Could global democracy satisfy diverse policy values? An empirical analysis

Introduction

Over the past decades, deepening global interdependence in economic, environmental, social and other affairs, along with concomitant reactions against various forms of international integration, has provided renewed impetus to age-old debates in political thought on the appropriate spatial scale of governance and democracy (Dahl 1999b, Borowiak 2007). The effective provision of global collective goods and the protection of human rights and fundamental interests is often said to require deeper forms of cross-border political integration, stronger intergovernmental institutions, and perhaps even some kind of global government (Cabrera 2010, Zürn 2016). Scholars supporting the transfer of authority to global institutions generally also argue that such institutions ought to make decisions in accordance with democratic principles. Cosmopolitan democrats maintain that the best way to preserve democracy under conditions of globalization is to extend it beyond states, for instance by creating a global parliamentary assembly (Held 1995, Falk and Strauss 2001, Archibugi 2008). Some cosmopolitan theorists go as far as stating that "[e]ither democracy is global or it is not democracy" (Marchetti 2008, 1). While most scholarship on global democracy is concerned with normative arguments on its desirability, some studies empirically trace the emergence of nascent democratic dimensions in existing global governance institutions (Macdonald 2012, Payne and Samhat 2012, Tallberg, et al. 2013, Grigorescu 2015, Zürn 2016).

As the number of scholars arguing in favour of one form or another of global democracy has grown, so has the number of their critics. Criticism has come from a variety of quarters, such as Realist IR scholars who maintain that state leaders will resist any real transfer of authority, theorists of democracy who regard it as possible only among populations that share intense and exclusionary bonds of identity, or analysts who consider global decision-making

too distant from ordinary citizens to enable them to meaningfully participate or be represented (Dahl 1999a, Schweller 1999, for discussions see Archibugi 2004, Miller 2009, Valentini 2014). Even some defenders of international institutions' democratic legitimacy argue that such institutions should be seen as roughly akin to central banks or judiciaries, effective and normatively desirable elements of democratic systems precisely because they are partially insulated from direct public input (Keohane, et al. 2009).

In this paper, we focus on a widespread and fundamental—but, we argue, insufficiently scrutinized—objection to global democracy: the view that in the world as a whole people's preferences over the content of public policies are simply too diverse for democracy.

Excessive diversity of what we term policy values—people's fundamental views on public policy questions—may lead to two dangers. First, unless everyone in a polity is in perfect agreement, any political regime will leave some citizens more dissatisfied with the content of policy decisions than others. To the extent democracies follow majority rule they can minimize this concern. More homogenous polities will be more likely to satisfy a larger portion of the population. Shifting the site of democratic decision-making from the state level to the transnational level risks subjecting populations to majority views distant from their own because policy values within states are thought to be relatively homogeneous, at least in comparison with the world as a whole. It follows that the emphasis should be on promoting and preserving national democracy rather than striving for some form of global democracy. A second and related fear is that a shift in the site of democratic decision-making to the transnational level would increase the risk of *persistent minorities*, that is, the existence of groups of people who are systematically outvoted not only on individual policies but on most policy issues they care about (Christiano 2008). Trying to keep the amount of citizens' dissatisfaction with public policies as low as possible is a worthwhile objective of institutional design. It underlies the principle of subsidiarity and much economic literature on federalism

and decentralization. The problem of persistent minorities may be of even deeper normative significance, since for some theorists it potentially undermines the democratic credentials of a political system by not treating individuals equally.

While in this paper we treat the potential increase of policy dissatisfaction and especially of the risk of persistent minorities as a *normative* problem, we also note that they have important pragmatic implications, e.g. undermining democratic stability. Even in situations where majority decisions might be legitimate for democratic *theory*, they may be rejected as illegitimate by the affected minorities themselves, with the resulting risk of alienation and rebellion.

If it were true that the extension of democracy to global decision-making would increase policy dissatisfaction and generate persistent minorities, this would constitute a significant challenge for its proponents. But is it true? Numerous scholars seem to assume, explicitly or implicitly, that it is. For instance, in criticising the proposal for a global parliamentary assembly, Joseph Nye remarked that "treating the world as one global constituency implies the existence of a political community in which citizens of around 200 states would be willing to be *continually* outvoted by more than a billion Chinese and a billion Indians" (Nye 2002, 17 emphasis added). The underlying assumption is that, if given the opportunity, people would vote along national lines and would do so consistently across the range of issues that may be the object of decision.

We must recognize that we have had little empirical basis to say whether such common assumptions are accurate. This paper contributes to filling this gap. After introducing the terms of the debate, the paper assesses how the risk of persistent minorities changes under an imagined shift in the site of democratic decision-making from the national to the global level. We do so by systematically comparing—for the first time, to our knowledge—the distribution of policy values within numerous countries of the world to the distribution of policy values in

the world as a whole. We perform this comparison by defining and calculating five measures: heterogeneity of policy values, polarization of policy values, crosscuttingness of policy values, overall policy dissatisfaction across issues, and inequality in policy dissatisfaction across issues. Each measure contributes to our understanding of whether policy dissatisfaction and persistent minorities would increase under global democracy.

Our empirical analysis draws on two global surveys of political and social attitudes with around 50,000 respondents each, which together give us data for 72 unique countries that represent 86 percent of the global population. We find that, on average, the world as a whole is slightly more heterogeneous and polarized than individual countries. We also find that, on average, it is slightly more crosscutting. In terms of dissatisfaction, we find that a world democracy would have no more distance between citizens and the median policy value than the average country would. Furthermore, this dissatisfaction would be distributed more widely at the world scale than it would be within the average country. The key finding is thus that a world polity would have values of heterogeneity, polarization, crosscuttingness, dissatisfaction, and inequality of dissatisfaction that are comfortably *within* the range of those of existing states – in other words, the world polity would not be an outlier. The results, robust to a variety of alternative data, measurements, and aggregation rules, suggest that, on balance, the risks of dissatisfaction with policy and persistent minorities would not increase in a global democratic polity compared to individual states.

