

In: HOMO Oeconomicus, Journal of Behavioral and Institutional Economics, Vol 34, No 1, April 2017, pp 1-9, Springer, ISSN 0943-0180, DOI 10.1007/s/41412-017-0040-9. (Published online: 08 March 2017)
Accepted version.

The final publication is available at: <http://link.springer.com/journal/41412>

PROPOSALS FOR A DEMOCRACY OF THE FUTURE

Bruno S. Frey

University of Basel

and

CREMA – Center for Research in Economics, Management and the Arts

Abstract: This contribution focuses on how direct participation of citizens in the political process could be further developed in order to still be prosperous in the future. Recently, there have been strong attacks against existing democracy. The issue dealt with is where, when, and to what extent such participation rights should exist. The intention is to introduce novel ideas rather than to (formally) re-analyze well-known concepts. Several concrete proposals of how direct participation rights could be reformed are presented. This discussion is based on the Public Choice approach.

Keywords: Direct Democracy, Voting Weights, Referendums, Random Decisions, Elections.

JEL Codes: D02, D70, D72, H10, Z18.

Bruno S. Frey is Permanent Visiting Professor at the University of Basel and Research Director of CREMA – Center for Research in Economics, Management and the Arts, Zurich (bruno.frey@bsfrey.ch). He thanks Evelyn Holderegger for checking the manuscript, and Margit Osterloh, Manfred Holler and two anonymous referees for helpful suggestions for improvement.

1. *The Development of Democracy*

Democracy is an old and honorable institution already discussed and practiced in ancient Greece. Over the centuries, it has had its ups and downs, and has transformed itself by allowing (former) slaves and women to have the right to vote. However, democracy is not very dynamic. For instance, the construction of the European Union – which, of course, claims to be democratic – can hardly be considered a further development of the democratic idea for the 21st century. Rather, in large measure it represents falling back to the rule of professional politicians who fill the ranks of the European commission, other executive agencies and of the European parliament. Neither do national countries seriously deal with the challenge of the digital world that may impose totally different forms of information, discussion and voting.

This contribution focuses on how direct participation of citizens in the political process could be further developed in order to still be prosperous in the future. Recently, there have been strong attacks against existing democracy such as by by Jason Brennan (2016) in his book *Against Democracy* or David Van Reybrouck (2016) in his book *Against Elections: The Case for Democracy*. I consider direct participation rights of people to be a desideratum. The issue I deal with is where, when, and to what extent such participation rights should exist. As a Swiss, direct democratic institutions of my country influence my considerations. The country has fared well with direct democracy. Econometric analyses suggest that Switzerland's high-income level has been positively influenced by direct democracy (see Kirchgässner, Feld and Savioz 1999, Kirchgässner and Feld 2000, Kirchgässner 2015). Switzerland is also top in many rankings¹. Moreover, the Swiss are, next to Denmark, the happiest people in the world (see e.g. World Happiness Report 2016, Update). According to Frey and Stutzer 2000, 2002,

¹ Switzerland is ranked as follows: 1 out of 140 on Global Competitiveness Report by the World Economic Forum (2015); 1 out of 128 in the Global Innovation Index by the World Intellectual Property Organization (2016); 4 out of 149 in the Prosperity Index by the Legatum Institute (2016); 3 out of 188 in the Human Development Index by the United Nations Development Programme (2015).

when comparing the 26 cantons in Switzerland, and controlling for dozens of other factors influencing happiness, the different possibilities of citizens to participate by direct votes in referendums significantly influence the subjective well-being of citizens. Moreover, foreigners who have no voting rights are less satisfied with their lives than are Swiss citizens even controlling for a large number of other determinants of subjective well-being. When foreign inhabitants in Switzerland get the Swiss nationality, their happiness rises because they are now entitled to participate not only in elections but also in the great number of national, cantonal and communal referendums.

I do not intend to provide a survey of direct democracy. This has been done elsewhere (e.g. Frey 1994, Frey and Goette 1998, Kriesi 2005). Rather, I present several concrete proposals of how direct participation rights could be reformed. This discussion is based on the Public Choice approach², i.e. assuming that individuals are rational actors and respond systematically to relative prices determined by institutional conditions (see e.g. Brennan and Hamlin 2000, Mueller 1996, 1997). The goal is to widen the scope of the present analysis of democracy by suggesting novel ideas to further develop democracy. The author is well aware that all these proposals can be undermined by strategic action³. However, the Gibbard-Satterthwaite-Theorem states that *all* public decision-making mechanisms are subject to possible strategic action. Thus, the novel proposals here advanced are not the only ones subject to this problem. In what exact way my proposals can be influenced by strategic action, and what mechanisms can be introduced to reduce its impact, must be left to future research.

