

ONLINE APPENDIX

to the article

Exchange: Why the Future Is (Still) Democratic

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OA-Figure 1. The Temporal Constancy of Autocratic-vs-Democratic Regimes' Link to Authoritarian-vs-Emancipative Values

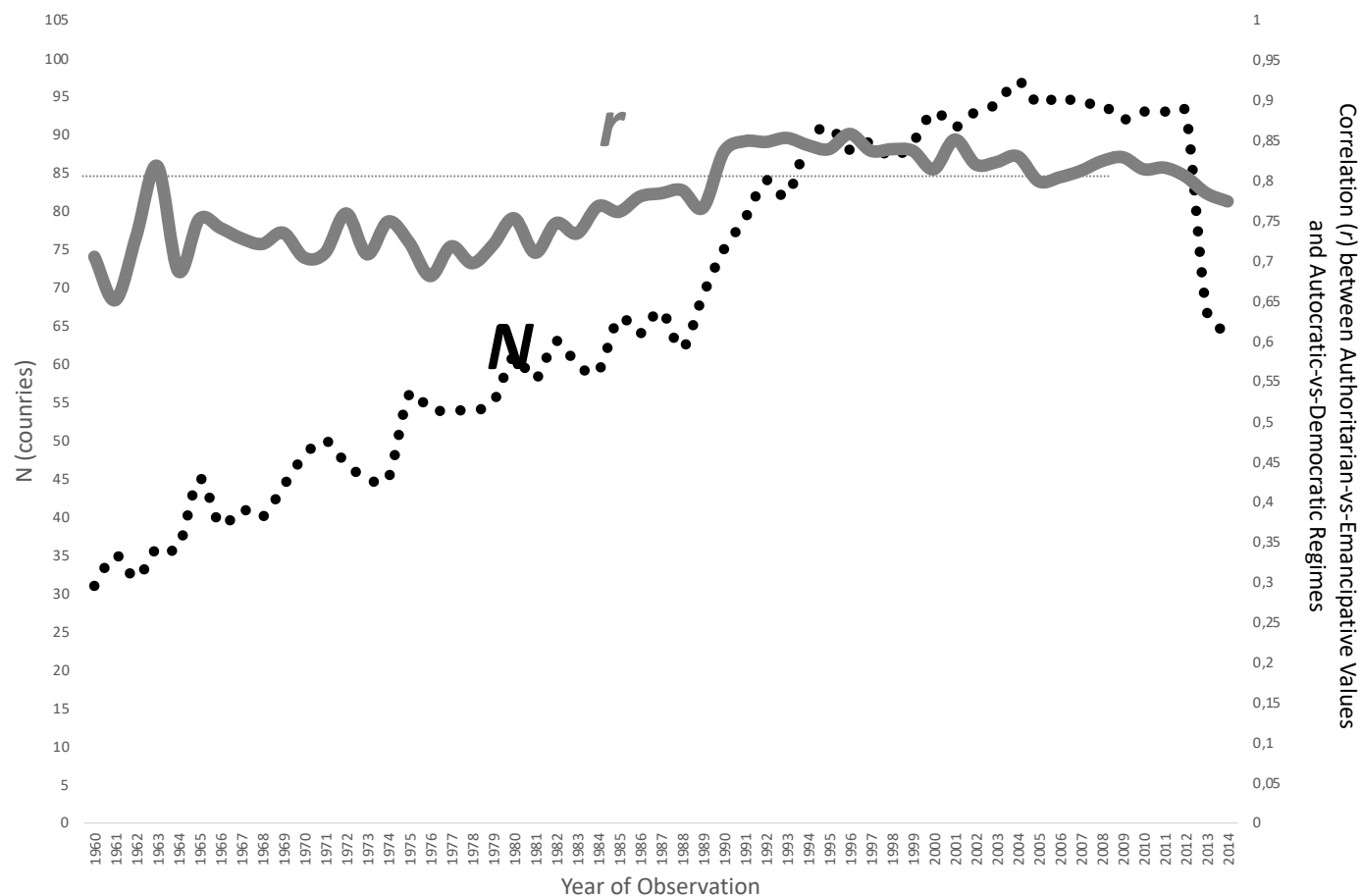
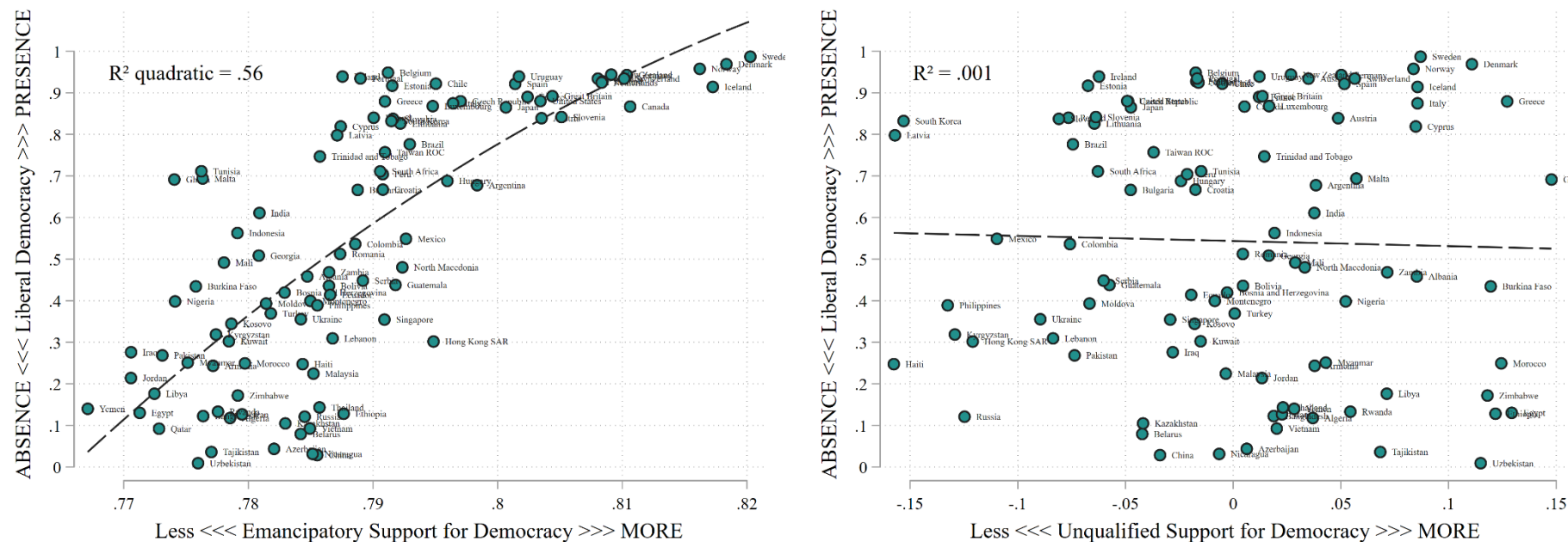


Figure source: Christian Welzel, “Democratic Horizons: What Value Change Reveals about the Future of Democracy,” *Democratization* 28 (2021): 992-1016, Figure 8 (by permission of the author). *Interpretation:* The association between regimes and values is constant over time, despite all the trending patterns in regime dynamics. Thus, populations with the most strongly encultured emancipative values at their time also enjoyed the highest levels of democracy at their time. This pattern implies that, during democratic downswings, more emancipatory publics are more likely to resist to downtrend and to avoid democratic losses, whereas during democratic upcycles, more emancipatory publics are more likely to lead trend and make democratic gains.

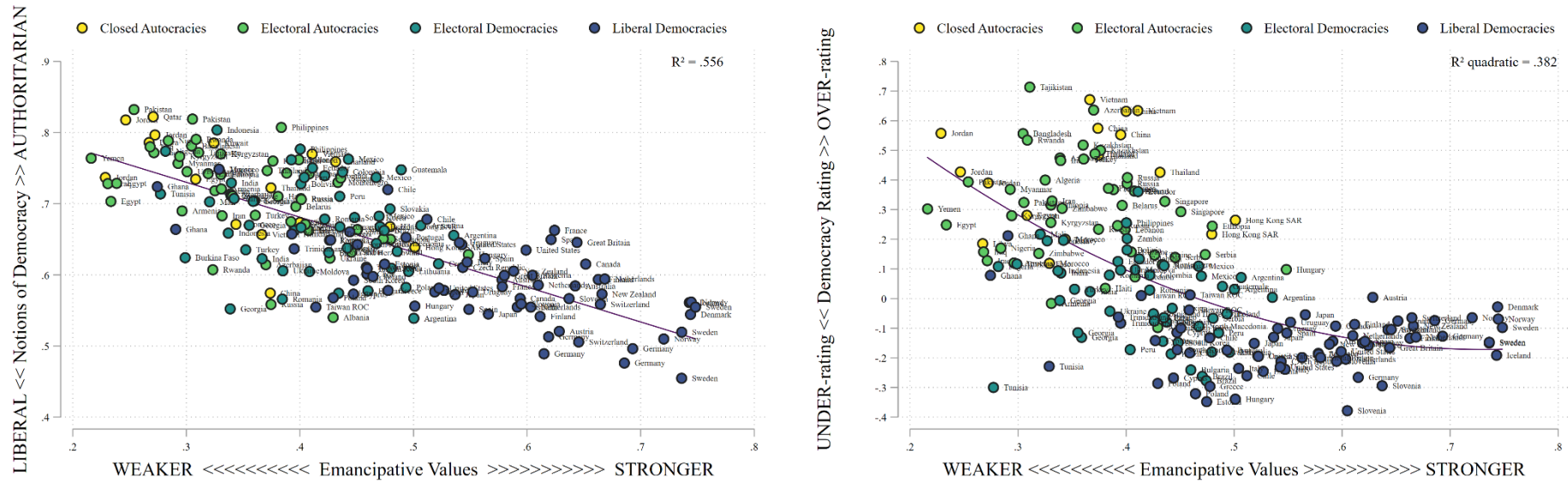
OA-Figure 2. Liberal Democracy as a Function of Emancipatory Support for Democracy



