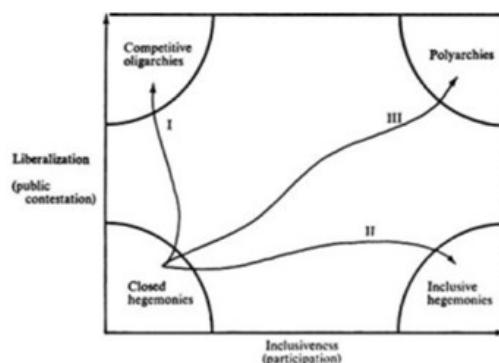


Doctorado en Ciencia Política
Seminario Política Comparada
Instituto Ciencia Política - Universidad de la República
Docente: David Altman

- I. Conceptualizando y midiendo democracia
- II. Innovaciones democrática: Marcos Analíticos
- III. Democracia Directa: Orígenes contemporáneos y difusión
- IV. Democracia directa: Sesgos (SQ, L-R)
- V. Innovaciones Autocráticas o (MDDs participación, satisfacción con la democracia)

Dahl, Robert A. 1971. *Polyarchy: Participation and Opposition*. New Haven: Yale University Press.

The Polyarchy Framework



CONCEPTUALIZING AND MEASURING DEMOCRACY

Evaluating Alternative Indices

GERARDO L. MUNCK
JAY VERKUILEN
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Table 2
A Framework for the Analysis of Data: Conceptualization, Measurement, and Aggregation

Challenge	Task	Standard of Assessment
Conceptualization	Identification of attributes	Concept specification: Avoid maximalist definitions (the inclusion of theoretically irrelevant attributes) or minimalist definitions (the exclusion of theoretically relevant attributes)
	Vertical organization of attributes by level of abstraction	Conceptual logic: Isolate the "leaves" of the concept tree and avoid the problems of redundancy and conflation
Measurement	Selection of indicators	Validity: Use multiple indicators and establish the cross-system equivalence of these indicators; use indicators that minimize measurement error and can be crosschecked through multiple sources Reliability
	Selection of measurement level	Validity: Maximize homogeneity within measurement classes with the minimum number of necessary distinctions Reliability
	Recording and publicizing of coding rules, coding process, and disaggregate data	Replicability
Aggregation	Selection of level of aggregation	Validity: Balance the goal of parsimony with the concern with underlying dimensionality and differentiation
	Selection of aggregation rule	Validity: Ensure the correspondence between the theory of the relationship between attributes and the selected rule of aggregation Robustness of aggregate data
	Recording and publicizing of aggregation rules and aggregate data	Replicability

Table 3
Existing Data Sets on Democracy: An Overview

Name of Index	Attributes	Components of Attributes	Measurement Level	Aggregation Rule
ACLP, Alvarez, Cheibub, Lamont & Przeworski (1996)	Contestation Offices	Election executive Election legislature	Nominal Nominal Nominal	Multiplicative, at the level of components and attributes
Arat (1991)	Participation	Executive selection Legislative selection Legislative effectiveness Competitiveness of the nomination process	Ordinal Ordinal Ordinal Ordinal	Additive, at the level of components; combined additive and multiplicative, at the level of attributes
Inclusiveness Competitiveness Coerciveness		Party legitimacy Party competitiveness	Ordinal Ordinal Interval	
Bollen (1980)	Political liberties	Press freedom Freedom of group opposition Government sanctions	Interval Interval Interval	
	Popular sovereignty	Fairness of elections Electoral competition Legislative selection and effectiveness	Interval Interval Interval	
Coppedge & Reinicke Polyarchy (1991)	Contestation	Free and fair elections Freedom of organization Freedom of expression Plurality in the media	Ordinal Ordinal Ordinal Ordinal	Guttman scale (hierarchical), at the level of components
Freedom House (Ryan 1994)	Political rights Civil rights	9 components 13 components *	Ordinal Ordinal	Additive, at the level of components
Gasiorowski Political Regime Change (1996)	Competitiveness Inclusiveness Civil and political liberties		Ordinal with residual category +	None
Hadenius (1992)	Elections	Suffrage Elected offices Meaningful elections ++ [openness, fairness, and effectiveness]	Interval Ordinal Ordinal	Combined additive and multiplicative (of weighted scores), at the level of components, additive, at the level of attributes
	Political freedoms	Freedom of organization Freedom of expression Freedom from coercion	Ordinal Ordinal Ordinal	
Polity IV (Marshall & Jagers, 2001a)	Competitiveness of participation Regularity of participation Competitiveness of executive recruitment Openness of executive recruitment Constraints on executive		Ordinal Ordinal Ordinal Ordinal Ordinal	Additive (of weighted scores)
Vanharen (2000a)	Competition Participation		Interval Interval	Multiplicative