² For an extensive survey see Mueller 2003, and Tideman 2006. Of special interest for the paper's topic is Holler (2016) who compares Condorcet's jury theorem, i.e., the belief that there is some truth that can be approximated in collective decision-making. On the other hand, if individual preferences are taken as the building block of society there are inevitable conflicts in aggregating them.

³ As formally established by Gibbard (1973) and Satterthwaite 1975, and further developed for voting in elections e.g. by Alvarez and Nagler 2000, Cox 1994, or to strategic abstention in referenda e.g. by Côté-Real and Pereira 2004, Herrera and Mattozzi 2010.

Section 2 shortly considers the application of democracy to new areas. While this aspect has been rarely undertaken, it has been intensively discussed in the social sciences. Section 3 suggests variable voting weights according to several dimensions. The following section 4 discusses a possible reform of how to deal with close referendum outcomes. Section 5 introduces random procedures to improve democracy. Section 6 concludes.

2. Applying Democracy to New Areas

Democratic voting rights have been suggested in the context of *co-determination* for all kinds of organizations. This includes incorporated companies in which traditionally the voting rights are proportional to the number of stocks held. This is, of course, a far cry from an arrangement in which every employee's vote has the same weight. Such voting rights have been introduced to some extent in Germany but not much beyond (see e.g. Schiller 2011).

Another domain outside traditional politics is the democratization of technocratic units created by communes and other regional units. A proposal to introduce direct voting on issues of content has been suggested in the context of FOCJ, i.e. Functional, Overlapping, Competing Jurisdictions (Frey and Eichenberger 1999). FOCJ are proposed to emerge due to the demands of the citizens to deal with problems and result in a web of democratic institutions covering many different fields.

These extensions of democracy to new areas have been intensively dealt with in the literature and therefore need not be further discussed here⁴. Nevertheless, such extensions are quite rare and are certainly a viable possibility to strengthen direct participation rights of persons involved in economic activities.

⁴ Thus Saari and Sieberg (2001) show that in the case of direct democratic voting with more than two non-independent issues it may be possible that no participant likes the final combination of issues.

3. Voting Rights with Variable Weights

A basic idea of democracy is that people being affected by political decisions have a say. However, in most countries and regional units non-nationals have no voting right though they are directly subject to the political decisions made. They experience both the benefits and the costs (i.e. the taxes) of such actions. Foreign nationals jump from a zero weight to a full weight when they acquire citizenship. In many countries such a possibility takes many years, often more than a dozen years.

I suggest that foreigners' voting rights should be proportioned increasing them step-by-step from zero to one hundred per cent the longer a person stays in a country. One possibility would, for instance, be that non-nationals after two years of permanently living in the country get a vote weight of 20%, after five years 50%, and after ten years 100%; this compares to the present situation in which they first have 0%, and after nationalization 100% vote weight.

Nationals living abroad would be given a decreasing vote weight as they are less and less affected by the political decisions in their former country of residence. They could, for instance, have a weight of 100% over the first two years of living abroad, after five years it falls to 50%, and after ten years they would no longer have the right to vote.

Yet another group of persons for whom variable voting weights would make sense are the many commuters traveling each working day from their home in a suburb or in the countryside to the city where they work. Their voting weight could be split half-half between where they have their home and where they work. Today, they have full voting right in the former, and no voting right in the latter but are strongly affected by the political decisions in the political unit where they work.

Variable voting weights may also be considered with respect to age. Presently, it is often claimed that the young should have more weight because it is their age

group, and not the old, who will live in the future where the consequences of the political decisions will be felt. This seems to make sense. However, there is also a contrary view suggesting that the old should have a higher vote weight. This applies to constitutional decisions where the rules of the game for decisions to be taken in the future are determined. The old have little personal interests of how these rules are fixed because they will no longer live when they are applied. This may allow them to decide about such constitutional issues more objectively than would the presently young voters. Hayek (1960; see also the collection by Hamowy 2011) was acutely aware of the different incentive structures of the young and the old. He therefore proposed that the future rules of the game should be determined by a senate composed of old persons.

