge, Michael and Wolfgang Reinicke. "Measuring Polyarchy." *Studies in Comparative International Development* 25 (1990): 51-72.
- Dahl, Robert. *Polyarchy*. New Haven: Yale University Press, 1950.
- de Laet, Sigfried J., ed. *History of Humanity Volume I: Prehistory and the Beginnings of Civilization*. New York: Routledge, 1994.
- Diamond, Jared. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: W.W. Norton, 1997.
- Diamond, Larry. *Spirit of Democracy*. New York: Times Books, 2008.
- Downs, Anthony. *An Economic Theory of Democracy*. New York: Harper, 1957.
- Dryzek, John. *Deliberative Democracy and Beyond*. London: Oxford University Press, 2000.
- E.W. Robinson, *Ancient Greek Democracy: Readings and Sources*. New York: Blackwell, 2003.
- Flower, Harriett. *The Cambridge Companion to the Roman Republic*. London: Cambridge University Press, 2004.

- Fombrun, C. "Crafting an Institutionally Informed Ecology of Organizations." In *Ecological Models of Organizations*, ed. G. Carroll. Cambridge: Bolinger Books, 1988.
- Freedom House. *Freedom in the World 2009*. Online, available at: <http://www.freedomhouse.org>. Accessed 1 August 2010.
- Fried, Morton. *The Notion of Tribe*. Menlo Park, CA: Cummings Press, 1975.
- Gastil, Raymond. "The New Criteria of Freedom." *Freedom at Issue* 17 (Winter 1973).
- Geller, D.S. and J.D. Singer. *Nations at War: A Scientific Study of International Conflict*. Cambridge: Cambridge University Press, 1998.
- Gibney, Mark. *Political Terror Scale*. Database online. Available at: <http://www.politicalterror scale.org>; accessed 1 August 2010.
- Gill, Graeme. *The Dynamics of Democratization*.
- Gould, Stephen J. *Ever Since Darwin: Reflections on Natural History*. New York: W.W. Norton, 1993
- Gurr, Ted. *Polity II: Political Structures and Regime Change, 1800-1986*. Boulder, CO: Center for Comparative Politics [producer], 1989. Severn, MD: Center for Systemic Peace [distributor].
- Gutman, Amy and Dennis Thompson, *Democracy and Disagreement*. Cambridge: Harvard University Press, 1996.
- Hajer, M. and H. Wagenaar, ed. *Deliberative Policy Analysis: Understanding Governance in the Network Society*. Cambridge: Cambridge University Press, 2003.
- Hannan, M.T. and J. Freeman. "The Population Ecology of Organizations." *American Journal of Sociology* 82 (1977): 929-964.
- Hansen, Mogens, ed.. *A Comparative Study of Thirty City-State Cultures*. Copenhagen: Special-Trykkeriet Viborg, 2000.
- Hilborn, Robert. "Sea Gulls, Butterflies, and Grasshoppers: A Brief History of the Butterfly Effect in Nonlinear Dynamics." *American Journal of Physics* 72 (2004).
- Hobson, Christopher. "Beyond the End of History." *Millenium: Journal of International Studies* 37, no. 3 (2009).