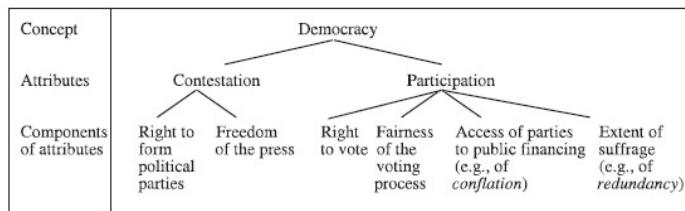
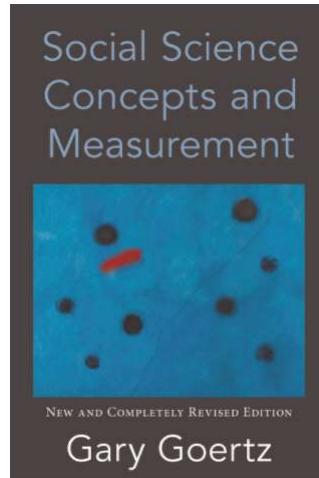


Figure 1. The logical structure of concepts.

Note: This example has two levels of abstraction, labeled *attributes* and *components of attributes*. One could introduce a third level of abstraction, called *subcomponents of attributes*, and go even further. However, no matter how many levels of abstraction are introduced, attributes at the last level of abstraction, generically labeled as *leaves*, are used as the starting point for the task of measurement. In this example, "right to form political parties" is a leaf.



Goertz, Gary. 2005. *Social Science Concepts: A User's Guide*. Princeton, NJ: Princeton University Press.

Construcción conceptual (Goertz, 2005: 27):

- Explicitamente analiza su polo negativo.
- Teoriza el continuo subyacente entre el polo positivo y negativo del concepto
- Teoriza sobre la zona “gris” y luego determina si el concepto debe ser considerado dicotómico o continuo.
- No dejes que la distribución empírica de los casos influencien muchas decisiones. La distribución empírica de los casos debe ser explicado y no presumida en conceptos.

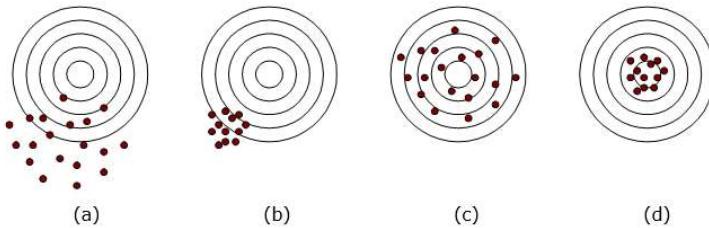
Agregación de sus componentes (Goertz, 2005: 30):

- No listes solamente las dimensiones de un concepto.
- Se explico sobre las condiciones necesarias, si es que las hay.
- Da los criterios de suficiencia. Esto debe ser así tanto para las condiciones necesarias y suficientes, así como las estructuras de familiaridad o tipológicas.
- No fuerces al lector a adivinar la estructura conceptual basada en los ejemplos provistos o las matemáticas detrás de un concepto cuantitativo.

Ponderación de los atributos en conceptos (Goertz, 2005: 39):

- Se explico sobre la pregunta de la ponderación.
- Usualmente, la no ponderación explicita involucra una ponderación igual entre los componentes de un concepto.
Una ponderación igual entre los componentes debe surgir de fundamentos teóricos y no “by-default.” Esta debe ser una decisión consciente del investigador.
- Justifica el esquema de ponderación utilizado entre los componentes de un concepto.

Consistencia del concepto-medida: Validez vs. Confianza



Bajo el escenario (a) no tenemos confianza (no concentra las tiros) ni validez (están muy lejos del objetivo). (b) mejor en términos de confianza (la concentración de los tiros), pero esta notoriamente desviado de objetivo. (c) si bien cubre el objetivo del blanco y consecuentemente su validez es alta, la concentración de los disparos es muy difusa y por lo tanto su confianza es poca. El último escenario es el mejor de todos: en este, la confianza es alta (no erramos tanto), y su validez es también alta (se ha dado en el blanco).

Table 4
Existing Data Sets on Democracy: An Evaluation

Name	Strengths	Weaknesses
ACLP: Alvarez, Cheibub, Limongi, & Przeworski	Identification of attributes: offices Conceptual logic Appropriate selection of indicators Clear and detailed coding rules	Minimalist definition: omission of participation and agenda setting
Arat	Identification of attributes: offices and agenda setting	Conceptual logic: problem of conflation
Bollen	Identification of attributes: offices, agenda setting, and fairness	Minimalist definition: omission of participation Conceptual logic: problem of conflation Restricted empirical (temporal) scope
Coppedge & Reinicke Polyarchy	Identification of attributes: fairness Test of intercoder reliability Sophisticated aggregation procedure	Minimalist definition: omission of participation, offices, and agenda setting Restricted empirical (temporal) scope
Freedom House	Comprehensive empirical (spatial) scope	Maximalist definition Conceptual logic: problem of conflation Multiple problems of measurement Inappropriate aggregation procedure
Gasiorowski Political Regime Change	Comprehensive empirical scope	Minimalist definition: omission of offices and agenda setting Multiple problems of measurement
Hadenius	Identification of attributes: offices, agenda setting, and fairness Appropriate selection of indicators Clear and detailed coding rules Sophisticated aggregation procedure	Conceptual logic: problems of redundancy and conflation Restricted empirical (temporal) scope
Polity IV	Identification of attributes: offices and agenda setting Clear and detailed coding rules Test of intercoder reliability Comprehensive empirical scope	Minimalist definition: omission of participation Conceptual logic: problem of redundancy Inappropriate aggregation procedure
Vanhelanen	Clear coding rules Comprehensive empirical scope Replicability	Minimalist definition: omission of offices and agenda setting Questionable indicators Inappropriate aggregation procedure

