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Issues in Measuring Political Regimes

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A research center at Central European University



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I. INTRODUCTION

It seems that we are currently witnessing what could be called a 'third wave' of interest in and practice of measuring political regime types. After some first crude attempts at developing global measures of political regime types in the 1950s and 1960s (e.g. Coleman 1960, Cutright 1963, Neubauer 1967, Smith Jr. 1969, Jackman 1973), the measurement efforts were considerably improved as communication techniques and access to information was eased and more attention to measurement theory was paid (Coppedge & Reinicke 1990, Arat 1991, Hadenius 1992, Bollen 1993, Gastil 1991, Jagers & Gurr 1995, Vanhanen 1997). Despite these enhancements, several recent articles (Bollen 1990, Bollen & Paxton 2000, Lauth, Pickel & Welzel 2000, McHenry 2000, Przeworski, Alvarez, Cheibub & Limongi 2000, and Munck & Verkuilen 2002) identify a list of weaknesses of the existing democracy measures. Partly as a reaction to these convincing critiques, new attempts are made to learn from the shortcomings of earlier democracy measurements and to create new data sets that are better suited for capturing the new political realities (e.g. Mainwaring, Brinks & Pérez-Lián 2000, Reich 2002, Munck 2003, Bertelsmann Stiftung 2004, Schneider & Schmitter 2004b, Bowman, Lehoucq & Manoney 2005, Moon, Birdsall, Ciesluk, Garlett, Hermias, Mendenhall, Schmid & Wong 2006).

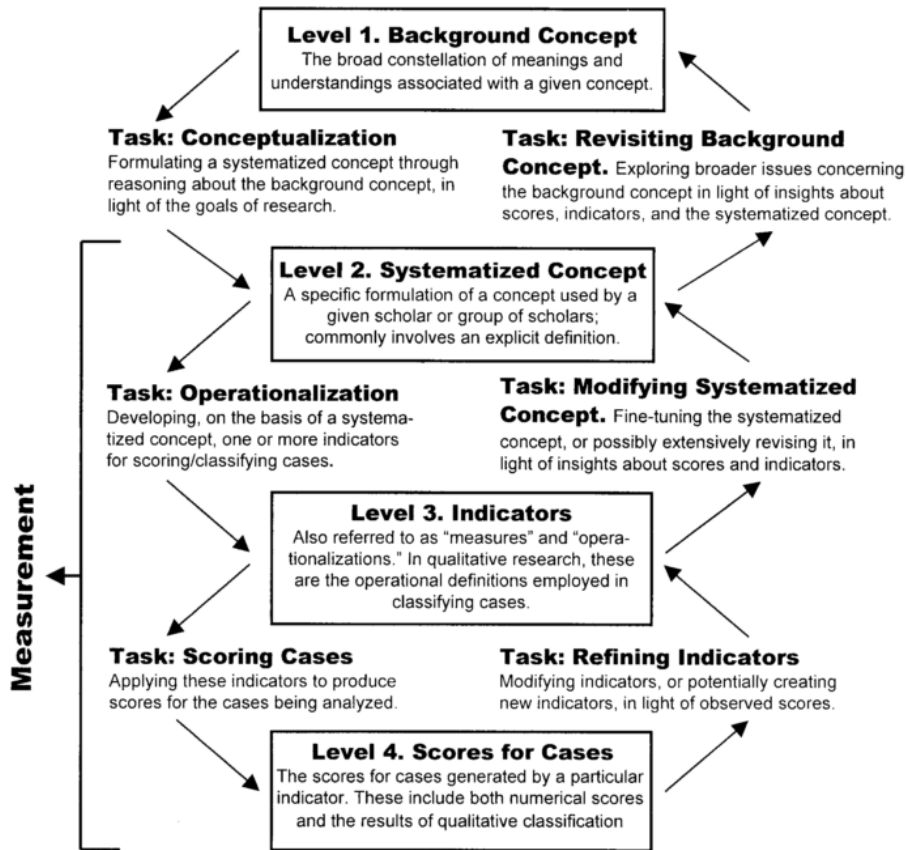
Arguably, the task of constructing new (global) measures of regime types has become more difficult since the so called third wave of democratization (Huntington 1991) reached its peak after the fall of the Berlin wall. There are several reasons for this increased difficulty. First, there are simply more cases that need to be assessed. Only after the decolonialization in the 1950s and 1960s has the number of independent countries increased as dramatically as it did after the end of the cold war. Second, the crude (and often misleading) dichotomization of regime types into 'good' (capitalist) Western-style democracies and 'bad' (communist) authoritarian regimes (with some unpleasant bed fellows of repressive but pro-capitalist non-democracies supported by the West in between) today no longer can convince anybody.

Third, as the cold war has come to an end, we have more access to information on non-democratic regimes than we had during the existence of the iron curtain. This, in turn, makes us more aware of the differences *among* authoritarian (and also democratic) regimes. In a dialectical twist, we are living, fourth, also through a process in which the Western democracies that were formerly perceived as ideal-typical democracies (and, thus, always received the highest scores on all democracy measures) not only show different serious flaws in their democratic performance, but also their legitimacy is challenged, both from inside and from outside (e.g. Dalton 2004 and Pharr, Putnam & Dalton 2000).

A fifth reason for why the task of measuring political regimes has become more difficult and complex is the fact that more than ever the objects to be assessed are moving targets. As evidence for that one just needs to think of the series of so called colored revolutions, events which almost have become routine in certain parts of the world (see Bunce & Wolchik forthcoming, Hale 2006, or Herd 2005). Sixth, and probably most importantly, the recent transitions away from clearly defined types of authoritarian regimes without arriving at clearly defined types of democracy (or regressions to clearly defined authoritarian regime forms) has led to the emergence of types of political regimes that, so an increasing number of scholars argues, are of a distinctively new quality. In the social scientific literature this social reality is reflected by the proliferation of democracies with adjectives (Collier & Levitzky 1997, Merkel 2004) and, more recently, authoritarianism with adjectives (e.g. Levitzky & Way 2002, Schedler 2006).

This paper is an attempt to reflect on these new challenges in coming up with valid measures that allow for useful comparisons between *different* political regimes *types* around the globe. This paper is structured along the ideas on concept formation formulated by Giovanni Sartori (1970 and 1984) and David Collier and collaborators (Adcock & Collier 2001, Collier & Adcock 1999, Collier & Levitzky 1997, and Collier & Mahon 1993). This literature specifies the process of concept formation and measurement by subdividing it into different levels of generality. Greatly simplifying the argument, these levels are: (1) a background and (2) a systematized concept, both derived from theory; (3) an operationalization of the systematized concept via indicators; (4) scores for cases on the indicators (see Figure 1).

Figure 1: Conceptualization and Measurement: Levels and Tasks



Source: Adcock/Collier (2001: figure 1)

Each level of generality presents different tasks. The aim of this paper is not, and probably cannot even be, to present exhaustive discussions of all topics involved at all different levels of generality. Instead, I discuss selected issues for each level that are at stake when trying to comparatively measure regime types in the early 21st century. Together, these suggestions might help to improve the data we are gathering on political regimes and the analytic gains we can obtain from this data.

In part one, I address *theoretical* and *conceptual* issues (levels 1 and 2) and argue that a shift away from 'democracy' to 'political regime' as the main point of reference - or background concept - for classifying existing regimes might liberate us from some false teleological beliefs and might yield more fruitful theoretical and practical insights on the present state of affairs in many countries around the globe, particularly in the former Soviet republics. Related to that, I claim that this shift in the background concept offers more possibilities for a shift on the level of the systematized concept away from just assessing degrees (of

democracy in different cases) towards emphasizing the classification of cases into different types of regimes. Along these lines, I suggest the use of fuzzy sets as a tool for combining the tasks of assessing qualitative (types) and quantitative (degrees) differences between cases. In the second part, I turn to indicators and focus on one important aspect of the task of *operationalization* that is frequently neglected in the current practice of producing measures of regime types: the question whether the logical structure of a concept (levels 2) is adequately reproduced when the scores for indicators (level 3) are aggregated. In the third part, I then discuss some standard issues in measurement theory that are related to the task of *assigning scores to cases*, such as providing cross-system equivalence of indicators, or diversification of data sources (level 3 and 4). Based on own experience in producing a larger N political regime measurement device (Schneider & Schmitter 2004b, see also Schneider & Schmitter 2004a), I present the so called 'Hierarchical Coding Process' as a set up for producing regime indices for more than a handful of cases and argue that this particular way of organizing the endeavor of coding cases best enables scholars to fulfill the various requirements of a good, unbiased, and reliable measurement device. The paper concludes with some (disputable) suggestions for generating new comparative political regime data.

II. BACKGROUND AND SYSTEMATIZED CONCEPT: SHIFT TO TYPES OF POLITICAL REGIMES

Since about five or six years, one can observe a shift in the (mainly US American) literature on regime changes away from focusing on the *democraticness* of political regimes to assessing the degree and/or type of *autocraticness* of those political systems that underwent some regime change during the last 20-30 years (Brooker 2000, Brownlee 2002, Brownlee 2004, Diamond 2002, Hale 2006, Levitzky & Way 2002, Ottaway 2003, Schedler 2002, Schedler 2006, Way 2005, Zakaria 1997). Most probably, this shift of perspective reflects the sobering experience of many countries which transited away from their old authoritarian regime forms (communist, military, sultanistic etc.) and which, despite the enthusiasm of their new-born citizens and the (sometimes naïve) expectations in the West, never arrived (yet) at anything that remotely resembles a democratic regime type.

The conceptual shift from trying to understand these new political systems from the perspective of authoritarianism rather than democracy is neither trivial, nor superfluous. It is not trivial because authoritarianism should be perceived and conceptualized as something more than the mere absence of democratic traits (below I will spell out the consequences of this statement for creating regime measures in further detail). If so, authoritarian regimes are not simply a residual category for those cases that come short of fulfilling all democratic standards. Instead, these regimes might follow a qualitatively different logic of operation than democracies, which, thus, needs to be explicitly defined, conceptualized, and measured.