In conclusion, we find no significant support for rejecting global democracy *in general* on the ground of preference heterogeneity and persistent minorities. A global democratic polity would be like a fairly typical state in this regard. While our argument obviously addresses only one of the major debates regarding the democratic legitimacy of supranational institutions, our findings should be reassuring for those who believe that there should be more, and more democratic, governance at the global level.

Why global democracy?

If democracy is an "essentially contested concept" (Gallie 1956), this is all the more true for global democracy. Since here we do not aim to settle conceptual differences, we adopt a working definition of global democracy that should be acceptable to many supporters as well as critics. Following Koenig-Archibugi (2011, 522), we understand 'global democracy' as any institutional arrangements that meets the following set of broad criteria: (i) it encompasses all regions of the world; (ii) supranational bodies make binding decisions on a range of issues of global relevance; (iii) the members of those bodies are representative of, and accountable to, groups of citizens, through electoral mechanisms or other formal and transparent relationships of political delegation; (iv) these mechanisms promote the equal representation of all world citizens in conjunction with other principles such as a balanced representation of the constitutive territorial units and possibly forms of functional representation; (v) decisions are taken by majority rule, except when minorities are granted veto rights to protect legitimate and impartially determined vital interests; (vi) independent supranational judicial bodies resolve conflicts in accordance with constitutional rules; and (vii) there are robust mechanisms for promoting compliance with decisions and rulings, although not necessarily by concentrating control of means of coercion.

Generally speaking, supporters of global democracy advance two kinds of justification for it, which mirror the main justifications offered for democracy in general. Following the literature, we call them "intrinsic" and "instrumental" respectively (Caney 2006, Christiano 2006, Cabrera 2014). The intrinsic justification is based on the principle that individuals should be entitled to participate, on equal terms, in important decisions that affect their lives (Held 1995, Gould 2004). Several authors note that global governance institutions create legal orders meant to address common problems and realizing shared values. While these authors regard the strengthening global rule-making as an appropriate response to material and moral

interdependence, they argue that individuals, being the ultimate subject to global rules, should have an equal opportunity to influence the content of those rules and hold accountable the power-wielders in charge of their application. The requirement is particularly strong when the power-wielders employ coercion (Abizadeh 2012, Valentini 2014, Erman 2016). For various reasons, the democratic principle that those subject to a law should also be its authors is not well served by the traditional doctrine of state consent and therefore, ideally, global democratic institutions and procedures are required to legitimize international law (Buchanan 2004, 314-27). Other authors support a more expansive interpretation of participatory entitlements in decision-making: such entitlements are owed not only to those who are subject to (coercively enforced) regulations, but to all those whose interests are significantly affected by the decisions (Goodin 2007). From this perspective, global democratic mechanisms are needed to control not only multilateral law-making but also unilateral policies of powerful states (Koenig-Archibugi 2012).

While such intrinsic arguments for global democracy stress "input legitimacy," instrumental justifications for it focus on the output of decision-making systems. From this perspective, global democratic procedures are sees as the most effective institutional framework for the realization of global justice and/or the protection of human rights, such as life, bodily integrity and basic economic opportunities (Caney 2006, Cabrera 2014). Also this strand of argument builds on a line of reasoning that is often heard in the context of national democracies: the protection of people's fundamental rights and interests is greatly enhanced if they have a voice in political decision-making, alongside other mechanisms such as fair access to impartial courts that safeguard the rule of law (Mill 1861). Global democratic institutions are desirable, the argument goes, because they would provide people with means to advance their core interests that would be unavailable in a world of sovereign states.

Assessing the merits of the intrinsic and instrumental justifications of global democracy falls outside the scope of this paper, but for our purposes it suffices that an increasing number of political theorists argues that circumscribing the scope of democratic politics to nation-states cannot be justified on normative grounds. The remainder of this paper examines two important concerns raised by this argument.

The problems of diversity and persistent minorities

As noted above, the idea of global democracy entails not only the existence of mechanisms aimed at reducing political inequality among people around the world but also the expectation that, ultimately, policy decisions should reflect the preferences of the largest number. This expectation holds even though all known blueprints for global democracy contain devices for protecting the interests of minorities, notably the judicial review of legislative and executive decisions by a constitutional court, a federal distribution of authority across governance levels, and sometimes 'consociational' arrangements (Moore 2006). Here we do not examine how the inclusion of majoritarian elements has been justified by its supporters (see Marchetti 2008, 64-5). Instead, in this section we will show how those majoritarian elements have prompted some authors to question the normative desirability of global democracy.

We consider two reasons why introducing democratic-majoritarian procedures at the global level may be normatively undesirable: the first reason is that such a move would fail to respect and accommodate the legitimate diversity of policy values among the people of the world, which is better served by insulating national democracies from illegitimate outside interference; the second reason is that the global diversity of policy values is distributed in such a way that democratic-majoritarian procedures at the global level would generate a serious problem of persistent minorities. To be sure, there are other reasons why global democracy may be seen as undesirable, such as the obstacles to deliberation in a linguistically and culturally fragmented world, low levels of trust or solidarity, or absence of consistent collective

preferences and sufficient levels of "meta-agreement" (as opposed to substantive agreement) among the world's population (Kymlicka 2001, Miller 2009, List and Koenig-Archibugi 2010, Miller 2010, Song 2012, see the comprehensive discussion by Valentini 2014). But here we consider only the two lines of argument sketched above, which we now examine more closely.

At the root of much criticism of global democracy is the view that, as Andrew Hurrell (2007, 47) summarizes a central aspect of the pluralist interpretation of global politics, "diversity is a fundamental feature of humanity and that the clash of moral, national, and religious loyalties is not the result of ignorance of irrationality but rather reflects the plurality of values by which all political arrangements and notions of the good life are to be judged." Robert Jackson (2000, 178-9) distinguishes two ways in which the current world order is pluralist: it displays jurisdictional pluralism, i.e. the recognition of the equal sovereignty and territorial integrity of states; and it displays value pluralism, i.e. a strong diversity of values held by people in different states. "There is almost unlimited heterogeneity in the history, politics, ideology, religion, language, ethnicity, culture, customs, traditions, of the member states of global international society" (Jackson 2000, 403). In Jackson's account, the key function and achievement of jurisdictional pluralism is the protection of value pluralism. "People want to do their own thing in their own way in their own place" and thus "the most important thing is to have a local sovereign jurisdiction within which different groups of people can endeavour to build their own political life according to their own enlightenment and free of foreign interference" (Jackson 2000, 403-4). Pluralists conclude that, "[i]f diversity and value conflicts are such important features of international life, then we should seek to organize global politics in such a way as to give groups scope for collective self-government and cultural autonomy in their own affairs and to reduce the degree to which they will clash over how the world should be ordered" (Hurrell 2007, 47).

