# RECONCILING POWER AND EQUALITY IN INTERNATIONAL ORGANIZATIONS: A VOTING METHOD FROM RABBI KROCHMAL OF KREMSIER

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Organizations whose members are national governments face a problem in their choice of a voting mechanism: they need systems that recognize the greater power and contribution of the larger members while preserving some influence for the smaller ones. Voting by count and account is suggested here as providing a good compromise between power and equality. It avoids certain surprising and counterintuitive results produced by other systems that international bodies now use, such as basic votes. At the organization's founding it is easy to negotiate and it also symbolizes the accepted status relationships in an international body better than current methods do, thus giving a vote more legitimacy. For international organizations, it is the natural analogue of a two-house system. The reasons that a Jewish community in Moravia in the seventeenth century used it seem to be similar to those that make it appropriate for international organizations today.

Since the end of the Cold War, nations have set up more intergovernmental organizations and entrusted them with more tasks. There are hundreds of institutions whose membership consists of

Jewish Political Studies Review 12:3-4 (Fall 2000)

national governments, monitoring treaties and trade regimes, fixing standards of measurement, conducting military actions, and performing various other activities. Their increased importance has led to disputes over their voting rules, and these arguments have shown a recurring pattern, with rich states demanding more power because of their greater financial contributions and poor states arguing for sovereign equality. Intergovernmental organizations have used special voting methods to accommodate the rights of large and small, such as weighted voting schemes where a small nation gets a share of votes that is out of proportion to its size but less than a large state's share.

This essay advocates a different method, drawn from the responsa of the leader of a seventeenth century Moravian community. Following Peleg (1991) we term it voting by count and account. As will be explained, the situation that prompted its use there is quite similar to that which nations face now.

Voting by count and account is defined as follows: when a vote is taken, two tallies are made. The first is simply the number of supporters, and the second is the sum of their weights. A supporter's weight, or "account," is some pre-agreed-upon objective quantity, most likely based upon the size of the financial contribution to the group, but possibly based upon population or degree of use of the organization's resources. A motion passes only if it attains a majority by both count (number) and account (total weight.)

Two advantages of this method are that it is easy to negotiate and that it avoids many of the unintended consequences of other methods, which sometimes in fact worsen the problem. Like other voting methods, it makes a symbolic statement about the social order of the group using it. This symbolism is important to make the decision legitimate in the minds of those who will carry it out, and a third advantage of voting by count and account over other methods is that its symbolism is appropriate.

# The Large Versus the Small in International Bodies

Egalitarianism and power come into conflict in all types of political institutions — in setting up a municipal council or combining provinces into a federal system — but international bodies face these conflicts most severely. There are 50,000 citizens of India to one Palaun, but each country has one vote in the United Nations. Japan contributes 1600 times as much to the regular UN budget as Bangladesh, but again each has one vote. This is unfair, but it would also be unfair to deprive Bangladesh of a significant voice because of its poverty. The disparities of wealth and population across countries are so great that if the larger and richer countries had voting weights in proportion, they could impose their way on the smaller ones, violating the principle of sovereignty. Big powers will surely apply pressure behind the scenes, but a world body needs the acceptability that comes from fairness in its formal procedures. *Realpolitik* proposals that large states should simply take control of world affairs are unrealistic. The small countries may be seen as negligible individually, but they are considerable as a group, and their participation is also necessary for the organization's legitimacy.

The conflict of equality and power should not be seen as one of principle versus coercion, since the rich nations can also ground their claims in fairness: they can expect more say in the activities that they are funding. Also, those states with larger populations are more affected by a typical international decision, simply because they have more people who will experience the decision's consequences. There are also practical reasons for giving the larger states greater voting power, since otherwise they may reduce their participation or use their influence behind the scenes to try to undo the group's decisions. An organization's formally-taken decisions cannot depart too far from the underlying power relationships.