Furthermore, this shift in perspective is not superfluous because most scholars and practitioners seem to agree that many of these new hybrid regimes will stick around for some time in the future. Even if their characteristic feature of mixing democratic and autocratic elements – often in a dysfunctional way - within one political regime setting makes them candidates for instability and further changes, it is far from clear whether these subsequent changes will drive them towards the autocratic or democratic end poles of the regime classification scale. The majority of the so-called hybrid regimes might not be able to go back to clearly authoritarian regimes of the old type; *Zeitgeist*, external pressure, financial dependence, problems of legitimacy, and lack of resources for scaling up the level of pressure all prevent rulers in hybrid regimes to move to full-blown authoritarianism. On the other hand, lacking political will and skill, the same as difficult (internal and external) context condition do not work in favor of pushing hybrids in the direction of full-blown democracies either. Hence, many of these regimes may be doomed to live as hybrids - whether anybody likes it or not.¹

¹ Along these lines, a short comment on the still predominant terminology in the field. Titles of workshops, articles, and books such as ‘Measuring Democracy’ or ‘Measuring Democratic Transition’ (involuntarily) give the impression that those cases that have moved away from authoritarian rule are on their way towards democracy. While in the 1970’s and 1980s this turned out to be a plausible expectation, we now have to come to grips, though, that this, most likely, is not the case anymore for many political regimes that are still in the conceptual limbo between autocracy and democracy. I would thus suggest to use the more neutral formulation ‘Measuring Political Regime Types’ instead.

The term ‘democratic transition’ even has two flaws. First, even if a case transits from authoritarianism to democracy, it might well be the case that the transition itself was anything but democratic. In fact, some of the most successful transitions to democracy, so called pacted transitions (Karl 1990, Karl & Schmitter 1991, and Karl & Schmitter 2002), are characterized by secretive agreements between a small group of elites, thus excluding the broad masses of citizens and by deals with the outgoing non-democratic elites excluding issues from the transition agenda that are of vital interest to them (such as non-persecution of human rights violations, property

As a consequence of this, social scientists are left with the task of giving names to these regimes and to develop tools not only for measuring these new concepts but also to track changes over time. Both (inter-related) bodies of literature – that on hybrid democracies and of hybrid authoritarian regimes – are important first attempts at coming to grips with the increased variety of political regime types. No doubt, there is still some way to go. For instance, what should be the decisive difference between semi-democracies and semi-authoritarianism (Ottaway 2003), or how many defects can a democracy display (Merkel 2004) before it ceases to be a democracy? Beyond the still remaining conceptual work to be done on hybrid regimes, it must be mentioned that the progress already made so far has not yet entered the more specific literature and research practice of generating political regime measures (i.e. large N measures of political regimes).

How, then, can such a regime measure be achieved that distinguishes between both democracy and authoritarianism, on the one hand, and between subtypes of each of these broad categories? Achieving such a goal requires solving issues on the theoretical-conceptual and at the empirical-operationalizational level. I address both levels by pointing to some possible avenues towards constructing such a refined regime measure.

One first step is that the underlying dimension for measuring regime types must be abstract and neutral rather than too specific and clearly geared towards assessing just one form of political regime, be it democracy or authoritarianism. Only with a more general root concept (Collier & Levitzky 1997) as a point of reference for a measurement device is one in the position to classify all regime types in a positive way rather than conceptualizing some of these types as residual categories and mere negations of one other type. Rather than simply being able to point out which elements certain cases are lacking in order to be a democracy, a regime measure device should be able to indicate which traits of a case exist and make it become an instance of a specific regime type.

rights etc.). Second, in certain world regions, especially in the former Soviet republics, many of the transitions did not lead to democracy at all – regardless of whether the transition itself contained fewer or more ‘democratic’ elements, such as mass participation, transparency, and open political agendas.

One major issue in achieving this goal is to overcome what Munck & Snyder 2004: 19 call the “overwhelming emphasis on the electoral process”² predominant in the literature not only on democracy measures, but also on hybrid regimes. This focus on elections has several implications that are relevant for the topic of political regime measures. First, it tends to overlook the importance of the context in which elections take place. Second, and related to that, it leads to misclassifications of cases, most commonly in the form of classifying cases as democracies that, in fact, are not (Bogaards 2007). Third, the focus on elections makes researchers incapable of grasping analytically relevant differences among those cases that do not hold elections at all (Munck & Snyder 2004). Without going into further detail, just think of some of the many important differences between genuinely authoritarian regimes that the literature alludes to and that would be worth being measured in (large N) regime measures, such as personalistic versus theocratic authoritarian regimes or military versus civilian authoritarian regimes. Fourth, and related to the previous point, also important differences between cases that do hold elections are hidden. The analytic differentiation between types of democracy (such as presidential versus parliamentary or consensus versus majoritarian) has entered the core curriculum of almost all political science departments and the causes and consequences of these differences among democracies is producing books and journals full of findings. Yet, also this difference is not reflected in the current measurement devices for political regimes. Due to this, I agree with an increasing number of scholars that “[u]nderstanding the variety of contemporary non-democratic regimes thus requires a broader conceptual framework, one that goes beyond the current focus on electoral politics” (Munck & Snyder 2004: 19). I also fully agree with these authors when they argue that when looking for extra-electoral dimensions that are useful for mapping the full range of contemporary political regimes, one should not try to re-invent the conceptual wheel but rather make use of the already existing and well established literature on political regime classifications. More specifically, Munck and Snyder suggest starting from Juan Linz’ 1975 regime dimensions: *Who rules? How do rulers rule? Why do rulers rule?* To this they add the fourth dimension: *How much do rulers rule?* This dimension is commonly labeled as ‘stateness’ and, although it was brought

² As early as 1986, Terry Karl (1986) pointed out to the dangers of the ‘electoral fallacy’ (see also Schmitter & Karl 1991: 78, Linz & Stepan 1996: 4).

to the analytic fore already by Huntington's 1968 seminal work, has only lately received its due attention in the literature on regime measures – partly due to the lack of stateness not only, but also in many of the former Soviet republics.³

These four dimensions are general enough in order not to be biased towards any of the political regime types. Each of these four dimensions can take different values. For instance, the dimension 'Who rules?' can be answered by 'a personal leader', 'the military', 'a theocrat', 'a sultan', or 'a democratically elected government'. The dimension 'Why do rulers rule?' can be answered with, for instance, 'religious aims', 'because of an ethnic agenda', 'greed', or 'social welfare and political stability'. By combining these four multi-categorical dimensions, a comprehensive map of all logically possible political regime types can be constructed.⁴ Any case, including democratic ones, can be located somewhere in this four-dimensional property space (Lazarsfeld 1937) of political regimes.

Let the four basic dimensions of political regimes be subdivided in the following way:

Table I: Political Regime (Sub)-Dimensions, Example

(A) Who rules?

- (A1) a democratically elected government
- (A2) the military
- (A3) a theocrat
- (A4) the communist party
- (A5) a sultan

(B) How do rulers rule?

- (B1) following commonly agreed formal rules and norm
- (B2) physical force
- (B3) clientelism and corruption

(C) Why do rulers rule?

- (C1) achieving economic welfare, social justice, and political stability
- (C2) religious aims
- (C3) achieving social utopias
- (C4) greed

(D) How much do rulers rule?

- (D1) a lot
- (D2) little

³ Linz & Stepan 1996 are among the first who address the issue of stateness when studying 'third wave' regime transition cases.

⁴ Since the combination of these four dimensions with multiple categories yields a very high number of logically possible regime types, only a small subset that is occurring in empirical reality is usually discussed in the literature.

This example has as its sole purpose the demonstration of how logical (rather than standard algebraic) operators can be used to construct (sub-)types of political regimes. Of course, the choice of dimensions and sub-dimensions can be altered and they could be further subdivided. All this depends on the research aims, the theoretical grounding and taste of individual researchers.

Given the high amount of logically possible permutations of these regime characteristics (that is, there are many logically possible regime types that could be constructed based on these dimensions), it is of utmost importance for the analytic usefulness of regime classifications to explicitly spell out which combination(s) of characteristics represents which regime (sub-)type and how these features should be combined (for more on this issue, see section 0). The three simple logical operators AND, OR, and NOT suffice for combining the different regime type dimensions such that both the difference between broad regime types (such as democracy and authoritarianism) and between subtypes within these broad classes of regimes is specified. In order to demonstrate this, let us define some political regime types making use of these logical operators and the regime dimensions specified above in Table I.

For instance, we could define that all democracies must fulfill the following criteria:

Minimum democracy: $A1 * D1$,

where $*$ indicates logical AND, $+$ indicates logical OR, and \sim indicates the negation of a concept. In plain words, any case that is labeled as a democracy must have a democratically elected government ruling ($A1$)⁵ and it must have at its disposal a reasonably well-functioning state apparatus ($D1$). This set of conditions is necessary for belonging to the set of minimum democracies. We can then further define sub-types of democracy by specifying further conditions that need to be fulfilled. For example:

Liberal democracy: $A1 * D1 * B1 * C1$

In addition to the criteria for minimum democracies, liberal democracies would be characterized as those cases that also show respect for formal rules ($B1$) and govern in the interest of social, economic, and political welfare for all citizens ($C1$). Another sub-type of

⁵ By implication, this means that the rulers are not the military ($\sim A2$), a theocrat ($\sim A3$), the communist party ($\sim A4$), nor a sultan ($\sim A5$).

democracy – for lack of a better term let us call it ‘clientelistic democracy’ – could be defined as:

Clientelistic democracy: A1 * D1 * B3 * C4

Rather than following the formal rules, clientelistic and corrupt structures prevail and dictate the functioning of the political system (B3) and the main motivation for rulers to do this job is greed (C4).

Furthermore, the necessary condition for belonging to the regime type military dictatorship could simply be that the rulers stem from the military (A2) and that they predominantly rule by (physical) force (B2).