Authors who stress the role of national sovereignty in protecting the pursuit of a diverse range of values do not necessarily have the same views on why such diversity deserves to be protected. Martha Nussbaum (2006, 314) notes that "[t]o protect national sovereignty in a world of pluralism is an important part of protecting human freedom." In David Miller's analysis of where the boundaries of demoi should be drawn, the importance attached to value diversity derives from an approach to democratic theory that he labels "radical democracy." From this perspective, "Democracy is a system in which people come together to decide matters of common concern on the basis of equality, and the aim is to reach decisions that everyone can identify with, that is, can see as in some sense *their* decision" (Miller 2009, 205-6). Miller argues that a group must possess several qualities in order to be able to function as a demos in this way, one of which is an underlying agreement on ethical principles. Because such agreement is weaker beyond nation-states than within them, "radical" democrats generally do not find it desirable expanding the demos transnationally and thus dilute an essential quality of it, especially when there are alternative ways of dealing with the detrimental external effects of the decisions of national democracies (see also Miller 2010, 145-6).

Significantly, these authors tend to assume a high correspondence between—and perhaps even tend to conflate—people's views on public policy, their broader cultural values and orientations, and their membership in societies delimited by state boundaries. Crucially for our purposes, these arguments do not simply stress that the world population is diverse with regard to policy values and preferences, but they maintain that patterns of diversity and commonality track the division of the world into states. Simply put, they contrast relatively homogeneous state citizenries with a relatively heterogeneous world population.[1]

[1] In a related vein, some authors posit that "the likelihood of agreement on justice diminishes with the increasing size of the polity" (Kukathas 2006, 20).

As we noted above, there is a second line of argument that leads from the distribution of policy preferences in the world to a rejection of global democracy. This argument has been developed mainly by Thomas Christiano, who expects that global democracy would greatly exacerbate the problem of persistent minorities compared to national democracies. A persistent minority consists of members of a population who are systematically outvoted across all policy issues, rather than being sometimes on the winning side and sometimes on the losing side. Christiano distinguishes this problem from the problem of tyranny of the majority, which results from a majority knowingly exploiting and violating the basic rights of minorities. Christiano (2008) and other authors (Barry 1979, Dworkin 1987, Guinier 1994, Saunders 2010, Cabrera 2014) argue that the existence of persistent minorities weakens the legitimacy of democracy even if the majority decision does not violate basic rights. The existence of a group that almost never gets the policies that it wants is normatively problematic, Christiano argues, because it clashes with several important features of a just democratic process:

> "Clearly, if a group never or almost never has its way in the process of collective decision-making then it will not be able to provide a corrective to the cognitive bias of the majority in making the laws. They will not be able to make the larger world it lives in a home for themselves. And since other citizens will experience no need to listen to their ideas about justice and well-being, they will not learn much from the democratic process. Finally, since they can see that these interests are being neglected by the democratic process, they will have reason to think that they are not being treated as equals by the society at large. So they will not have their equal status recognized and affirmed." (Christiano 2008, 296)

Christiano posits that the problem of persistent minorities would be more severe in a global democracy than in national democracies. "This is a significant problem in modern states as they are. But it would appear to be an even greater problem in global and transnational

institutions if they were fully democratized. The larger the constituency, the larger the chances are that particular minorities would simply get lost in the democratic decision-making" (see also Christiano 2006, Christiano 2012, 76). Cabrera (2014, 231) agrees that the problem of persistent minorities "could again be magnified with a global extension of participatory institutions," but thinks that this problem is soluble with the appropriate approach to defining the boundaries of the demos.

Whatever their philosophical merits, both the diversity and the persistent minority arguments make specific empirical assumptions. The former assumes that policy values are significantly more diverse at the global than at the national level, and the latter assumes that persistent minorities are more likely at the global than at the national level. How accurate are these empirical assumptions? The remainder of this paper tackles this question.

Assessing the empirical assumptions: measures

Empirically assessing the view that policy value diversity and the likelihood of persistent minorities are significantly higher at the global level than within existing states presents considerable challenges. First, we need to know what the policy values of individuals around the world are. Second, we need to know which distributions of policy values across individuals are likely to leave more people dissatisfied with the outcome of collective decisions and to generate more inequality in how policy dissatisfaction is distributed. This and the next section outline our strategy for tackling these challenges. Since the second challenge sets some constraints on how we can approach the first one, we address it first. The question of the relevant data is then discussed in the next section.

Our task is to gauge the extent to which individuals will be left dissatisfied with the outcome of majoritarian decisions on policies, and the likelihood that persistent minorities will emerge. To do so, we adopt or introduce five different measures that apply to a population and that, by themselves or in combination, provide useful information for these purposes. These are: (1)

heterogeneity, which refers to the extent to which views on a policy value (e.g. "free market") are distributed across a population, without reference to the shape of that distribution; (2) polarization, which captures the extent to which views on a policy value cluster at opposite ends of a given dimension (e.g. strong support for and strong opposition to traditionalist family policies); (3) crosscuttingness, which captures the extent to which views on one policy value (e.g. "free market") are correlated with views on a different policy value (e.g. traditional morality) in a population; (4) overall policy dissatisfaction in a population, which aggregates the distances of individuals from the central (i.e. median) value across policy issues; and finally (5) inequality of policy dissatisfaction among the members of a population across policy issues, which capture the extent to which dissatisfaction is concentrated in certain individuals.