Disputes of large versus small often occur at the founding of the organization, one case being the International Fund for Agricultural Development, which saw obstructive debates about weighted versus unweighted voting (Zamora, 1980). Controversies also arise with functioning organizations. Concerning the United Nations, in 1985 the U.S. Congress passed the Kassebaum Amendment, by which the United States would lower its contribution by one-fifth unless the UN adopted weighted voting for budgetary matters.<sup>1</sup> This conflict over control of the UN budget has steadily expanded and harmed the organization's effectiveness. Voting procedure issues also arise when new members are admitted to an international body: the small-versus-large tension has been central in the debate over expanding the European Union.

# Voting by Count and Account

Voting by count and account takes into consideration both size and equality and does so in a very simple way: votes are counted twice, first with each party weighted equally, and then with each weighted by its financial contribution or some other objective measure; a proposal passes if it gets a majority both ways. The rule formalizes the idea that an organization should act only when it has the support of both the important members and the general membership.

The method came to our attention through a legal decision rendered in a seventeenth century Moravian community. In 1635, Rabbi Menahem Mendel Krochmal moved from Krakow to Kremsier and his new congregation brought a dispute to him for judgment. In an election for a *shamash*, forty of the forty-five members had voted for one candidate, but the five in opposition comprised a rich man, his two sons and two sons-in-law, who together contributed 60 percent of the tithes. By a longstanding rule in the community, a candidate needed a majority of both people and money. The candidate's supporters wanted Rabbi Krochmal to set this rule aside as unfair and unworkable.

Rabbi Krochmal upheld it, however, on the grounds that it was established custom, and also because it had a basis in justice, since those who would pay more for a *shamash* deserved a greater say.<sup>2</sup> He referred to the method as deciding by a majority of *minyan* and a majority of *binyan*, of numbers and of structure. This phrasing drew on a certain analogy: as used in the Talmud, the words relate to the issue of when incomplete human remains legally constitute a person's body. Is it sufficient to have just a numerical majority of the bones, the *minyan*, or is it necessary to have the main parts of the structure, the skull, backbone and hips, etc.? These form the *binyan*. In the community of Kremsier the general membership provided the numbers and the rich members provided the structure.

A number of double-criterion rules are in use in elections around the world, but it is important to distinguish them from voting by count and account. Swiss referenda require a majority of population and a majority of cantons.<sup>3</sup> Many countries use two legislative houses — a typical bill in the U.S. Congress requires a majority of both the Senate, where states have equal representation, and the House of Representatives, where representation increases with the state's population. Other voting rules add a quorum-like requirement: to change property taxes in the state of Oregon, 50 percent of eligible voters must turn out and 50 percent of these must support the proposal. These methods are somewhat like the one advocated here, but they are not the same. They do not have the feature that each member votes only once and that vote is counted twice, unweighted and weighted. The Swiss referendum counts voters, but then it counts where the cantons stand on the issue, although a canton never literally casts a vote. The U.S. bicameral system is also different. A senator and a member of the House of Representatives may come from the same state but each votes separately, often in opposite ways. A bicameral system would make no sense internationally since the delegates are representatives of governments and those in both houses would vote identically. For the intergovernmental context, the reasonable analogue of two houses is voting by count and account, but it is not the same.

# Advantages of International Votes by Count and Account

The case for using count and account in international organizations is based on three considerations:

## **Ease of Negotiation**

The first advantage of voting by count and account is its ease of negotiation. At an organization's founding, parties must decide on the rules, and the 50 percent criterion is an especially prominent one. If it were proposed in a negotiation, it would be hard for some critic to come up with a persuasive counterproposal, i.e., to argue for increasing or decreasing the majority required. The discussion is less likely to break down into haggling, since the 50 percent rule is most natural.<sup>4</sup> The negotiability of the 50 percent rule is based partly on this innate salience but also on precedent, in that the more groups that are using it, the more acceptable it will become for further adoption.

