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DEMOCRACY AND DICHOTOMIES: A Pragmatic Approach to Choices about Concepts

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ABSTRACT

Prominent scholars engaged in comparative research on democratic regimes are in sharp disagreement over the choice between a dichotomous or graded approach to the distinction between democracy and nondemocracy. This choice is substantively important because it affects the findings of empirical research. It is methodologically important because it raises basic issues, faced by both qualitative and quantitative analysts, concerning appropriate standards for justifying choices about concepts. In our view, generic claims that the concept of democracy should inherently be treated as dichotomous or graded are incomplete. The burden of demonstration should instead rest on more specific arguments linked to the goals of research. We thus take the pragmatic position that how scholars understand and operationalize a concept can and should depend in part on what they are going to do with it. We consider justifications focused on the conceptualization of democratization as an event, the conceptual requirements for analyzing subtypes of democracy, the empirical distribution of cases, normative evaluation, the idea of regimes as bounded wholes, and the goal of achieving sharper analytic differentiation.

INTRODUCTION

Should scholars engaged in comparative research on democracy treat the distinction between democracy and nondemocracy as a dichotomy, or in terms of gradations? This recurring and much debated question has important implications for how research is organized, for how data are collected and analyzed, and for inferences about the causes and consequences of democracy. It also serves as a reminder that discussions of research design in political science must pay central attention to conceptual issues.

Among the authors who have advocated an approach based on grading and ranking, Bollen & Jackman argue that "democracy is always a matter of degree" and that treating it as dichotomous is a "flawed" practice (1989:618, 612). A graded perspective is likewise adopted by Dahl, using the term polyarchy (1971:2, 8, 231-35; 1989:241, 316-17), and later by Coppedge & Reinicke (1990). By contrast, Sartori finds that treating the distinction between democracy and nondemocracy in graded terms is an analytically "stultifying" exercise in "degreeism," which misses the basic fact that political systems are "bounded wholes" (1987:184; also 1991:248). Other scholars who have adopted a dichotomous approach include Linz (1975:184-85), Huntington (1991:11-12), and Geddes (1999). Przeworski and collaborators have specifically rejected Bollen & Jackman's argument as "confused" because it does not recognize that regimes "cannot be half-democratic: there is a natural zero point" (Alvarez et al 1996:21). Their position is especially striking because their larger project (Przeworski et al 1996, Przeworski & Limongi 1997) is based on quantitative data and sophisticated forms of statistical analysis. Yet when it comes to measuring democracy versus nondemocracy, they select a dichotomy.

We see an interesting puzzle here. The choice of a dichotomy in effect places this distinction at what is traditionally viewed as the lowest level of measurement (Stevens 1946, Roberts 1976:492–93). This choice thereby appears to underutilize more fine-grained information that may routinely be available about differences among regimes. Yet both Sartori and Przeworski and collaborators are convinced that this lowest level of measurement is more valid in conceptual terms. This puzzle points to a question: What, indeed, are the grounds for viewing this as a valid dichotomy, and not a "false dichotomy"?

This is an important question. First, quite apart from the scholars who are explicitly debating this choice, large numbers of qualitative researchers (on the one side) and quantitative researchers (on the other side) in effect take a position on this issue without ever directly addressing it. Second, this choice is important because it affects substantive findings of research on democracy. Although alternative dichotomous and graded measures are strongly correlated with one another (Alvarez et al 1996:21), Elkins (1999) has shown that, in assessing the impact of regime type on the initiation of war, a graded measure reveals interesting incremental effects that would not be detected with a dichotomy. He likewise shows that, in studies of the effect of regime type on political stability, the use of a single cut-point can mask a relationship that

emerges only if one looks at a different cut-point. Similarly, Coppedge (1997: 181, 189–97) finds that in cross-national tests evaluating explanations for levels of polyarchy, different results emerge depending on which cut-point is employed in creating a dichotomous measure of polyarchy. Restricting the analysis to any single dichotomous cut-point can thus obscure potential findings.

Given that the findings of research can be influenced by these choices, it is important to examine the conceptual reasoning that justifies alternative approaches. However, somewhat surprisingly, recent methodological writing in political science provides insufficient guidance for dealing with such questions, and various contributors to recent debates on research design have called for greater attention to conceptual issues (Laitin 1995:455–56, Collier 1995: 463, Brady 1995:16–18, Munck 1999).

This paper examines the conceptual justifications that lead scholars to choose a dichotomous or graded approach. Part 1 focuses on general methodological arguments about concept formation, dichotomies, and gradations. Part 2 reviews examples of the generic justifications employed by prominent authors in the literature on democracy. Part 3 considers more specific justifications, which we believe provide a better rationale for the choice between dichotomies and gradations.

In favoring these more specific justifications, we adopt a pragmatic position.¹ While recognizing that usage is shaped and constrained by the broader scholarly understanding of a concept's meaning, we hold that specific methodological choices are often best understood and justified in light of the theoretical framework, analytic goals, and context of research involved in any particular study. As theory, goals, and context evolve, choices about concepts likewise may evolve.

To explicate our pragmatic approach, it is useful to identify two interrelated priorities that underlie this perspective. First, it rejects the idea that there is a single correct, or "best," meaning for all concepts and views the search for a single best meaning as frequently being an unproductive enterprise. Second, this approach focuses on understanding how alternative meanings are connected with the specific goals and context of research. Thus, how scholars understand and operationalize a concept can and should depend in part on what they are going to do with it.

Our approach thus shares important concerns with the tradition of concept analysis that, in conjunction with a broad focus on the structure of meaning,

¹In developing our position, we have drawn on discussions of concepts and measurement in Popper (1976:17–31), Kaplan (1964:34–81), Adams & Adams (1987), Jones (1974), Shapiro (1989), and Collier (1998). In relation to recent debates on the philosophy of science, we see our position on concepts as compatible with the general position of "pragmatic realism" advocated by Shapiro (1990:231–38).

explores variations in concept usage among different authors and different schools of thought. This tradition is identified both with the field of political theory (Gallie 1956, Pitkin 1967, Freeden 1996), and also with studies that draw directly or indirectly on Sartori's (1984b:40–42) methodology for the reconstruction of concepts. Examples of this latter approach include studies of consensus (Graham 1984), elite (Zannoni 1978), ideology (Gerring 1997), political culture (Patrick 1984), revolution (Kotowski 1984), and social movement (Diani 1992). This tradition generally avoids preemptively ruling out particular meanings or usages, and instead focuses on understanding each usage in its own terms.

Our pragmatic approach also shares important concerns with the focus on "construct validity," which is one central consideration in efforts by quantitative researchers in political science to evaluate choices about concepts and operationalization (Zeller & Carmines 1980:79–81). A central goal in assessments of construct validity is to evaluate whether a given operationalization of a concept, when used in testing a well-established hypothesis, yields results that are plausible and interesting in light of theoretical expectations regarding that hypothesis. With regard to the concept of democracy, Elkins (1999) is an excellent example of this approach.

We share with the construct validity approach a concern with the details of how particular concepts are actually used in exploring specific research questions. However, in contrast to this approach, we address this concern in relation to a broader range of issues about how concepts are applied and understood in empirical research. For example, we consider the implications of treating democratization as a well-bounded "event" and the conceptual requirements for analyzing subtypes of democracy, as well as issues of the empirical distribution of cases and normative assessment that arise in specific contexts of research.

These questions of justifying choices about concepts are complex, and we wish to underscore two issues not addressed here. First, we take as given the procedural definition of democracy that has predominated in the recent comparative literature on democratization. The interesting question of dichotomies in relation to other definitions of democracy is not addressed. Second, if a scholar adopts gradations, a further choice concerns the choice of procedures for aggregating observations in scales.² This choice is crucial but is likewise beyond our focus.

 2 For example, among advocates of a graded approach, Bollen (1993) and Bollen & Paxton (2000) begin with eight ordered scales (each involving between two and seven categories) and employ structural equation models with latent variables to produce an aggregated scale that ranges from 0 to 100. Coppedge & Reinicke (1990) begin with five graded measures (each involving either three or four categories) and employ Guttman scale analysis to produce an aggregated scale that ranges from 0 to 10.

1. CONCEPT FORMATION AND THE BURDEN OF DEMONSTRATION

This section explores two claims about dichotomies: (*a*) they are fundamental because concept formation is inherently based on classificatory reasoning; and (*b*) they can be justified through arguments about object concepts and bounded wholes. We conclude this section by considering where the burden of demonstration should lie in justifying a dichotomous or graded approach. For more than three decades, Sartori has been the scholar most centrally concerned with these issues.³ Focusing on his views offers a productive way of exploring this debate, particularly because his position continues to be important in research on concept formation and on democracy (e.g. O'Kane 1993:170, 191; Vanhanen 1997:40), and because, in a number of respects, it is parallel to the approach of Przeworski and collaborators discussed below.