Our measures of heterogeneity and polarization are adopted from the literature. Cross-cuttingness has also been used by other scholars to assess the distribution of religious or ethnic cleavages in societies, but we take the additional step of applying it to policy values, as we have in earlier work on the European Union. To our knowledge, this is the first article to measure overall policy dissatisfaction and inequality of policy satisfaction both within countries and globally.

Each measure can in principle be operationalized in various ways. In Web-Appendix 1 we discuss how the measures capture the theoretical concepts of interest and note the various formulas that we use in this paper and, when relevant, compare them with alternative formulas. What is relevant here is that each of these measures can help us capture the underlying phenomena of interest, i.e. a) how dissatisfied with majority decisions should group of individuals expected to be in different polities, and b) how unequal that dissatisfaction is likely to be. Our measures of heterogeneity, polarization, and, most directly, dissatisfaction each provide information on the first concept, the extent to which a majority decision will satisfy all members of the polity. Regarding the second, *inequality of policy dissatisfaction* is a way to

directly estimate the severity of the persistent minority problem. Combining *crosscuttingness* with *heterogeneity* or *polarization* provides a different route to that goal. When policy preferences on individual issues are not polarized, democratic satisfaction is likely to be widespread even at low levels of crosscuttingness. The more preferences on individual issues are polarized, the more high crosscuttingness is necessary to ensure that democratic satisfaction is widespread. The problem of highly unequal democratic satisfaction and persistent minorities is severe when polarization is high and crosscuttingness is low.

The implications of transferring powers to supranational levels of governance hence raises the following question: *How do the five measures compare between the national and the global levels?*

Assessing the empirical assumptions: data

The problems of preference dissatisfaction and persistent minorities are here understood in relation to the content of public policies, as opposed to other forms of minority exclusion such as lack of demographic representativeness of elected politicians. We are therefore interested in the "policy values" of individuals. These are distinct from personal values in that policy values refer to the content of collectively binding decisions rather than norms of personal conduct. Policy values are also distinct from preferences for specific public policies in that they refer to the outcomes of political decision-making rather than the means to achieve them.

Some studies use socio-demographic indicators such as religious affiliation, language and ethnicity as proxies for the distribution of preferences across a population.[2] While such socio-demographic characteristics no doubt influence the formation and distribution of policy values, the correlation between the two is far from perfect – we simply cannot assume high

[2] Alesina, et al. (1999), for instance, treat ethnic heterogeneity as proxy for preference heterogeneity. On crosscuttingness applied to ethnic and religious identities and income see Selway (2011), Finseraas and Jakobsson (2012), Gubler and Selway (2012).

homogeneity amongst all members of a certain religious, linguistic, socio-economic, or other group (Kriesi 1998, De La O and Rodden 2008, Dion and Birchfield 2010, Guillaud 2013, Kitschelt and Rehm 2014). Hence, our empirical strategy aims at capturing those values directly through the analysis of opinion polls.

A key decision concerns the dimensions that structure policy values around the world. Recent research on Western countries seems to have reached the conclusion that public opinion (as opposed to political parties) is divided along at least two distinct dimensions (Kitschelt 1994, Kriesi, et al. 2008, Van der Brug and Van Spanje 2009, Lefkofridi, et al. 2014, Rovny and Marks n.d.). First, there is an economic left-right dimension, which concerns issues such as the relationship between governments and markets and the redistribution of income and other resources across economic strata. Second, there is a cultural dimension that pits libertarian-alternative against traditionalist-authoritarian positions. While these dimensions are compelling and are included in the study, we accept the argument of Rovny and Marks (n.d.) for identifying the main dimensions deductively rather than inductively (e.g. via factor analysis). Therefore we add a third dimension – the importance of protecting the environment even at the expenses of economic growth – because theoretically it seems sufficiently independent from the other two dimensions and because of its substantive importance for national and global politics.

Our goals set significant constraints on the surveys that we can use. First, the surveys need to have sufficient coverage, i.e. they need to encompass all countries in the world or, more realistically, a substantial number of countries from each region of the world. Second, to measure crosscuttingness we need to know how the *same* individuals responded to questions on *at least two*, and ideally more, distinct policy dimensions. Third, we need questions that ensure comparability across diverse national contexts. While some degree of context anchoring is inherent in all survey data, questions that explicitly or implicitly lead respondents to use the

national status quo as baseline (e.g. Do you prefer *more* or *less* redistribution?) are less useful than questions that do not do so (e.g. Should the government take care of the poor?).

With these considerations in mind, we rely primarily on the Pew Global Attitudes Survey 2007, which polled around 1000 individuals in each of 47 countries representing 60 percent of the world's population. The advantage of the Pew survey is that the relevant questions are phrased in absolute terms rather than relative to an (implicit) baseline. The relevant questions covering traditionalism, economic values, and environment are shown in Table 1. However, to assess the robustness of our findings we also use the fifth wave of the World Values Survey (WVS), which was conducted between 2005 and 2007 and polled approximately 1000 individuals in each of 90 countries. Because not every question was asked in every country in the fifth wave of the WVS, in practice we include only 52 countries from that survey, which cover about 70 percent of the world population. The drawback of the WVS is that the three questions on the economy, and one of the questions on the environment, are phrased in more relativist terms than the Pew questions, and hence responses are likely less comparable across countries than those in the Pew survey (see Table 1).[3]

In sum, estimates for what in the following we call the "world" refer either to all the approximately 47,000 participants in the Pew study or to the 50,000 individuals surveyed for the questions we have selected in the WVS fifth wave. Together they cover around 100,000 individuals in 72 unique countries representing 86 percent of the world population. In the results reported in the following section, the responses are weighted proportionally by the

[3] The drawback is probably not severe. Lindqvist and Östling (2010, 546), who use the same economic questions from the WVS, show that, as long as the concentration of responses does not directly depend on the current level of government intervention, the standard deviation (the measure of polarization used by them and by us) is unaffected by whether questions refer to preferred changes from the status quo or preferences for absolute levels of government intervention.

population of the respondents' countries, to simulate a simply "one person, one vote" scenario. In a subsequent section, we report results based on alternative aggregation methods.