Conceptualizing and Measuring Democracy: A New Approach

Michael Coppedge and John Gerring, with David Altman, Michael Bernhard, Steven Fish, Allen Hicken, Matthew Kroenig, Staffan I. Lindberg, Kelly McMann, Pamela Paxton, Holli A. Semetko, Svend-Erik Skaaning, Jeffrey Staton, and Jan Teorell.¹

Table 1
Conceptions of democracy

	Principles	Question	Institutions
I. Electoral (aka elite, minimal, realist, Schumpeterian)	Contestation, competition	Are government offices filled by free and fair multiparty elections?	Elections, political parties, competitiveness and turnover
II. Liberal (aka consensus, pluralist)	Limited government, multiple veto points, horizontal accountability, individual rights, civil liberties, transparency	Is political power decentralized & constrained?	Multiple, independent, and decentralized, with special focus on the role of the media, interest groups, the judiciary, and a written constitution with explicit guarantees
III. Majoritarian (aka responsible party government)	Majority rule, centralization, vertical accountability	Does the majority (or plurality) rule?	Consolidated and centralized, with special focus on the role of political parties
IV. Participatory	Government by the people	Do ordinary citizens participate in politics?	Election law, civil society, local government, direct democracy
V. Deliberative	Government by reason	Are political decisions the product of public deliberation?	Media, hearings, panels, other deliberative bodies
VI. Egalitarian	Political equality	Are all citizens equally empowered?	Designed to ensure equal participation, representation, protection, and politically relevant resources



What Is the Problem?

1.

Democracy Caused by and/or Affects (e.g.):

- Economic Development
- Interstate War/Peace
- Civil War
- Human Health
- Quality of Life
- Ethnic Identities/Nationalism
- Class Conflict
- Group/Gender (In)Equality
- Arab spring, color revolutions...

2.

D&G/HR Support

- Contradictory findings
- Annual *at least \$13 billions* (2010)
(D&G: OECD + the UN)

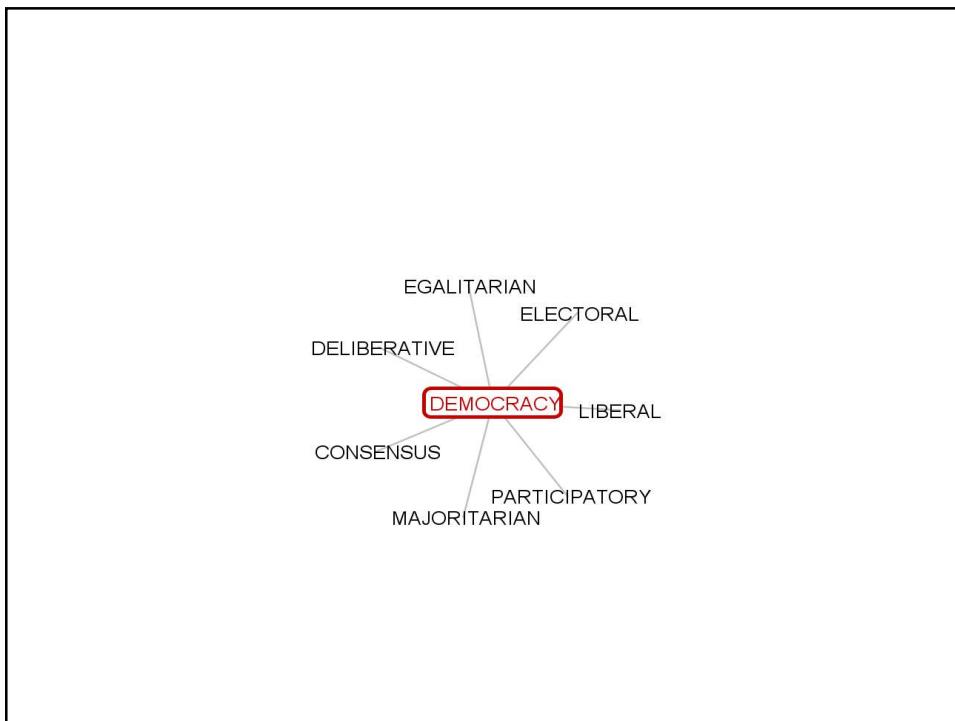
3.