Is Concept Formation Inherently Based on Classificatory Reasoning?

Central to Sartori's view of concepts, as formulated in his classic article on "concept misformation" (1970), is the argument that concept formation is inherently based on classification and that dichotomies are therefore fundamental to reasoning about concepts. We focus on two parts of Sartori's argument. First, he suggests that the process of human reasoning that underlies concept formation involves thinking in terms of classification and cut-points. Thus, "human understanding—the way in which our mind works—requires cut-off points which basically correspond (in spite of all subsequent refinements) to the slices into which a natural or qualitative language happens to be divided" (Sartori 1970:1038). Second, Sartori applies essentially the same argument to norms of scholarly inquiry. He states that "whatever their limits, classifications remain the requisite, if preliminary, condition for any scientific discourse" (1970:1040).

With regard to the first point, since the time of Sartori's formulation of his position in 1970, a large body of research in linguistics, cognitive psychology, and cognitive science has yielded strong empirical evidence supporting a more multifaceted view of human cognition. Although classification is fundamental

³Sartori's arguments are by no means the only relevant point of reference. For example, Kalleberg (1966) also defends the primacy of classificatory reasoning. However, DeFelice (1980:120–23) and Jackman (1985:167–69) have effectively shown that Kalleberg's argument is undermined by a logical error, and hence it appears unnecessary to address it here. As DeFelice (1980:122–23) points out, this flawed argument is echoed in Sartori's 1970 article. Yet Kalleberg's argument is but one of several arguments that Sartori makes in favor of classification; our focus is on those not directly addressed by DeFelice and also on a major argument that Sartori advanced in 1987, after DeFelice's and Jackman's articles were published.

to human cognition, reasoning about gradations is likewise fundamental. Linguists employ terms such as cline, scale, and pragmatic scale to characterize graded understandings, and even prior to the full development of the contemporary field of cognitive linguistics, Lakoff's (1973) work on "hedges" pointed to the complexity of gradations away from central instances of a concept that are established by the application of modifiers to nouns. Rosch (1978) provided an empirical demonstration of the centrality of prototypes (i.e. cases that are understood as exemplifying a concept) in conceptual reasoning, and of graded reasoning in relation to prototypes (see also Lakoff 1987). It is further argued that, far from providing an unreliable and uncertain foundation for human cognition, a system of thought centrally organized around ideas of gradation is more stable, flexible, and reliable in the face of changing empirical reality (Taylor 1995:53-54). Overall, we are convinced that viewing human understanding as fundamentally anchored in classification presents an incomplete picture that fails to capture the remarkable capacity of the mind to conceptualize different modes of gradation and different forms of the partial occurrence of any given phenomenon.

Sartori's second point concerns norms of social science inquiry. Here we are likewise convinced that the reasoning about similarities and differences that underlies concept formation encompasses not only ideas about sharp contrasts and cut-points but also ideas about different forms of gradation and ordering. Both are fundamental to the conceptual work entailed in formal measurement theory. The axioms and conceptual reasoning that are a logical underpinning for measurement encompass simultaneously ideas about equal versus nonequal, which provide the foundation for categorization, and ideas about greater than versus less than, which provide the foundation for graded reasoning (Roberts 1976:476-78; Michell 1990:166-70). Both are also fundamental to less formal procedures for reasoning about conceptualization and operationalization. The choice of an approach based on either classification or gradation in fact involves a complex process of simplifying the available information about the cases under consideration. Although the "output" of this choice is presented in terms of cut-points or gradations, the "input" routinely includes observations and intuitions both about sharply defined contrasts and about gradations.

This conclusion has an important implication for Sartori's well-known argument that "concept formation stands prior to quantification" and that "the progress of quantification should lag—in whatever discipline—behind its qualitative and conceptual progress" (1970:1038). To the extent that Sartori is asserting that the process of assigning numbers to cases should be preceded by careful conceptual reasoning, he is correct. But it is important not to link this essential assertion to his other claim that classificatory reasoning based on cutpoints is necessarily the first step in concept formation. We emphasize instead, following our argument above, that such conceptual reasoning is specifically not limited to classificatory thinking.

Object Concepts and Bounded Wholes

Sartori (1987:182-85, 1993:118-20) has subsequently developed a more flexible argument about dichotomies that focuses on "object concepts" and "bounded wholes." He begins by distinguishing between "contraries" and "contradictories," a distinction he uses in conjunction with an approach that explores the meaning of concepts by examining their opposites. Sartori states that in the case of conceptual oppositions that are contraries, intermediate positions exist. Examples are big vs small, hot vs cold, and rich vs poor. By contrast, in the case of oppositions that are contradictories, there is no intermediate possibility. The opposing concepts "are not only mutually exclusive but also exhaustively exclusive" (1987:182). Sartori's formulation thus echoes the traditional idea in philosophical logic of the "excluded middle" (Honderich 1995:256–57). He offers alive vs dead, married vs single, and biped vs quadruped as examples of contradictories, and he argues that democracy vs nondemocracy should be treated as a contradictory (1987:182-84). Sartori's distinction represents a flexible approach in that it validates the use of graded comparisons in treating some conceptual oppositions, while underscoring the importance in other instances of the dichotomous treatment entailed in contradictories.

In discussing contraries and contradictories, Sartori (1987:182-85) utilizes a related distinction between "object concepts" and "property concepts." This distinction, in effect, provides a rationale for treating certain concepts as contradictories and hence approaching them dichotomously. When a concept is construed as an object concept, then it designates what Sartori refers to as a type or an entity, and applying such a concept to empirical cases involves "identifying an entity" (1987:183). The type in question may be a complex phenomenon, such as a given form of political system. Sartori argues that such systems are constituted by multiple attributes, all of which must presumably be present for a case to be classified as an instance of the concept. Thus, it can be thought of as a bounded whole. When an object concept is applied to a particular case, one must establish, in dichotomous terms, whether or not the case corresponds to the concept. Sartori contrasts the idea of object concepts with a property concept approach, in which the concept is viewed as a characteristic that cases display to varying degrees and that hence calls for a graded treatment (1987:183-84; see also 1975:28-29).

We wish to underscore two contributions of this approach. First, Sartori explicitly presents it as a flexible perspective that allows for alternative ways of approaching the logical treatment of concepts. Concept formation thus involves "deciding which logical treatment is appropriate for what purpose" (1987:185). Relatedly, he discusses how particular concepts are construed as being suitable for one or the other of these logical treatments (1987:183; see also 1975:29). Choice is involved, and the choice could presumably be influenced by the goals of the investigator. We believe that this pragmatic emphasis on the goals of research takes the discussion in a good direction. Second, Sartori's argument about object concepts is promising because it focuses attention on the idea of an interaction among the component attributes of democracy. In Part 3, we address this interaction via the distinctively conceptual idea that each component attribute can potentially take on a different meaning, depending on the presence of other attributes.

At the same time, it is essential to sound a note of caution. We have a vivid label for the mistake of overstating the degree to which the attributes one seeks to conceptualize cohere as if they were like an object—this error is "reification." We present two observations concerning the potential problem of reifying bounded wholes, one about what is involved in "naming" phenomena, the other about changing empirical knowledge and evolving scholarly usage.

The observation about naming concerns a tacit belief, or what cognitive scientists call a folk theory, that people routinely hold about concepts. It is widely believed that, in relation to many phenomena in the real world, it is possible to identify an inherently correct name or system of names. People believe it is possible to identify "the name of a thing, the one that tells what it 'really is'" (Brown 1958:17; see also Lakoff 1987:9, 118-21). This tacit belief about naming has both an up side and a down side. On the up side, if a specific name is understood as designating what the phenomenon under discussion "really is," the use of this name can facilitate communication and make it easier to remember the argument being presented. Indeed, if the analyst has in fact meaningfully summarized a complex body of information as consisting of two distinct types, this impressive analytic accomplishment deserves to be clearly communicated. On the down side, if a particular name resonates primarily due to this tacit belief, rather than because it provides an analytically appropriate slicing of reality, then this name can become a slogan that is employed in a sloppy and uncritical manner, with serious risk of reification. One possible consequence could be that the idea of bounded wholes is uncritically embraced for the wrong reasons.