We do not aggregate questions across the surveys to avoid potential measurement errors. Within each survey, we followed Ansolabehere, et al. (2008) and averaged individuals' responses across questions in the same dimension to reduce the potential bias any individual question may introduce (with appropriate adjustments to make sure high and low responses were in the same direction across countries, and, in the case of the traditionalism measure in the WVS data, to compress two questions with 10 responses categories to five). Ansolabehere, et al. (2008) found averaging across questions to be little different empirically from more complex (and less transparent) approaches to combining data to capture an underlying dimension (e.g. factor analysis).

Findings

Table 2 provides an overview of our findings, showing how a world polity would compare to existing countries in relation to the various measures presented above. In relation to each measure and policy dimension, the table indicate the place of the world in a ranking where the first-ranked country displays the highest level of heterogeneity, polarization, cross-cuttingness, overall dissatisfaction, or inequality of dissatisfaction. Recall that higher scores can be expected to exacerbate the problems of diversity and persistent minorities, with the exception of crosscuttingness, for which higher scores are more beneficial. Web-Appendix 2 provides full results on each measure: the exact scores for each country, the average of countries, and the scores for the world as a whole. In the following, we provide an overview of the main findings.

Heterogeneity. According to the Pew data, for all three dimensions the level of heterogeneity of the world is virtually identical to the average level of heterogeneity of all countries. According to the WVS data, the world is more heterogeneous than the average country in all

dimensions, but, strikingly, not much more. In no case is it more heterogeneous than the most heterogeneous countries. According to the WVS, a hypothetical world polity would have less disagreement on the traditionalism dimension than the United States.

Polarization. Our measurement of polarization as standard deviation paint a similar picture. The Pew data show the world to be *less* polarized than the average country in the economy and traditionalism dimensions, falling comfortably low in the rankings. It is as polarized as the average country in the environment dimension. The WVS data, by contrast, show the world to be more polarized than the average country, although several countries – including the United States in the traditionalism dimensions – are more polarized than the world.

Crosscuttingness. The measure provides information on how policy values crosscut or reinforce each other in the surveyed countries and across all the citizens in our sample as a whole. Our three dimensions can combine in three different ways: traditionalism-economy, economy-environment, and traditionalism-environment. As with our other measures, a hypothetical global democratic polity would fall comfortably within the range of individual countries in terms of crosscuttingness. In the Pew data, the world as a whole is more cross-cut than the average country in the economy-environment and traditionalism-environment dimensions, and less than the average country in the economy-traditionalism dimensions. In the WVS data, policy values are more crosscutting in the world as a whole than within the average country for all dimensions. In particular, the world is more crosscut than the United States in all dimensions in both surveys, except with regard to WVS data on economy-environment.

Figure 1 summarizes the preceding findings graphically. Each of subgraphs plots the values of each country and of the world (World-PR) in relation to the polarization in one dimension (horizontal axis) and the crosscuttingness between two dimensions (vertical axis). Recall the point made above: the risk of persistent minorities is highest when high polarization is

combined with low crosscuttingness, a situation that corresponds to the bottom-right area of the graphs. The graph shows that the world as a whole is further away from the "danger zone" than a significant portion of countries.

Overall dissatisfaction and inequality of dissatisfaction. Finally, the findings regarding dissatisfaction reveal a very similar story. According the Pew data, the world as a whole has almost exactly as much dissatisfaction as the average country, falling squarely in the middle of the distribution. The WVS data, in turn, show the world as a whole as having slightly less total dissatisfaction than the average country. In both datasets, however, the world's dissatisfaction is spread more broadly than in the average country, with the world ranking 16th out of 47 in the Pew data and 11th out of 45 in the WVS data. (Full results in Web-Appendix 2).

Probing assumptions about transnational solidarity

The empirical strategy employed in this paper rests on the assumption that the policy values expressed by citizens would not change if the context of democratic decision-making shifted from the national level to the global level. This assumption makes sense in the context of our thought-experiment—there is no a priori reason to treat a larger polity differently from a smaller one—but how closely does it match current reality? The assumption seems highly plausible for some of the policy values we consider and the survey questions we use to capture them – for instance, a supporter of the legalization of homosexuality in her own country is unlikely to support a ban across the world, and this is likely to apply to other issues pitting personal freedoms vs traditional morality. The validity of the assumption is perhaps less straightforward in relation to other issues, and specifically views on poverty and inequality. Most importantly, a respondent completely agreeing that "It is the responsibility of the state to take care of very poor people who can't take care of themselves" (one of the Pew survey questions we use) may have only her poor co-nationals in mind when answering the question, and possibly object to the use of public funds to help poor people abroad. Of course, under the

global polity we posit, everyone in the world would be co-nationals, but we may worry that higher levels of cultural diversity, economic disparity, and other factors may systematically reduce such sentiments as the size of the polity expands. Taking the analysis one step further, we assess this possibility via a further question included in the Pew survey: "Do you think the wealthier nations of the world are doing enough or not doing enough to help the poorer nations of the world with problems such as economic development, reducing poverty, and improving health?" Two response categories are relevant: "doing enough" and "not doing enough". This survey question complements the economy questions considered above by capturing transnational economic solidarity values more directly.