Notes: All countries included in the Integrated Values Study 2021 (henceforth: IVS 2021)¹, rounds 5-7 (N=102). Liberal Democracy is V-Dem's Liberal Democracy Index.⁴ Unqualified Support for Democracy are residuals in a population's overall demand for democracy unpredicted by this population's overall emancipative values. Emancipatory support for democracy is a population's overall demand for democracy predicted by this population's overall emancipative values.

Interpretation: Liberal democracy associates strongly with the amount of public support for democracy that is predicted by a public's overall emancipative values but not at all with support for democracy that is unpredicted by emancipative values. Hence, in disjunction from emancipative values, support for democracy is unpredicted by emancipative values. Hence, in disjunction from emancipative values, support for democracy is not beneficial to democracy.

OA-Figure 3. Emancipative Values and Subjective Notions and Estimations of Democracy



Notes: Data are taken from all country-waves included in the IVS 2021¹, while measures on the horizontal and vertical axes for the same country are also always from the same wave. Regime classifications are based on Lührmann, Tannenberg, and Lindberg’s (2018) 4-category “Regimes of the World” classification².

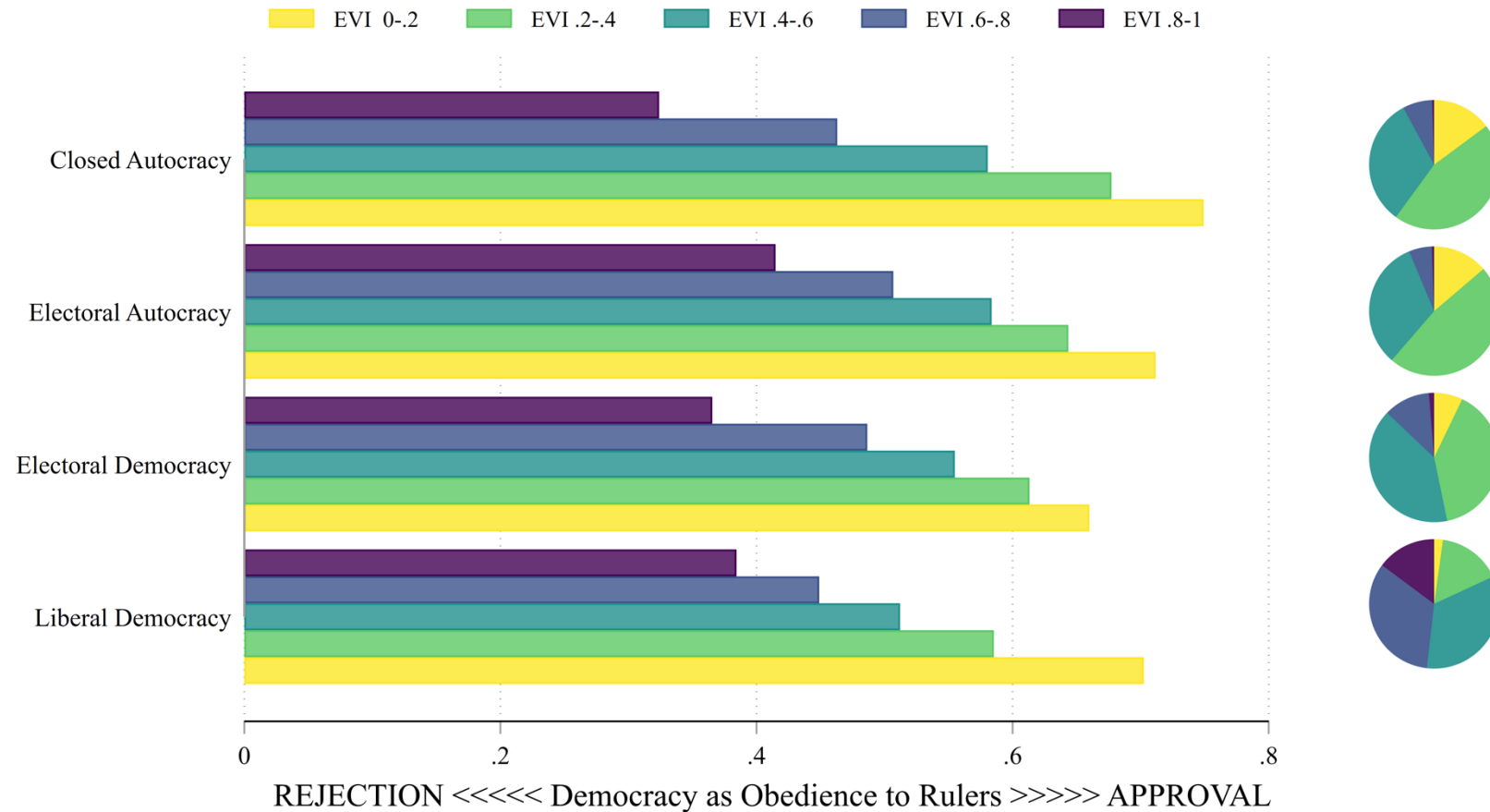
Emancipative Values on the *horizontal axes* in both diagrams are a twelve-item additive index, summarizing the respondents' emphasis on child autonomy (approval of independence and imagination and disapproval of obedience as desired child qualities), gender equality (approval of women's equal access to education, paid jobs and positions of power), reproductive choice (tolerance of abortion, divorce and homosexuality) and people's voice (priority for freedom of speech as well as people's voice and vote in local, job-related and national affairs).

Notions of Democracy on the *vertical axis on the left-hand diagram* measure the extent to which respondents approve three authoritarian meanings of democracy (i.e., military government, theocracy, people's obedience to rulers) and at the same time disapprove three liberal meanings of democracy (i.e., free elections, civil liberties, equal rights). The index has a theoretical minimum of 0, for the case that someone fully approves the three liberal meanings and at the same time fully disapproves the authoritarian meanings. The index has a theoretical maximum of 1.0 for the exact opposite constellation. For details of index construction see Welzel and Kirsch.³

Democracy Ratings on the *vertical axis on the right-hand diagram* measure to what extent respondents over – or under-estimate their country’s level of democracy relative to V-Dem’s Liberal Democracy measure⁴ of the same year. Over-estimations show up in positive scores up to a theoretical maximum of 1.0, for the case that a respondent perceives her country as fully democratic when in fact it is entirely undemocratic. Under-estimations show up in negative scores down to a theoretical minimum of -1.0, for the case that a respondent sees her country as entirely undemocratic when in fact it is fully democratic. Scores close to 0 indicate accurate estimation. For details of index construction see Kruse, Ravlik and Welzel (2016)⁵.

Interpretation: Stronger emancipative values systematically diminish authoritarian misunderstandings of democracy as well as inflationary over-ratings of democracy's presence.