A few voting bodies have used systems that are like count and account, but, oddly enough, none seems to have required the pair of 50 percent quotas. In the OPEC Special Fund, which was set up in 1976 to provide finances for the development of non-oil-producing countries, support for a motion must include at least twothirds of the members who represent at least 70 percent of the contributions to the Fund (Zamora, 1980). The 1982 formula for amending the Canadian Constitution required "resolutions of the legislative assemblies of at least two-thirds of the provinces that have, in the aggregate, according to the then latest general census, at least fifty percent of the population of all the provinces" (Kilgour and Lebesque, 1984). The Montreal Protocol on Subon Substances that Deplete the Ozone Layer set goals for decreased production and consumption of controlled substances. The goals to be achieved by 1998 were amendable by a two-thirds majority of the voting parties, representing two-thirds of the total consumption. In the Global Environmental Facility, an agency of the World Bank founded in 1993, a motion must be approved by at least 60 percent of the countries representing 60 percent of the contributions.<sup>5</sup> In the Council of Ministers of the European Community, countries are assigned voting weights from 2 votes up to 10. Certain motions, those that were not proposed by the Commission, require approval by 10 countries out of 15, with a combined voting weight of 62 out of the total 87 (Hosli, 1996).<sup>6</sup> These methods are like count and account except for their higher majority quotients. The context suggests that the groups using them wished to make it harder to pass certain kinds of motions, and included the double majority criterion and the higher majority quotients to favor the status quo. Our view is that the double 50 percent rule has a broader function — it is appropriate for the regular motions in a voting body, in place of the simple majority by count. Our theoretical calculations and our empirical studies using UN roll calls indicate that the rule is only slightly more conservative than the regular simple majority.

#### **Transparent Simplicity**

The goal of voting by count and account is to require assent from both the many small countries as well as the few that supply most of the resources. It is clear that it does this and it is clear how it does it. Other rules that have addressed the problem seem simple enough but they conceal some unacceptable flaws. As will be shown, some may actually diminish the power of the small countries they mean to help. However, this phenomenon cannot arise in voting by count and account. According to a reasonable measure of voting power, the rule always distributes power among the members more equitably than a voting rule based purely on weight (e.g., on financial contribution).<sup>7</sup>

International organizations have often used weighted majority voting rules, with weights based on some quantity like size or financial contribution. To reconcile the claims of small and large states, the weights did not increase in strict proportion to the quantity; smaller countries got more than their share. In the European Community Council of Ministers, for example, votes increase with population, with 10 votes to the UK, Germany, France and Italy, 2 to Luxembourg and the rest of the fifteen members with votes in between. The votes are not in exact proportion to population, since Luxembourg would then get effectively zero.

The Council of Ministers weights are not based on an explicit rule, and the arbitrariness is grounds for criticism - each new member's weight must be negotiated. Other bodies have used explicit rules. The most common kind internationally is the system of basic votes. Part of the total voting weight is divided equally among the members and the rest is assigned in proportion to size. As a consequence, the small members receive a share that is less than average but greater than one set by size alone. Basic votes is an especially common system in organizations for commodity regulation, like the International Sugar Council and the International Jute Council, and in international banks and development funds, like the International Monetary Fund, the World Bank, and the Inter-American Development Bank. In the commodity organizations, the total votes are often divided equally between exporters and importers, for example, 1,000 votes to each with 100 votes distributed equally within each group. Passing a motion might require a simple or two-thirds majority of both groups.

Basic votes still have an arbitrary component, the proportion to set aside as basic votes for equal division. This proportion must be negotiated at an organization's founding and can stall an agreement. Large states will want it low and small states will want it high. Unless the group is willing to divide the votes 50/50, i.e., basic votes equal to proportional votes, there is no prominent split that suggests the natural agreement. A proportion of 50 percent basic votes is more generous than the large states have been so far in these organizations, and typically it has been set so low that the small states get negligible benefit. The small benefit is most striking in organizations that give a fixed number of basic votes to each member and divide the rest by the nominal dollar values of the members' contributions (in contrast to a rule that keeps the basic votes at a fixed fraction of the total votes). If the total contributions to the organization go up, then the proportion of basic votes will fall. In some groups the basic votes have drifted down to insignificance because of inflation, the growth of the organization or of the world economy. In the International Monetary Fund, for one, the basic vote proportion started at 11.15 percent at the founding in 1946, and increased as more countries joined. However, inflation and economic growth overwhelmed this trend, and the total basic votes are now about 2 percent of the grand total — they are no more than a nod to equality. The history of the Inter-American Development Bank (IDB) is even more extreme, starting at 3 percent, and falling to .07 percent. Some international banks have a significant proportion of basic votes, like the African Development Bank at 45 percent, but these are typically the ones with no predominant wealthy members. They have tended to be less effective in promoting development, precisely because they lacked large, rich members.