Our other basic observation about bounded wholes and reification is that in the face of changing social reality, shifting definitions of the subject matter, and evolving theoretical understanding and empirical knowledge, conceptualizations that initially serve to justify a dichotomy based on a particular cutpoint can subsequently break down. This breakdown can be illustrated with some of Sartori's examples of contradictories. Social change in recent decades has, in many different ways, surely made married vs single a more complex distinction than it once was. The scholar studying evolving social relationships and related political and legal debates in contemporary society needs to consider a variety of alternative cut-points in defining married vs single as a dichotomy. Similarly, evolution in medical technology has led to complex legal, ethical, and policy debates about the definition of alive vs dead, as well as to the introduction of intermediate concepts such as "brain dead." More broadly, in many domains of knowledge, what initially appeared to be clear distinctions sometimes break down and are reconceptualized. For example, zoology has seen a long history of distinctions that initially appeared clear-cut but that subsequently were superseded (e.g. Gould 1983). Overall, it can be argued that in a variety of disciplines, (*a*) dichotomies are of central importance, (*b*) the cutpoints that establish dichotomies may evolve over time, and (*c*) scholars face an ongoing choice between retaining the use of dichotomies, based on these potentially evolving cut-points, or shifting to a graded approach that employs multiple cut-points.

Shifting the Burden of Demonstration

In light of these issues of changing social reality and evolving theoretical understanding, we suggest a pragmatic approach that places Sartori's distinction between object and property concepts on firmer ground. We carry even further Sartori's idea, noted above, of "deciding which logical treatment is appropriate for what purpose." It may often be the case that Sartori's distinctions provide a useful way to characterize a specific approach to the formulation and definition of a concept. Thus, a scholar may well develop a particular understanding and application that precludes intermediate alternatives, making it appropriate to view the concept as if it designated an object consisting of a set of interrelated parts, all of which are treated as definitionally necessary. On the other hand, the broad claim that a concept itself necessarily has object-like characteristics involving interrelated parts may be far more problematic.

Indeed, conceptual disputes are often only deepened when different groups of scholars involved in the dispute each treat their own particular approach as if it were a valid overall characterization of the concept. In her influential study of representation, Pitkin demonstrates how recognizing the multiple competing views of a concept, each of which mistakes its own "partial view" for the "complete structure," can help us to understand and overcome conceptual confusion (1967:10–11). A variety of other accounts of the complexity of concepts likewise supports this conclusion, including Gallie's (1956) discussion of the multifaceted structure of many important concepts, Lakoff's (1987) theory of the cognitive models that provide complex sources of conceptual meaning, and Freeden's (1996:60–67) view of conceptual "morphology" in which the potential meaning of a concept encompasses a spectrum of "quasi-

contingent" features. Hence, scholars should be cautious in claiming to have come up with a definitive interpretation of a concept's meaning. It is more productive to establish an interpretation that is justified at least in part by its suitability to their immediate research goals and to the specific research tradition within which they are working.

This flexible, pragmatic approach shifts the burden of demonstration in justifying choices about concepts. Rather than treating the distinction between object concepts and property concepts as a permanent status, we understand this distinction as depending on the specific meanings and definitions that particular authors give to a concept, and on the goals and context of research.

2. EXAMPLES OF GENERIC JUSTIFICATIONS

We now consider justifications for gradations or dichotomies that have been advanced by prominent authors in the comparative literature on democracy and democratization. These authors focus most of their arguments on generic claims that the concept of democracy inherently requires one approach or the other. These examples suggest to us that this dispute is hard to resolve at the level of these generic claims, which is a further motivation for shifting the focus of justification to more specific arguments.

Justifying Gradations

Bollen and collaborators have strongly aligned themselves with the argument that the distinction between democracy and nondemocracy should be viewed in graded terms. Over a series of publications, Bollen (1980, 1993; Bollen & Grandjean 1981; Bollen & Jackman 1989; Bollen & Paxton 2000) has developed graded measures that treat political democracy as a property that regimes display in varying degrees. He incorporates gradations into his definition, defining democracy as "the extent to which the political power of the elite is minimized and that of the non-elite is maximized" (1980:372; see also 1993: 1208).

Bollen defends his choice of a graded approach with the generic conceptual assertion that it is dictated by the concept of democracy. Bollen & Jackman describe the use of a dichotomy as "hard to justify" because the resulting measures fail to reflect the "inherently continuous nature of the concept of political democracy" (1989:617, 612). Likewise, Bollen asserts that "the concept of political democracy is continuous" and hence we "unnecessarily compromise the concept by considering it a dichotomous phenomenon" (1990:13).

Bollen builds on this conceptual claim to make a further argument in favor of gradations based on a concern about measurement error (1990:14). He argues that, although both approaches introduce substantial measurement error because they fail to capture fully the continuous nature of political democracy, there are reasons to favor a graded approach. Bollen believes that "we can do better than dichotomous or three-point scales" and that a dichotomy is "crude" relative to the ordinal scales we can produce (1990:18). He favors scales with more than two or three categories because the "error introduced by analyzing ordinal indicators as if they were continuous generally is less, the greater the number of categories" (1990:18). His argument about error obviously depends on his conceptual argument, given that his assessment of the error entailed in ordinal versus dichotomous approaches focuses on how well they can capture a phenomenon he presumes to be continuous. Bollen specifically rules out statistical procedures that assume the underlying concept entails distinct categories. He considers them "not appropriate since the concept is continuous" (1990:18).

Dahl, in his influential writings on democracy, likewise incorporates gradations into his conceptualization and definition. He argues that "countries vary enormously in the extent to which their governments meet the criteria of the democratic process" (1989:233). In *Polyarchy*, he adopts a view of democracy that defines it in relation to an ideal type and thereby lays the foundation for his graded approach. Hence, as "one end of a scale, or a limiting state of affairs, it can (like a perfect vacuum) serve as a basis for estimating the degree to which various systems approach this theoretical limit" (1971:2).

Having used the term democracy to refer to this ideal, Dahl introduces the term polyarchy for discussing actual regimes. Following Dahl, Coppedge & Reinicke (1990) have employed Guttman scale analysis to operationalize a graded treatment of polyarchy, and Dahl's preference for gradations is also reflected in his use of their scale (1989:241).

Dahl is quite clear about the inadequacy of a classificatory approach. His conceptualization of polyarchy focuses on "opposition, rivalry, or competition between a government and its opponents" (1971:1), and he takes it as a conceptual given that there is "an underlying, hypothetical continuum that extends from the greatest to the least opportunity for oppositions" (1971:231). From this perspective, a classificatory treatment is an undesirable simplification. Thus, after identifying the two main dimensions with which he is concerned, Dahl states that "since a regime may be located, theoretically, anywhere in the space bounded by the two dimensions, it is at once obvious that our terminology for regimes is almost hopelessly inadequate, for it is a terminology invariably based upon classifying rather than ranking" (1971:6).

Obviously, Dahl and Bollen have both made outstanding contributions to the study of democracy. They offer carefully formulated definitions that incorporate a graded approach, and their use of the concept appropriately follows their own definitions. Yet establishing a definition based on gradations does not preclude the possibility that other scholars will employ conceptualizations and definitions based on a dichotomy, and it does not provide a basis for adjudicating the dispute over democracy and dichotomies.

Justifying a Dichotomy

Sartori argues that the distinction between democracy and nondemocracy should be treated as dichotomous (1962:150–52; 1987:156, 182–85, 205–7; 1991:248–49; 1993:118–20). Hence, the essential initial task is to establish exhaustive and mutually exclusive categories of democracy and nondemocracy (1987:182–85). In Sartori's view, approaches that treat the difference between democracy and nondemocracy as a matter of degree are fundamentally flawed. "What is completely missed by this degreeism, or continuism, is that political systems are *systems*, that is, bounded wholes characterized by constitutive mechanisms and principles that are either present (albeit imperfectly) or absent (albeit imperfectly)" (1987:184).

Sartori's claim about bounded wholes might appear to state an empirical hypothesis according to how imperfectly these mechanisms and principles are present or absent. However, our reading of Sartori's position is that he invokes empirical cases to illustrate a generic conceptual assertion that is treated as a necessarily valid claim about the concept of democracy, rather than to offer a validation of a potentially falsifiable claim. Sartori illustrates the need for dichotomies by pointing to sharp empirical differences—for example, between the United States and the Soviet Union, and between regimes that are so harsh as to produce large numbers of political refugees and those that receive these refugees (1987:184, 185). In these examples, he does not focus on the problem of comparing intermediate cases, among which the idea of gradations of democracy might potentially be especially relevant. Thus, he does not appear to look for evidence that would call his bounded-whole thesis into question.

Despite his arguments against a gradation-based approach, Sartori does not preclude the use of gradations altogether but argues that such a treatment should be applied only to countries deemed democratic in terms of an initial dichotomy. Thus, "what makes democracy *possible* should not be mixed up with what makes democracy *more democratic*" (Sartori 1987:156). Sartori argues that both issues can be addressed in a single, integrated framework as long as the analyst follows a specific two-step procedure. First, regimes must be classified as democracies or nondemocracies. Then, only as a second step, a further set of criteria can be applied to those regimes deemed democratic by the initial dichotomy. Only with regard to these cases should we inquire as to how democratic they are (1987:182–83). Sartori asserts that "unless the two problems are treated in this order, the oxen may well wreck the cart rather than pull it" (1987:156).