Authoritarianism: A2 * B2

Beyond that, the subtype of military dictatorships with a strong societal agenda (rather than greed or religious aims), such as some of Latin American dictatorships’ strive for order and progress in the 1960s to 1980s could be specified as⁶:

Social utopian military dictatorships: A2 * B2 * C3 * D1

The specification of necessary characteristic that need to be fulfilled in order to belong to a given political regime type provides for a grouping of cases into (mutually exclusive) categories while the definition of different features spells out the criteria for belonging to one of the various subtypes of these primary political regime types. If this is true, then the necessary and sufficient approach to regime classification could be a viable way – at least in principle - of achieving the goal of devising a map of political regimes that can differentiate both between democracy and non-democracy and between types of democracy and types of non-democracy.⁷ It will also be possible to specify what exact combination of traits defines which type of hybrid regime.

⁶ Many more fine-grained sub-types could be specified. For instance, any political regime that fulfils this criteria A2 * B2 must belong to the broad category of military regimes. Beyond that, they can be ruled by a junta or de facto by a single strong man (within the junta). This difference, for instance, would separate the cases of Argentina and Chile in the 1970s and 1980s, the latter political regime being dominated by the figure of Augusto Pinochet while the former political regime experienced a series of shifts in the military political leadership. Such difference are important in order to understand such crucial issues like the type of demise of military regimes, which in Argentina was a (rather quick and uncontrolled) breakdown and in Chile a transition, if not controlled then at least dominated by the outgoing military rulers.

⁷ Below I discuss the possibility of also assessing the degree to which a given case belongs to the different types of political regimes. Here the notion of fuzzy sets might contain some potentially fruitful and still under-used insights.

Of course, whether or not these aims are achieved primarily hinges upon solving the task of coming up with theoretically plausible definitions of what are the necessary ingredients of basic regime types such as democracy and authoritarianism and what are the criteria that meaningfully distinguish subtypes within these broader categories. Most likely, the academic community will never agree on a sole answer to these highly normative questions⁸ but dealing with this question in the framework of the necessary and sufficient approach to concept formation raises the likelihood that the discussants can agree on what they do not agree.

In sum, new forms of political regimes have emerged and they are likely to stick around for some time. We therefore have to engage in efforts to develop theory-embedded concepts that help us to distinguish hybrid regimes from non-hybrid regimes, on the one hand, and in between different types of hybrid regimes, on the other. One thing seems to be clear: the existing measures are only poorly suited for this task. To a certain extent, the emergence of a large number of new regime measure attempts testifies to that fact. While measures such as Freedom House and the Polity data can be used to identify cases that are either clearly democratic or authoritarian, the analytic shortcomings are the following: (a) an ever increasing number of cases falls into the middle range of these one-dimensional scales and (b) cases at the endpoints of these scales show relevant analytic differences with regard to their regime *type* that remain hidden in the current regime measures and their focus on assessing differences in degree expressed in one-dimensional scales. Hence, the way these measures are designed (or, at least, the way they are used by the majority of scholars) makes it almost impossible to differentiate among hybrid regimes and, equally important, among different types of clearly authoritarian and clearly democratic regimes.⁹ The reasons for the inadequacy of existing measures to cope with the need for more fine-grained assessments are twofold (at least). First, due to their remarkable scope, both geographically and temporally, both FH and the Polity index almost by default must be crude measures of

⁸ See O'Donnell 2004 for a brilliant account on why, ultimately, the boundaries of democracy are doomed to be blurred.

⁹ For an attempt at distinguishing between different forms of hybrid regimes based on FH and the Polity data, see e.g. Howard & Roessler 2006. For an innovative use of the Polity data, see Doorenspleet 2005.

complex realities. Second, both indices¹⁰ force the phenomenon of different regime types into a one-dimensional scale. This means that they subscribe to the argument that democracy is a matter of degree and that a high amount of authoritarianism is nothing else than the absence of democracy and vice versa.

III. FITTING CONCEPTS AND INDICATORS: DIMENSIONALITY, DATA AGGREGATION, AND FUZZY SETS

By definition, each index that assigns one single score to each case and which holds that these numbers can be put into a rank order (e.g. 1 represents 'more' of the concept than 2, which in turn represents 'more' of the concept than, say, 10 etc.) reduces the underlying concept to a one-dimensional phenomenon. *Ipsa facto*, such a reduction of complexity is neither better nor worse than going for more complex multidimensional measures. In fact, the drive towards one-dimensionality and the assigning of single scores to cases seems to be largely driven by the need of the consumers of these indices – social scientists who want to use it for their (regression) analysis; politicians, who want a quick statement on those countries they are dealing with; decision makers in international organizations who need to know which country is more worth of receiving funds than others etc. Given these interests, the unavoidable loss of information that comes along with any kind of data aggregation seems to be the prize one needs to pay.

If, however, we think we should abstain from such oversimplifications in order to grasp what is going on in many of these hybrid regimes, how they differ from each other, and what the causes and consequences of these different regime types are, then we need to do at least four things: (a) develop multi-dimensional concepts of political regimes; (b) collect data on all theoretically derived dimensions of the concept; (c) pay attention to the mathematical aggregation rules; and/or (d) leave the data disaggregated (e.g. Munck 2001). Interestingly, on the most general, theoretical level, most of the relevant literature defines democracy in multidimensional terms. When it comes to operationalization and aggregation, though, the multidimensional theoretical concept is collapsed into a one-

¹⁰ As most other measures that were developed in the 1990s; for some sort of exception, see Coppedge & Reinicke 1990 who construct a Guttman scale which contains more information than simple scales but which still remains

dimensional scale (see e.g. Goertz 2006a and Munck & Verkuilen 2002 for insightful discussions of this phenomenon).

In this chapter, I first address the issue of how to design the data aggregation formulas such that they are more in line with the theoretical structure of the concept. Then I discuss some possibilities for leaving the information on cases in a disaggregated form and to develop *types* rather than *degrees* of regime types. In a final section, I show how both approaches to regime measures – types of regimes (qualitative differences) and degrees of regimes (quantitative differences) – can be combined in one single measure when the tool of fuzzy sets (Zadeh 1965, Zadeh 1968 and Zadeh 2002, Klir, Clair & Yuan 1997, Ragin 2000, and Smithson & Verkuilen 2006) is applied.

Preserving the Logical Structure of the Concept

The first problem related to data aggregation and thus to the issue of one-dimensionality does not question the fact *that* democracy index producers aggregate their data into one single score but *how* they do it. As a punch line, one of the most common mistakes in the present efforts of measuring political regimes is that the mathematical procedures for aggregating scores do not follow the logical structure of the concept as it is defined at the theoretical level.¹¹ In his work, Gary Goertz (2006a) has drawn scholarly attention to this aspect of measurement validity that goes beyond the two standard questions with regard to the relation between concepts and measures (Are key indicators missing? and Are inappropriate indicators included? (Adcock & Collier 2001)). To this, he adds the question of whether the *verbally* defined theoretical structure of a concept is taken serious when it comes to aggregating the *numbers* for indicators via different mathematical operations. He defines ‘concept-measure consistency’ as “the degree to which the numeric measure reflects well the basic structure of the concept” (Goertz 2006a: 95).

Let me briefly present the core features of Goertz’s argument

The meaning of most, if not all, social scientific concepts is fixed in verbal statements (the level of the background and the ‘systematized concept’, Adcock & Collier 2001). These

one-dimensional.

¹¹ In this statement, I already assume that the mathematical aggregation rules are made explicit and transparent and, thus, that information on the disaggregated data is available. For most of the existing indices, these basic requirements of reproducibility can not be taken for granted (Munck & Verkuilen 2002), though.

verbal theoretical statements on the meaning and content of a concept not only spell out what are the different dimensions of the phenomenon to be conceptualized. In addition to that, each verbal conceptualization also indicates how these dimensions relate to each other. This, in turn, determines with which mathematical operation the numeric expressions of these dimensions should be combined.

Goertz (2006b) identifies two basic principles of how concepts are structured: the 'necessary and sufficient' view of concepts and the 'family resemblance' type of concept. The former type is by far the most common form while the latter was systematically introduced and discussed by Collier & Mahon 1993. Both types of concept structures (and possible mixed types, see section II) are best formalized by the mathematics of set theory or logic (Goertz 2006b: 7). If a concept is of the necessary and sufficient type, then the logical operation for combining its composite dimensions is the logical operation AND. If the concept is a family resemblance type, then the logical operation to be used is the logical OR.

As an example, take Dahl's (1971 and 1989) famous conceptualization of democracy as 'participation' AND 'contestation'. As the logical operator AND indicates, both dimensions are necessary for democracy to be present and together they are jointly sufficient. This, in turn, means that if in a given country one dimension is not fulfilled, it cannot be classified as a democracy. Dahl, thus, proposes a 'necessary and sufficient' type of concept for democracy.¹² The mathematical operation for the logical AND is taking the minimum score across all dimensions. In contrast, the operation for the logical OR is taking the maximum value (Ragin 2000, Goertz 2006b).

A review of the literature on democracy measures reveals that almost all of them (a) employ multi-dimensional concepts that are (b) of a necessary and sufficient structure (for an overview, see Goertz 2006b: table I.1). Despite this fact, when it comes to aggregating data, they use either addition or correlation. "*However, none of these is the appropriate mathematical formalization of the necessary and sufficiency structure*" (Goertz 2006b: 11; italics

¹² If the theoretical concept had stated 'participation OR 'contestation, none of the dimensions would be necessary for democracy to be in place but both dimensions alone would be sufficient. Hence, a case in which one of the two dimensions is missing would still be considered as a democracy.

in the original). Instead, the weakest link rule (taking the minimum value) should be applied to provide for a high concept-indicator consistency.¹³

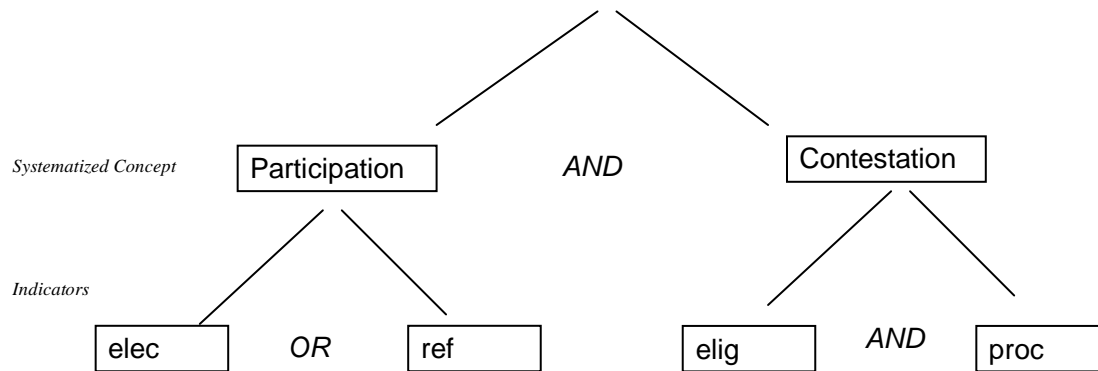
Goertz (2006b: 95-126) provides an intriguing empirical discussion based on the Polity data in which he shows how important the issue of concept-indicator consistency is and how decisive the changes in the ranking of cases can be once the correct aggregation rule is applied. Correct in the case of the Polity data would be a combination of logical AND and logical OR at different levels of generality (see Figure 1) rather than simply adding and averaging numbers as is commonly done.