- Huntington, Samuel. *The Third Wave*. Norman, OK: University of Oklahoma Press, 1991.
- Ish-Salom, Piki. "'The Civilization of Clashes': Misapplying the Democratic Peace in the Middle East." *Political Science Quarterly* 122 (Winter 2008): 533-54.
- Jacobsen, Thorkild. "Primitive Democracy in Ancient Mesopotamia." *Journal of Near Eastern Studies* 2, no.3 (1947).
- Kauffman, Stuart. *At Home in the Universe: the Search for Laws of Self-Organization and Complexity*. New York: Oxford University Press, 1995.
- Kaufmann, Daniel, Art Kraay, and Massimo Mastruzzi. "The Worldwide Governance Indicators Project: Answering the Critics." *World Bank Policy Research Working Paper 4149* (March 2007).
- \_\_\_\_\_. "Governance Matters VIII: Governance Indicators for 1996-2008." *World Bank Policy Research Working Paper No. 4978* (June 2009).
- Kekic, Lisa. "The Economic Intelligence Unit's index of democracy." In *The World in 2007*, London: *The Economist*, 2007.
- Kramer, Samuel. *The Sumerians: Their History, Culture and Character*. Chicago: University of Chicago Press, 1963.
- LaPorte, Todd. "Organized Social Complexity: Explication of a Concept." In *Organized Social Complexity*, ed. Todd LaPorte. Princeton, NJ: Princeton University Press, 1975.
- Latham, Earl. *The Group Basis of Politics*. New York: Octagon Books, 1957.
- Leick, Gwendolyn. *Mesopotamia: Invention of the City*. London: Penguin, 2002.
- Lintott, Andrew. *The Constitution of the Roman Republic*. New York: Oxford University Press, 1999.
- Lipset, Seymour Martin and Jason M. Lakin. *The Democratic Century*. Norman, OK: University of Oklahoma Press, 2004.
- Lipset, Seymour Martin. "Some Social Requisites of Democracy." *American Political Science Review* 53 (1959): 69-105.
- Marks, Susan. "International Law, Democracy, and the End of History." In *Democratic Governance and International Law*, ed. Gregory Fox and Brad Roth, 532-66. Cambridge: Cambridge University Press, 2000.

- Marshall, Monty G. and Benjamin R. Cole. "Revised Macro-Comparative Analysis of the Problem of Factionalism in Emerging Democracies." Paper presented at the 2008 Annual Meeting of the American Political Science Association, Boston, MA, August 2008.
- \_\_\_\_\_. "Global Report on Conflict, Governance, and State Fragility 2009." Severn, MD: Center for Systemic Peace, 2009.
- Marshall, Monty G. and Jack A. Goldstone. "Global Report 2007: Conflict, Governance and State Fragility." *Foreign Policy Bulletin* (Winter 2007).
- Marshall, Monty G. and Keith Jagers. *Polity IV Project: Political Regime Characteristics and Transitions 1800-2007*. The Polity IV Dataset. Online, available at: <http://www.systemicpeace.org/polity/polity4.htm>. Accessed 1 August 2010.
- Marshall, Monty G., Keith Jagers, and Ted Gurr. "Polity IV, 1800-1999: Comments on Munck and Verkuilen." *Comparative Political Studies* 35, no. 1 (2002): 40-45.
- Midlarsky, M.I., ed. *Handbook of War Studies II*. Ann Arbor, MI: University of Michigan Press, 2000.
- Miller, John H. and Scott Page. *Complex Adaptive Systems: An Introduction to Computational Models of Social Life*. Princeton: Princeton University Press, 2007.
- Muller, Edward. "Democracy, Economic Development, and Income Inequality." *American Sociological Review* 53 (1988): 50-68.
- Munck, Gerardo L. and Jay Verkuilen. "Conceptualizing and Measuring Democracy: Evaluating Alternative Indices." *Comparative Political Studies* 35, no. 1 (2002).
- Ober, J. *Democracy and Knowledge: Innovation and Learning in Classical Athens*. Princeton: Princeton University Press, 2008.
- Plattner, Marc. *Democracy without Borders? Global Challenges to Liberal Democracy*. New York: Rowman and Littlefield, 2007.
- Przeworski, Adam. "Minimalist Conception of Democracy: A Defense." In *Democracy's Value*, ed. Ian Shapiro and Casiano Hacker-Cordon. Cambridge: Cambridge University Press, 1999.
- Redman, Charles. *The Rise of Civilization: From Early Farmers to Urban Society in the Ancient Near East*. San Francisco: W. H. Freeman, 1978.