Sartori does not propose his two-step procedure for all concepts but specifically for those conceptualized as bounded wholes. His assertion of the need for the two-step procedure hence presupposes his previous claim that democracy must be treated as a bounded whole. To be plausible, this two-step procedure would require a fuller elaboration of the bounded-whole idea and a defense of its appropriateness for a particular definition of democracy. In Part 3, we suggest what such an elaboration and defense might look like.

Przeworski, Alvarez, Cheibub, and Limongi's argument for their dichotomy is based both on a generic claim about how democracy should be conceptualized and on a more specific claim about measurement and the empirical distribution of cases (see Part 3). Regarding the first claim, their definition of democracy requires the selection of the chief executive and the legislature through contested elections, the presence of more than one party, and the actual rotation of the incumbents out of office after a reasonable interval (Alvarez et al 1996:19). They argue that the graded approach is flawed because it fails to recognize that any regimes in which executive and legislative offices are not contested should not be considered democratic to any degree (Przeworski et al 1996:52, Alvarez et al 1996:21). To argue that there are borderline cases that call for a graded approach is, in their view, "ludicrous," because in a carefully applied classification of regimes, the ambiguous status of a case can only reflect "bad rules" or "insufficient information" (Alvarez et al 1996: 21-22). If a treatment of regimes fails to distinguish clearly democracies from nondemocracies, this does not undermine the attempt to apply a dichotomy; rather, it means that the scoring procedures need to be modified to remove the ambiguity.

Although Przeworski and collaborators thus make a broad claim about democracy, they go further than does Sartori in basing their justification on a specific understanding of the interaction among the attributes of democracy. Yet this justification still does not provide as complete an argument as we would like. For example, in our view it remains unclear why a regime that has competitive elections for the presidency, rotation in the presidential office, and more than one party—but lacks competitive elections for legislative office—is not at least partially democratic. This approach could also be helped by a specific justification of why each of the component attributes should be understood dichotomously, and not in terms of gradations.

Przeworski and collaborators do not rule out all graded comparisons among democracies but instead advocate the same two-step procedure as Sartori, with the first, dichotomous step essentially based on the idea of bounded wholes. They argue that

while some regimes are more democratic than others, unless offices are contested, they should not be considered democratic. The analogy with the proverbial pregnancy is thus that while democracy can be more or less advanced, one cannot be half-democratic: there is a natural zero-point. (Alvarez et al 1996:21)

Przeworski and collaborators offer a criticism of Bollen & Jackman that explicitly challenges a basic assumption of gradation-based approaches.

Note that Bollen and Jackman (1989) are confused: it is one thing to argue that some democracies are more democratic than others and another to argue that democracy is a continuous feature over all regimes, that is, that one can distinguish the degree of "democracy" for any pair of regimes. (Alvarez et al 1996:21; see also Przeworksi et al 1996:52)

For the purpose of comparing regimes that fall short of their standard, Przeworski and colleagues thus preclude the option of reasoning about them as partial democracies. Instead, they propose a separate conceptualization involving three dimensions of "dictatorship": whether it is mobilizing or exclusionary, how many formal centers of power it has (executive, legislative, and parties), and whether it rules within a framework of law or in some more arbitrary manner (Alvarez et al 1996:16–19).

In principle, we are sympathetic to this two-step procedure. Nevertheless, it would be valuable to formulate a more sharply focused argument about why certain core attributes entailed in a particular definition must occur together if a regime is to be considered minimally democratic according to this definition. As with the arguments for gradations noted above, such an argument may support the choice made in a particular research project, yet it should not be interpreted as a generic prescription that applies across all conceptualizations of democracy.

3. TOWARD MORE SPECIFIC JUSTIFICATIONS

We now turn to examples of justifications for dichotomies that are more specifically linked to the theoretical and analytic goals of the research and to the particular context being studied. We do not seek to cover all possible justifications but rather to illustrate some issues that arise in offering more specific justifications. An important counterpoint runs through the discussion. Although each of these justifications is initially meant to defend dichotomies, we find, in relation to each justification, a counterjustification that favors the use of gradations.

A major goal of the literature considered here is to understand the causes and consequences of democracy. However, the goals most relevant to our discussion are more specific. We first consider the implications of two analytic concerns that have been central in much of the comparative literature on democracy, namely a focus on events and a focus on subtypes of democracy. We then examine justifications—based on the empirical distribution of cases and normative concerns—that we believe provide part of the underlying rationale for a dichotomous approach. Finally, we explore how the idea of bounded wholes could be more fully developed as a justification for a dichotomy, and we consider some implications of a concern with achieving sharper analytic differentiation.

Studying Events and Subtypes

EVENTS An important part of recent research on democratization is routinely called the "transitions literature" because of its concern with the event called a transition. The study of events has recently become an important focus in comparative social science (Abbott 1992, Griffin 1993, Sewell 1996), and, as Riker (1957) demonstrated in his classic article on defining events, the analytically rigorous study of events requires establishing their boundaries in dichotomous terms. Correspondingly, O'Donnell & Schmitter (1986:6) define a transition as "the interval between one political regime and another" (see also Huntington 1991:11). This definition in turn calls for a dichotomous approach that establishes the cut-point or threshold in relation to which the event of a transition to democracy is identified.

In studies based on complex comparisons across countries and over time, important problems can arise in establishing a threshold that meaningfully delimits the onset of democracy. Bollen & Jackman raise two concerns about such dichotomous treatments. First, they point to the difficulty of establishing conceptual equivalence among cases of democratization that occur in different historical contexts. This concern with equivalence centers on the fact that "the nature of political democracy (especially inclusiveness) has changed considerably over the past decades" (1989:619; see also Markoff 1996:4,116–17). Second, for many cases, they question the feasibility of locating a point in time at which democracy, conceived dichotomously, began. They argue that "it is meaningless to claim that democracy was inaugurated in a given country on a single date," and that "dating the inauguration of democracy conceived in binary terms is an inherently ambiguous task.... In fact, it is an impossible task" (1989:618, 619).

One plausible response to Bollen & Jackman's first concern is to adopt a context-specific approach to conceptual equivalence. A central problem in establishing equivalence lies in the fact just noted, that the plausible agenda of "full" democratization has changed dramatically over time. What could be viewed as full democratization by the standards of an earlier period might be seen as incomplete democratization by later standards. For example, in the late 20th century, universal suffrage and the protection of civil rights for the entire national population are routinely seen as essential features of democracy, whereas in the 19th century they were not (Huntington 1991:7, 16). In light of

this problem of equivalence, one solution is to compare regimes according to whether they have achieved full democratization in relation to the norms of the relevant time period (RB Collier 1999:ch. 1, Russett 1993:15). This context-specific conceptualization allows for a dichotomous classification of cases distinguishing those that are fully democratized from those that are not.⁴

The goal of conducting strong tests of hypotheses can provide a rationale for adopting this conceptualization, and hence for sticking with a dichotomy. Thus, the analyst may accept the standard of equivalence of full democratization according to the norms of the historical period, in part because it leads to the inclusion of what may be considered "inconvenient facts" (Weber 1958: 147) from the standpoint of a major hypothesis being entertained in the study. For example, Russett (1993:15) wishes to include 19th-century cases in his tests of the democratic peace hypothesis because that inclusion pushes him to deal with a greater number of conflicts that could be interpreted as wars between democracies. Similarly, RB Collier (1999:ch. 1) is skeptical about some arguments concerning the pivotal role of the working class in democratization, and to make her case, she wishes to include late nineteenth- and early twentieth-century cases that were the basis for classic arguments about the working class role.

A plausible response to Bollen & Jackman's second concern, regarding the problem of establishing a single starting date for democracy, is to temper the idea of a strict dichotomy. Recognizing that important distinctions are lost by employing a single threshold (Paxton 1995:4, 18–19), the analyst may focus on two or more successive thresholds, which potentially are crossed at widely separated dates. By conceptualizing democratization as a sequence of steps, rather than as a single event, this approach in effect introduces gradations. Examples are found in Rueschemeyer et al (1992:160–62, 205, 304–8) and RB Collier (1999:ch. 1). This approach allows both the author and the reader to evaluate the implications of alternative thresholds for the findings of the analysis. Along these lines, Geddes' comparative study of democratic transitions that have occurred since 1946 is another example of an analysis that reports the consequences of alternative thresholds (1999: Table 1). We strongly endorse this practice.