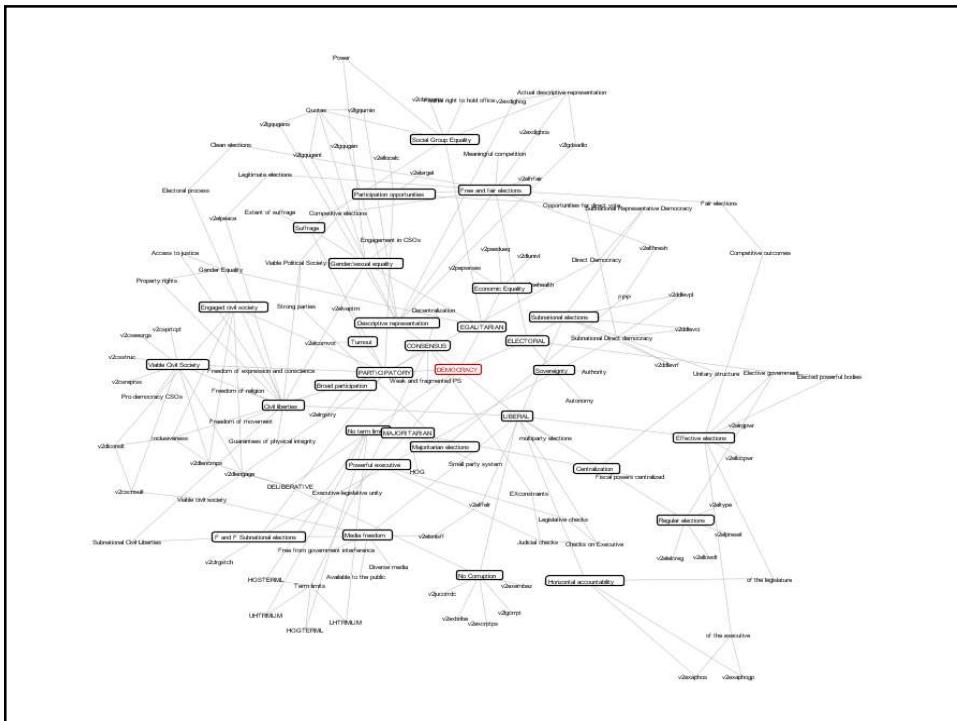
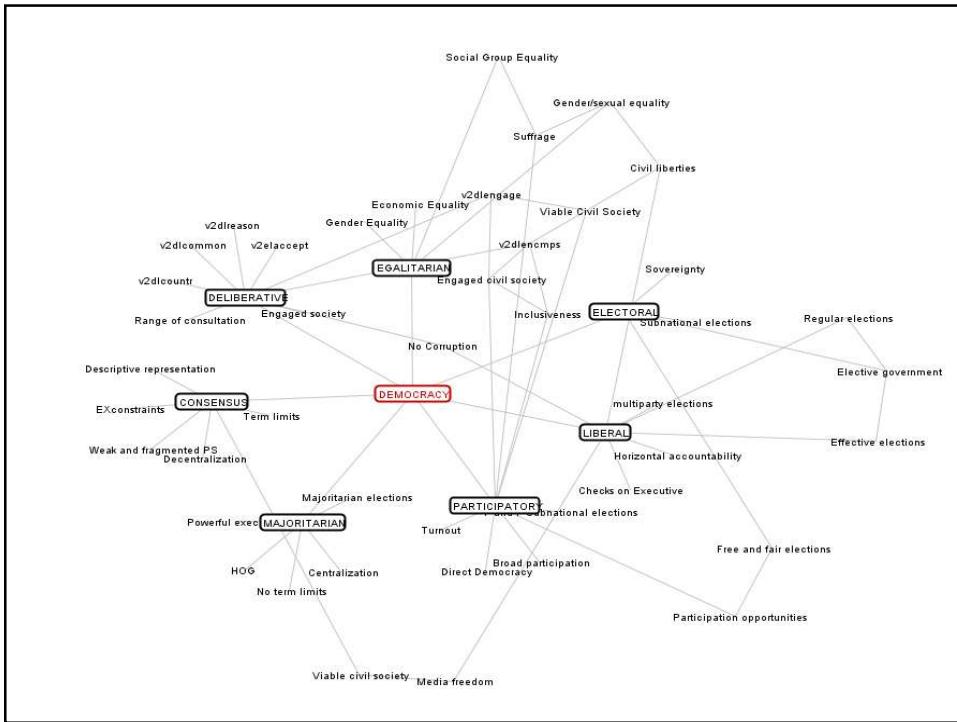
No Consensus....