We find that support for global redistribution is both higher and more widely distributed than may be commonly thought. First, the respondents answering that the wealthier nations are *not* doing enough outnumber respondents answering that enough is being done in all 47 countries except Indonesia. Globally, about three in four respondents support the idea that rich countries should do more. Second, contrary to what some perhaps might expect, we find that the view that wealthier nations are *not* doing enough for poorer nations is more widespread in wealthier countries than in poorer countries. There is a strong positive correlation ($r = 0.59$, $p < 0.01$) between the GDP per capita of a country and support for the view that richer countries should do more to promote economic development, reducing poverty, and improving health in poorer countries.[4]

For our purposes, however, the overall level of solidarity is less important than how it may affect the distribution of policy values at different levels of aggregation. Given what we know

[4] The correlation reported is between (a) the difference between the percentage responding "not doing enough" and the percentage responding "doing enough" and (b) expenditure-side real GDP in 2007 at current PPPs divided by population and logged (from Penn World Tables 9.0). The correlation is slightly weaker if GDP per capita is not logged ($r = 0.32$, $p < 0.05$).

about levels of international solidarity, would the distribution of opinions on helping the *global* poor be fundamentally different than the distribution of opinions on government help for the poor in national contexts? We can test this question by weighting individuals' views over economic redistribution by whether or not they express transnational solidarity. Specifically, we re-calculate our economic dimension at the global level by recoding all respondents who a) completely/mostly agree that the government should take care of the poor (question Q24b on the Pew survey) *and* b) replied that rich countries were already "doing enough" as respondents who mostly/completely *disagree* that the government should take care of the poor.[5] In other words, those who support public help for the poor but not transnational solidarity are now assumed to only support help for the poor at the national level, and are therefore coded in opposite way for our calculations of a global polity. Under this very restrictive assumption, does the global polity lead to a highly increased risk of dissatisfaction or permanent minorities?

Table 3 compares a world polity in which opinions on redistribution are weighted by transnational solidarity to one in which they are not. As we would expect, assuming that all respondents who do not express support for transnational solidarity would turn against redistributive policies at the global scale increases the world polity's heterogeneity and polarization. Significantly, however, the effect is modest, shifting the world from the middle of the distribution to the top quartile, still comfortably within the range of countries. The effect on crosscuttingness and overall dissatisfaction is instead largely neutral or even slightly positive. In sum, even if respondents were to sharply change their policy views on helping the

[5] Specifically, 4004 respondents who "strongly agree" with government responsibility for the poor but not with more help from rich to poor countries were re-coded as "mostly disagree" with government responsibility for the poor, and 2557 respondents who "mostly agree" with government responsibility for the poor but not with more help from rich to poor countries were recoded "strongly disagree" with government responsibility for the poor. In total 14.5 percent of the observations were changed for the new measure.

poor with a shift to a global polity, the overall distribution of policy values would not be unduly prone to the problem of persistent minorities.

While these results should be considered suggestive rather than conclusive, what we can say is that the most relevant available evidence on public opinion does not support the expectation that citizens in rich countries would be constantly outvoted by citizens of poor countries over issues of transnational redistribution under a regime of global democracy. As with the policy dimensions considered earlier, transnational solidarity is a contentious issue, but not more *across* countries than *within* them.

Alternative assumptions on global institutions

The measures for the "world" reported above are based on the assumption that public policies will reflect median policy values and that each individual counts the same, irrespective of the size of her country of residence or other factors. However, in principle there are various ways in which individual responses can be combined into a global measure, reflecting alternative assumptions on how citizen preferences may be represented and aggregated in a global decision-making process. This point is important because scholars and activists have proposed a variety of institutional designs for global democracy. While some are sympathetic towards global majoritarianism, most proponents of global democracy would prefer a combination of majoritarian elements with "federal" institutional devices that acknowledge the role played by nation-states in structuring people's interests and identities (see, for instance, Held 1995; Archibugi 2008). One such combination is familiar from the U.S. constitution: a bicameral system in which one chamber aims for equal representation of individual citizens and the other chamber gives equal weight to constituent states in the allocation of representatives to citizens. Moreover, some supporters of an elected global assembly advocate an institutional design that balances individual and state equality within the same chamber, by implementing degressive proportionality in the distribution of assembly seats to constituencies. Specifically, leaders of

the International Network of a Second UN Assembly and of the Committee for a Democratic U.N. have endorsed the square root formula proposed by Lionel Penrose in 1946 (Segall 1990, Bummel 2010).[6] Another proposal for allocating votes is based on a formula that gives equal weight to the population of member states, the sovereign equality principle, and financial contributions to common activities (Schwartzberg 2012). More complex designs are conceivable (Colomer 2014).

This is not the place to assess the merits and drawbacks of different aggregation methods. But we are interested in determining how our results change if we make different assumptions about how individual views are aggregated at the global level. To do this, we compare measures based on four different aggregation principles: (1) the "one person, one vote" world assumed in the previous section, where individual survey responses are weighted in direct proportion to the population of the respondents' countries; (2) a "Penrose" world, where they are weighted by the square root of the country's population; (3) a "censitary" world, where they are weighed by the GDP of their country, understood as proxy for financial contributions to providing global public goods; and (4) a "sovereign equality" world, where individual survey responses are not weighted by population or other factors. (We do not compute formulas mixing the four principles for reasons of manageability).

Figure 2 shows graphically the outcomes of this analysis (the exact scores are provided in Web-Appendix 3). We find that the worlds reflecting Penrose, censitary and sovereign-equality aggregation principles differ only marginally from the one person, one vote world described in the previous sections. Most importantly, the global polities based on each of the four aggregation principles would all have values of heterogeneity, polarization, crosscuttingness,

[6] Penrose (1946, 56) proposed that "the voting power of each nation in a world assembly should be proportional to the square root of the number of people in millions on each nation's voting list."

overall dissatisfaction and dissatisfaction inequality *within* the range of values displayed by existing states.

Conclusion

In this paper we have probed the empirical assumptions of two important objections to the thesis that democracy should be extended to the global level: the fear that global democracy would fail to respect and accommodate the legitimate diversity of policy values among the people of the world, and the fear that it would undermine its own democratic credentials by locking a substantial proportion of its citizens into a status of persistent minority.

The empirical analysis has revealed that the distribution of policy values across countries is not significantly different from the distribution of policy values within countries. In terms of heterogeneity and polarization, the world is about as diverse as the average country in most respects, and in any case it cannot be described as an outlier. At the same time, policy values across countries tend to crosscut one another slightly more than policy values within countries. Overall dissatisfaction with the median position is similar in the world as a whole and in the average country, and this dissatisfaction is spread somewhat more equally among individuals.