Notwithstanding the importance of this concern about meaningful starting dates, we would reject a blanket pronouncement in favor of the universal use of gradations in research on democratization. Although Bollen & Jackman are correct to suggest that a focus on democratization as a single event is flawed for many cases, this does not imply that it is inapplicable in all cases. Those cases where democratization is an abrupt, rather than protracted, process might

⁴An important example of a context-specific approach that was constructed to deal with differences across regions, rather than across historical periods, is found in Lipset 1959:73–74.

be adequately analyzed using a dichotomy that treats democratization as a single, well-bounded event.

SUBTYPES OF DEMOCRACY In some studies, the larger set of arguments advanced by the authors is concerned with assessing the causes or consequences of what may be called "classical" subtypes of democracy (Collier & Levitsky 1997:435). These subtypes are understood as corresponding to countries that are definitely democratic and that have some further differentiating attribute. The focus on these subtypes presupposes a concern with delimiting the set of democracies, within which the subtypes are differentiated.

A prominent example of this focus on subtypes is found in studies of the consequences for regime stability of parliamentary democracy, as opposed to presidential democracy (Stepan & Skach 1993, Linz & Valenzuela 1994, Sartori 1994). The inclusion of cases in this comparison strongly implies a dichotomous standard for establishing which countries are democratic and therefore can be considered instances, more specifically, of the parliamentary and presidential subtypes of democracy.

Another example is found in comparisons of what O'Donnell (1994) has called "delegative democracies," i.e. regimes with strong presidencies in which the "horizontal accountability" of the executive to the legislature is attenuated. O'Donnell is convinced that among democracies, this delegative pattern has the consequence of eroding political institutionalization. He specifically defines delegative democracies as regimes that are above a basic threshold of democracy (1994:56). Hence, inclusion in the set of delegative democracy assumes inclusion in a larger, dichotomously defined set of democratic countries. Still another example is found in the democratic peace literature, which explores the effect of national regime types on the likelihood that countries will go to war with one another. Elman (1997) argues that political scientists need to specify the democratic peace hypothesis more carefully by looking at the consequences of particular types of democracy for international conflict behavior, and she likewise focuses on the parliamentary and presidential subtypes. Her analysis, like O'Donnell's, is specifically concerned with understanding a set of countries that are democratic.⁵

Research questions conceptualized in terms of democratic subtypes may appear to require a dichotomous approach, yet, as with events, an alternative is available. These studies could ask, for example, whether the consequences of a presidential versus parliamentary organization of legislative-executive rela-

⁵Geddes' (1999) analysis of transitions from authoritarianism to democracy parallels these studies of democratic subtypes. She combines a dichotomous treatment of democracy vs nondemocracy with a focus on the consequences for regime stability of different (classical) subtypes of authoritarianism.

tions vary according to the degree of democracy, with different patterns emerging in borderline cases as opposed to cases that fully meet some accepted standard for democracy. This is a distinct, but certainly related, question. Delegative democracy could be analyzed in the same way. This graded approach is in fact followed in Shugart's new study, which seeks to explain the emergence of parliamentarism versus presidentialism. At one point in the analysis he looks at the strength of one explanatory factor among both (a)countries that are either semidemocracies or democracies and (b) countries that are specifically democracies (Shugart 1999:Table 5). Shugart thus moves away from the underlying notion of democracy as a well-bounded type by conceptualizing it in graded terms.

In their writing on delegative democracy, democratic peace, and parliamentarism versus presidentialism, O'Donnell (1994:56), Elman (1997), and Stepan & Skach (1993:3) are quite specific in stating that they are concerned with regimes that are democracies. This focus clearly depends on a prior dichotomous understanding of democracy as a type. The question then becomes, how does one justify the choice between this dichotomous understanding and a graded alternative?

Underlying Justifications

We are convinced that these choices about the study of events and subtypes often rest on underlying assumptions regarding the empirical distribution of cases and normative judgments. By recognizing these assumptions and defending them, scholars could provide better justifications for these choices.

EMPIRICAL DISTRIBUTION OF CASES One of the important ways in which the context of research affects choices about concepts involves the empirical distribution of the cases being studied. In a given context, scholars may observe a gap between democracy and nondemocracy, either across national units or over time within a given country, with observed cases generally either possessing or lacking most of the defining attributes of democracy. Given this gap, a dichotomy may provide an adequate summary of the empirical contrasts among cases. The use of a dichotomy in this context is not a conceptual assertion that rejects a graded approach as inherently flawed. On the contrary, the empirical hypothesis that regimes do cluster in this manner must be evaluated within a graded approach that can assess whether a gap exists. Thus, by looking for gradations, scholars may justify the conclusion that, for a given context, a dichotomy is good enough.

The idea of an empirical gap between democratic and nondemocratic regimes was of great importance to the recent literature on democratization, which was routinely concerned with relatively dramatic shifts in which many attributes of regimes changed in a relatively short span of time. Correspondingly, this literature made extensive use of a dichotomous conception of democracy/nondemocracy and of the idea of a regime transition as a wellbounded event.

Arguments about the empirical distribution of cases have also been used to justify a dichotomous approach, based on a concern with measurement error. Przeworski and collaborators argue that a "more refined classification will have a smaller error" if the distribution of cases is unimodal and approximately symmetric, whereas "there is less measurement error when a dichotomous scale is used" if cases are uniformly distributed (Alvarez et al 1996:31). Furthermore, if the distribution is "u-shaped," as they suggest the distribution of democracy versus nondemocracy tends to be, then the advantage of a dichotomy in terms of reducing error is even greater than it is for a uniform distribution (Alvarez et al 1996:31). Although Elkins (1999) has raised questions about the way these authors treat error, this unquestionably is an argument in which the criterion of justification focuses on the empirical distribution of cases.

If the choice of a dichotomy can be justified on the basis of the empirical distribution of cases, then a change in this distribution can lead to a different choice. Huntington's Third Wave treated democracy as dichotomous, though he noted a few intermediate cases (1991:12). Yet in a more recent article, he observes that "as formal democratic institutions are adopted by more and more diverse societies, democracy itself is becoming more differentiated." He therefore sees the need to focus on a "democratic-nondemocratic continuum," on which one finds "a growing number of countries somewhere in the middle" (Huntington 1996:10). Diamond makes the same argument with reference to Latin America, where he finds that the shift toward democracy has made it "more fruitful to view democracy as a spectrum, with a range of variation in degree and form." Owing to this changing empirical reality, treating democracy as something "merely present or absent" has become "a sterile perspective" (Diamond 1996:53). More recently, on the basis of a world-wide comparison of regimes, Diamond (1999: Table 2.4) shows that the proportion of intermediate cases has doubled between 1990 and 1997.

Although information about the empirical distribution of cases should play an important role in choices about dichotomies versus gradations, it should not be taken as the sole determinant of all such choices. It needs to be balanced against the potential value of sharp analytic distinctions, such as those offered by the classical subtypes discussed above, and against normative concerns that we discuss in the next section. In sum, we argue that although a graded approach is needed to adequately capture a highly uniform distribution, for more discontinuous distributions the choice between dichotomies and gradations remains open, and the various other considerations discussed throughout this paper may play a decisive role.

556 COLLIER & ADCOCK

Finally, in certain limited situations, a dichotomy may be justifiable regardless of the empirical distribution of cases. For example, in exploring certain research questions, the analyst's treatment of democracy vis-à-vis nondemocracy may need to reflect the viewpoint of the individuals who are being studied. With such an actor-defined, emic approach to differentiating among regimes, a dichotomy would be justifiable independently of the empirical distribution of cases, provided that the actors whose behavior is being examined do in fact think of the world in terms of a democracy/nondemocracy dichotomy.⁶ Starr's recent discussion of the democratic peace hypothesis provides an example of such an argument. He interprets the causal mechanism at work in the hypothesis as including the idea that "each side must understand that the other is a democracy." Hence, Starr argues that analysts can best evaluate this hypothesis if they establish a "threshold point" above which the relevant political actors in other nations view a given country as democratic (1997: 129-30). In specific instances, such an approach may not always win universal agreement, yet in principle it is an appropriate justification.

NORMATIVE EVALUATION Normative concerns play an important role in comparative research on democracy (Dahl 1971:ch. 2; Sartori 1987:7–8), and these concerns can provide another source of justification for a dichotomous or graded approach. Indeed, it appears likely that normative concerns lurk behind many arguments in favor of dichotomies, even though they are not made explicit. Although the idea of a fact-value distinction remains a familiar point of reference for many social scientists, we must recognize that the general choice of research topics, and more specific choices concerning what outcomes are explained and how they are conceptualized, routinely have a normative component. A study tends to be viewed as more important if it seeks to explain a humanly important outcome, and viewing an outcome as humanly important involves normative appraisal.