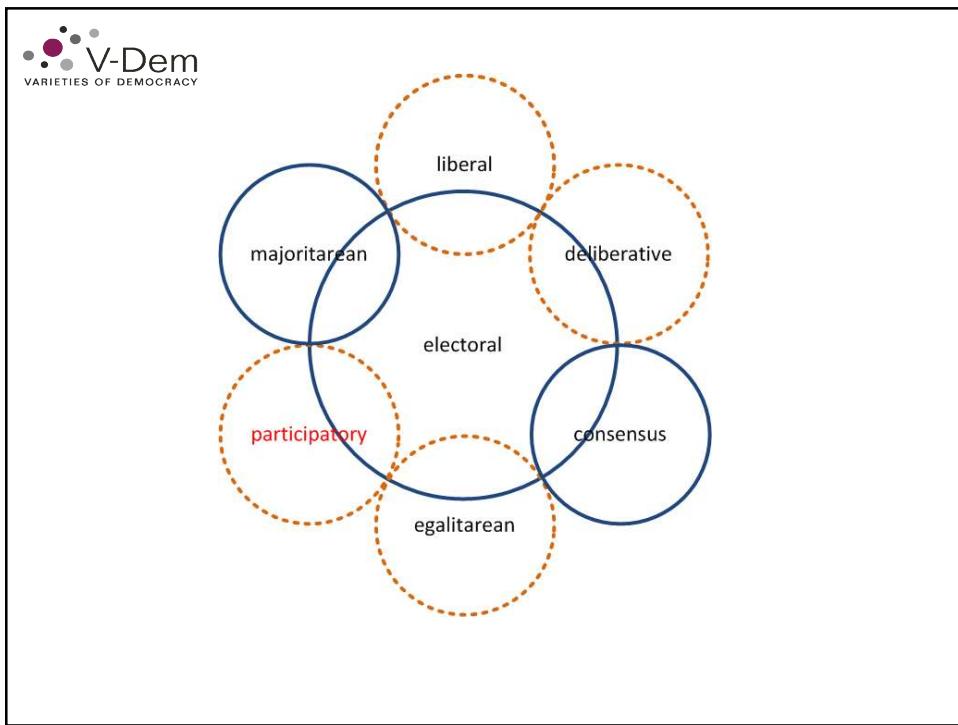
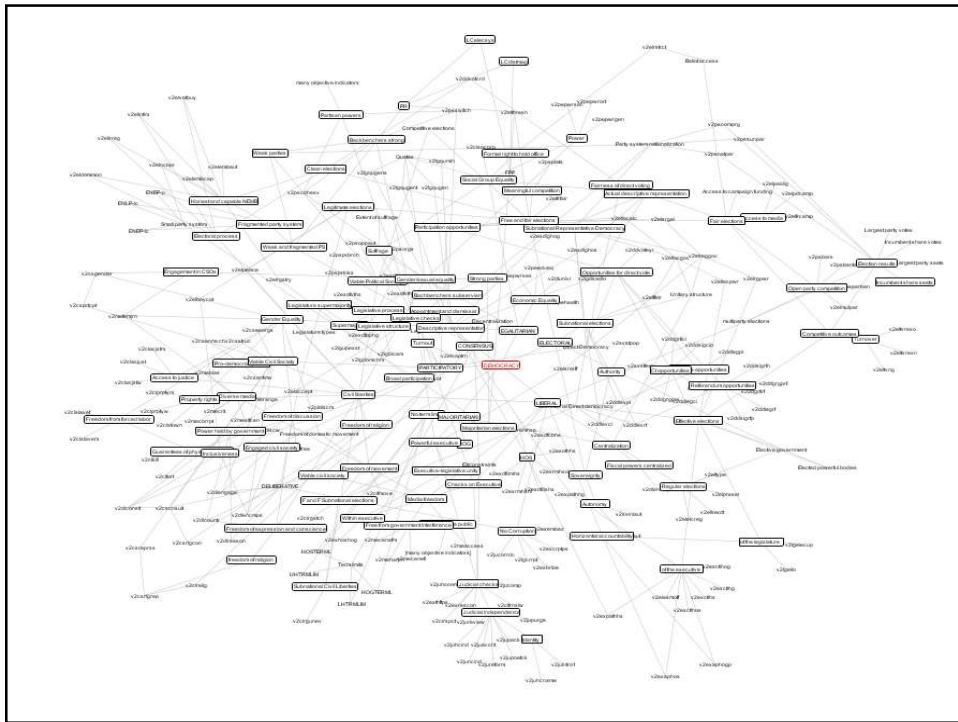
- Definition
- How To Measure