The most striking finding is how normal a hypothetical global democratic polity would be in terms of citizen policy values. We conclude that the two objections considered in the paper do not rest of solid empirical foundations. To be sure, this paper has not addressed other potential obstacles to global democracy, such as whether democratic deliberation in a common public sphere could be sustained in conditions of high linguistic diversity (Archibugi 2008) and whether democratic governance detached from national identities would be plagued by a deficit of trust and solidarity (Zürn 2000). However, its conclusions offer empirical reassurance regarding two important objections to extending democracy to a larger scale.

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Table 1: Survey questions used to measure policy values

Dimension	Question	Response categories	Source and question code
Traditionalism	Religion is a matter of personal faith and should be kept separate from government policy.	1 completely agree 2 mostly agree 3 mostly disagree 4 completely disagree	Pew2007 Q24c
	Our way of life needs to be protected against foreign influence	1 completely agree 2 mostly agree 3 mostly disagree 4 completely disagree	Pew2007 Q24d
	How much do you agree or disagree with each of the following statement: Politicians who do not believe in God are unfit for public office.	1 Agree strongly 2 Agree 3 Neither agree or disagree 4 Disagree 5 Strongly disagree	WVS 2005-7 F102
	How much do you agree or disagree with each of the following statement: Religious leaders should not influence government.	1 Agree strongly 2 Agree 3 Neither agree or disagree 4 Disagree 5 Strongly disagree	WVS 2005-7 F105
	Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: *Homosexuality*	1 Never justifiable ↑ ↓ 10 Always justifiable	WVS 2005-7 F118
	Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: *Divorce*.	1 Never justifiable ↑ ↓ 10 Always justifiable	WVS 2005-7 F121
Economy	Most people are better off in a free market economy, even though some people are rich and some are poor	1 completely agree 2 mostly agree 3 mostly disagree 4 completely disagree	Pew2007 Q19a
	It is the responsibility of the *(state or government)* to take care of very poor people who can't take care of themselves.	1 completely agree 2 mostly agree 3 mostly disagree 4 completely disagree	Pew2007 Q24b
	On this card you see a number of opposite views on various issues. How would you place your views on this scale?	1 Incomes should be made more equal ↑ ↓ 10 We need larger income differences as incentives	WVS 2005-7 E035
	On this card you see a number of opposite views on various issues. How would you place your views on this scale?	1 Private ownership of business should be increased ↑ ↓ 10 Government ownership of business should be increased	WVS 2005-7 E036
	On this card you see a number of opposite views on various issues. How	1 People should take more responsibility ↑	WVS 2005-7 E037

	would you place your views on this scale?	↓ 10 The government should take more responsibility	
Environment	Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs	1 completely agree 2 mostly agree 3 mostly disagree 4 completely disagree	Pew2007 Q19c
	I would agree to an increase in taxes if the extra money were used to prevent environmental pollution	1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree	WVS 2005-7 B002
	The Government should reduce environmental pollution, but it should not cost me any money	1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree	WVS 2005-7 B003

Table 2. Rank of the world in relation to heterogeneity, polarization, crosscuttingness, overall dissatisfaction and inequality of dissatisfaction

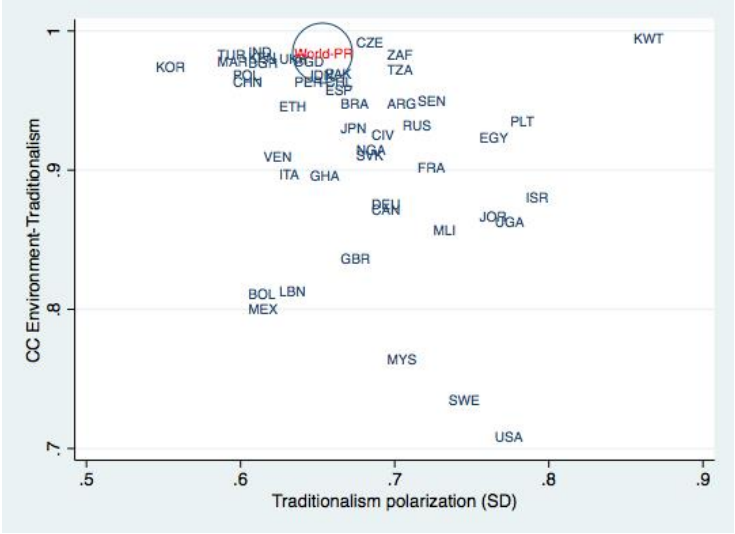
Measure	**Dimension(s)**	**Pew Survey**			**WVS**		
		Average of countries	World	Rank of World	Average of countries	World	Rank of World
Heterogeneity	Economy	0.59	0.59	28th of 48	0.82	0.84	9th of 53
	Traditionalism	0.58	0.59	19th of 48	0.63	0.68	14th of 46
	Environment	0.65	0.67	18th of 48	0.59	0.62	16th of 53
Polarization	Economy	0.68	0.65	37th of 48	1.68	1.90	11th of 53
	Traditionalism	0.66	0.63	33rd of 48	0.78	0.91	5th of 46
	Environment	0.85	0.85	25th of 48	0.69	0.73	17th of 53
Crosscuttingness	Economy-Traditionalism	0.73	0.69	31st of 48	0.91	0.96	13th of 46
	Economy-Environment	0.88	0.96	12th of 48	0.90	0.93	28th of 52
	Environment-Traditionalism	0.92	0.99	4th of 48	0.90	0.96	9th of 46
Overall dissatisfaction	All dimensions	0.94	0.93	30th of 48	0.88	0.88	19th of 46
Inequality of dissatisfaction	All dimensions	0.19	0.21	16th of 48	0.26	0.30	37th of 46

Table 3. Comparison of a world polity in which policy values over economy are weighted by transnational solidarity and one in which they are not. Pew data; responses proportional to population.