A second difficulty of basic votes is a fundamental irony they sometimes hurt the small members. Compared to a pure weighted system proportional to size, they give a small country more voting weight but less power. It is first worthwhile to distinguish voting weight from power. The two concepts are often treated as synonymous but are not. Consider a three-member committee with weights 1, 3, and 3, where a motion needs a simple majority of 4 out of 7 to pass. It is easy to see that each member has equal power since any two are necessary to win. The larger two voters should not feel that their larger weights give them more power. Suppose, however, that the majority quota is raised to 5 out of 7. The power of the 1-vote player disappears — there is no configuration of support where it can make a difference. In both cases voting power is different from voting weight, since power depends on the weights of the other members as well as the majority quota.

The difference between voting weight and voting power leads to the possibility that basic votes sometimes decrease the power of the smaller players. Consider an organization of five members where their sizes are in the proportions 3: 4: 4: 4: 10. When 100 votes are divided by size, the members receive the following weights:

(1) 100 votes allocated proportional to size: 12, 16, 16, 16, and 40.

Now introduce a system of basic votes, where 25 votes are divided equally and the remaining 75 are allocated in proportion to size. Easy arithmetic gives the following weights.

(2) 25 votes shared equally and 75 by size: 14, 17, 17, 17, and 35.

(For example, the largest member gets 5 of the basic votes plus 10/25 of the 75 proportional votes, or 35 votes in all.)<sup>8</sup>

Here switching to basic votes wipes out the power of the small voter. Assuming that 51 votes are needed to pass, in the original arrangement (1) the small voter had some power. It could combine with the 40-vote member or with all three 16-vote members to make a majority. In (2), however, the small voter has no power. Power means making a difference, and there is no group the small voter can join and change a loss into a win. It can no longer put the large voter over the top, since the latter has become weaker, and the middle three voters now have more weight and have a majority without the small one.

Of course, there might be abstentions on a motion and this event would give the smallest voter a role again, but abstentions occur typically on issues that are less significant or are especially controversial. The small states should not find it attractive that they hold power only when others do not want to vote on the issue.<sup>9</sup>

This example is constructed to show that basic votes may fail to achieve their goal. It is only a possibility, and such examples are quite unlikely when the group is large, since large groups allow so many configurations of support and opposition that there is usually some way a small player can make a difference. However, the example should be a warning that the relationship between voting power and weight is subtle. Even if introducing basic votes does not rob a small player of all power, it may do less or more than was intended. This phenomenon cannot happen with voting by count and account. According to a theorem of Peleg (1991), the method always distributes power at least as equally or more so than voting purely by account. (Further, it is at least as favorable to the large states as voting purely by count.)

A more general method of guaranteeing a voice to the smaller nations is to introduce a voting floor, where a country, however small, receives some minimum voting weight. In the EC Council of Ministers, for example, Luxembourg receives two votes, although its proportional weight would put it at almost zero.

Voting floors can be accused of arbitrariness in setting the minimum votes. Also, as with basic votes, changing the weights can have unexpected consequences for power — in particular, adding a floor may sometimes help the largest member. Although one can expect that a floor will help those who are raised to the floor, their added power can come from those just above their size, even though the latters' votes have not changed. To illustrate these possibilities, consider a body of four voters with weights 1, 2, 2, and 6. Assuming a majority quota of two-thirds, then 8 votes are needed to pass. The smallest voter has no power. If we now set a floor of 2 votes, then the weights become 2, 2, 2, and 6, and the two-thirds majority quota stays at 8. With more 2-vote members available, it is easier for the 6-vote member to find an ally. Equivalently, there is stiffer competition among the 2-vote members to be the ally of the large voter, so they can demand less for their support.<sup>10</sup> Adding the floor increases the power of the 6-vote member and reduces the power of the existing 2-vote members.