An example of a study that is careful and self-conscious in explicating the normative criteria that can underlie the choice of a dichotomy is the summary volume by O'Donnell & Schmitter (1986) in the *Transitions from Authoritarian Rule* series. Their point of departure was explicitly normative (1986:5, 11, 13) and was formulated in light of the political and social parameters, as of the 1980s, faced by the Latin American and Southern European countries with which they were concerned. Given these parameters, the authors were convinced that a plausible target for advocates of regime transitions was a "procedural minimum" version of democracy that encompassed free and fair elections, universal suffrage, and broad protection of political and civil liberties. They labeled this constellation of features "political democracy" (1986:8,

⁶On the emic-etic distinction, see Headland et al 1990.

13),⁷ and they employed a dichotomous distinction to establish it as a democratic target. In establishing this target, they were deliberately positioning themselves in relation to scholars and political actors who aimed at a lower or higher standard.

Although normative concerns may lead scholars to adopt a dichotomous treatment and may serve to justify the choice of a particular cut-point, similar concerns can also motivate a graded approach. In *Democracy and Its Critics,* Dahl expresses concern that in the evaluation of regimes, a dichotomous approach may "impose upon the moral and empirical complexities of the world a false Manichean orderliness" (1989:316). A dichotomy is "empirically misleading" because it overlooks the fact that "countries below a reasonable threshold for full polyarchy are of extraordinary variety." As a consequence, such an approach is "morally inadequate and likely to lead to inept policies" (1989:316). Dahl's concern for flexibility and subtlety in normative appraisal is further reflected in his suggestion that such appraisal needs "to make judgments about the *dynamics of change*, and particularly the *direction* and *rate* of change," because "even highly repressive regimes are not morally and empirically equivalent if their dynamics of change are radically different" (1989: 316).

These two perspectives on normative evaluation reflect the different purpose of the authors. O'Donnell & Schmitter were writing in the midst of a dramatic, world-wide episode of democratization. They sought to identify what they saw as appropriate targets (neither too low nor too high) at which political actors should aim in pursuing democratization within this context. By contrast, Dahl is making a more general statement about normative evaluation that is not embedded in a specific historical episode, and hence his more flexible approach is also appropriate.

Further Issues of Justification

DEVELOPING THE IDEA OF BOUNDED WHOLES Given the emphasis on bounded wholes in the conceptual discussions reviewed in Parts 1 and 2, it is somewhat surprising that we have not found what we consider fully elaborated versions of this potential justification for a dichotomous, type-based conceptualization of democracy. We seek here to develop the notion of bounded wholes by focusing on conceptual interaction among the defining attributes of democracy.⁸ Specifically, we explore the argument that if each component attribute within the definition is to be meaningfully understood as reflecting an aspect of democracy, then the other attributes must also be present. It seems likely

⁷O'Donnell & Schmitter (1986:8) also include horizontal accountability in their initial definition, but it does not appear to play a role in their subsequent analysis.

⁸An alternative theoretical approach to developing the notion of bounded wholes might build on the idea of equilibrium.

that if such an argument is to be effective, it would not be a generic argument about democracy but rather would be tied to a specific definition based on a particular set of component attributes, and potentially also a specific context of analysis.

Although we have not encountered examples of full conceptual justifications along these lines, we have found partial examples in which authors do consider this kind of interaction among certain attributes of democracy. Specifically, they assert that the meaning of some defining attributes of democracy is changed if an additional attribute is not present. Thus, a "negative score" on one key attribute in effect cancels the meaning of a "democratic score" on others. Whereas the bounded whole criterion entails the expectation that all of the attributes are interrelated in this manner, this more limited thesis holds that the score on one of the attributes affects the meaning of the others. Thus, the arguments presented in this section are not in themselves full justifications for a dichotomy, but they are an example of the kind of conceptual reasoning that, if applied to all defining attributes, could provide such a justification.⁹

One example is found in discussions of "electoralism" (Karl 1986). This term is applied to regimes that hold elections in which substantial competition occurs, with uncertain electoral outcomes, yet where widespread violations of civil liberties continue to be a fundamental feature of political life. Various analysts argue that the electoral arena should not be seen as genuinely competitive and uncertain if civil liberties are not respected. Thus, one finds an interaction among these attributes of democracy, in that the absence of civil liberties as being democratic.

Another example is found in discussions of the problem that some "democratically" elected governments lack effective power to govern.¹⁰ In several Latin American countries, one legacy of authoritarian rule has been the persistence of "reserved domains" of military power over which elected governments have little or no authority (Valenzuela 1992:70). Hence, despite free or relatively free elections, civilian governments in these countries are seen by

⁹If X_1, X_2, X_3 , and X_4 are dichotomous components of democracy that assume a value of 0 or 1, the idea of a bounded whole might be represented by $X_1*X_2*X_3*X_4$. This bounded-whole formulation assumes the value 1 if all the component scores are 1, and zero if any of them are zero. In contrast, the idea of partial interaction being discussed here, in which a score of zero on one key attribute (X_4) cancels the meaning of a democratic score on the others, can be represented by $(X_1+X_2+X_3)*X_4$. This partial-interaction formulation would not lead to the simple zero/one dichotomy of the bounded-whole formulation because if X_4 has a value of 1, the overall expression can assume a value of either 0, 1, 2, or 3. However, the conceptual reasoning in the partialinteraction formulation regarding the relationship between X_4 and the other attributes does provide an example of the kind of arguments that would be necessary for each attribute if the idea of a bounded whole is to be fully justified.

¹⁰The following discussion draws on Collier & Levitsky (1997:442–45).

some analysts as lacking effective power to rule. In light of these authoritarian legacies, and often in response to claims that these countries are "democratic" because they have held free elections, some scholars sought to modify the definition of democracy by specifying as an explicit criterion that the elected government must have a reasonable degree of effective power. With this revised approach, some scholars have excluded countries such as El Salvador and Chile, during certain periods, from the set of cases classified as democracies, even though they held relatively free elections (Karl 1990:2; Valenzuela 1992:70; Loveman 1994:108–13). This revised definition has received substantial acceptance (Huntington 1991:10, Markoff 1996:102–4), although there has not been full agreement on the treatment of specific cases (Rabkin 1992:165).

In the context of our discussion of the conceptual reasoning that could provide a full justification of a dichotomous approach, the point here is as follows: In cases where the elected government lacks effective power to rule, it is not valid to treat the other defining attributes of democracy (e.g. competitive elections) as meaningfully measuring the presence of democracy. The absence of effective power to rule does not merely make countries somewhat less democratic; it undermines the meaningfulness of the other defining attributes of democracy.

If the search for interactions among attributes is to be convincing, it is important that, in principle, the investigator be able to find negative cases, i.e. instances in which such a conceptual interaction might be found but is not. An example appears in the debate over the observation that in many new democracies, elected presidents at times make extensive use of decree power, circumvent democratic institutions such as the legislature and political parties, and govern in a plebiscitarian manner that is seen as having strong authoritarian undercurrents. Such tendencies are addressed by definitions of democracy that include checks on executive power and hence exclude cases of weakly constrained presidentialism (Schmitter & Karl 1991:76, 87; Ball 1994:45–46).

However, this innovation has not been widely adopted. In this example, a crucial point is that these presidents are elected leaders. Hence, it might be appropriate to treat these regimes as meeting a minimal standard for democracy and to avoid any further adjustment in the definition—as long as they maintain presidential elections, a more-or-less viable legislature, and a general respect for civil liberties, and as long as opposition parties are not banned or dissolved. Scholars have considered the option of viewing the weakness of checks on executive power as invalidating the democratic characterization of these regimes, but instead they have concluded that it represented additional useful information about regimes that should be considered democratic (O'Donnell 1994:56).

This discussion of checks on executive power is a useful negative example, in which scholars conclude that the absence of one attribute does not invalidate or diminish the meaning of other attributes in relation to the concept of democracy. Scholars concerned with refuting a bounded-whole approach could usefully devote more attention to making such arguments about the absence of this specific kind of interaction among attributes. Rather than endorsing or rejecting the bounded-whole approach in general terms, we urge scholars to carefully address themselves to the attributes of a particular definition of democracy, and to ask whether all the attributes display the kind of conceptual interaction which we have explored.

SHARPER DIFFERENTIATION Achieving sharper, more fine-grained differentiation is an important goal in the comparative analysis of democracy, and a standard view of the advantages of a graded, as opposed to dichotomous, approach is that it more effectively promotes this goal. The practice of giving explicit names to categories that group together similar cases is also a means of pinpointing and differentiating crucial attributes of regimes. In this section, we explore two strategies that pursue the goal of sharper differentiation by combining gradations with named categories.