- Reed, Charles A., ed. *The Origins of Agriculture*. Chicago: Aldine, 1977.
- Richardson, Lewis Fry. "Variation of the Frequency of Fatal Quarrels with Magnitude." *Journal of the American Statistical Association* 43 no. 244 (1948).
- Ringen, Stein. *What Democracy is For*. Princeton: Princeton University Press, 2007.
- Rose, Hannan. "From Command to Free Politics." *Political Quarterly* 64, no. 2 (1993).
- Russett, Bruce. *Grasping the Democratic Peace: Principles for a Post-Cold War World*. Princeton, NJ: Princeton University Press, 1993.
- Sartori, Giovanni. *Democratic Theory*. Detroit: Wayne State University Press, 1962.
- \_\_\_\_\_. *Theory of Democracy Revisited*. Chatham, NJ: Chatham House, 1987.
- Scarre, Christopher, ed.. *The Human past: World Prehistory and the Development of Human Societies*. New York: Thames & Hudson, 2005.
- Schelling, Thomas. *Micromotives and Macrobehavior*. Toronto: W.W. Norton, 1978.
- Schneider, Aaron. "Decentralization: Conceptualization and Measurement." *Studies in Comparative International Development* 38 (Fall 2003): 32-56.
- Schumpeter, Joseph. *Capitalism, Socialism and Democracy*. New York: Harper, 1950.
- Shao, Wangping. "The Formation of Civilization: The Interaction Sphere of the Longshan Period." In *The Formation of Chinese Civilization: An Archaeological Perspective*, ed. Kwang-chih Chang and Pingfang Xu, 85-124. New Haven, CT: Yale University Press, 2001.
- Simon, Herbert. "The Architecture of Complexity." In *General Systems Yearbook Volume 10*, ed. L. von Bertalanffy and A. Rapoport, 1965.
- Smith, Tony. *A Pact with the Devil*. New York: Routledge, 2007.
- The Economist Intelligence Unit. "The Economist Intelligence Unit's Index of Democracy 2008." *The Economist* (2009).
- The World Bank. *World Development Indicators 2009*. Database online. Available at <http://www.worldbank.org/data>; accessed 10 June 2010.
- Thomas, Melissa. "What do the Worldwide Governance Indicators Measures?" Unpublished manuscript, Johns Hopkins University. Quoted in Daniel Kaufmann, Art Kraay, and Massimo Mastruzzi. "The Worldwide Governance Indicators

Project: Answering the Critics." *World Bank Policy Research Working Paper 4149* (March 2007).

Thorley, J. *Athenian Democracy*. New York: Routledge, 1996.

Truman, David. *The Governmental Process*. New York: Knopf, 1951.

Urry, John. *Global Complexity*. Cambridge: Polity, 2003.

Vanhanen, Tatu. "A New Dataset for Measuring Democracy, 1810 – 1998." *Journal of Peace Research* 37 (March 2000): 251-265.

Wagenaar, Hendrik. "Governance, Complexity and Democratic Participation." *American Review of Public Administration* 37, no 1. (March 2007).

Waldrop, Mitchell. *Complexity: The Emerging Science at the Edge of Order and Chaos*. New York: Simon & Schuster, 1992.

Weatherford, Jack. *Indian Givers: How the Indians of the Americas Transformed the World*. New York: Crown, 1989.

\_\_\_\_\_. *Native Roots: How the Indians Enriched America*. New York: Crown, 1992.

White, Michael, Daniel Marin, Deborah Brazeal, and William Friedman. "The Evolution of Organizations: Suggestions from Complexity Theory About the Interplay Between Natural Selection and Adaptation." *Human Relations* 50, no. 11 (1997).

Whitehead, Laurence. "'Reform of State' and 'Regulation of the Market.'" *World Development* 21, no. 8 (1993).

Wright, Henry. "Recent Research on the Origin of the State." *Annual Review of Anthropology* 6 (1977): 379-97.

Zizek, Slavoj. *In Defense of Lost Causes*. London: Verso, 2008.



## **Curriculum Vitae**

Benjamin R. Cole is a macro-comparative political scientist with Bachelor of Arts and Master of Arts degrees in Political Science from the University of New Hampshire. He completed his Ph.D. in Public Policy between 2006 and 2011 at George Mason University's School of Public Policy. Since 2008 Ben has held the post of Hood House Lecturer in International Affairs at the University of New Hampshire, where he teaches international and comparative politics, coordinates the international affairs dual major curriculum, and mentors undergraduate researchers. In addition to teaching he maintains an active research agenda in state fragility and failure, democratic transition dynamics, and state-society relations, while also consulting for Societal Systems Research, Inc., and serving on the Advisory Board for the non-profit Center for Systemic Peace. He is married and has two children, and lives and works on a small-scale organic sheep farm in Nottingham, NH.