The logic of the concept-indicator consistency and its set theoretic foundation can be demonstrated with a simple hypothetical example. Let the phenomenon to be conceptualized and measured be democracy. On the level of the systematized concept, we state: 'A democracy is a political regime in which (a) individuals and collective actors can freely participate in the political process AND in which (b) they compete for public offices. On the next lower level of generality, we must specify indicators for each of the two dimensions separately (participation and contestation). We argue that participation can take different forms depending on the context and that these different forms are functionally equivalent. Put differently, one form of participation can substitute another. We therefore formulate: 'Participation is present if the majority of citizens participates in general elections (elec) OR in referenda (ref)'. For the dimension of contestation, instead, we do not apply the family resemblance structure but, as in the higher level of generality, the necessary and sufficient structure. 'Contestation is present if no restrictions on the eligibility of adult citizens exist (elig) AND no party is hindered in taking part in the election process (proc)'. The multi-dimensional and multi-level structure of this simple concept of democracy can be graphically represented as shown in Figure 2:

Figure 2: Graphical representation of hypothetical concept of democracy

¹³ The difficulty of the task of applying the appropriate mathematical rule given a certain verbal structure of a concept increases with the number of levels of generality a concept contains. At minimum, a concept has three levels (see Figure 1) but each indicator can be further specified with less general criteria on a lower level of generality. As a rule, each higher level must contain clear instructions of how to combine measures at the next lower level of generality.

Background Concept



Based on this graphical representation, it is easy to calculate the scores for any given country. Let countries A to F have the following scores at the indicator level.

Table 2: Country Scores on Hypothetical Democracy Index

		Countries					
Dimensions	Indicators	A	B	C	D	E	F
Participation	<i>elec</i> +	1	1	0	0	1	0
	* <i>ref</i>	0	1	0	1	1	0
Contestation	<i>elig</i> *	1	0	1	0	1	0
	<i>proc</i>	1	1	0	0	1	0
Aggregation Rules	<i>minimum</i> (*); <i>maximum</i> (+)	1	0	0	0	1	0
	<i>average</i>	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	1	0

As we see from Table 2, none of the cases score identically on all indicators. If we take the theoretically defined structure of the concept serious and use the minimum when the logical AND and the maximum when the logical OR is mentioned, then we find that two cases are democratic (A and E), whereas the other four cases (B, C, D, F) are not. If, instead, we use the commonly applied strategy of calculating the average across the four indicators, then we create differences between cases that should not be differentiated and, at the same time, blur differences between cases that should be differentiated.

As an example of *false variation* induced by the inappropriate aggregation by averaging, take the cases A and E. If we are true to the verbal structure of the concept, both cases are indistinguishably democratic. If we are not true to the structure and use the average, then E (4/4) is more democratic than A (3/4). The same phenomenon can be observed with cases B and C. Both are not democratic, but the averaging makes B (3/4) somehow less undemocratic (or more democratic) than C (1/4).

As an example of *false equivalence*, take cases A and B. If we apply the mathematical rules dictated by the theory of the concept (minimum when logical AND, maximum when logical OR), country A receives a maximum score of 1 indicating that it is a democracy whereas country B receives a score of 0, indicating that it is not a democracy. Notice that if we apply the common practice and add up and/or average the scores, the decisive qualitative difference between A and B is hidden and both cases receive the same score for their democracy. Country B would look as (un)democratic¹⁴ as country A despite the fact that it lacks one aspect of democracy that was clearly identified by theory as a necessary ingredient for democracy (the requirement not to exclude adult citizens from being eligible for public offices).

In sum, different aggregation rules lead to different regime classifications.¹⁵ What kind of aggregation rule should be applied is determined by the theoretical concept. Most verbal definitions establish a concept structure that is best understood in with the tools of basic formal logical operators, such as AND and OR. This, in turn, makes set theoretic thinking about the empirical scores for cases useful. This, in turn, makes the application of the mathematical rules (minimum and maximum). It is safe to say that more often than not taking the average across different indicators overtly (and unduly) simplifies the internal structure of concepts such as that of democracy or (m)any other political regime types.

Constructing Multi-Dimensional Regime Types

Looking at the empirical information on 6 cases in Table 2 one can argue that also the minimum-maximum rule – while being more in line with the theoretically defined structure

¹⁴ My hunch is that the careless use of the average contributes to the problem many scholars encounter when they try to justify the imposition of theoretically credible thresholds in the current indices of democracy.

of the concept – still puts together cases that differ in their composite scores. Of course, this is true by the very nature of aggregation, which, by definition, leads to a loss of information as the price for more parsimony. So the legitimate question can be asked whether one should always aggregate the scores into one dimension. As should have become clear, the answer is no; for decision not to aggregate the data into one single score is necessary for identifying different regime *types* rather than simply assessing the *degree* to which cases fulfill the criteria of some one-dimensional ideal type and how they perform in that task compared to other cases.

Let us continue using the previous example in which democracy is defined as participation AND competition and the six cases receive the same scores as displayed in Table 2.

A two-dimension concept with each dimension taking two possible values (0 or 1) yields 4 logically possible types as displayed in Figure 3¹⁶. Since participation AND competition must be present, only those cases that fall into the box of type IV ('participatory competitive) are democracies. All other cases are not. In addition to stating that they are not democracies, we can further specify which type of non-democracy they belong to: Box 2 and 3 are hybrid types and Box 1 contains closed political regimes defined as non-participatory and uncompetitive.

The classification of cases into regime types thus allows us to make differentiations that are not possible either with the min-max rule, nor with the averaging strategy. Often enough, these analytic differences are important for theorizing. For instance, it might make a difference whether a political regime allows for participation but not competition or the other way round. Depending on which hybrid regime type they are, there are different expectations on, for example, these hybrids are likely to go to war against each other.

Finally, the classification of regimes in a multidimensional property space also allows us to recognize that the social world presents itself in clusters/bundles of characteristics. Notice that in our hypothetical example, there are no cases that are low on participation but high

¹⁵ Goertz 2006b: 122 specifies the empirical conditions under which this is *not* the case.

¹⁶ As a rule, in case each dimension can take two different values (high, low), then 2 dimensions yield 4 possible types, 3 dimensions 8 types, 4 dimension 16 types and so on (the formula for the number of logically possible types is 2^k where k is the number of dimensions). The exponential increase of possible types should lead scholars to take a parsimonious approach to identifying different dimensions of a concept. Sometimes, less can be more! But even the modest number of three distinct conceptual dimensions already produces eight possible regime types. Most likely, this is more diversity than one can find in the empirical world. As a consequence, only some of

on competition (Box III). This very widespread phenomenon in comparative social research is called *limited diversity*.

Figure 3: Example of a Multidimensional Typology of Regime Types

		C	
		<i>Low (0)</i>	<i>High (1)</i>
P	<i>High (1)</i>	II <i>participatory competitive</i> Cases: B, D	IV <i>participatory competitive</i> Cases: A, E
	<i>Low (0)</i>	I <i>unparticipatory uncompetitive</i> Cases: C	III <i>unparticipatory uncompetitive</i> Cases: -

P = participation
C = competition

Even if the substantial interpretation and further theoretical work should be focused in the empirically observed regime types, thinking and arguing about the non-existing ones can also yield fruitful insights. If, for instance, our empirical data shows that there are many types of regimes that are ‘illiberal uncompetitive’ (cell I), ‘illiberal competitive’ (cell II), and ‘liberal competitive’ (cell III) but not a single one that is ‘liberal uncompetitive’ (cell IV in Figure 3 is empty), then we might try and find reasons for why the social reality clusters in such a way that the combination of low levels of political rights with high levels of civil liberties does not occur. More often than not, the lack of empirical cases of a certain type of regime is neither accidental nor due to ‘bad’ case selection. Instead, there are social, historical, and political reasons for why these logically possible regime types do not occur.¹⁷ Leaving the topic of limited diversity¹⁸ aside, one advantage of multidimensional regime types is that they contain more information than one-dimensional regime indices. This

the cells, i.e. regime types, will be filled with empirically observed cases, leaving the other types as mere logical possibilities.

¹⁷ As one example, think of the concepts ‘types of US presidents’ defined by gender and race. It is far from accidental that the logically possible combination (i.e. type of president) of a ‘black female’ US president has never occurred so far, nor has there ever been a ‘white female’ or a black male’ US president.

¹⁸ In the literature on Charles Ragin’s method of Qualitative Comparative Analysis (QCA) and its fuzzy set extension (Ragin 1987 and 2000), the phenomenon of empirically non-occurring but logically possible combinations of features of an object is discussed under the label of limited diversity. Due to historical processes,

makes measures of types theoretically richer than measures of degrees. This is a decisive advantage when the measure is used in a causal analysis either as the dependent (DV) or as an independent variable (IV).

As a hypothetical and simple example demonstrating the potential richness of regime types versus regime degrees, take the hypothesis that two democracies (IV) do not go to war against each other (DV). The hypothesized underlying causal mechanism linking IV and DV is that wars are too costly and unpopular to be accepted by the electorate. Now, if democracy is conceptualized in terms of the two dimensions 'participation' and 'contestation', then it is clearly the dimension of participation of citizens in the political decision making process that is driving the empirical observation that democratic dyads do not fight wars. It therefore makes a difference whether a case fulfils the dimension 'participation' but not 'contestation' or whether it is the other way round. Both types are hybrid regimes and both would be indistinguishably located somewhere in the middle of a one-dimensional democracy index if their scores on these dimensions were averaged into one overall score. In a multi-dimensional approach, instead, we can generate different expectations about the causal impact of these different types that are all derived from the general causal hypothesis and its underlying causal mechanism.