First, with an ordinal scale based on a limited number of categories, names can be given to the categories. An example is Dahl's adaptation of the Coppedge-Reinicke scale of polyarchy. Dahl applies to the marginally democratic categories in this scale such names as "dominant party regimes" and "multiparty nondemocratic regimes" (Dahl 1989:241). Diamond (1996:57) offers a similar ordinal scale, based on Freedom House data, in which the categories have names such as "partially illiberal democracy" and "semicompetitive authoritarian." To the extent that these names meaningfully identify important empirical differences among the categories, this form of the scale may convey more information than does the scale without the names. For example, Dahl's label "multiparty nondemocratic regime" conveys more information about the cases in this category than would a simple numerical score on his scale. He thus adds, in relation to the ordinal idea of "more or less," sharper differentiation concerning "more of what."

A second combined strategy that achieves sharper differentiation begins on the side of categories but incorporates the idea of gradations. As Collier & Levitsky (1997:437–42) have shown, in the names of "diminished subtypes" such as semidemocracy, the adjective serves to cancel part of the meaning of democracy, creating a type that is less than fully democratic by whatever definition the author is using but that still retains some attributes of democracy. The subtype thus expresses the idea of a gradation away from democracy.

The use of diminished subtypes presents an interesting alternative to employing an ordinal scale. Consider, for example, three diminished subtypes formed in relation to standard procedural definitions of democracy, which routinely include universal suffrage, fully contested elections, and civil liberties. In relation to that definition, one finds diminished subtypes that characterize cases as missing one of these attributes. Thus, "male democracy" is used for cases that lack women's suffrage; "controlled democracy" is used for cases with some important limitation on contestation, such as the banning of one political party; and "illiberal democracy" is used for cases where civil liberties are attenuated (Collier & Levitsky 1997:440). With each of these subtypes, one attribute is missing, but other attributes in this procedural definition remain present.

Consider how this same information would be conveyed using an additive scale of zero to three, based on the sum of a dichotomous (zero-one) version of these three component attributes. With the alternative configurations of attributes that correspond to these three diminished subtypes, the score in all three instances would be a two, conveying no information about which attribute is lacking. By contrast, if diminished subtypes are carefully employed, that information is clearly conveyed in the names of the subtypes. In this case, the concern with sharper differentiation parallels a concern, expressed by Gleditsch & Ward (1997:381) in their recent assessment of the Polity III data, that the use of aggregated scales can divert attention from important insights that emerge at a more disaggregated level. In sum, in relation to the idea of "more or less," diminished subtypes convey sharper, more disaggregated differentiation regarding "less of what."

However, along with this advantage, scholars should note a down side: this approach can encourage an undesirable proliferation of subtypes. If this occurs, the potential gains in sharper differentiation could be cancelled by the conceptual confusion that may result.

CONCLUSION

The debate on democracy and dichotomies raises basic issues, faced by both qualitative and quantitative researchers, concerning appropriate standards for justifying choices about the formation and application of concepts. We have argued that justifications for the use of a dichotomous or graded approach are most productive when they focus on specific arguments about the goals and context of research. Throughout the discussion, a counterpoint emerged in which arguments that initially appeared to favor a dichotomy could, with modification, be compatible with, or even require, the use of gradations. This counterpoint reinforces our conviction that justifications should be as specific as possible, and that scholars should recognize that conceptual choices may prove more ambiguous than they initially appear.

We have shown that decisions about gradations versus dichotomies are often built into the framing of research questions. Research that focuses on democratization as a well-bounded event and on classical subtypes of democracy favors dichotomies. However, alternative ways of viewing events and subtypes are also available that allow for the introduction of graded notions. In relation to these conceptual choices, we hold that, although gradations are necessary in certain contexts, in other contexts the empirical distribution of cases or normative concerns may justify a dichotomy. Justifications based on the conceptualization of regimes as bounded wholes are also promising but have not been adequately developed. Finally, our discussion of the goal of sharper differentiation points to the value of combining gradations with named categories.

Our pragmatic approach, which recognizes that concepts, definitions, and operationalization may evolve with changes in the goals and context of research, should not be seen as neglecting an essential concern with standardization and rigor. We certainly do not favor an "epistemological anarchism" in which "anything goes" (Feyerabend 1973). Rather, the specific goals of standardization and rigor are most productively pursued in conjunction with a realistic focus on how other goals influence the use and application of concepts. For certain concepts, it is not plausible, and may even be counterproductive, to assume that the accumulation of knowledge requires that all scholars adopt a standardized meaning. Instead, for such concepts, it is more realistic to aim for an accumulation of knowledge grounded in mutual comprehension among scholars who self-consciously recognize their conceptual decisions as real choices. Thus, they are choices from a range of alternatives, which, although they are justified in light of certain context-specific criteria, still allow the scholar to recognize the validity of other decisions in other contexts.

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Literature Cited

- Abbott A. 1992. From causes to events: notes on narrative positivism. *Sociol. Methods Res.* 20:428–55
- Adams EW, Adams WY. 1987. Purpose and scientific concept formation. *Br. J. Philos. Sci.* 38:419–40
- Alvarez M, Cheibub JA, Limongi F, Przeworski P. 1996. Classifying political regimes. *Stud. Comp. Int. Dev.* 31:3–36
- Ball AR. 1994. *Modern Politics and Government*. Chatham, NJ: Chatham House. 5th ed.
- Bollen KA. 1980. Issues in the comparative measurement of political democracy. *Am. Sociol. Rev.* 45(June):370–90
- Bollen KA. 1990. Political democracy: conceptual and measurement traps. *Stud. Comp. Int. Dev.* 25:7–24
- Bollen KA. 1993. Liberal democracy: validity and method factors in cross-national measures. Am. J. Polit. Sci. 37:1207–30
- Bollen KA, Grandjean B. 1981. The dimensions of democracy: further issues in the measurement and effects of political democracy. *Am. Sociol. Rev.* 46:651–59
- Bollen KA, Jackman RW. 1989. Democracy, stability, and dichotomies. Am. Sociol. Rev. 54:612–21
- Bollen KA, Paxton P. 2000. Subjective measures of liberal democracy. *Comp. Polit. Stud.* In press
- Brady HE. 1995. Doing good and doing better. Part 2 of a symposium on *Designing Social Inquiry. Polit. Methodol.* 6:11–19
- Brown R. 1958. How shall a thing be called? Psychol. Rev. 65:14-21
- Collier D. 1995. Translating quantitative methods for qualitative researchers: the case of selection bias. Am. Polit. Sci. Rev. 89:461–66
- Collier D. 1998. Putting concepts to work: toward a framework for analyzing conceptual innovation in comparative research. Presented at Annu. Meet. Am. Polit. Sci. Assoc., Sept. 3–6, Boston, MA
- Collier D, Levitsky S. 1997. Democracy with adjectives: conceptual innovation in comparative research. World Polit. 49:430–51
- Collier RB. 1999. Paths Toward Democracy: Working Class and Elites in Western Europe and South America. Cambridge, UK:Cambridge Univ. Press. In press
- Coppedge M. 1997. Modernization and thresholds of democracy: evidence for a common path and process. In *Inequality*, *Democracy, and Economic Development*, ed. M Midlarsky, pp. 177–201. New York: Cambridge Univ. Press

- Coppedge M, Reinicke WH. 1990. Measuring polyarchy. *Stud. Comp. Int. Dev.* 25: 51–72
- Dahl RA. 1971. Polyarchy: Participation and Opposition. New Haven, CT: Yale Univ. Press
- Dahl RA. 1989. *Democracy and Its Critics*. New Haven, CT: Yale Univ. Press
- DeFelice EG. 1980. Comparison misconceived: common nonsense in comparative politics. Comp. Polit. 13:119–26
- Diamond L. 1996. Democracy in Latin America: degrees, illusions, and directions for consolidation. In Beyond Sovereignty: Collectively Defending Democracy in the Americas, ed. T Farer, pp. 52–104. Baltimore, MD: Johns Hopkins Univ. Press
- Diamond L. 1999. Developing Democracy: Toward Consolidation. Baltimore, MD: Johns Hopkins Univ. Press. In press
- Diani M. 1992. The concept of social movement. *Sociol. Rev.* 40: 1–25
- Elkins Z. 1999. Gradations of democracy: empirical tests of alternative conceptualizations. Presented at Seminar on Democratization, Inst. Int. Stud., Stanford Univ., Jan. 21, Stanford, CA
- Elman MF. 1997. Unpacking democracy: presidentialism, parliamentarism, and the democratic peace theory. Presented at Annu. Meet. Am. Polit. Sci. Assoc., Aug. 28–31, Washington, DC
- Feyerabend P. 1973. Against Method: Outline of an Anarchistic Theory of Knowledge. London: Verso
- Freeden M. 1996. Ideologies and Political Theory: A Conceptual Approach. Oxford, UK: Oxford Univ. Press
- Gallie WB. 1956. Essentially contested concepts. Proc. Aristotelian Soc. 51:167–98
- Geddes B. 1999. What do we know about democratization after twenty years? Annu. Rev. Polit. Sci. 2:115–44
- Gerring J. 1997. Ideology: a definitional analysis. *Polit. Res. Q.* 50:957–94
- Gleditsch KS, Ward MD. 1997. Double take: a reexamination of democracy and autocracy in modern politics. J. Confl. Resol. 41:361–83
- Gould SJ. 1983. What, if anything, is a zebra? In Gould, *Hen's Teeth and Horses' Toes*. New York: Norton
- Graham GJ. 1984. Consensus. See Sartori 1984a, pp. 89–124
- Griffin LJ. 1993. Narrative, event-structure analysis, and causal interpretation in historical sociology. *Am. J. Sociol.* 98: 1094–1133