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The original 1-vote player does indeed acquire some power, but it comes from the 2-vote members, with the large voter actually gaining power from them as well. The floor system is helping the poor and the rich by taxing the semi-poor.

## **Correct Symbolism**

A final grounds for using the method is less precise but probably more important: voting by count and account embodies the correct symbolism for an international organization's public actions. Accordingly it gives its votes more legitimacy.

One type of symbolism is based on analogies (O'Neill, 1999). In it, the symbol and the larger idea being symbolized have a similar structure. Onlookers note the similarity, they know that others are noticing it, and they form mutual expectations about how they will all act on the important matter being symbolized. The Berlin Wall, for example, became a prominent symbol for the Western nations during the Cold War. It was seen as dividing East and West Berlin, imprisoning those behind it, analogous to communism's division of Europe into free and oppressed peoples. Recognition of this in the West increased mutual expectations of each other taking an anti-communist stance, and this mutual increased confidence of support becomes self-fulfilling - those who know that others will act on the symbol are more willing to take such a position. In another example, Handelman (1990) describes the symbolism of Israel's memorial day at the Western Wall. The participants include the president, the chief rabbi of the Israel Defense Forces, soldiers, members of bereaved families, and others. Further symbolic elements involve the flame to represent the war dead, the flag standing for the modern state, and the Western Wall to recall the tradition of the Jewish people. The ceremony has these elements interact in a way that models the proper relationships among the groups and ideas that the symbols represent. It reaffirms those relationships, and makes the audience more mutually aware of the basis of their social bond. The expectation is generally increased that everyone else will act consistent with those ideas.

When an important deliberative body takes a public vote, it has an opportunity to assert its structure and ideals, thus reinforcing the general order of the group and giving legitimacy to the particular decision being voted for, by reminding the group that it is being taken according to an accepted structure. One example is the bicameral system of the United States where the inclusion of

the Senate, in which states are represented equally, expresses the equality of their rights in the federal system. At the founding of the International Monetary Fund, a motive for including basic votes, rather than assigning voting weights strictly by financial contribution, was, according to Gold (1981), to symbolically avoid a decision structure that makes the Fund look like a corporation with stockholders. The voting rules of the United Nations Security Council show attention to this kind of symbolism. A motion requires a majority of 9 of 15 members including all the "Big Five" permanent members. Several authors have noted that the system can be restated as based on voting weights and a supermajority. If the Big Five had seven votes each and the other ten members had one vote each, and if the majority were 39 out of the total 45 votes, the same motions would pass and fail. Abstractly, these are two different ways of stating the same voting rule. Symbolically, however, they are different. The first way of putting it, the qualified majority, is the prevalent and officially accepted one. It symbolically states that both the small and especially large states must concur in a Security Council action. The alternative way of stating the rule seems to suggest that some nations are several times as important as others, and the key to passing a motion is to get a sufficient weight of support behind a proposal. This formulation is not politically acceptable. Nor is another popular way of putting the rule, that each of the Big Five has a "veto," since this suggests that there are two groups, the small states and the large states, with the latter given the right to frustrate the former's wishes. The wording that the Security Council uses a "veto" system would not appear in the most official United Nations documents, because it makes a symbolic inappropriate suggestion about the world body. Instead it is seen as using a "qualified majority" with the criterion that all permanent members cast "concurring votes."

A weighted voting scheme is symbolically inappropriate for an international assembly. It suggests that the nations have different degrees of importance as measured by their voting weights. It fails to recognize the principle that all nations are equal in at least one important sense of sovereignty. Voting by count and account, however, includes this principle, since the tally by count treats all nations alike.