Fuzzy Sets: Combining Types and Degrees in one Measure of Political Regimes

A final issue to be addressed with regard to my claim that we should pay more attention to defining and measuring *types* rather than *degrees* is the reasonable objection that more often than not, we want to go beyond putting cases into boxes with labels, i.e. to assign them to types of regimes. In addition to this, we want to make some statements on the degree to which a case belongs to a certain ideal type.

One approach to combining *qualitative assessments of types* with *quantitative assessments of degrees* is the tool of fuzzy sets (Zadeh 1965, Zadeh 1968 and Zadeh 2002, Klir, Clair & Yuan 1997 Ragin 2000, Smithson & Verkuilen 2006). Fuzzy sets can be perceived of as an extension of normal crisp (dichotomous) sets. Each element (case) can have a membership

our social world is a world of limited diversity, a fact that severely hampers our possibilities when it comes to drawing causal inferences (Ragin 2000, Schneider & Wagemann 2006).

in a fuzzy set that ranges from full membership indicated by the fuzzy membership value of 1 to full non-membership indicated by the score of 0. The membership score of 0.5 indicates the point of indifference at which cases are neither 'more in than out' nor 'more out than in' the concept. In between these three qualitative anchors (fully in = 1, fully out = 0, and neither in nor out = 0.5), any fuzzy membership value can be assigned to cases. These values indicate the quantitative difference of cases with respect to the concept to be operationalized by a fuzzy set.

Imagine a fuzzy set representing the membership of countries in the set of democratic political regimes. A fuzzy value for country A of 0.8 in this set thus carries three pieces of information: (a) the *qualitative* statement that country A belongs to the type of democratic regimes because 0.8 is above the cross-over point of 0.5; (b) the *quantitative* statement that its membership in the set of democratic regimes is not perfect because 0.8 is less than the perfect membership of 1; and (c) the relational statement that its membership is higher than, say, that of country B, because 0.8 is higher than 0.7, B's membership score in the same concept. Country B still is within the type of democratic regimes (its score is above the qualitative anchor 0.5), but it is less so than country A. Imagine a third case, country C, with a membership score of 0.2. Compared to countries A and B, the difference is not just *quantitative* (0.2 is lower than 0.7 and 0.8) but *qualitative* since country C's score is below the qualitative anchor of 0.5 and it thus belongs to the type of non-democratic regimes.

A fuzzy set as described so far incorporates information on both aspects of assessing regimes: qualitative and quantitative evaluations. Yet, in its simple version fuzzy sets remain one-dimensional. Cases are qualitatively assessed whether or not they belong to a given type of political regime and quantitatively assessed to what degree they belong to this regime type. The full potential of fuzzy sets, however, is exploited when they are used for constructing multidimensional concepts.

To illustrate this point, let us return to the example of a political regime classification based on two dimensions: participation (P) and competition (C).¹⁹ Unlike in the above discussion, the dimensions are not dichotomized but they are constructed as fuzzy sets. The fuzzy set 'Countries with high levels participation (P)' and the fuzzy set 'Countries with high levels of competition' (C). Rather than just being able to assign two scores to cases (high = 1 or

¹⁹ For a similar application of fuzzy sets to the task of classifying welfare state regimes, see Kvist 2006.

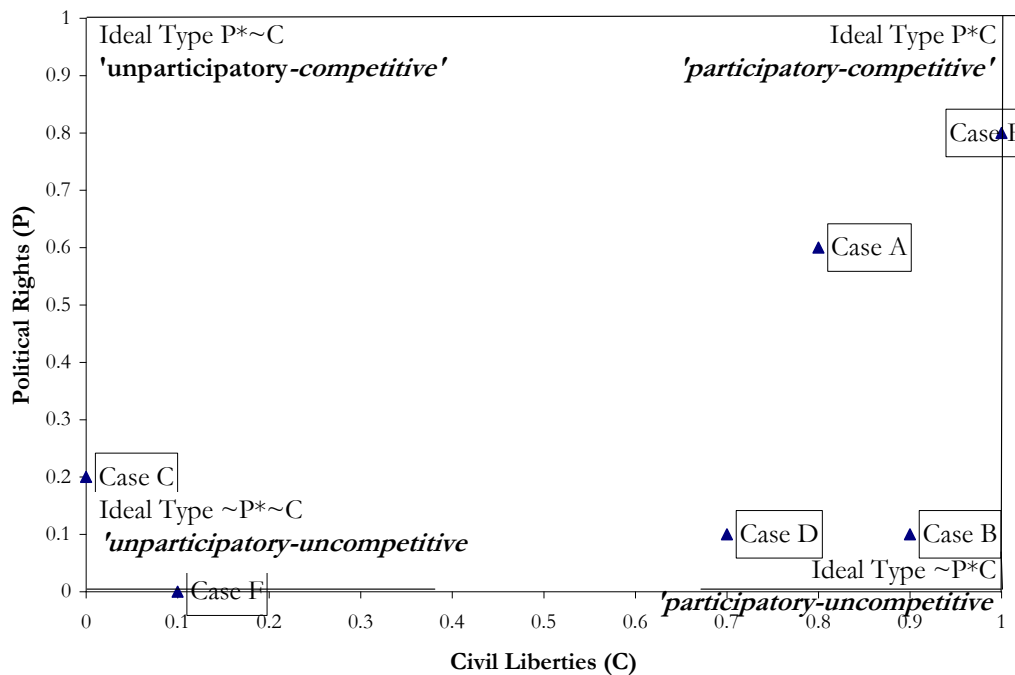
low = 0) as in the above crisp example, one can now assign any value between 0 and 1 for each case in both dimensions independently. Let the six cases A – F have membership scores in P and C as shown in Table 3.

Table 3: Fuzzy membership Scores of Six Cases in Two Dimensions

Country	Dimensions of Democracy	
	Participation	Contestation
A	0.6	0.8
B	0.1	0.9
C	0.2	0
D	0.1	0.7
E	0.8	1
F	0	0.1

This information on membership scores can be graphically presented. Rather than a two-by-two table, the combination of the two fuzzy dimension yields something similar to a scatterplot. Since the endpoints of the two fuzzy scales are qualitatively defined and since the turn-over point 0.5 also carries a qualitative meaning, the resulting figure is called a x-y plot (for the difference between a standard scatterplot and a x-y plot, see Schneider & Grofman 2006).

Figure 4: X-Y Plot, Property Space, Ideal Types, and Six Cases



The four corners of this plot correspond to the four cells of Figure 3. Hence, cases that fall into the upper right corners are full instances of the ‘participatory-competitive’ regime type (they receive the fuzzy membership scores of 1 for both P and C), those in the lower right are the ‘unparticipatory-uncompetitive’ regimes etc. Therefore, the corners of this plot represent ideal types. As with dichotomous concepts, there are 2^k logically possible ideal types. Empirical cases seldom fulfill the criteria of ideal types and thus fall somewhere else in the ‘property space’ (Lazarsfeld 1937 and Barton 1955) as it is set up by the dimensions P and C.²⁰

The exact location of each case in the property space is determined by its membership scores in the two dimensions. Let’s take country A with a fuzzy membership score in set PR of 0.8 and in the set of CL of 0.6. Its location in Figure 4 is easily determined. We move 0.8 units on the x-axis and 0.6 units up on the y axis. The further questions then are: What type of political regime does country A have (qualitative assessment)? And, to what degree does it belong to this (and other) types (quantitative assessment)?

²⁰ Notice that by definition every case must fall somewhere in the property space, i.e. somewhere in the x-y plot shown in Figure 4.

Let us address the first question²¹ by reformulating it: To which corner of the property space does country A belong? Such a reformulation is possible because, as mentioned above, the four corners of the x-y plots are the four logically possible ideal types that can be constructed based on 2 dimensions. The intuitive and graphical answer to this question is: Country A belongs to the ideal type to which it is physically closest. In case of country A, this is the upper right corner, which is the corner of 'liberal competitive' regimes.

Such an eye-balling approach to assigning regime labels becomes impossible as soon as one goes beyond the number of three dimensions. We therefore need a mathematical formula for determining to which ideal type any given case belongs. Fortunately, the mathematical rule is simple. However, the substantive logic behind it might cause some trouble to understand.

First, we need to understand that each corner of Figure 4 can be labeled in terms of the absence-presence of the two dimensions P and C. Let \sim denote the absence of a dimension and $*$ the logical operator AND. Then $\sim P * \sim C$ denotes the lower left corner (the ideal type of 'not liberal AND not uncompetitive regimes'); $\sim P * C$ the upper left corner; $P * \sim C$ the lower right corner; and $P * C$ the upper right corner.

Second, the membership of a case in the negation (\sim) of a set is calculated by subtracting its membership in the original set from 1. If country A has a membership in PR of 0.8, then its membership in $\sim PR$ is $1 - 0.8 = 0.2$ (Klir, Clair & Yuan 1997).

Third, as already mentioned above, if two sets are combined with a logical AND ($*$), we need to take the minimum membership score that a country displays in the two sets in order to determine its membership in the combined set. If country A has a membership in C of 0.8 and in P of 0.6, then its membership in the combined set (i.e. the ideal type) of competitive AND liberal regimes ($C * P$) is $\min(0.8, 0.6) = 0.6$. The requirement for being democracy is that the regime is both participatory AND competitive. Scoring low in one dimension must therefore lead to a low membership in this regime type.

Fourth, the membership of any given case can be calculated for any of the 2^k ideal types. In substantive terms this means that any case that is not a perfect instance of one ideal type (fuzzy membership score of 1) will have partial membership in different ideal types.

²¹ Sartori 1970 (see also Kalleberg 1966) rightfully argues that one can only assess the degree of membership of cases in a category one has established the type of category to be measured. Hence, qualitative assessments logically must precede quantitative assessments.