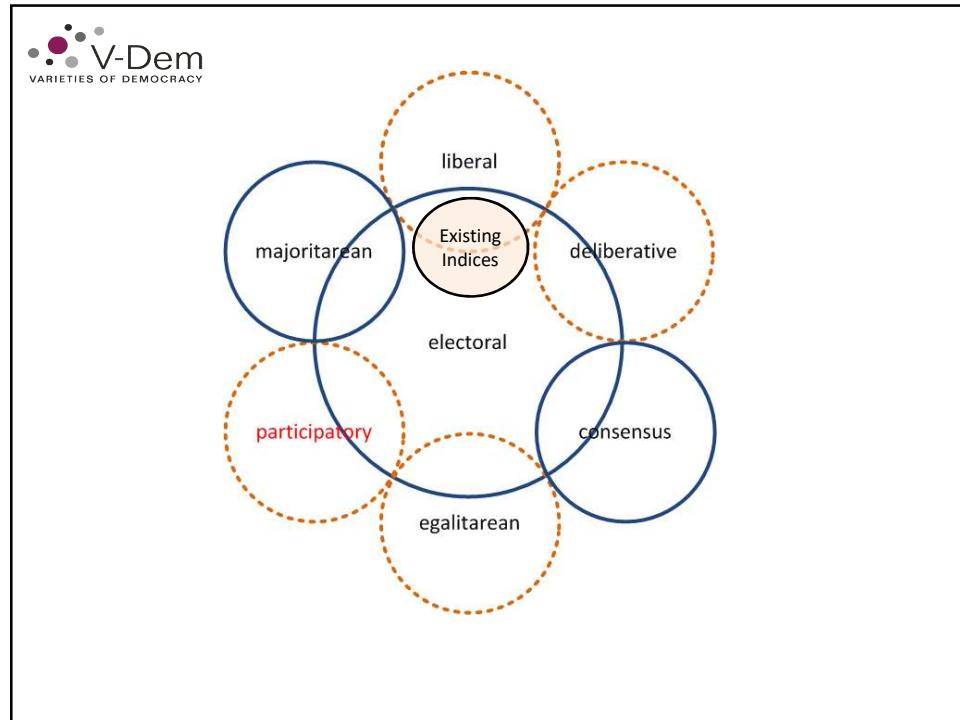
Existing Measures: Problems

- **Definition:** agreement only on “rule by the people”
- **Accuracy:** narrow, generally one-dimensional
- **Coverage:** often limited to last few decades
- **Sources:** problematic
- **Coding:** questions broad, unknown biases
- **Aggregation:** methods unclear & unjustified
- **Inter-coder reliability tests:** rare









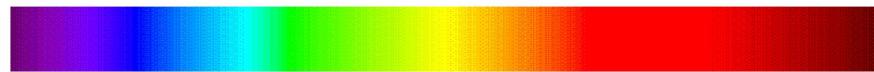
A Full Spectrum of Indicators

Existing indices that cover most countries
and many years
measure only some of the attributes of democracy.



A Full Spectrum of Indicators

V-Dem covers virtually all
conceptions of democracy.



Measuring Polyarchy Across the Globe, 1900–2017

Jan Teorell¹  • Michael Coppedge² •
Staffan Lindberg³ • Svend-Erik Skaaning⁴

Measuring the Whole: Aggregating the Components

and so on. What we call the Multiplicative Polyarchy Index (MPI) is following this “necessary conditions” logic.¹⁶

$$\text{MPI} = \text{Elected Officials} * \text{Clean Elections} * \text{Associational Autonomy} * \text{Suffrage} * \text{Freedom of Expression and Alternative Source of Information} \quad (1)$$

A low score on *any* of the component indices thus suppresses the value of the overall index. As a result, the distribution is heavily skewed towards zero (see the upper left quadrant of Fig. 3). The measures of uncertainty in the lower-level