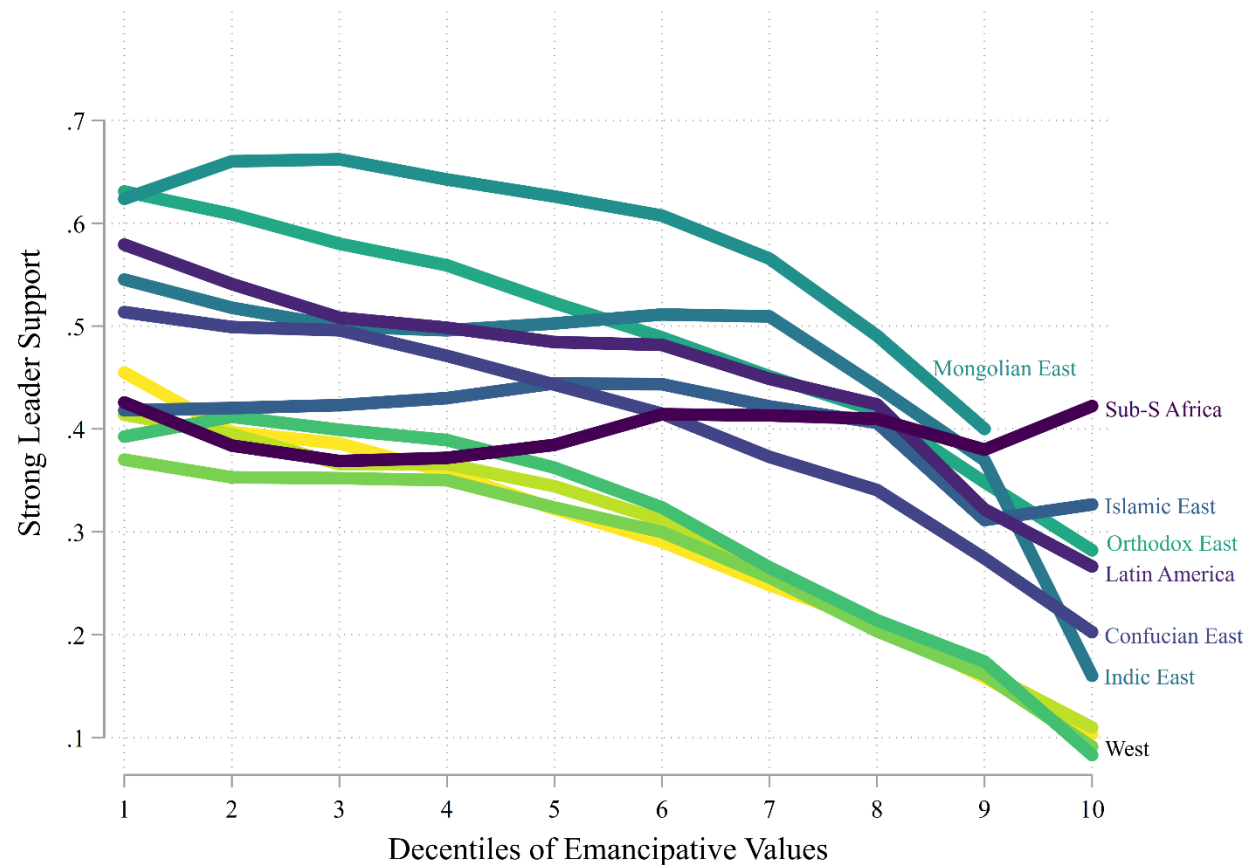
OA-Figure 4. Misunderstandings of Democracy as “Obedience to Rulers” by Emancipative Values and Regime Type



Notes: Data are from the IVS (2021).¹ Regime classifications are based on Lüthmann, Tannenber, and Lindberg's (2018) 4-category "Regimes of the World" classification.²

Interpretation: In all types of regime, stronger emancipative values associate with a stronger rejection of "obedience to rulers" as the definition of democracy.

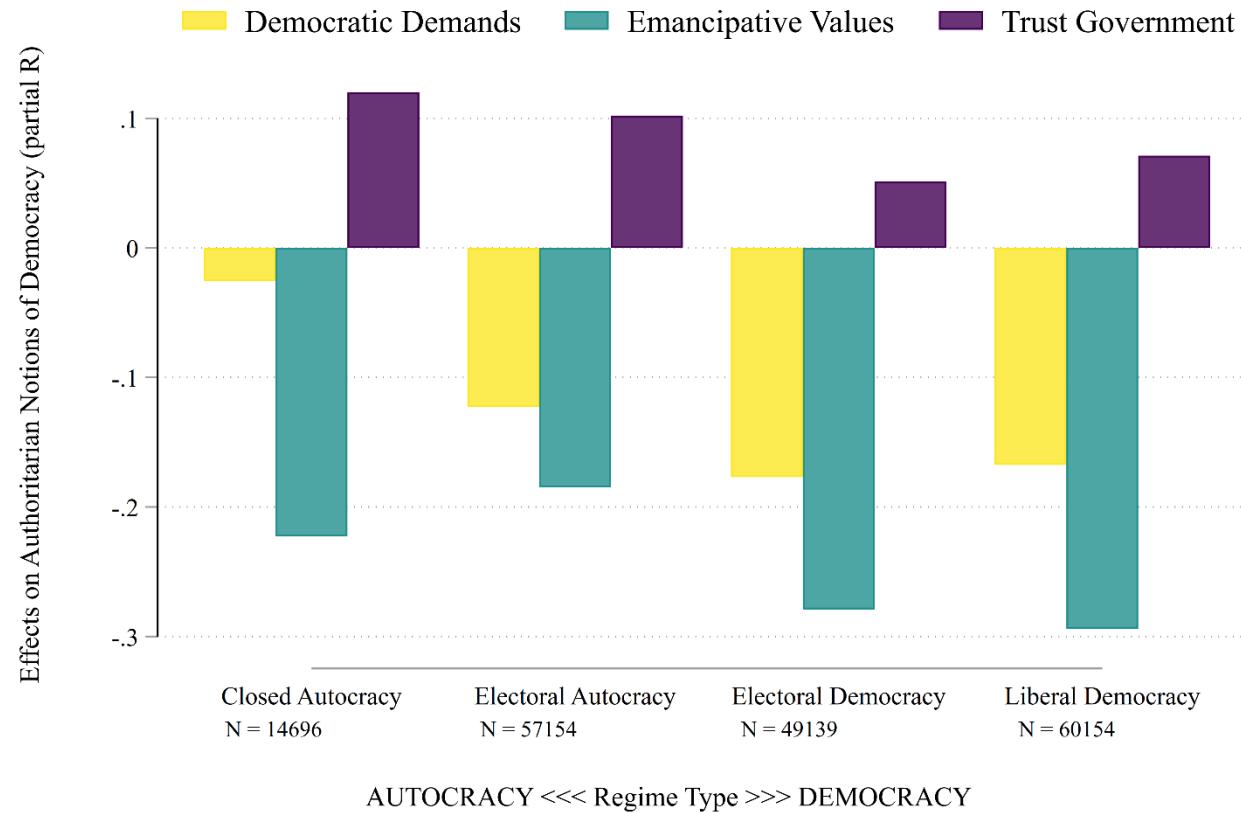
OA-Figure 5. Support for Strongmen Rule by Emancipative Values in Different World Regions



Data source: IVS (2021).¹ Decentiles of Emancipative Values order respondents into ascending categories of emancipative values, with each category covering a .10-points interval on the 0-to-1 emancipative values index. Thus, EVI-1 at the low end includes respondents scoring from 0 to .10, while EVI-10 at the high end includes respondents scoring from .90 to 1.0. “Strong leader support” measures respondents response to the statement “Having strong leaders who do not have to bother with parliaments and elections,” using a four point scale: 0 “a very bad idea,” 0.33 “a fairly bad idea,” 0.66 “a fairly good idea,” 1 “a very good idea.”

Interpretation: Albeit on different slopes and intercepts, stronger emancipative values associate everywhere in the world with less support for strongmen rule.

OA-Figure 6. The Effects of Emancipative Values, Democratic Demands and Political Trust on Authoritarian Misunderstandings of Democracy