Another aspect of symbolism is important for international voting rules: the symbolic meaning of the rules within the body itself. There are two broad classes of international organizations (Zamora, 1980). Some make mostly declarations of principle and advisory pronouncements, usually to establish or reinforce international norms. Others make decisions to be implemented. The former usually function by one country/one vote, while the latter tend to have voting rules that take account of size differences. In the latter, the voting system is often present but in the background, and decisions are made by the "sense of the group." However, this does not mean a requirement of unanimity, nor does it mean equality of influence. The group forms expectations of whose support is more important for various decisions. It does so largely in the formal voting rules, so that the voting rules symbolize the informal power and role in decision-making possessed by the different members.

This argument, then, suggests that voting rules are symbolic indexes of power, even in groups where votes are rare. Voting by count and account gives more appropriate symbolism of the power relation in organizations. It suggests that countries have two sources of importance — their relative contribution and their equal status as sovereign states. The two are incommensurable and cannot be lumped together as a single weight. Each is taken account of respectively in the two criteria set by count and account.

# Conclusion

For decision-making within a democratic state, a tried method is a two-house system. Voting by count and account is its appropriate analogue for intergovernmental organizations. It tends to equalize power compared to straight voting by account, but still gives larger states appropriately greater power. Compared to current systems of voting by assigned weights, it is less arbitrary, easier to agree on, and avoids certain perverse consequences where an attractive-seeming set of voting weights leads to greater inequality. Also it projects the correct symbolism, both within the voting body and to the world.

It is a striking fact that a voting scheme retrieved from the seventeenth century would have international uses today, but some aspects of Rabbi Krochmal's context suggest that this is more than a coincidence. In a modern urban community, if someone feels that their city council is trampling on their rights they can appeal to the higher court system. However, Rabbi Krochmal's community had to avoid this. If a discontented party resorted to the higher authority, namely the state, it would divide the community and decrease its autonomy, as Moshe Rosman has discussed in this issue. A decision method was needed that would look for a compromise between the elements and avoid higher appeals.<sup>11</sup> In its need to resolve a conflict internally, the international system is like Rabbi Krochmal's community. In Moravia a higher appeal was harmful; in the international system it is impossible. Giving one faction its full way and expecting the losers to bear it, will not do. One needs a method where the group acts only when there is wide agreement.

#### Notes

- \* The authors would like to thank Robert Aumann, Hana Shemesh, Bruce Russett, William Thomson, and Benjamin Weiss for their help and suggestions. We are grateful to William Thomson of the University of Rochester, and Robert Aumann of the Hebrew University, who passed the method on to us as one of interest and relevance. Gideon Schwartz suggested the name of the method. Barry O'Neill would like to thank the Center for Rationality at the Hebrew University for its support and inspiring atmosphere.
- 1. The Congress put its discontents succinctly in the amendment, which read in part: (a) Findings — The Congress finds that the United Nations and its specialized agencies which are financed through assessed contributions of member states have not paid sufficient attention in the development of their budgets to the views of member governments who are major financial contributors to these budgets. (b) Voting Rights — In order to foster greater financial responsibility in preparation of the budgets of the United Nations and its specialized agencies which are financed through assessed contributions, the Secretary of State shall seek the adoption by the United Nations and its specialized agencies of procedures which grant voting rights to each member state on matters of budgetary consequence. Such voting rights shall be proportionate to the contribution of each such member state to the budget of the United Nations and its specialized agencies (Foreign Relations Authorization Act, Fiscal Years 1986 and 1987, Section 143, p. 21).
- 2. Consistent with his reputation as a defender of the poor, Rabbi Krochmal found his way around the rule in this particular case. The salary of the *shamash* would come in part from a fund involving per-person contributions. The masses of the congregation had given a greater amount to the fund than their usual proportion, and based on his calculations, which he included in his judgment, their candidate had the support of most of the people and most of the money after all, and could be installed. A further responsa in the volume (#84) clarifies his thinking — he supported a voice for the poor on the grounds that even though their contribution was small, they made a greater sacrifice in rendering it.