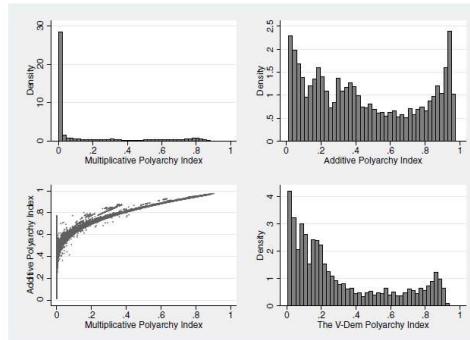


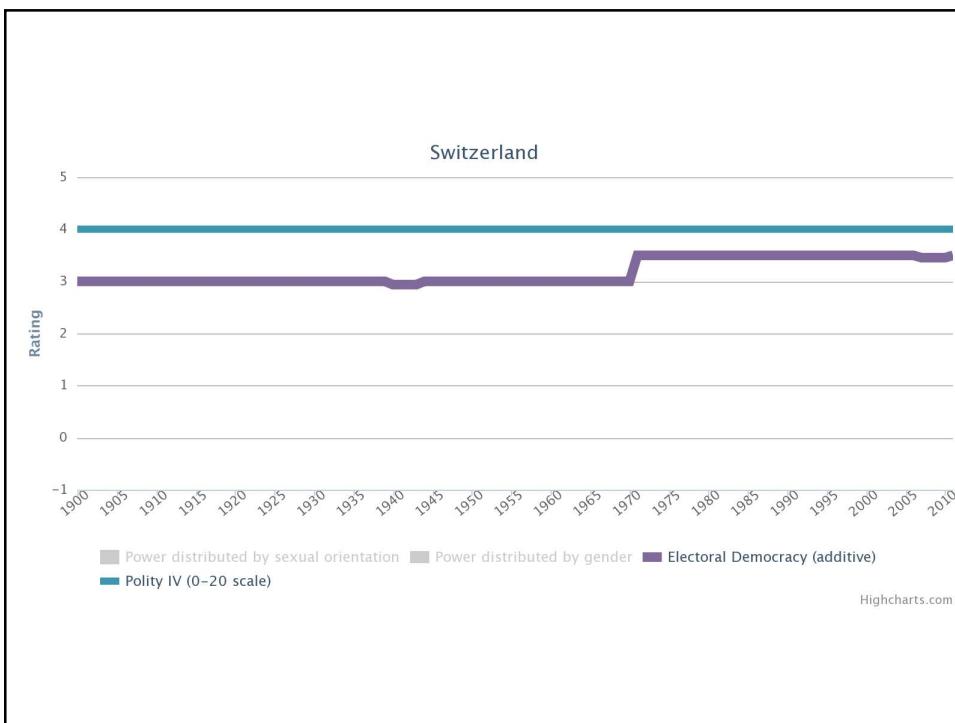
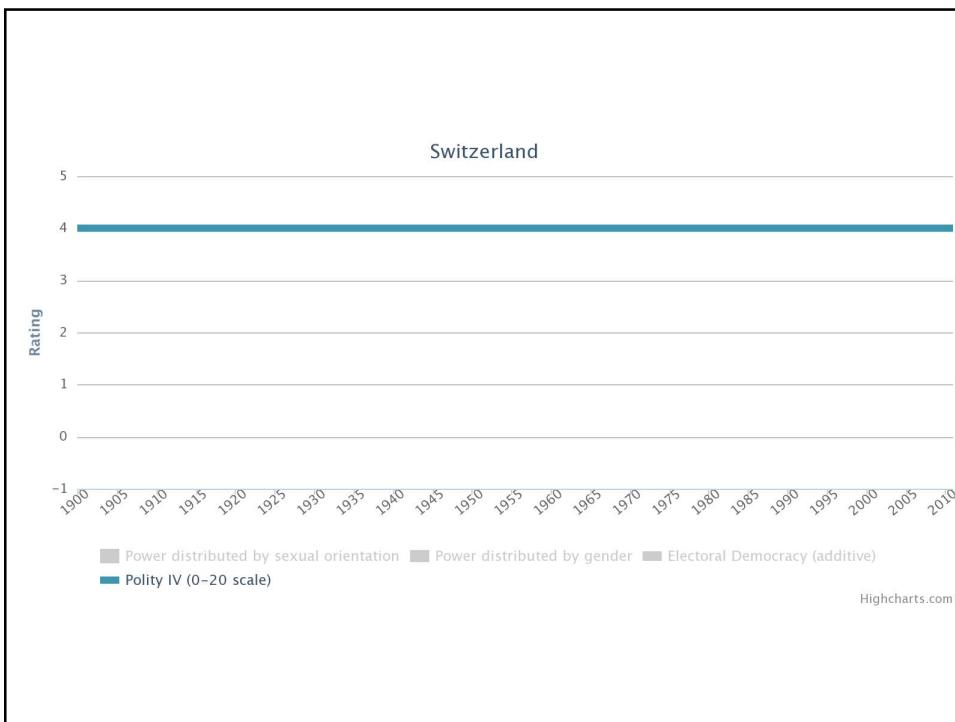
Fig. 3 Aggregating polyarchy

and Freedom of Expression and Alternative Sources of Information). The Additive Polyarchy Index (API) is thus computed as follows:¹⁷

$$\begin{aligned} \text{API} &= [(\text{Elected Officials} + \text{Suffrage}) + 2 * (\text{Clean Elections} + \text{Associational Autonomy} \\ &\quad + \text{Freedom of Expression and Alternative Source of Information})] / 8 \\ &= .125 * \text{Elected Officials} + .125 * \text{Suffrage} + .25 * \text{Associational Autonomy} \\ &\quad + .25 * \text{Clean Elections} + .25 * \text{Freedom of Expression and Alternative Source of Information} \end{aligned} \quad (2)$$

The V-Dem electoral democracy (polyarchy) index is thus constructed by averaging (1) and (2), or more precisely:¹⁸

$$\begin{aligned} \text{Polyarchy} &= .5 \text{ MPI} + .5 \text{ API} = .5 * \text{Elected Officials} * \text{Clean Elections} * \text{Associational Autonomy} * \\ &\quad \text{Suffrage} * \text{Freedom of Expression} + .0625 * \text{Elected Officials} + .125 * \text{Clean Elections} \\ &\quad + .125 * \text{Associational Autonomy} + .0625 * \text{Suffrage} + .125 * \text{Freedom of Expression} \end{aligned} \quad (3)$$