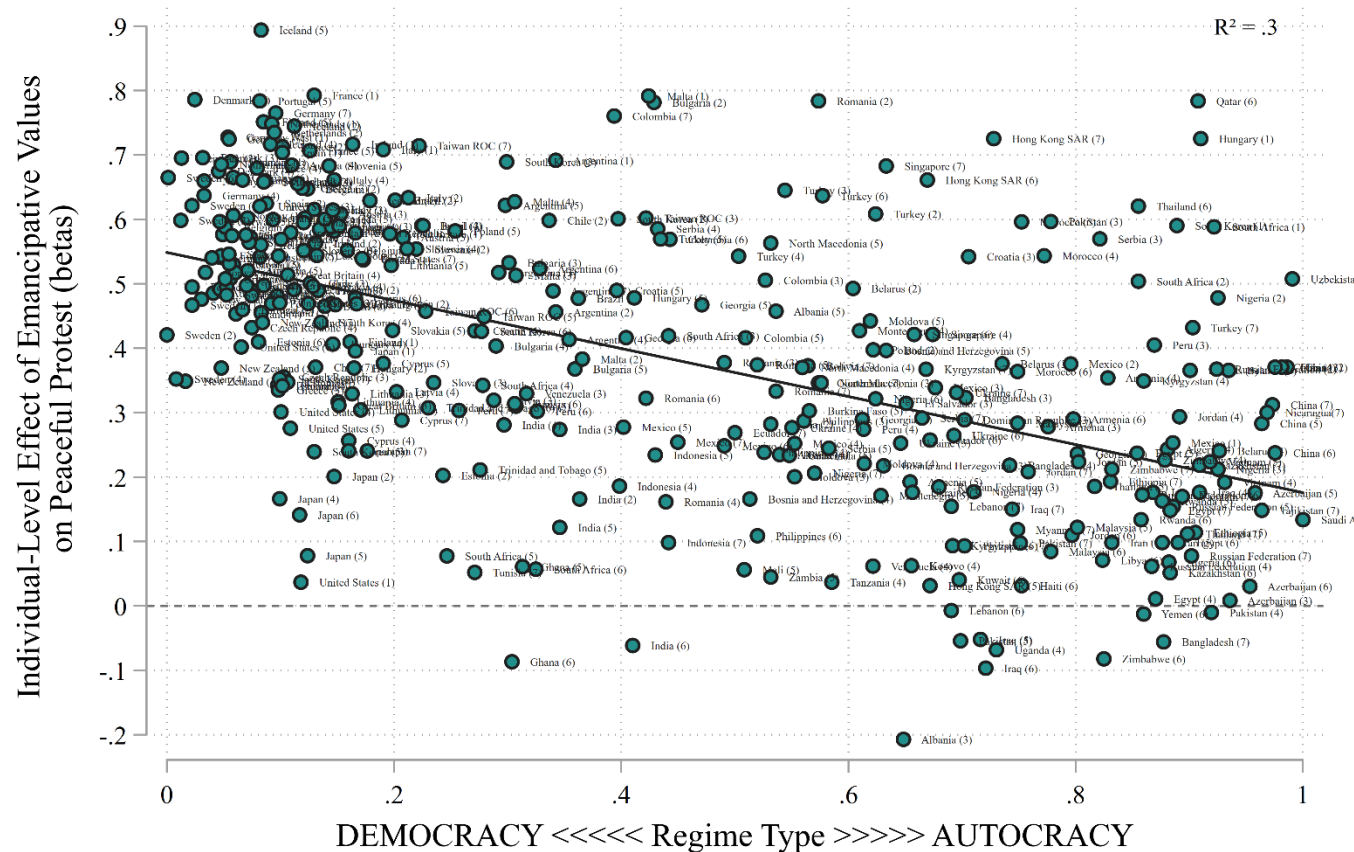


Data source: IVS (2021).¹ Regime classifications are based on Lührmann, Tannenberg, and Lindberg's (2018) 4-category "Regimes of the World" classification.²

Bars show the partial correlation coefficient of each variable with "Authoritarian Notions of Democracy" under mutual control of the other two variables.

Interpretation: Emancipative values diminish authoritarian misunderstandings of democracy in all types of regime, and much more so than democratic demands do. The latter actually increase authoritarian misunderstandings when these demands are expressed in straight autocracies.

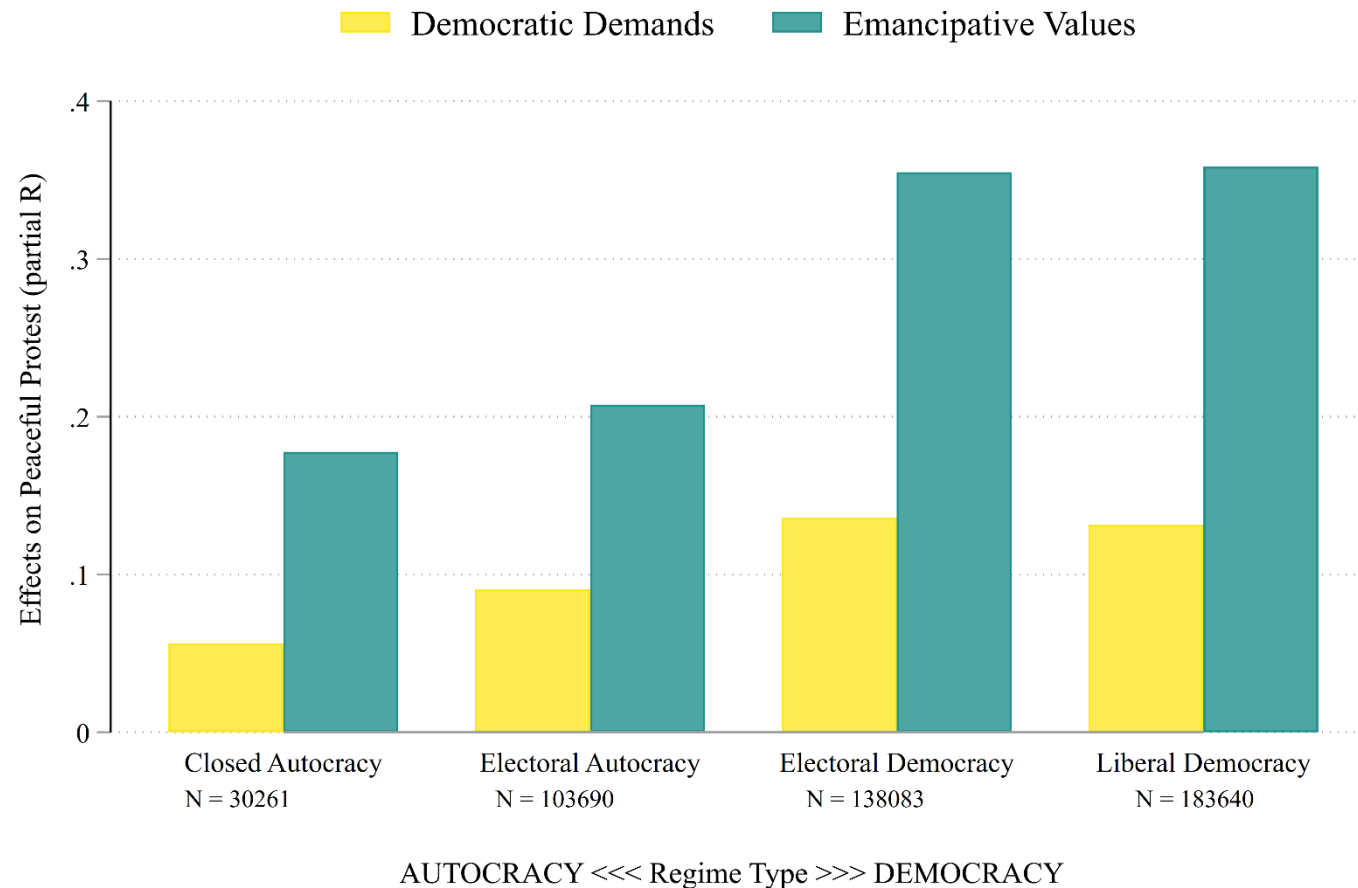
OA-Figure 7. The Protest Effect of Emancipative Values by Level of Autocratic Repression



Interpretation: Examining the full evidence from the IVS (2021)¹, we find that among 368 country-wave observations (covering about a hundred countries worldwide and seven observation periods from 1981 to 2020), the individual-level effect of emancipative values on peaceful protest is statistically significant in 334 observations. Even in autocratic and semi-autocratic countries in which protestors face severe repression—as in China, Russia, Turkey or Venezuela—the effect is highly significant and strongly positive. Of course, as one would expect, the extent to which democracy is absent and autocracy present in a country does tend to diminish the individual-level effect of emancipative values on peaceful protest. However, this tendency is not so powerful as to entirely turn off or render insignificant the ubiquitously positive protest-effect of emancipative values. In conclusion, rising emancipative values make people more critical and unruly. This finding confirms a recent simulation study showing across 100 countries and 40 years (4,000 country-by-year

observations) that emancipative values predict non-violent protests even in autocratic contexts. These findings are also in line with an analysis of 152 elections in 33 electoral autocracies over 21 years, showing that publics with more firmly encultured emancipative values are more likely to protest against electoral fraud when autocratic incumbents win. See Margarita Zavadskaia and Christian Welzel, “Subverting Autocracy: The Role of Emancipative Mass Values,” *Democratization* 21 (2014): 1105-1130. Paolo Li Donni, Maria Marino and Christian Welzel, “How Important is Culture to Understand Political Protest?” *World Development* 148 (December 2021): forthcoming.

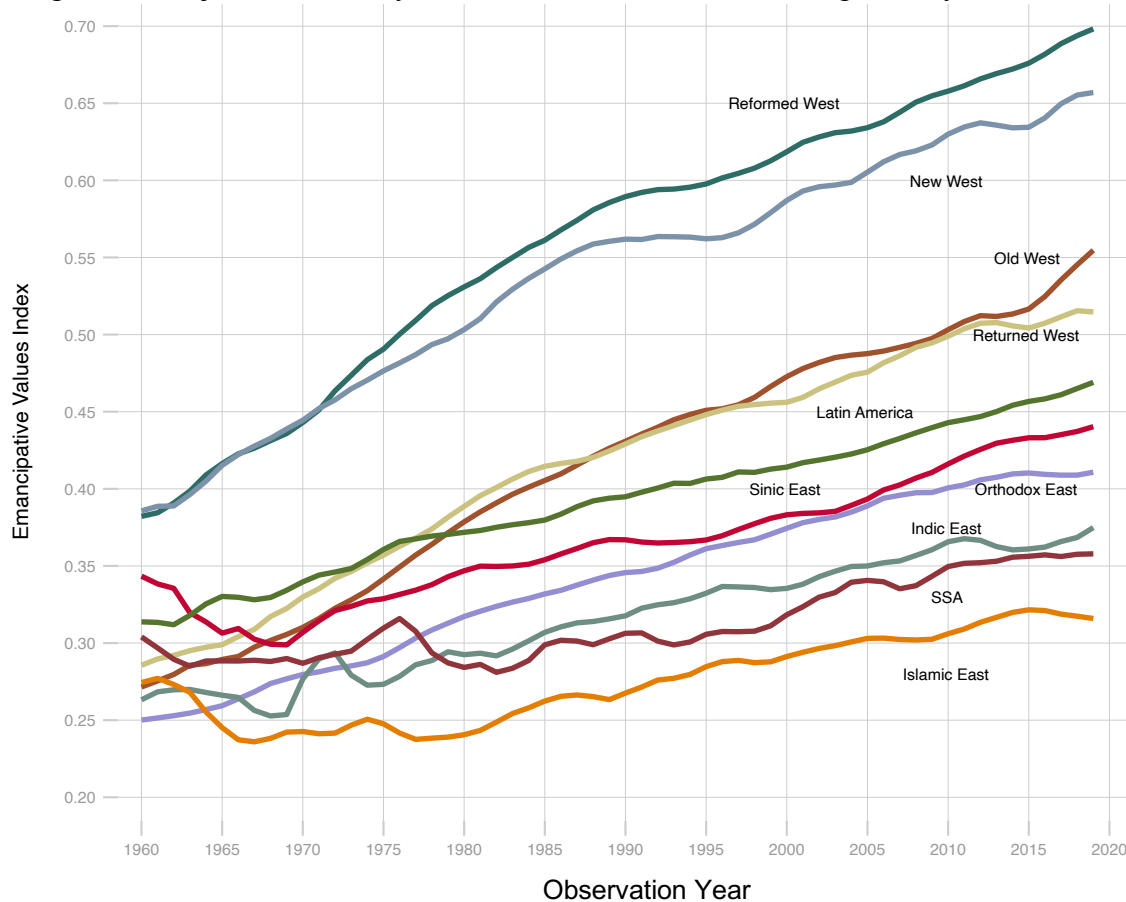
OA-Figure 8. The Simultaneous Effects of Democratic Demands and Emancipative Values on Nonviolent Protest by Regime Type