Table 4: Fuzzy membership scores in ideal types

Country	Regime Dimensions		Regime Ideal Types			
	P	C	$\sim P^* \sim C$	$\sim P^* C$	$P^* \sim C$	$P^* C$
A	0.8	0.6	0.2	0.4	0.2	0.6
B	0.9	0.1	0.1	0.9	0.1	0.1
C	0	0.2	0.8	0	0.2	0
D	0.7	0.1	0.3	0.7	0.1	0.1
E	1	0.8	0	0.2	0	0.8
F	0.1	0	0.9	0.1	0	0

Table 4 displays the fuzzy set membership scores for six countries (A-F) in the two dimensions P and C and in the four logically possible ideal types that can be formed based on two dimensions.

One important information in Table 4 is that each case has a membership of higher than 0.5 in *only one* of the four ideal types. As mentioned above, whether or not a case can be seen as an instance of a given ideal type (even an imperfect instance), is decided based on whether it has a membership score above the qualitative anchor 0.5. It is a nice general property of fuzzy sets that any given case can only have a membership of higher than 0.5 in *one* corner of the property space/fuzzy set ideal type.²²

Focusing on cases, we see that A and E are instances of the ideal type P^*C - of different degrees, though. They are the only two cases with a membership in P^*C of higher than 0.5, with A having a membership of 0.6 and E 0.8. In contrast, with respect to the ideal type P^*C , the other cases have the similarly low membership scores (B and D 0.1 and C and F 0). In conceptual terms this means that from the perspective of the ideal type P^*C these cases all look the same. This is identical to the phenomenon that many different cases cluster at the low end of one-dimensional democracy scales. Any regime measure that has democracy rather than a more general concept as its root concept will make look alike many cases that are not democracies. We therefore must construct regime measures capable of classifying cases from different regime type perspectives, such as the one I propose here.

If we shift our perspective to another of the four ideal types, we can make visible differences between some of these cases. For example, in the ideal type $\sim P^*C$ case B has a higher membership (0.9) than case F (0.1) has.

In sum, by using fuzzy sets for measuring different regime dimensions, we can not only assign cases to different regime types, but also assess to what extent they belong to any of the logically possible types.

Summary

The current literature on evaluating democracy indices pays increasing attention the process of data aggregation. I identified and discussed three related issues. First, if scholars decide to aggregate their data into one single score representing each case's degree of democracy, more attention must be paid to the logical structure of the concept. If the concept is defined in terms of necessary and sufficient dimensions, then the mathematical formulas for data aggregation must make use of the minimum rule. If it is a family resemblance concept, then the mathematical operation to use is the maximum. The use of the average and the sum does not directly correspond to any of these two fundamental structures of concepts. Second, I argue that more theoretical, conceptual, and empirical effort should be directed into developing and measuring types of regimes rather than degrees of regimes. Third, I outlined some ways in which fuzzy sets can be used to tackle the task of coming up with multi-dimensional regime measures and that enable researchers to combine qualitative and quantitative comparative assessments of the cases to be measured.

IV. SCORING CASES: THE 'HIERARCHICAL CODING APPROACH'

This chapter deals with some of the more practical issues that are involved in creating a political regime measure for more than a handful of cases. Based on own experience with organizing a large project in which data for more than 30 countries over 26 years (the Democratization Data Set 1974-2000 Project, Schneider & Schmitter 2004b and Schneider

²² This rule only breaks down if the score of 0.5 is assigned to one or more of the separate fuzzy dimensions.

& Schmitter 2004a), I highlight a list of selected issues that, I think, are crucial for everybody engaging in the business of measuring political regimes. These issues are somewhat neglected in the otherwise highly sophisticated literature on advising and criticizing democracy index producers. This is unfortunate because there is a large variety of organizing the act of coding cases with crucial implications for the overall data quality. Hence, even if all other more theoretical and conceptual tasks for coming up with a high-quality measures are met, a bad setup for the coding process can nullify all these efforts.

The issues I discuss refer to the actual coding process, the lowest level of the ladder of generality that is underlying all concept formation and measurement efforts, i.e. when researchers get in touch with empirical evidence and try to express what they see with numbers and/or words. This roughly refers to the tasks to be accomplished at the levels 3 and 4 of Adcock and Collier's (2001) scheme in Figure 1. I present the so-called 'Hierarchical Coding Approach', a design that has been applied in the Democratization Data Set 1974-2000 Project (Schneider & Schmitter 2004b and Schneider & Schmitter 2004a).

More often than not, the clarity and transparency of cross-sectional measures of democracy stops – at best - at the level of indicators. Only rarely is the coding process, i.e. the procedures by which the indicators are translated into scores, explicitly described and justified. In my opinion, this constitutes a shortcoming for a measurement instrument, because the coding process is a crucial link in the chain of concept formation and measurement. Different coding procedures can have decisive impacts on results, and therefore information on them is indispensable in interpreting scores. It is only recently that the coding procedure has received more focused interest (Munck & Verkuilen 2002, Marshall, Gurr, Davenport & Jagers 2002, Munck 2003, Schneider & Schmitter 2004b, and Coppedge & Reinicke 1990 for an earlier example), a more than welcome development in the field of democracy measurement.

Roughly speaking, two different types of coding procedures can be distinguished in the democracy measurement literature, each of which has its advantages and disadvantages. The first kind of coding process can be labeled (for lack of a neater expression) as the 'everybody does everything' approach. A single person, or, more common nowadays, a

small team, of coders is jointly responsible for coding all cases. A second manner of designing the coding process can be labeled as the 'hierarchical' coding approach. Because this approach seems less common in the field, I will outline its logic in greater detail.

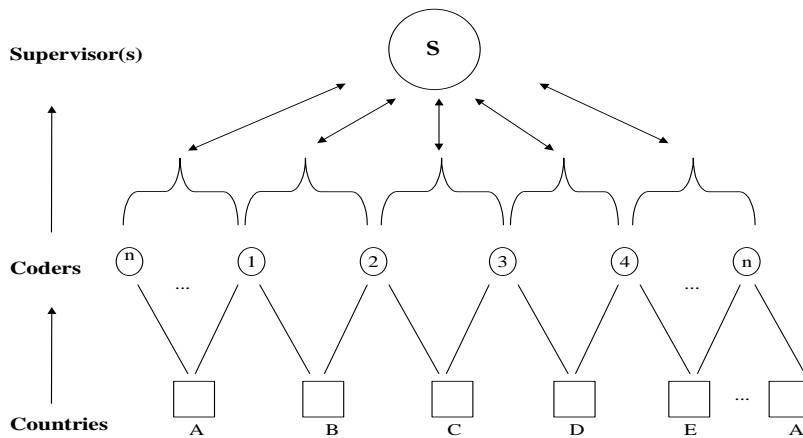
First, for each country, two different coders are chosen. In addition, each coder is responsible for at least two different countries. The two coders assigned for one case do not code another case together, though. In this way, each country is coded by two persons who each have experience in coding at least one other different case each. This feature of the organizational setup is important because it helps coders to put the evidence on one case into a comparative perspective. This, in turn, is crucial for achieving the double aim of any regime index: On the one hand, cases are assessed with regard to an ideal type. This is usually the endpoint of an index. On the other hand, an index also assesses the performance of a case in relation to the other cases. Experience shows that both aspects influence the coders' assessments of a cases.

Second, in none of the cases are both coders citizens of the country under study. This is to avoid the well-known phenomenon of bias introduced by those judging their home country. Third, ideally typically during the coding process the coders should all reside in the same place. This is important since the physical closeness of the coders allows for multiple possibilities for interaction, which, in turn, contributes to the fact that coders share roughly the same conceptual understandings. At the same time, however, during the coding process, the coders responsible for the same country are not allowed to communicate their assessments to one another.

Fourth, in case of doubts – either on the meaning of some items, the coding rules, or on the relevance of specific events – coders have the possibility to get in touch with (one of) the supervising person(s). The existence of such a supervising person is one of the defining aspects of the hierarchical coding procedure. In general, much depends on the supervisor(s), who must ensure that all coders share the same understanding of the concepts to be measured and the coding rules applied. Furthermore, it is their role to judge in each single case whether the evidence provided by a coder constitutes a functional equivalent for a certain indicator, and if so, how this evidence can be incorporated into a generalized coding instruction such that it be used by other coders. In a nutshell, the supervisor(s) are responsible for keeping an eye over the project as a whole and for

checking that the scores assigned make sense in relation to one another. This function is crucial since, as mentioned, a regime index always contains two kinds of information: the distance of a case in relation to an ideal type (i.e. the maximum score) and the relative position of a case *vis-à-vis* other cases.²³

Figure 5: Hierarchical Coding Procedure



To give a practical example, if – for random or non-random reasons - both coders for country A are highly restrictive in their coding and, thus, very reluctant to acknowledge progress made, the supervising person should detect this collective bias and oblige the coders to justify their coding decisions more extensively. Most importantly, a bias in both coders for one country can only be detected by looking at various cases simultaneously. Furthermore, it is important to note that there is always some margin of liberty available to the coders – regardless of how explicit and specific the coding instructions are. The empirical world never fits neatly into our theoretically derived indicators and it is only after

²³ It may be claimed that the first type of information constitutes the true purpose of a political regime measure and that assigning scores for cases by looking at their relative positions is untrustworthy because instead of ‘objectively’ ranking them on the basis of their achievements, coders might subjectively produce a ranking that fulfils their *ex ante* expectations. My impression is that such a view overestimates the possibility of isolating one’s observation of one case from knowledge of other cases. The important point is that such an implicit comparison of one case with others as separate from comparison with an ideal typical concept should be made

looking at the cases that we have any idea of what is ‘really’ going on. As Adcock and Collier (2001) rightly point out, this kind information that is generated during a research project should be used to refine the measurement within the same project.²⁴ From what has been said so far, the ideal typical hierarchical coding process should have a design as shown in

Figure 5.