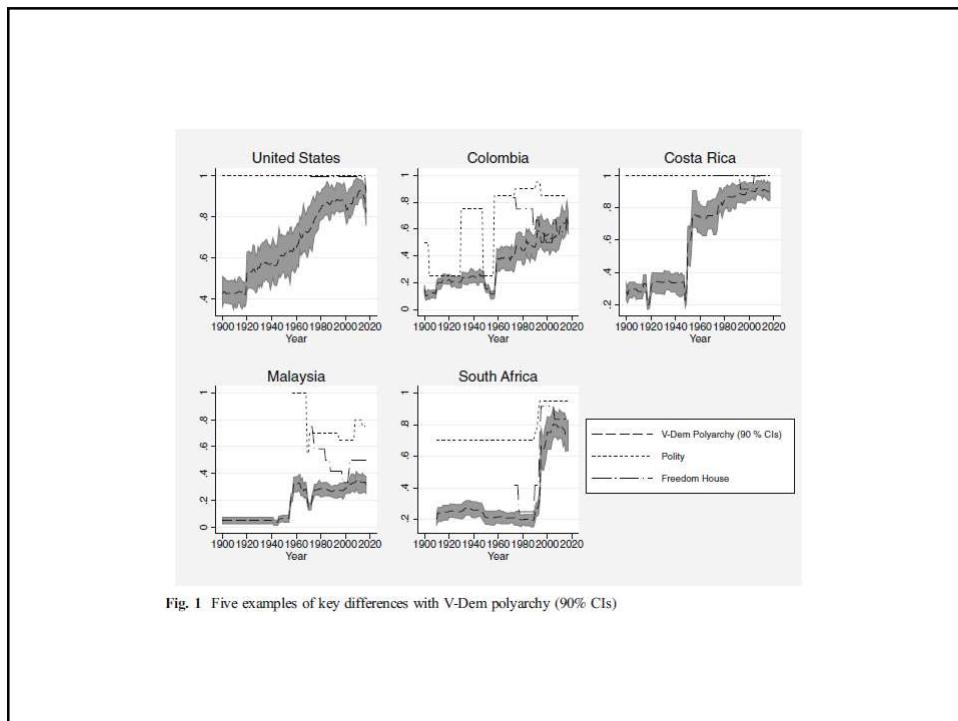


Fig. 1 Five examples of key differences with V-Dem polyarchy (90% CIs)

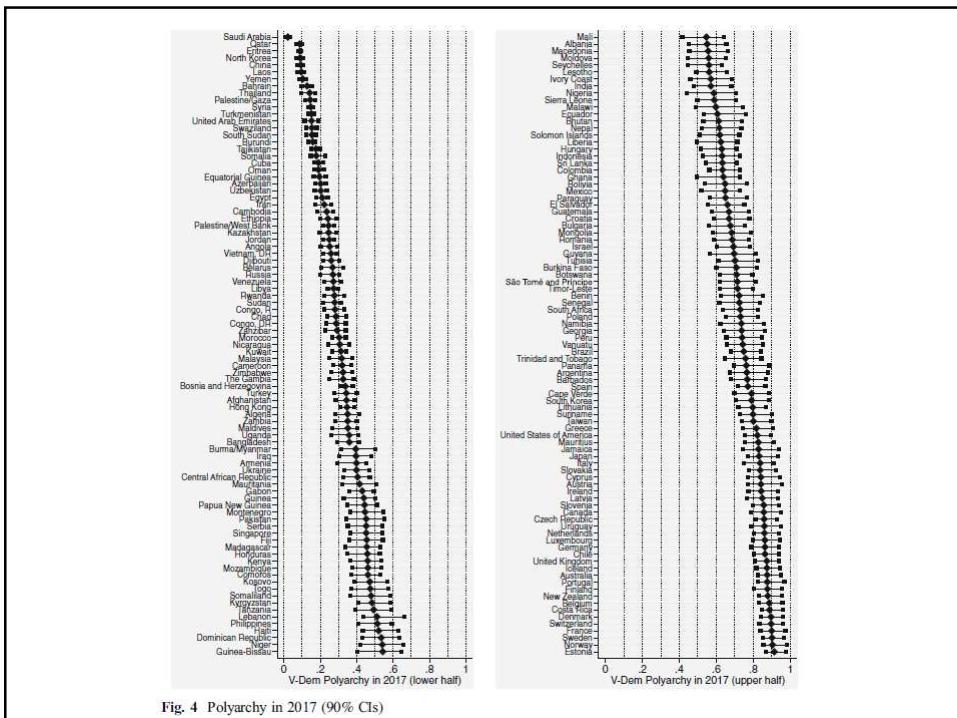


Fig. 4 Polyarchy in 2017 (90% CIs)

<https://www.v-dem.net/en/>