Data source: IVS (2021).¹
 Regime classifications are based on Lührmann, Tannenberg, and Lindberg's (2018) 4-category "Regimes of the World" classification².

Interpretation: Emancipative values have a significantly positive effect on nonviolent protest within all regime categories on the autocracy-vs-democracy spectrum, although the effect strengthens towards the democratic end of the spectrum. And in each regime category, the protest-stimulating effect of emancipative values is by a large magnitude stronger than that of democratic demands, in spite of the fact that democratic demands should encourage protest in particular strength precisely in autocratic settings, unless—as we pointed out—democratic demands in autocratic contexts do not measure what intuition suggests.

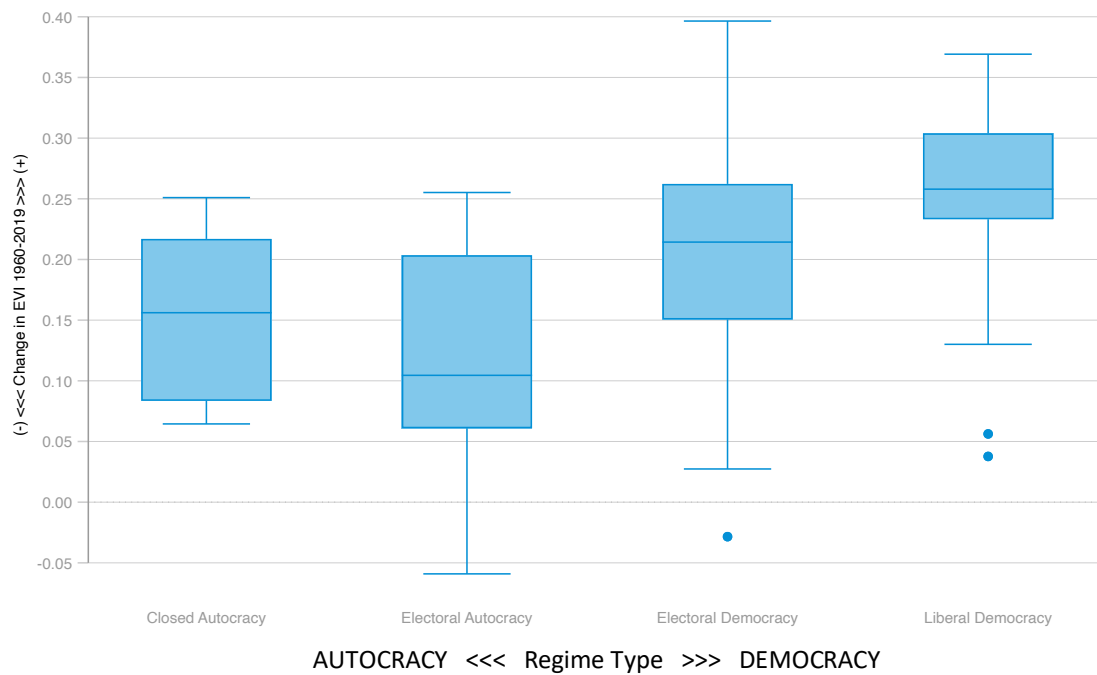
OA-Figure 9. Trajectories and Cycles in the Global Rise of Emancipative by Culture Zone



Notes: Moving averages of backwards estimated EVI 1960-2019 using data from the IVS (2021).¹ Backward estimations are based on transposing cohort differences in a recent survey into a time-series of annual observations as explained in Brunkert, Kruse, and Welzel (2019).⁶ The EVI version (“EVI_ipol35_002a”) used here is based on the following parameters: cohort age = 35, trend deflator = 0.002, and EVI weight = 0.6. Displayed trends are based on data from 109 nations. Country-years with less than 20 observations are excluded. The moving average smoother applied is $(1/9) \cdot [1 \cdot x(t-2) + 2 \cdot x(t-1) + 3 \cdot x(t) + 2 \cdot x(t+1) + 1 \cdot x(t+2)]$; $x(t)$ = EVI. *Source:* IVS (2021)¹.

Interpretation: Due to cohort-based projections, emancipative values have been rising in all culture zones of the world from 1960 till 2019, albeit on differently steep slopes and on different base levels.

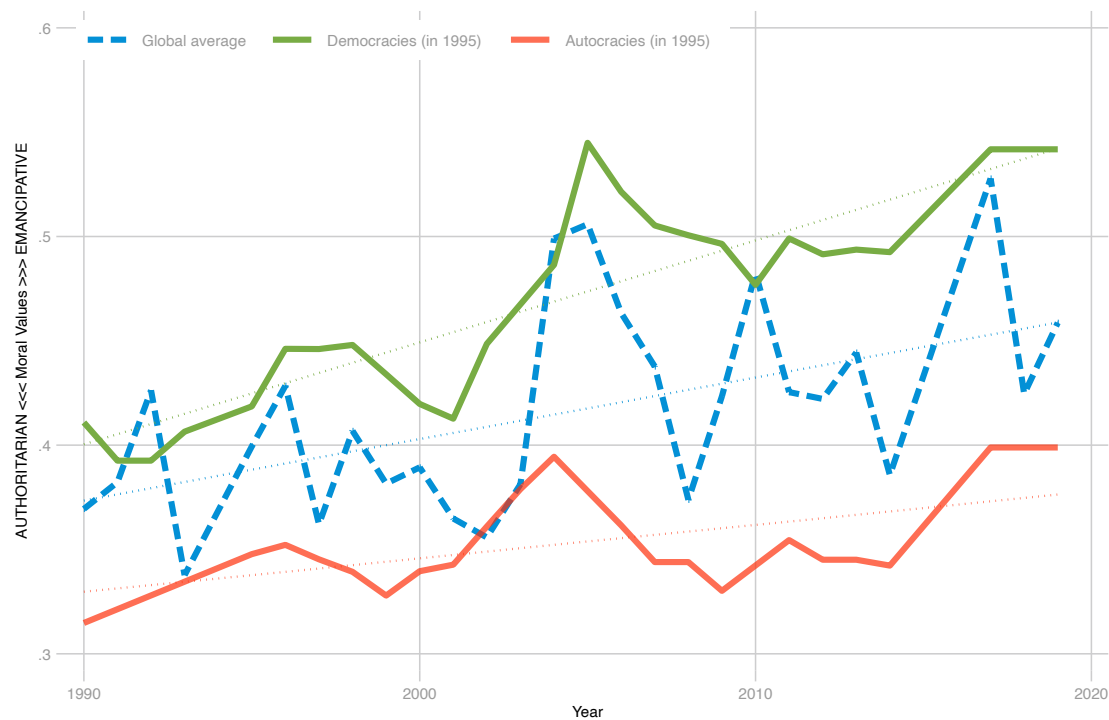
OA-Figure 10. Rise of Emancipative Values over 60 Years by Regime Type



Notes: The diagram displays the distribution of changes in (backwards estimated) EVI scores between 1960-2019 using IVS data (2021).¹ Backward estimations are based on transposing cohort differences in a recent survey into a time-series of annual observations as explained in Brunkert, Kruse, and Welzel (2019).⁷ The EVI version used here (“EVI_ipol35_002a”) is based on the following adjustment parameters: age = 35, trend deflator = 0.002, and EVI weight = 0.6. Reported changes in EVI are based on data from 89 nations. Regime types are based on the Regimes of the World classification.²

Interpretation: According to cohort-based projections, emancipative values have been predominantly rising over the last thirty years in all types of regime, albeit more steeply in more democratic regimes.