What are the advantages of the hierarchical coding process over the more commonly applied ‘everybody does everything’ approach? First, as outlined, one of the defining features of the hierarchical coding process consists of the fact that many coders are involved yet none of them is responsible for all of the cases. Having many different coders with diverse orientations minimizes the ‘method factor’ (Bollen & Paxton 2000). Instead of relying on a single person or a small team responsible for all countries, Bollen and Paxton recommend a ‘panel of judges with diverse orientations and experiences’. There is no doubt that such diversity existed among the coders in the case of the hierarchical coding approach.

Second, the hierarchical coding approach helps to mitigate the old and well-known problem of conceptual stretching (Sartori 1970, Collier & Mahon 1993) by allowing for context sensitivity during the data generation process and thus in the resulting scores without the need to exclusively focus on one world region only – a commonly applied strategy for avoiding conceptual stretching (see e.g. Mainwaring, Brinks & Pérez-Linán 2000 and Munck 2003 for Latin America).²⁵ Hence, I argue that the hierarchical coding approach is a viable device for capturing many different cases without losing within-depth case knowledge. Each coder is an expert on her case(s). In addition, the initial coding instructions undergo

explicit, and can be made fruitful. In addition, it is often the relative ranking of cases that is important in theorizing about political regimes, not just their proximity to an ideal type.

²⁴ This feature is expressed by the upward-leading arrows on the right-hand side in **Figure 1**.

²⁵ It should be noted that some of the regional democracy measures – while aware of the risk of stretching concepts across *space* – are less concerned with the problem of conceptual stretching across *time*. For instance, Mainwaring, Brinks, and Pérez-Linan (2000) measure democracy in Latin America from 1945 to 1999. Clearly, this raises the question of whether and how certain concepts can be applied over such long time periods.

constant adjustment based on the experiences and empirical evidence provided by the coders, which contributes to the context-sensitivity of the indicators.²⁶

Third, by and large, the problem of *cross-system equivalence* is reasonably well resolved in the hierarchical coding approach. Not only were coders chosen on the basis of their case knowledge and appropriate theoretical background, but all scores were also subject to explicit justification to the supervisor(s) of the whole coding process for all countries and to the other coder of the same country. Due to this procedure, possible cross-system inequivalences can be detected, corrected, and documented in additional coding rule clarifications and item descriptions. The general problem to overcome is the following: the more countries are included, the wider the time horizon is, and the more indicators are applied, the more difficult it is to provide for the cross-system equivalence of those indicators. Since large-N, time-series indices of democracy include many countries and very different time points, this is a highly relevant issue. Can one single indicator actually mean the same thing in two different countries at different points in time?²⁷ One solution to this problem is to formulate context sensitive indicators, i.e. a set of functionally equivalent items, a procedure which Collier and Adcock (1999) label the ‘context-specific approach’. It is important to note that this method for establishing functional equivalence lies at the lowest level of generality, i.e. at the stage of a research process in which the scores for cases are assigned. Thus, in the process of generating data, context sensitivity is achieved by additional coding instructions that are formulated based on the practical experiences made during the coding process. Needless to say, this act of updating and specifying of the content of indicators needs to be transparent and publicly reported.

In fact, the strategy of using context-specific indicators can be seen as introducing an additional rung to Adcock and Collier’s ladder of generality (see Figure 1). This additional level would be located in between level 3 (Indicators) and level 4 (Scores for Cases) and

²⁶ It has to be admitted, though, that even the most careful and intensive instructions do not fully avoid a coding bias. Careful contextual instructions do, however, ‘provide control over the *content* of bias’ (Verkuilen 2005: 472).

²⁷ For instance, consider electoral participation as an indicator for the participation aspect of democracy. Vanhanen’s (2003) index uses exactly this indicator. But how should we as critical readers interpret this? Does the low percentage of voter turnout in national elections in the USA really indicate that participation in political life is lower than in, say, China, or, to use a less drastic example, than in Belgium where voting is compulsory? It is analytically questionable to use turnout as an indicator for participation across different countries at different time-points because turnout is highly influenced by institutional and situational circumstances. In short, the context in which the turnout takes place determines its meaning.

could be labeled ‘Level 3.5: Context-Sensitive Indicators’. It is important to underline the fact that the context specification of indicators is the rule rather than the exception in the business of measuring democracy.²⁸ If it is true that the use of context-sensitive indicators is common practice, then it may be analytically fruitful to include it as a generic feature of the process of concept formation and measurement in Adcock and Collier’s scheme, rather than discussing it separately from the standard procedure of directly converting indicators into scores.

V. CONCLUSION

In this paper, I discussed a selective list of issues that are at stake when trying to comparatively measure political regimes around the globe in the early 21st century. On the more abstract, theoretical level of the process of concept formation and measurement, I argued that we should consider a shift of our root concept away from one specific type of political regime - democracy - towards the more general concept of political regime. I furthermore claimed that given the diversity of new regimes, we are likely to learn more if we engage more in conceptualizing and measuring multi-dimensional (hybrid) types of political regimes rather than aggregating all information into a one-dimensional index. I then highlighted the importance of choosing the correct mathematical aggregation rules, whereby ‘correct’ is determined by the verbally defined structure of the concept on the level of the background and the systematized concept. In a further step, I introduced the notion of fuzzy sets and outlined how they can help to combine the dual aims of qualitatively differentiating between regime types and quantitatively assessing the differences in degree between cases. Finally, I presented the Hierarchical Coding Approach and argued that this way of organizing a team of coders to assign scores to cases is likely to yield more reliable and valid results than alternative (and more common) ways of setting up the task of coding many countries in different places.

²⁸ Almost all approaches explicitly rely on ‘subjective’ indicators and justify this choice by the greater leverage gained from making them context-sensitive. Even seemingly context-insensitive approaches such as that of Przeworski, Alvarez, Cheibub, and Limongi (2000) with their conceptual choice to dichotomize democracy based on the criterion of whether the government is formed by free and fair elections leaves enough space – and creates the need for – context-sensitive decisions when it comes to assigning scores to the cases.

The points raised in this paper can be condensed into a list of (disputable) suggestions for those scholars who are engaged in producing new regime measures:

- Explore the benefits of going multidimensional. It might not always be the most fruitful strategy to succumb to the expectations by donors, international organizations, political think tanks, and publishers to come up with one single summary measure for classifying a political regime.
- Explore the analytic gains of using the more general concept of 'political regime' as the point of reference for the measure rather than one specific form of political regime: democracy.
- Put particular emphasis in theorizing, conceptualizing, operationalizing, and measuring the wide (multidimensional) space in between the ideal-typical regime forms 'democracy' and 'authoritarianism'.
- Pay attention to the data aggregation process by always having an eye on how the logical structure of the concept is defined on the theoretical level and which mathematical aggregation rules this theoretical structure requires.
- Explore the usefulness of using fuzzy sets in constructing regime measures. With fuzzy sets it might be easier to translate the verbally defined concepts into numeric expressions. Most importantly, the logical operators AND, OR, and NOT which are frequently used in verbally expressed social scientific theories, are easier translated into mathematical operations when fuzzy sets are used. Regime measures based on fuzzy sets might also help combining assessments of types *and* degrees in one political regimes measurement device.
- Carefully design the practical aspects of the coding process.

References

- Adcock, R. & Collier, D. (2001). Measurement validity: a shared standard for qualitative and quantitative research, *American Political Science Review* 95 (3): 529-546.
- Arat, Z.F. (1991). *Democracy and human rights in developing countries*. Boulder: Lynne Rienner.
- Barton, A.H. (1955). The concept of property space in social research. In: Lazarsfeld, P.F. & Rosenberg, M. *The language of social research. a reader in the methodology of social research*. New York/London: The Free Press: 40-53.
- Bertelsmann Stiftung (ed.) (2004). *Bertelsmann Transformations Index 2003 - Auf dem Weg zur*

- marktwirtschaftlichen Demokratie*. Guetersloh
- Bogaards, M. (2007) Measuring democracy through election outcomes: a critique with African data, *Comparative Political Studies* 40 (10): 1211-1237.
- Bollen, K.A. (1990). Political Democracy: Conceptual and Measurement Traps, *Studies in Comparative International Development* 25 (1): 7-24.
- Bollen, K.A. (1993). Liberal democracy: validity and method factors in cross-national measures, *American Journal of Political Science* 37 (4): 1207-1230.
- Bollen, K.A. & Paxton, P. (2000). Subjective measures of liberal democracy, *Comparative Political Studies* 33 (1): 58-86.
- Bowman, K., Lehoucq, F. & Manoney, J. (2005). Measuring democracy: case expertise, data adequacy, and Central America, *Comparative Political Studies* 38 (8): 939-970.
- Brooker, P. (2000). *Non-democratic regimes: theory, government and politics*. New York: St. Martin's Press.
- Brownlee, J. (2002). ... and yet they persist: explaining regime survival and transition in neopatrimonial regimes, *Studies in Comparative International Development* 37 (3): 35-63.
- Brownlee, J. (2004). Ruling parties and durable authoritarianism. Center on Democracy, Development, and the Rule of Law. Number 23, October 28 . Stanord Institute on International Studies.
- Bunce, V. & Wolchik, S. (forthcoming). Bringing down dictators: American democracy promotion and electoral revolutions in postcommunist Eurasia. In: Orenstein, M. & Bloom, S. *Transnational and national politics in postcommunist Europe*.
- Coleman, J.S. (1960). *The politics of developing areas*. Princeton: Princeton University Press.
- Collier, D. & Adcock, R. (1999). Democracy and dichotomies: a pragmatic approach to choices about concepts, *Annual Review of Political Science* 2: 537-565.
- Collier, D. & Levitzky, S. (1997). Democracy with adjectives: conceptual innovation in comparative research, *World Politics* 49 (3): 430-451.
- Collier, D. & Mahon, J.E.Jr. (1993). Conceptual "Stretching" revisited: adapting categories in comparative analysis, *American Political Science Review* 87 (4): 845-855.
- Coppedge, M. & Reinicke, W.H. (1990). Measuring polyarchy, *Studies in Comparative International Development* 25 (1): 51-72.
- Cutright, P. (1963). National political development. measurement and analysis, *American Sociological Review* 28 (2): 253-264.
- Dahl, R.A. (1971). *Polyarchy participation and opposition*. New Haven: Yale University Press.
- Dahl, R.A. (1989). *Democracy and its critics*. New Haven: Yale University Press.
- Dalton, R. (2004). *Democratic challenges, democratic choices: the erosion of political support in advanced industrial democracies*. Oxford: Oxford University Press.
- Diamond, L. (2002). Elections without democracy: thinking about hybrid regimes, *Journal of Democracy* 13 (2): 21-35.
- Doorenspleet, R. (2005). *Democratic transitions: exploring the structural sources of the fourth wave*. Boulder, Colorado: Lynne Rienner Publishers.
- Gastil, R.D. (1991). The Comparative Survey of Freedom: Experiences and Suggestions. In: Inkeles, A. *On Measuring Democracies: Its Consequences and Concomitants*. New Brunswick (New Jersey): 21-46.
- Goertz, G. (2006a). Increasing concept-measure consistency. In: Goertz, G. *Social science concepts. a user's guide*. Princeton: Princeton University Press: 95-127.
- Goertz, G. (2006b). *Social science concepts. a user's guide*. Princeton : Princeton University Press.