- Headland TN, Pike KL, Harris M. 1990. *Emics* and *Etics: The Insider-Outsider Debate*. Newbury Park, CA: Sage
- Honderich T. 1995. The Oxford Companion to Philosophy. Oxford, UK: Oxford Univ. Press
- Huntington SP. 1991. The Third Wave: Democratization in the Late Twentieth Century. Norman: Univ. Oklahoma Press
- Huntington SP. 1996. Democracy for the long haul. J. Democr. 7:3–13
- Jackman RW. 1985. Cross-national statistical research and the study of comparative politics. Am. J. Polit. Sci. 29:161–82
- Jones CO. 1974. Doing before knowing: concept development in political research. *Am. J. Polit. Sci.* 18:215–28
- Kalleberg AL. 1966. The logic of comparison: a methodological note on the comparative study of political systems. *World Polit*. 19: 69–82
- Kaplan A. 1964. *The Conduct of Inquiry*. San Francisco: Chandler
- Karl TL. 1986. Imposing consent? electoralism vs. democratization in El Salvador. In *Elections and Democratization in Latin America*, 1980–1985, ed. PW Drake, E Silva, pp. 9–36. La Jolla, CA: Cent. Iberian and Latin Am. Stud., Univ. Calif., San Diego
- Karl TL. 1990. Dilemmas of democratization in Latin America. Comp. Polit. 23:1–21
- Kotowski CM. 1984. Revolution. See Sartori 1984a, pp. 403–51
- Laitin D. 1995. Disciplining political science. Am. Polit. Sci. Rev. 89:454–60
- Lakoff G. 1973. Hedges: a study of meaning criteria and the logic of fuzzy concepts. J. Philos. Logic 2:458–508
- Lakoff G. 1987. Women, Fire, and Dangerous Things: What Categories Reveal About the Mind. Chicago: Univ. Chicago Press
- Linz JJ. 1975. Totalitarian and authoritarian regimes. In *Handbook of Political Science*, ed. FI Greenstein, NW Polsby, 3:175–353. Reading, MA: Addison-Wesley
- Linz JJ, Valenzuela A, eds. 1994. The Failure of Presidential Democracy. Baltimore, MD: Johns Hopkins Univ. Press
- Lipset SM. 1959. Some social requisites of democracy: economic development and political legitimacy. Am. Polit. Sci. Rev. 53: 69–105
- Loveman B. 1994. "Protected democracies" and military guardianship: political transitions in Latin America, 1979–1993. J. Interam. Stud. World Aff. 36:105–89
- Markoff J. 1996. Waves of Democracy: Social Movements and Political Change. Thousand Oaks, CA: Pine Forge
- Michell J. 1990. An Introduction to the Logic

of Psychological Measurement. Hillsdale, NJ: Erlbaum

- Munck G. 1999. Canons of research design in qualitative analysis. *Stud. Comp. Int. Dev.* 34:In press
- O'Donnell G. 1994. Delegative democracy. J. Democr. 5:55–69
- O'Donnell G, Schmitter PC. 1986. Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Transitions. Baltimore, MD: Johns Hopkins Univ. Press
- O'Kane RHT. 1993. The ladder of abstraction: the purpose of comparison and the practice of comparing African coups d'état. J. Theor. Polit. 5:169–93
- Patrick GM. 1984. Political culture. In Social Science Concepts: A Systematic Analysis, ed. G Sartori, pp. 265–314. Beverly Hills, CA: Sage
- Paxton P. 1995. Women in the measurement of democracy: problems of operationalization. Presented at Annu. Meet. Am. Sociol. Assoc., Aug. 21, Washington, DC
- Pitkin HF. 1967. The Concept of Representation. Berkeley, CA: Univ. Calif. Press
- Popper K. 1976. Unended Quest: An Intellectual Autobiography. La Salle, IL: Open Court
- Przeworski A, Alvarez M, Cheibub JA, Limongi F. 1996. What makes democracies endure? J. Democr. 7:39–55
- Przeworski A, Limongi F. 1997. Modernization: theories and facts. World Polit. 49: 155–83
- Rabkin R. 1992. The Aylwin government and "tutelary" democracy: a concept in search of a case? J. Interam. Stud. World Aff. 34:119–94
- Riker WH. 1957. Events and situations. J. Philos. 54:57–70
- Roberts FS. 1976. Discrete Mathematical Models, with Applications to Social, Biological, and Environmental Problems. Englewood Cliffs, NJ: Prentice-Hall
- Rosch E. 1978. Principles of categorization. In Cognition and Categorization, ed. E Rosch, BB Lloyd, pp. 27–48. Hillsdale, NJ: Erlbaum
- Rueschemeyer D, Stephens EH, Stephens JD. 1992. Capitalist Development and Democracy. Chicago: Univ. Chicago Press
- Russett B. 1993. Grasping the Democratic Peace: Principles for a Post-Cold War World. Princeton, NJ: Princeton Univ. Press
- Sartori G. 1962. *Democratic Theory*. Detroit, MI: Wayne State Univ. Press
- Sartori G. 1970. Concept misformation in comparative politics. Am. Polit. Sci. Rev. 64:1033–53
- Sartori G. 1975. The Tower of Babel. In Tower

of Babel: On the Definition and Analysis of Concepts in the Social Sciences, ed. G Sartori, FW Riggs, H Teune, pp. 7–38. Occas. Pap. No. 6, Int. Stud. Assoc., Univ. Pittsburgh

- Sartori G, ed. 1984a. Social Science Concepts: A Systematic Analysis. Beverly Hills, CA: Sage
- Sartori G. 1984b. Guidelines for concept analysis. See Sartori 1984a, pp. 15–85
- Sartori G. 1987. *The Theory of Democracy Revisited*. Chatham, NJ: Chatham House
- Sartori G. 1991. Comparing and miscomparing. J. Theor. Polit. 3:243-57
- Sartori G. 1993. *Democrazia, cosa è*. Milan: RCS Rizzoli Libri, SPA
- Sartori G. 1994. Comparative Constitutional Engineering: An Inquiry into Structures, Incentives, and Outcomes. New York: New York Univ. Press
- Schmitter PC, Karl TL. 1991. What democracy is...and is not. J. Democr. 2:75–88
- Sewell WH. 1996. Three temporalities: toward an eventful sociology. In *The Historical Turn in the Human Sciences*, ed. TJ McDonald. Ann Arbor: Univ. Mich. Press
- Shapiro I. 1989. Gross concepts in political argument. Polit. Theory 17:51–76
- Shapiro I. 1990. *Political Criticism*. Berkeley: Univ. Calif. Press
- Shugart MS. 1999. Presidentialism, parliamentarism and the provision of collective goods in less-developed countries. *Const. Polit. Econ.* 10:53–88
- Starr H. 1997. Anarchy, Order and Integra-

tion: How to Manage Interdependence. Ann Arbor: Univ. Mich. Press

- Stepan A, Skach C. 1993. Constitutional frameworks and democratic consolidation: parliamentarianism versus presidentialism. World Polit. 46:1–22
- Stevens SS. 1946. On the theory of scales of measurement. Science 103(2684):677–80
- Taylor J. 1995. Linguistic Categorization: Prototypes in Linguistic Theory. Oxford, UK: Oxford Univ. Press
- Valenzuela JS. 1992. Democratic consolidation in post-transitional settings: notion, process, and facilitating conditions. In *Is*sues in Democratic Consolidation: The New South American Democracies in Comparative Perspective, ed. S Mainwaring, G O'Donnell, JS Valenzuela, pp. 57–104. Notre Dame, IN: Univ. Notre Dame Press
- Vanhanen T. 1997. Prospects of Democracy: A Study of 172 Countries. London: Routledge
- Weber M. 1958. Science as a vocation. In From Max Weber: Essays in Sociology, ed. HH Gerth, CW Mills, pp. 129–56. New York: Oxford Univ. Press
- Zannoni P. 1978. The concept of elite. *Eur. J. Polit. Res.* 6:1–30
- Zeller RA, Carmines EG. 1980. Measurement in the Social Sciences: The Link Between Theory and Data. Cambridge, UK: Cambridge Univ. Press