OA-Figure 11. Change in Emancipative Values: Democracies vs. Autocracies

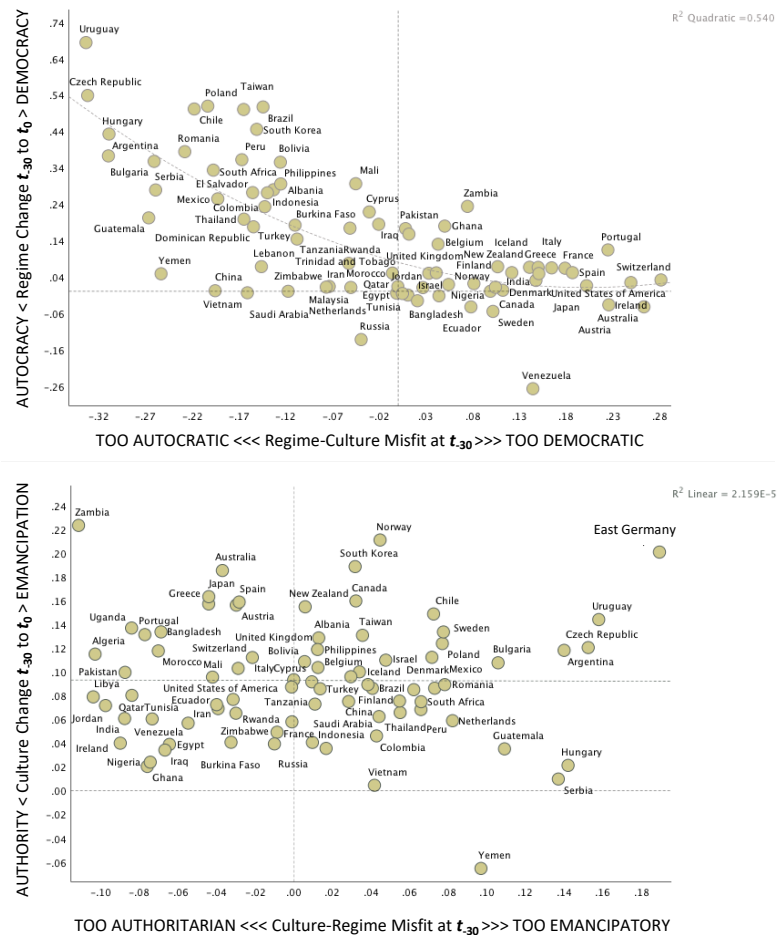


Notes: The diagram shows population-weighted moving averages with uniform weights (5-year timespan) across democracies and autocracies between 1990 and 2019. Countries are classified as (electoral or liberal) democracies or (closed or electoral) autocracies based on the Regimes of the World² indicator in the year 1995. The sample only includes countries with at least a 15-year timespan of data. *Data source:* IVS (2021).¹

Interpretation: Differences in intercept notwithstanding, emancipative values evolve on more steeply rising slopes in democracies than in autocracies. Nevertheless, the slopes of the trend lines are positive in both types of regimes.

OA-Figure 12.

Regime-Culture Coevolution: Regime-Culture Misfits Drive Regime Change but Not Cultural Change



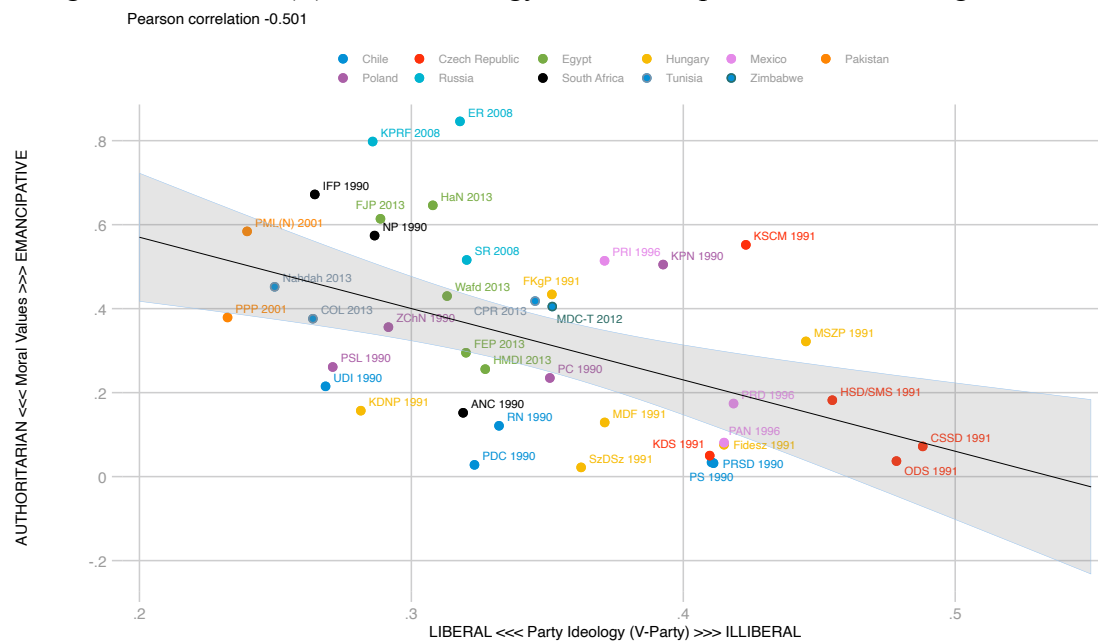
Notes: **Horizontal axis** measures the regime-culture misfit at time t_{30} by regressing liberal democracy at time t_{30} on backward estimated emancipative values at time t_{30} and plotting the residuals. Negative residuals suggest that the regime has been too autocratic relative to the population's emancipative values thirty years back in time. Positive residuals suggest that the regime has been too democratic relative to the population's emancipative values thirty years back in time. **Vertical axis** measures change in liberal democracy from time t_{30} till time t_0 . In this diagram, t_{30} is 1980 and time t_0 is 2010. Yet, the pattern exemplified here is generalizable to other thirty-year intervals: Regimes change as a function of their once accrued misfit to the surrounding culture. The backward Estimation of emancipative values is explained in the Online Appendix.

Notes: **Horizontal axis** measures the culture-regime misfit at time t_{30} by regressing backward estimated emancipative values at time t_{30} on liberal democracy at time t_{30} and plotting the residuals. Negative residuals suggest that culture has been too authoritarian relative to the regime's democraticness (or lack thereof) thirty years back in time. Positive residuals suggest that the culture has been too emancipatory relative to the regime's democraticness (or lack thereof) thirty years back in time. **Vertical axis** measures change in estimated emancipative values from time t_{30} till time t_0 . In this diagram, t_{30} is 1980 and time t_0 is 2010. Yet, the pattern exemplified here is generalizable to other thirty-year intervals: Values do NOT change as a function of their once accrued misfit to regime institutions.

Figure source: Christian Welzel, "Democratic Horizons: What Value Change Reveals about the Future of Democracy," *Democratization* 28 (2021): 992-1016, Figure 11, p. 1008 (by permission of the author).

Interpretation: The upper diagram in OA-Figure 10 shows that regimes change within the timespan of a generation in response to their misfit to the surrounding culture. At the same time, the lower diagram demonstrates that culture does however *not* change in response to its misfit to the given regime. Hence, cultural change drives subsequent regime change more than the other way around.

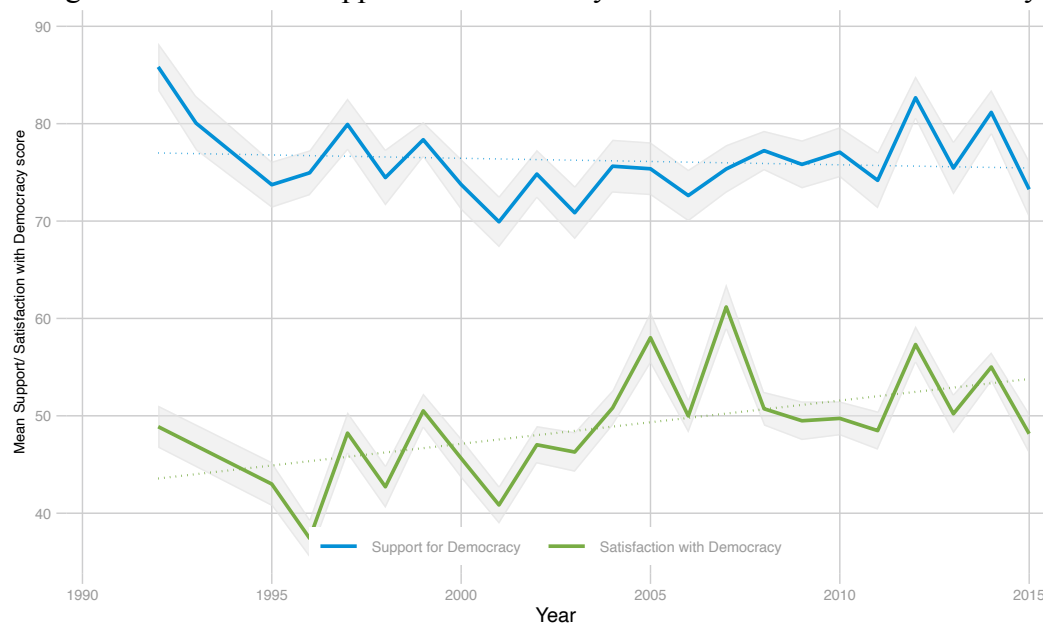
OA-Figure 13. Parties' (Il)Liberal Ideology and Emancipative Values among their Voters