4. Close Majorities in Popular Referendums

Several important popular referendums have resulted in narrow majorities. A pertinent example is the vote known under the name “Brexit”, which took place in the United Kingdom in June 2016. 51.9% approved the proposal to leave the European Union, and 48.1% opposed it. Even narrower was the majority among the electorate concerning the peace process with FARC, the Fuerzas Armadas Revolucionarias de Colombia in October 2016. 50.2% of the voters were against, and 49.8% for the peace plan proposed by the government. In Switzerland, the country with by far the largest number of popular referendums, there is quite a number of decisions taken by a very small majority. Thus, in 1992 the government proposal to join the European Economic Area was rejected by 50.2% against 49.8%. In 2014, the popular initiative to curb the mass entry of foreigners into the country was accepted by 50.3% against 49.7% of the voters. A proposition concerning public support of radio and television was accepted by merely 50.1% against 49.9% of the voters.

It may be argued that it is unfair and perhaps even “undemocratic” to have such a small number of voters – sometimes only some thousand citizens – to decide important issues affecting all the electorate and people living in a country.

This is indeed a major problem if the decision is word-for-word enforced as written in the vote proposal. If that happens, voters in the large minority are disappointed and disgruntled, which might support political unrest and instability. The many defeated voters may lose their faith in the democratic process and decide to no longer participate in the political process. High social costs are produced threatening the survival of democracy.

Small majorities can be evaded by requiring a qualified majority. By definition, the share of possible losing voters is smaller. When a three quarter majority is required at best slightly below 25% of the participants belong to the losers. Qualified majorities have, however, a distinct disadvantage. The higher the required majority, the more difficult it is to introduce changes in politics. The society risks getting increasingly conservative and fossilized. The desires of a possibly large majority wanting change are disregarded.

Based on the view of politics as a continuous process rather than a once for all decision I propose another solution⁵. The narrower the outcome of a vote is, the more strongly must the representatives of the two opposing camps engage in a *formalized, constitutionally sanctioned procedure* in which a solution agreeable to both sides is to be reached. Much effort must be devoted to find issues of interest to both sides, i.e. to actively search for Pareto-optimal solutions. The losing minority must advance compromising proposals to the majority. The larger the minority, the more the majority must be ready to agree to such proposals. This political process should lead to a consensus favourable to both sides. At the end, a new proposal is put before the electorate. If the proposal does not find a majority, a new round of constitutionally imposed negotiations is to take place.

5. True Democracy by Random Decisions?

⁵ This process resembles Harsanyi's (1977) Iterated Bargaining Model or Holler and Illing's (2008) Zeuthen-Harsanyi-Game, which can be considered to be both fair and reasonable.

Aristotle claimed that a true democracy cannot be based on voting. Rather, a random or *aleatoric choice* must guarantee that private interests by important families and (today) parties and interest groups are checked. This procedure has functioned surprisingly well in classical Athens and some other ancient Greek cities as well as in prosperous North Italian cities in the Middle Ages. In Venice the leading families of the city were able to agree that the doge is to be elected by a combination of random choice and elections. The number of possible contenders was first reduced by a vote, then by a random draw, thereafter by a vote, and then a random draw, until only one person was left to be the doge. This procedure helped to curb the dominance of a particular family. Each one of the leading families would have preferred to determine the doge but they were well aware that the other important families would have blocked such a move. The random mechanism allowed Venice to evade deadly internal strife and helped the city to successfully survive over hundreds of years. In fact, the city only lost its power and independence when Napoleon brought it to an end (see Manin 1997, Buchstein 2009 a, b).

Random procedures can be applied to issues of *content*. Lot can decide the outcome of a popular referendum with the weights given by the vote shares. This procedure is standard in many political contexts when there is an equal number of voters for, and against, a proposition. Then normally a coin is flipped in order to determine the winner. But such a procedure may also be used for any kind of distribution of votes. Assume that in a referendum about whether a bridge should be built, 60% of the vote is for, and 40% against it. The bridge can then be built with a *probability* of 60%. This does not, of course, mean that the bridge is built to 60%, i.e. a little bit more than half of the bridge is erected. That would be nonsensical (though sometimes observed in reality). Rather, an urn is filled with 60 green and 40 red balls. One of the balls is randomly drawn. If it is green, the (complete) bridge will be built, if the ball is red, it will not be built. In the former case, the bridge will fully exist though only by an *ex ante* probability of 60%. The likelihood that a bridge will be built is the larger, the higher the share of the voters supporting the proposition is. If, for instance, 90% voted yes, there are 90

green balls in the urn, and only 10 red ones. It is therefore much more likely that the bridge will be erected.

This procedure has the advantage that the size of the majority is taken into account, which is not the case when the simple majority rule is applied. The bridge will be approved even if only 51% voted yes while the preferences of the large minority of 49% is totally neglected. Even if a qualified majority, say three quarters, is used, the wishes of, say, 76% supporters are followed while the preferences of the 24% opponents are disregarded.