- Hadenius, A. (1992). *Democracy and development*. New York/Melbourne: Cambridge University Press.
- Hale, H.E. (2006). Democracy or autocracy on the march? the colored revolutions as normal dynamics of patronal presidentialism, *Communist and Post-Communist Studies* 39 (3): 305-329.
- Herd, G.P. (2005). Colorful revolutions and CIS: "manufactured" versus "managed" democracy, *Problems of Post-Communism* 52 (2): 3-18.
- Howard, M.M. & Roessler, P.G. (2006). Liberalizing electoral outcomes in competitive authoritarian regimes, *American Journal of Political Science* 50 (2): 365-381.
- Huntington, S.P. (1968). *Political order in changing societies*. New Haven: Yale University Press.
- Huntington, S.P. (1991). *The third wave. democratization in the late twentieth century*. Norman: University of Oklahoma Press.
- Jackman, R.W. (1973). On the relation of economic development to democratic performance, *American Journal of Political Science* 17 (3): 611-621.
- Jagers, K. & Gurr, T.R. (1995). Tracking the third wave with the polity III data, *Journal of Peace Research* 32 (4): 469-482.
- Kalleberg, A.L. (1966). The logic of comparison: a methodological note on the comparative study of political systems, *World Politics* 19: 68-82.
- Karl, T.L. (1986). imposing consent? Electoralism versus democratization in El Salvador. In: Drake, P.W. & Silva, E. *Elections and democratization in Latin America, 1980-1985*. San Diego: Center for Iberian and Latin American Studies, University of California: 9-36.
- Karl, T.L. (1990). Dilemmas of democratization in Latin America, *Comparative Politics* 23 (1): 1-21.
- Karl, T.L. & Schmitter, P.C. (1991). Modes of transition in Latin America, Southern and Eastern Europe, *International Social Science Journal* 128 (2): 267-282.
- Karl, T.L. & Schmitter, P.C. (2002). Concepts, assumptions & hypotheses about democratizations: reflections on 'stretching' from South to East. Prepared for workshop on Regime Transitions: Transitions from Communist Rule in Comparative perspective, Stanford University, November 15-16.
- Klir, G.J., Clair, U.St. & Yuan, B. (1997). *Fuzzy set theory. foundations and applications*. Upper Saddle River, NJ: Prentice Hall PTR.
- Kvist, J. (2006). Diversity, ideal types and fuzzy sets in comparative welfare state research. In: Rihoux, B. & Grimm, H. *Innovative comparative methods for policy analysis. beyond the quantitative-qualitative divide*. New York: Springer: 167-184.
- Lauth, H.-J., Pickel, G. & Welzel, C. (eds.) (2000). *Demokratiemessung. Konzepte und Befunde im internationalen Vergleich*. Wiesbaden: Westdeutscher Verlag.
- Lazarsfeld, P. (1937). Some remarks on typological procedures in social research, *Zeitschrift Für Sozialforschung* 6: 119-139.
- Levitzky, S. & Way, L. (2002). The rise of competitive authoritarianism, *Journal of Democracy* 13 (2): 51-65.
- Linz, J.J. & Stepan, A. (1996). *Problems of democratic transition and consolidation Southern Europe, South America and post-communist Europe*. Baltimore: Johns Hopkins University Press.
- Linz, J.J. (1975). Totalitarian and authoritarian regimes. In: Greenstein, F.I. & Polsby, N.W. *Handbook of Political Science.*: Addison-Wesley Publishing Company: 175-411.
- Mainwaring, S. et al. (2000). Classifying political regimes in Latin America, 1945-1999. Kellogg Institute for International Studies. Working Paper Series 280. Notre Dame.

- Marshall, M.G., Gurr, T.R., Davenport, C. & Jagers, K. (2002). Polity IV, 1800-1999. comments on Munck and Verkuilen, *Comparative Political Studies* 35 (1): 40-45.
- McHenry, D.E.Jr. (2000). Quantitative measures of democracy in Africa: an assessment, *Democratization* 7 (2): 168-185.
- Merkel, W. (2004). Embedded and defective democracies, *Democratization* 11 (5): 33-58.
- Moon, B.E., Birdsall, J.H., Ciesluk, S., Garlett, L.M., Hermias, J.J., Mendenhall, E., Schmid, P.D. & Wong, W.H. (2006). Voting counts: participation in the measurement of democracy, *Studies in Comparative International Development* 41 (2): 3-32.
- Munck, G.L. (2001). The regime question. theory building in democracy studies, *World Politics* 54 (October): 119-144.
- Munck, G.L. (2003). A new democratic regime index. Latin America, 1960-2000. Paper presented at the annual meeting of the American Political Science Association Philadelphia Marriott Hotel, Philadelphia, PA, August 28-31.
- Munck, G.L. & Snyder, R. (2004). Mapping political regimes: how the concepts we use and the ways we measure them shape the world world we see. Paper prepared for delivery at the 1999 annual meeting of the American Political Science Association, Atlanta, Georgia, September 1-5.
- Munck, G.L. & Verkuilen, J. (2002). Conceptualizing and measuring democracy: evaluating alternative indices, *Comparative Political Studies* 35 (1): 5-33.
- Neubauer, D.E. (1967). Some conditions of democracy, *American Political Science Review* 61 (4): 1002-109.
- O'Donnell, G.A. (2004). On the quality of democracy and its links with human development and human rights. In: Iazzetta, O., O'Donnell, G.A. & Vargas Cullel, J. *The quality of democracy in Latin America. theory and applications*. Notre Dame: University of Notre Dame Press
- Ottaway, M. (2003). *Democracy challenged: the rise of semi-authoritarianism*. Washington, D.C: Carnegie Endowment for International Peace.
- Pharr, S.J., Putnam, R.D. & Dalton, R.J. (2000). A quarter-century of declining confidence, *Journal of Democracy* 11 (2): 7-25.
- Przeworski, A., Alvarez, M.E., Cheibub, J.A. & Limongi, F. (2000). *Democracy and development: political institutions and material well-being in the world, 1950-1990*. Cambridge: Cambridge University Press.
- Ragin, C.C. (1987). *The comparative method. moving beyond qualitative and quantitative strategies*. Berkeley/Los Angeles/London: University of California Press.
- Ragin, C.C. (2000). *Fuzzy-set social science*. Chicago: University of Chicago Press.
- Reich, G. (2002). Categorizing political regimes: new data for old problems, *Democratization* 9 (4): 1-24.
- Sartori, G. (1970). Concept misformation in comparative politics, *American Political Science Review* 64 (4): 1033-1053.
- Sartori, G. (1984). Guidelines for concept analysis. In: Sartori, G. *Social science concepts. a systematic analysis*. Beverly Hills: Sage: 15-85.
- Schedler, A. (2002). The menu of manipulation, *Journal of Democracy* 13 (2): 36-50.
- Schedler, A. (ed.) (2006). *Electoral authoritarianism. the dynamics of unfree competition*. Boulder/London: Lynne Rienner Publishers.
- Schmitter, P.C. & Karl, T.L. (1991). What Democracy is...and Is Not, *Journal of Democracy* 2 (3): 75-88.
- Schneider, C.Q. & Grofman, B. (2006). It might look like a regression ... but it's not! An intuitive

- approach to the presentation of QCA and fs/QCA results. Compass Working Paper, WVP2006-39.
- Schneider, Carsten Q./ Schmitter, Philippe C. (2004a): The democratization data set, 1974-2000.
http://www.personal.ceu.hu/departs/personal/Carsten_Schneider/scalogram/Scalogram.XLS
- Schneider, C.Q. & Schmitter, P.C. (2004b). Liberalization, transition and consolidation. measuring the components of democratization, *Democratization* 11 (5): 59-90.
- Schneider, C.Q. & Wagemann, C. (2006). Reducing complexity in Qualitative Comparative Analysis (QCA): remote and proximate factors and the consolidation of democracy, *European Journal of Political Research* 45 (5): 751-786.
- Smith Jr., A.K. (1969). Socio-economic development and political democracy. a causal analysis, *Midwestern Journal of Political Science* 13 (1): 95-125.
- Smithson, M. & Verkuilen, J. (2006). *Fuzzy set theory: applications in the social sciences*. Thousand Oaks : Sage Publications.
- Vanhanen, T. (1997). *Prospects of democracy: a study of 172 countries*. London: Routledge.
- Vanhanen, T. (2003). *Democratization: a comparative analysis of 170 countries*. London: Routledge.
- Verkuilen, J. (2005). Assigning membership in a fuzzy set analysis, *Sociological Methods & Research* 33 (4): 462-469.
- Way, L. (2005). Authoritarian state building and the sources of regime competitiveness in the fourth wave, *World Politics* 57 (2): 231-261.
- Zadeh, L.A. (1965). Fuzzy sets, *Information and Control* 8: 338-353.
- Zadeh, L.A. (1968). Fuzzy algorithms, *Information and Control* 12: 99-102.
- Zadeh, L.A. (2002). From computing with numbers to computing with words, *Applied Mathematics and Computer Science* 12 (2): 307-332.
- Zakaria, F. (1997). The rise of illiberal democracy, *Foreign Affairs* 76 (6): 22-43.

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