Notes: The diagram shows the relationship between liberal-vs-illiberal party ideologies and authoritarian-vs-emancipative values among their supporters across a subsample of countries. Data on party ideologies reflect positions that parties express through official communication across the elections closest to the selected IVS survey. Party data are taken from the V-Party dataset (Lührmann et al. 2020). Data on value orientations of party supporters are taken from the IVS (op. cit.). The sample includes data from 40 parties across 11 countries including Chile 1990 (5), Czech Republic 1991 (5), Egypt 2013 (5), Hungary 1991 (6), Mexico 1996 (3), Pakistan 2001 (2), Poland 1990 (4), Russia 2008 (3), South Africa 1990 (3), Tunisia 2013 (3), and Zimbabwe 2012 (1). The Illiberalism Index combines (reversed) expert ratings on parties' position towards Respecting Political Opponents, Political Pluralism, Protecting Minority Rights, and Rejecting Violence (see Lührmann et al. 2020: 19). *Data Source:* IVS (2021). Lührmann et al. 2020.⁸

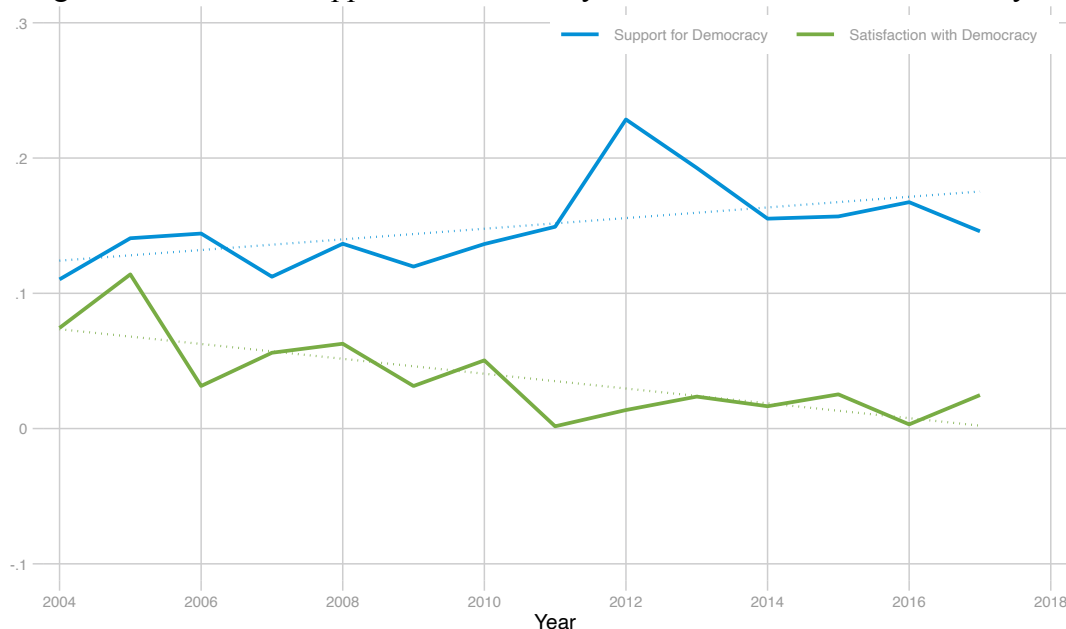
Interpretation: The parties' positions on the illiberalism scale and their supporters' emancipative values are highly correlated, $r = -.50$ ($p = 0.001$). This relationship implies that supporters of more liberal parties hold stronger emancipative values. Respectively, the emancipative values index is positively correlated with the liberally-coded subcomponents of the illiberalism index, including Respecting Political Opponents ($r = .43$, $p = 0.006$), Political Pluralism ($r = .34$, $p = 0.03$), Protecting Minority Rights ($r = .52$, $p = 0.001$) and Rejecting Violence ($r = .47$, $p = 0.002$).

OA-Figure 14a. Trend in Support for Democracy and Satisfaction with Democracy 2000-2015



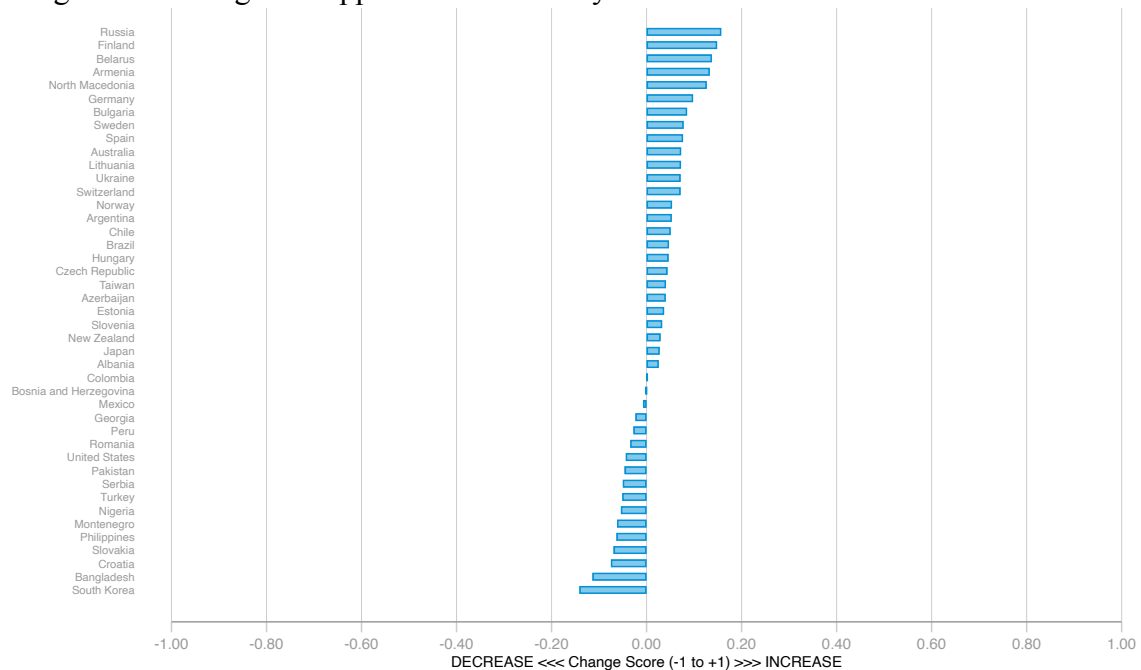
Notes: The figure displays average levels of support and satisfaction with democracy over time among democracies, including the linear trends (dotted lines). Support for Democracy scores are based on 715 surveys across 102 (electoral or liberal) democracies between 1992-2015. Satisfaction with Democracy scores are based on 872 surveys across 143 (electoral or liberal) democracies between 1992-2015. Countries are classified as (electoral or liberal) democracies or (closed or electoral) autocracies based on V-Dem's Regimes of the World indicator. *Source:* Andrew Klassen, Human Understanding Measured Across National (HUMAN) Surveys: Country-Survey Data (2018), <https://doi.org/10.7910/DVN/KIPB57>, Harvard Dataverse.

OA-Figure 14b. Trend in Support for Democracy and Satisfaction with Democracy 2004-2017



Notes: The figure displays average levels of support and satisfaction with democracy over time among democracies, including the linear trends (dotted lines). Scores are based on 1,179 surveys across 103 (100) electoral or liberal democracies between 2004-2017. Countries are classified as (electoral or liberal) democracies or (closed or electoral) autocracies based on V-Dem's Regimes of the World indicator. *Source:* Christopher Claassen, Replication Data for: Does Public Support Help Democracy Survive? (2019), <https://doi.org/10.7910/DVN/HWLW0J>, Harvard Dataverse.