Random procedures can also be applied to *elections into political bodies* (see e.g. Carson and Martin 1999). Part of the parliament may be decided by a random draw from the whole population in order to guarantee true representativeness, or one of the chambers of parliament may be chosen wholly by that procedure (as suggested by Buchstein 2009b, who calls the second chamber “House of Lots” in analogy to the House of Lords). The members of the government and the president of a country may be chosen randomly out of the members of parliament or even the population as a whole. The same applies to court decisions. Indeed, in several countries juries are selected from the population.

The major advantage of random procedures in politics is to guarantee equal chance and therewith fairness, given the underlying body (e.g. Stone 2007). Each and every one in the underlying population has an equal chance of getting elected. It is therefore not necessary to introduce special quotas e.g. for the share of women. Interestingly, random procedures even take into account dimensions not yet discussed or even beyond imagination. Most importantly, the body politic is opened to new ideas and otherwise disregarded views. This also holds for preferences not yet even known but which may be important in the future.

In contrast, today’s parliaments are far from representing the electorate. Rather, well-organized interests (e.g. the agrarian lobby) and particular occupations (e.g. lawyers and public officials) are overrepresented. Professional politicians with their special interests dominate the scene.

The disadvantage of random decisions in politics is that capabilities, education and the intensity of desires are disregarded. This is the main reason why random choices in politics are rarely, if ever, taken from the population as a whole. The advantage of equality and fairness must be compared to the disadvantage of lower competencies. There are a great many possibilities to combine the two – a worthy subject for future research.

The decision rule can also be randomized such as simple majority, two-thirds majority, three-quarter majority etc. This type of aleatoric decision-making has been analyzed by Holler (1985) and Berg and Holler (1986).

Random procedures should not be employed as the only way to reach social decisions. Rather, they should be skillfully combined with more orthodox decision-making mechanisms. (see, more fully, Frey and Osterloh 2016). As the historic examples show this requirement has indeed been followed in the past.

6. The Proposals in a Nutshell

This paper advances nine concrete proposals worth considering for a democracy of the future:

- 6.1 Direct participation rights can be extended to spheres beyond politics, in particular firms and other organizations;
- 6.2 Direct participation rights can be extended to functional political units (FOCJ) to overcome technocratic regimes;
- 6.3 Non-nationals can be given partial voting rights increasing with the number of years they have permanently lived in the country;

- 6.4 Nationals living in another country can progressively lose their voting rights in their country of origin the longer they have lived abroad;
- 6.5 Commuters can have half a vote weight each where they live and where they work;
- 6.6 Old persons can have a higher vote weight than young persons with regard to constitutional decisions on the future rules of the game;
- 6.7 The closer the outcome of a popular referendum is, the stronger should the representatives of the opposing parties engage in a constitutionally sanctioned procedure to reach a consensus which is then again put to the vote of the electorate;
- 6.8 The outcome of a popular referendum can be decided by lot with the weights given by the vote shares;
- 6.9 Random draws from an underlying population can be combined with elections (aleatoric democracy).

Clearly, the proposals do not necessarily go well with each other but it is hoped that each of them can fruitfully be used in some parts of the political realm. The proposals are far from being fully worked out. Rather, they may serve as unconventional ideas designed to open up the discussion about the future of democracy.

References

Alvarez, Michael R. and Jonathan Nagler (2000). A New Approach for Modelling Strategic Voting in Multiparty Elections. *British Journal of Political Science* 30 (1): 57-75.

Berg, Sven and Manfred J. Holler (1986). Randomized Decision Rules in Voting Games: A Model of strict Proportional Power, *Quality and Quantity* 20: 419-429.

Brennan, Geoffrey and Alan Hamlin (2000). *Democratic Devices and Desires. Theories of Institutional Design*. Cambridge: Cambridge University Press.

Brennan, Jason (2016). *Against Democracy*. Princeton: Princeton University Press.

Buchstein, Hubertus (2009a). Bausteine für eine Aleatorische Demokratietheorie. *Leviathan* 37 (3): 327-352.

Buchstein, Hubertus (2009b). *Demokratie und Lotterie. Das Losverfahren als Politisches Instrument von der Antike bis zur EU*. Frankfurt: Campus.

Carson, Lyn and Brian Martin (1999). *Random Selection in Politics*. Westport: Praeger.

Côrte-Real, Paulo P. and Paulo T. Pereira (2004). The Voter who wasn't there: Referenda, Representation and Abstention. *Social Choice and Welfare* 22 (2): 349-369.

Cox, Gary (1994). Strategic Voting Equilibria under the Single Non-Transferable Vote. *American Political Science Review* 88 (3): 608-621.