- 3. A similar system has been in use in Australia since the last century where a proposal must get a majority of the whole population, plus win a majority in a majority of the states. A version in which specified constituencies must give their support has been introduced in Canada to increase minority representation.
- 4. There is nothing unworkable about a rule requiring majority quotas above 50 percent, or one setting one at 50 percent or more and the other at a lower value. However, putting both below 50 percent risks a situation where two opposing coalitions both claim to be winners.
- 5. This procedure adds a complication in that countries group together into constituencies to put members on the Council, and a Council member can then cast the total voting weight of its group.
- 6. One proposal for voting by count and by weight is its expansion in the European Council of Ministers. A 1994 document from Germany's governing Christian Democratic Party suggested its use based on count of countries and by weight of population. The proposal drew French opposition at the 1997 Intergovernmental Conference — Germany and France have equal votes now and the change would advantage Germany, which is more populous. The episode shows that it is easier to adopt a rule in the founding discussions than to change a system in place.
- 7. Peleg's result extends to systems in which the majority quota differs from 50 percent. He used the Shapley-Shubik index, which many regard as the best measure of power in a voting body attributable to the constitutional rules for a member's vote.
- 8. An equivalent definition of basic votes involves moving each voter one quarter of the way from its current number towards the average weight of 20 votes.
- 9. This difficulty is one that occurs in principle but may not arise often in the world. Especially in organizations with many members, unless the votes are carefully set up to produce such a discrepancy, power is more or less proportional to weight, with a slight relative advantage held by the larger players (Riker and Shapley, 1966). In this case the small members' power would rise with basic votes. However, the example makes a broader point that one can never predict what one is doing by manipulating the weights — one is changing relative powers among all the members in unknown ways.
- 10. The Shapley-Shubik index of voting power reflects this argument. In the original game one can calculate that the players' respective power values are 0, .167, .167, and .667; in the game with the floor, they are .083, .083, .083, and .75, indicating that the greater power of the last player comes at the expense of other small ones.
- 11. On issues of setting taxes, conducting elections, or representation on deliberative bodies that perform assessments of wealth, a strong tradition in rabbinical judgments has been to follow whatever rule was in place in the particular community (Baron, 1942). One should not raise arguments from the law to indicate the community has been doing it wrong, or insist on justice on the grounds that the community

must adopt the method used elsewhere. On matters of allocation of resources and power within the community, the prime precept is not to disturb whatever has been working. Katz (1993) discusses responses to the tension between democracy and oligarchy.

#### References

- Baron, Salo. 1942. "Membership and Elections," in *The Jewish Community, Its History and Structure to the American Revolution* (Philadelphia: Jewish Publication Society of America), ch. 10.
- Gold, Joseph. 1981. "The Origins of Weighted Voting in the Fund," Finance and Development 18:25-28.
- Handelman, Donald. 1990. Models and Mirrors: Towards an Anthropology of Public Events (Cambridge: Cambridge University Press).
- Hosli, Madeleine. 1996. "Coalitions and Power: Effects of Qualified Majority Voting in the Council of the European Union," Journal of Common Market Studies 34:255-273.
- Katz, Jacob. 1993. Tradition and Crisis: Jewish Society at the End of the Middle Ages, trans. Bernard Cooperman (New York: New York University Press).

Kilgour, Marc and Terence Levesque. 1984. "The Canadian Constitutional Amending Formula: Bargaining in the Past and the Future," *Public Choice* 44:457-480.

- Krochmal, Menahem Mendel. 1675. Semeh Sedek (Amsterdam).
- O'Neill, Barry. 1999. Honor, Symbols and War (Ann Arbor: University of Michigan Press).
- Peleg, Bezalel. 1991. "Voting by Count and Account," in Reinhard Selten, ed., *Rational Interaction* (Berlin: Springer-Verlag), pp. 45-51.
- Riker, William and Lloyd Shapley. 1966. "Weighted Voting: A Mathematical Analysis for Instrumental Judgements," Nomos 9.
- Zamora, Stephen. 1980. "Voting in International Economic Organizations," American Journal of International Law 74:566-608.