OA-Figure 15. Change in Support for Democracy between 1995 and 2020

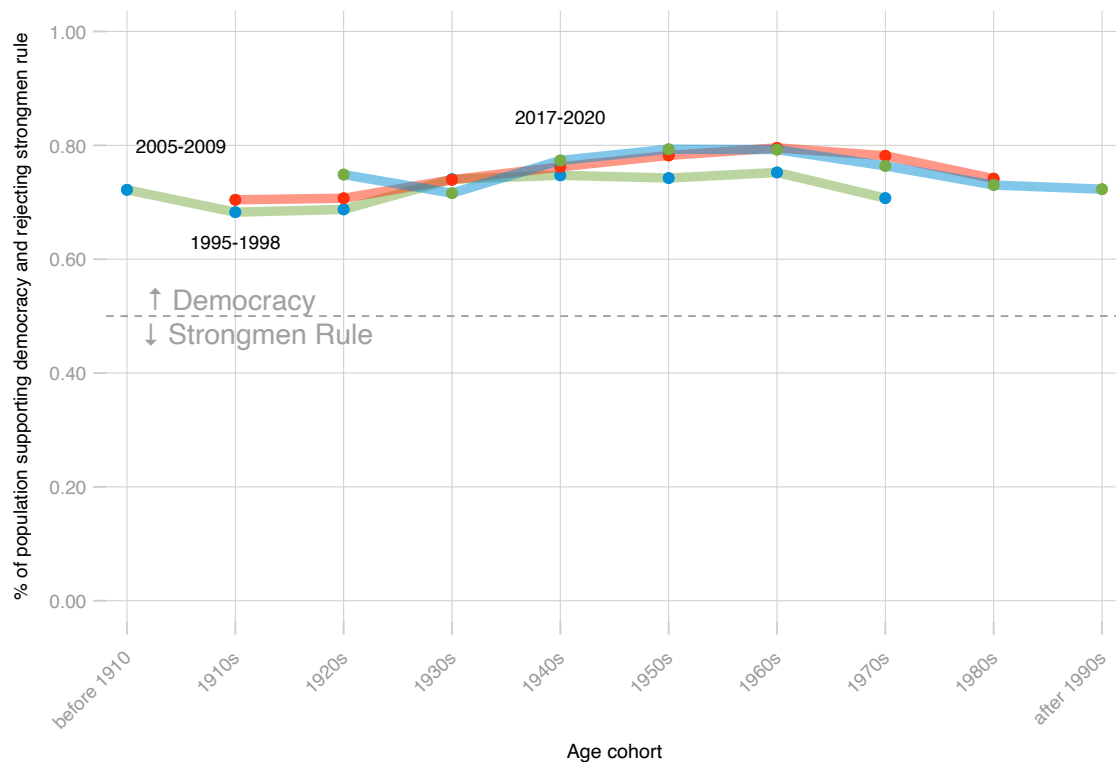


Notes: Support for democracy measures whether respondents say that “Having a democratic political system” is a very good way of governing their country. Change scores are standardized between -1 (100% loss of support for democracy) and +1 (100% gain in support for democracy).

Interpretation: World Values Surveys data from rounds 3 (1995-98) to 7 (2017-20) show that—**across the world**—popular support for democracy is static, with an average score of 0.77 in 1995-98 and 0.79 in 2017-20 across N=43 countries (measured on a continuous 0-to-1 scale, national samples weighted in proportion to the respective country’s population size). Similarly, looking only at mature democracies (including Australia, Finland, Germany, New Zealand, Norway, Spain, Sweden, Switzerland, and the US), the same holds true: .80 in 1995-98 and .87 in 2017-20, which is a negligible difference within the margin of measurement error. Likewise, standard deviations of these mean scores (at about 0.08) did not increase, suggesting that citizenries did not become more divided over their support for autocracy-vs-democracy. In terms of the number count, support for democracy increased in 27 countries and decreased in 16, yet all of these changes are in the narrow range between -.15 and +.15. Thus, there is no evidence supporting the claim of a sweeping decline in support for democracy.

Data source: IVS 2021.¹

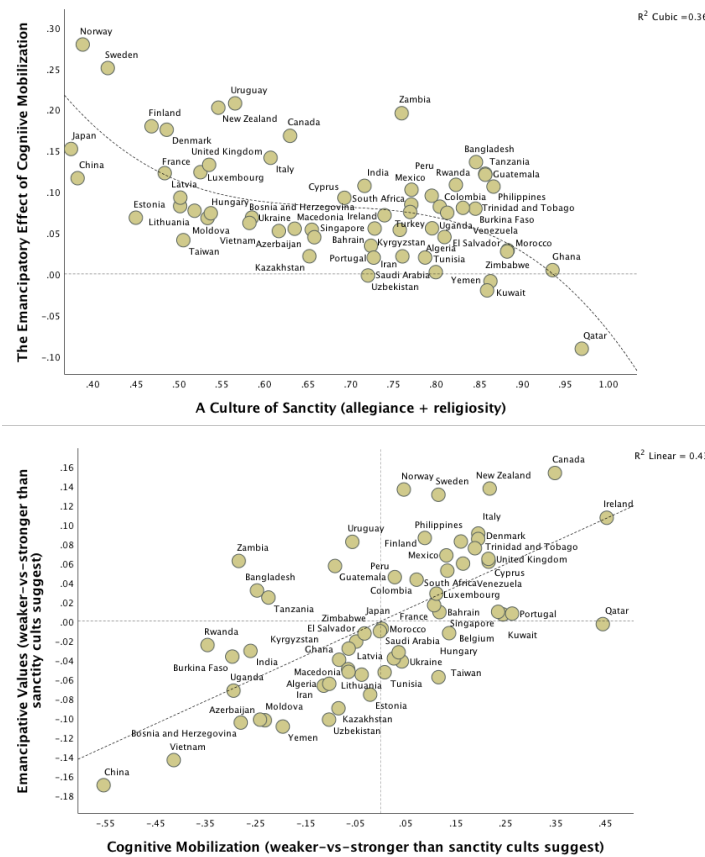
OA-Figure 16. Cohort Patterns and Temporal Shift in Strongmen Rule vs. Democracy Support



Note: The diagram shows percentages of national samples agreeing strongly or fairly with the statement that it is a good idea to have “democracy” and who at the same time disagree strongly or fairly with the statement that it is a good idea to have “strong leaders who do not have to bother with parliaments and elections.” National samples are weighted in proportion to the respective country’s population size and cover a constant set of mature Western democracies participating in rounds 3 (1995-98), 5 (2005-09) and 7 (2017-19) of the World Values Surveys, including: Australia, Finland, Germany, New Zealand, Norway, Spain, Sweden, Switzerland, and the US.

Interpretation: Younger cohorts in mature democracies are no less supportive of democracy than older cohorts and this pattern has not changed from wave 3 (1995-98) till wave 7 (2017-20) of the World Values Survey. *Data source:* IVS 2021.¹

OA-Figure 17. Sanctity Cults as a Decelerator of Modernity's Emancipatory Effect



Note: Horizontal axis is the inverse of Welzel's (2013) secular values index (short version), thus measuring the combination of national pride, an urge to make one's parents proud, willingness to fight for one's country in the case of war, respect for authority and strength of religious belief as well as frequency of religious practice.

The vertical axis displays the residuals in emancipative values in 2012 unexplained by a country's advancement in cognitive mobilization (see Figure 4). Data are from the World Values Surveys (www.worldvaluessurvey.org) (Haerpfer, Inglehart, Moreno and Welzel et al., cited in endnote 8).

Note: Variables on the two axes are residuals of the same variables in Figure 4, obtained after controlling the effect of cognitive mobilization on emancipative values for sanctity in the diagram above.

Figure source: Christian Welzel, "Democratic Horizons: What Value Change Reveals about the Future of Democracy," *Democratization* 28 (2021): 992-1016, Figure 7, p. 1003 (by permission of the author).

Interpretation: Elite-fabricated sanctity cults (which include patriarchal family, fertility and sex norms) slow down the translation of cognitive mobilization into emancipative values (upper diagram). But despite this deceleration, emancipative values continue to rise under the imprint of cognitive mobilization (lower diagram). *Data source:* Ronald Inglehart, Christian Haerpfer, Alejandro Morena and Christian Welzel et al. (eds.), *World Values Surveys: Time Series Datafile 1981-2020* (release version: July 2020, www.worldvaluessurvey.org), Madrid: WVS Archive.

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 - ⁴ Michael Coppedge, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, et al., V-Dem Codebook V10 (Varieties of Democracy (V-Dem) Project, 2020).
 - ⁵ Stefan Kruse, Maria Ravlik, and Christian Welzel, “Democracy Confused: When People Mistake the Absence of Democracy for Its Presence,” *Journal of Cross-Cultural Psychology* 50, no. 3 (2019): 315–35, <https://doi.org/10.1177/0022022118821437>.
 - ⁶ Lennart Brunkert, Stefan Kruse, and Christian Welzel, “A Tale of Culture-Bound Regime Evolution: The Centennial Democratic Trend and Its Recent Reversal,” *Democratization* 26, no. 3 (2019): 422–43, <https://doi.org/10.1080/13510347.2018.1542430>.
 - ⁷ Ibid.
 - ⁸ Lührmann, Anna, Nils Düpont, Masaaki Higashijima, Yaman Berker Kava- soglu, Kyle L. Marquardt, Michael Bernhard, Holger Döring, Allen Hicken, Melis Laebens, Staffan I. Lindberg, Juraj Medzihorsky, Anja Neundorff, Ora John Reuter, Saskia Ruth-Lovell, Keith R. Weghorst, Nina Wiesehomeier, Joseph Wright, Nazifa Alizada, Paul Bederke, Lisa Gastaldi, Sandra Grahn, Garry Hindle, Nina Ilchenko, Johannes von Römer, Daniel Pemstein, and Brigitte Seim. 2020. “Codebook Varieties of Party Identity and Organisation (V-Party) V1”. Varieties of Democracy (V-Dem) Project.