Frey, Bruno S. (1994). Direct Democracy: Politico-Economic Lessons from Swiss Experience. *American Economic Review* 84: 338-342.

Frey, Bruno S. and Reiner Eichenberger (1999). *The New Democratic Federalism for Europe. Functional, Overlapping and Competing Jurisdictions*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Frey, Bruno S. and Lorenz Goette (1998). Does the Popular Vote Destroy Civil Rights? *American Journal of Political Science* 24: 1343-1348.

Frey, Bruno S. and Margit Osterloh (2016). Aleatoric Democracy. CESifo Working Paper Nr. 6229.

Frey, Bruno S. and Alois Stutzer (2000). Happiness, Economy and Institutions. *Economic Journal* 110 (446): 918-938.

Frey, Bruno S. and Alois Stutzer (2002). *Happiness and Economics*. Princeton: Princeton University Press.

Gibbard, Allan (1973). Manipulation of Voting Schemes. A general Result. *Econometrica* 41 (4): 587-601.

Hamowy, Ronald ed. (2011). *The Collective Works of F.A. Hayek, Volume 17: The Constitution of Liberty*. Milton Park: Routledge.

Harsanyi, John C. (1977). *Rational Behavior and Bargaining Equilibrium in Games and Social Situations*. Cambridge and New York: Cambridge University Press.

Hayek, Friedrich A. (1960). *The Constitution of Liberty*. Chicago: Chicago University Press.

Herrera, Helios and Andrea Mattozzi (2010). Quorum and Turnout in Referenda. *Journal of the European Economic Association* 8 (4): 838-871.

Holler, Manfred J. (1985) Strict Proportional Power in Voting Bodies. *Theory and Decision* 19: 249-258.

Holler, Manfred J., (2016). Marquis De Condorcet and the Two-Dimensional Jury Model. Forthcoming in Alain Marciano and Giovanni Ramello (eds.): *Law and*

Economics in Europe and the U.S.: The Legacy of Jürgen Backhaus. Springer.
Available at SSRN: <https://ssrn.com/abstract=2847894>.

Holler, Manfred J. and Gerhard Illing (2008). *Einführung in die Spieltheorie*.
Berlin: Springer, 7th ed.

Kirchgässner, Gebhard (2015). Direct Democracy, Changes and Challenges.
CREMA Working Paper No 2015-09. CREMA – Center for Research in Economics,
Management and the Arts, Switzerland.

Kirchgässner, Gebhard and Lars P. Feld (2000). Direct Democracy, Political
Culture and the Outcome of Economic Policy: A Report on the Swiss Experience.
European Journal of Political Economy 16: 287-306.

Kirchgässner, Gebhard, Lars P. Feld and Marcel R. Savioz (1999). *Die Direkte
Demokratie. Modern, Erfolgreich, Entwicklungs- und Exportfähig*. Basel and
Munich: Helbing and Lichtenhahn/Vahlen.

Kriesi, Hanspeter (2005). *Direct Democratic Choice. The Swiss Experience*.
Lanham: Lexington Books.

Manin, Bernard (1997). *The Principles of Representative Government*. Cambridge:
Cambridge University Press.

Mueller, Dennis C. (ed) (1996). *Constitutional Democracy*. New York and Oxford:
Oxford University Press.

Mueller, Dennis C. (ed) (1997). *Perspectives on Public Choice*. Cambridge:
Cambridge University Press.

Mueller, Dennis C. (2003). *Public Choice III*. Cambridge: Cambridge University
Press.

Saari, Donald G. and Katri K. Sieberg (2001). Some Surprising Properties of Power Indices. *Games and Economic Behavior* 36 (2): 241-263.

Satterthwaite, Mark Allen (1975). Strategy-Proofness and Arrow's Conditions: Existence and Correspondence Theorems for Voting Procedures and Social Welfare Functions. *Journal of Economic Theory* 10 (2): 187-217.

Schiller, Theo (2011). Local Direct Democracy in Germany: Varieties in a Federal State. In: Theo Schiller (ed). *Local Direct Democracy in Europe*. Wiesbaden: VS.

Stone, Peter (2007). Why Lotteries are Just. *Journal of Political Philosophy* 15: 276-295.

Tideman, Nicolaus (2006). *Collective Decisions and the Vote. The Potential for Public Choice*. Alderhot and Barlington: Ashgate.

Van Reybrouck, David (2016). *Against Elections: The Case for Democracy*. New York: Random House.

World Happiness Report 2016 Update. Edited by John T. Helliwell, Richard Layard and Jeffrey Sachs. United Nations Sustainable Development Solutions Network, New York.