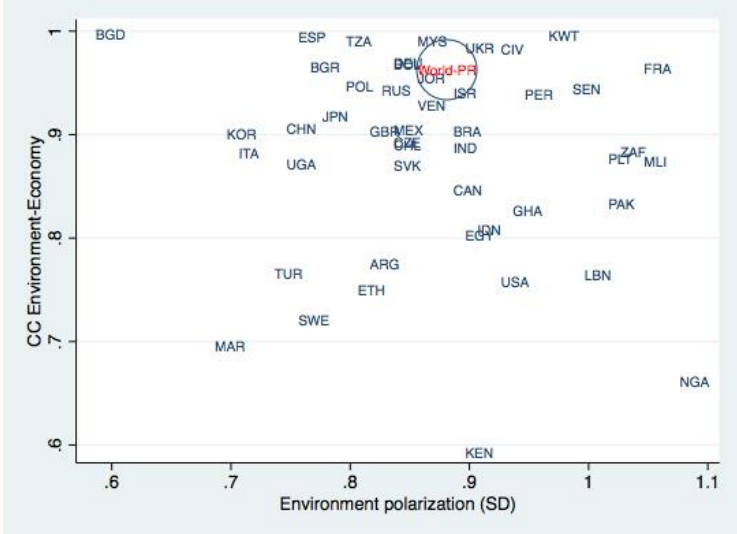
	Unweighted		Weighted for transnational solidarity	
	Value of World	Rank of World	Value of World	Rank of World
Heterogeneity economy	0.587	28th	0.624	9th
Polarization economy	0.65	37th	0.74	6th
Crosscuttingness economy-environment	0.964	12th	0.955	13th
Crosscuttingness traditionalism-economy	0.690	31st	0.727	27th
Overall dissatisfaction	0.931	30th	0.914	24th
Inequality of dissatisfaction (SD)	0.211	16th	0.233	13th

Figure 1 (a, b, c): Polarization and crosscuttingness of economy, traditionalism and environment for countries and World (World-PR), Pew survey.

a



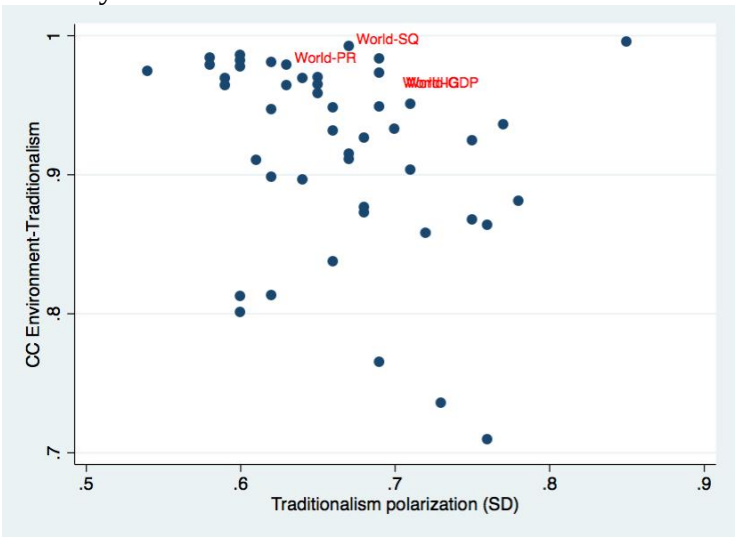
b



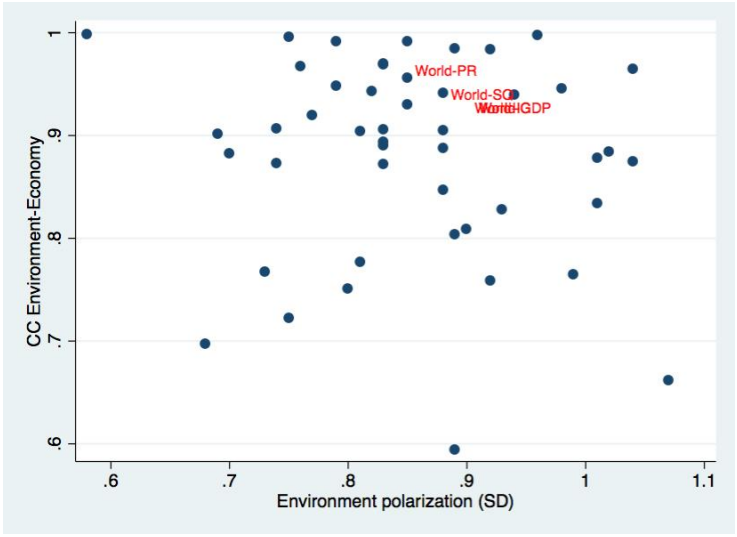
c

Figure 2 (a, b, c): Polarization and crosscuttingness of economy, traditionalism and environment for World under different aggregation rules, Pew survey.

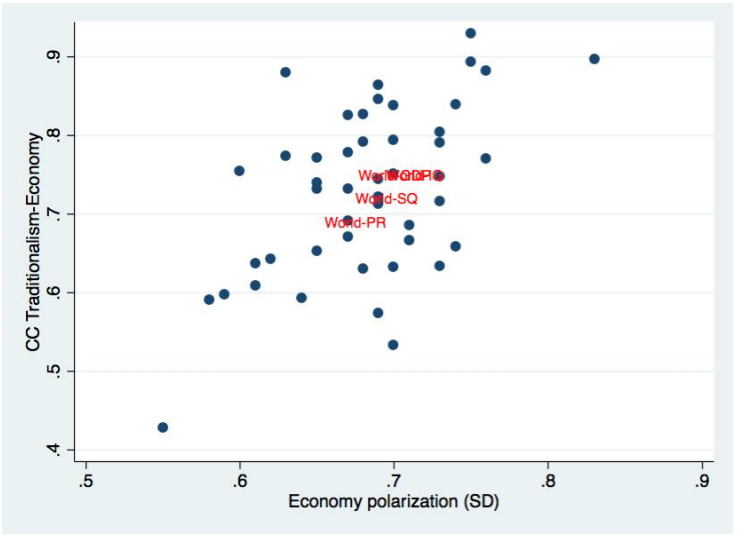
a



b



c



Note: World-PR denotes the “one person one vote” World; World-SQ denotes the “Penrose” degressive proportionality World; World-GDP denotes the censitary World; World-IG denotes the “sovereign equality” World; dots represent existing countries (country codes not shown).