

Cellular Democracy as a Necessary Condition for Completely Spontaneous Urban Planning and Order

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Abstract: There are two basic forms of representative democracy: mass democracy and cellular democracy, the latter consisting of small-group, bottom-up voting. Just as biological bodies are based on cells, cellular democracy divides the political body into neighborhood cells, and the residents vote only for neighborhood councils. A central concept of public choice theory is the power and subsidy-seeking of special interests who supply funds to candidates. Special interests influence urban planning with centralized zoning, building codes, master plans, and permit requirements. Mass democracy, in which few voters personally know and meet the candidates, generates an inherent demand for campaign funds. Its antidote, small-group voting, better reflects the desires of the public for public goods, including urban planning, and by decentralizing power, better facilitates market-based spontaneous planning.

I. INTRODUCTION

Neighborhood democracy provides a framework for the decentralized provision of the public goods which do not have significant economies of scale. Private or neighborhood-controlled streets are economically feasible when a firm or association controls the space and the common elements of a community, and can therefore collect the associated rentals from the members.

The authorities of a city usually seek to control its public works, as evidenced from the lack of ability of residents to privatize or decentralize their neighborhoods. One notable exception is St. Louis, Missouri. Since the middle 1800s there have been “private places” in St. Louis and neighboring towns in which the streets are owned by private contractual associations. The private places in St. Louis have persisted even though the homeowners do not get any reduction in their property or other taxes by paying to maintain their own streets. If they could get a rebate for the cost savings to the city, then private and governmental streets would have an equal financial status, and there would be much more privatization and localization (Foldvary 1994).

The local governance of streets facilitates the reform of the relevant public finance. Civic associations or proprietary communities typically tap sources such as the rental value of membership, or the rental value generated by the services. Such private-sector financing is more efficient in both having a lower economic burden and in being more directly re-

lated to the benefit provided. The decentralization of governance to neighborhood associations can induce a restructuring of the public finances from taxes on income and sales to levies based on the locational rents. Rent-based payments prevent the implicit subsidy of public goods into higher rent, and the double billing of tenants who pay both taxes on their wages and spending, and also the higher rent.

Revenue transfers influence the placement of governmental powers. Centralized financing complements national or large-scale planning by making local governments dependent on funds from the national government, inducing them to obey national and provincial rules. For example, the US federal government induced a greater use of city-wide planning with the passage of the Housing Act of 1954, which requires cities to enact a comprehensive city plan in order to obtain revenue sharing for urban renewal (Staley 2002).

An urban plan is a design for the physical elements of a city, such as the streets, blocks, land use and transit, and also for the operational elements such as the governance and finance. Plans by developers include not only the physical elements but also the post-construction administration of the community, such as with homeowner associations. Hardware is complementary to software, and the design of the hardware (buildings and streets) implies subsequent software (administration and finance). The governing software has been mostly condominiums and residential associations, but cellular democracy would also serve while keeping the governance within the public sector.

The local governance facilitated by small-group democracy also fits well with the knowledge problem analyzed by Friedrich Hayek. Economic knowledge, such as the how-to of production, is highly decentralized, changing, and tacit. Thus spontaneous planning, tapping local knowledge, is in harmony with decentralized governance.

Civic services by locally governed communities financed from site rents would have a significant impact on infrastructure planning. The maximization of rental income and avoidance of subsidized utilities and other services at the urban fringes would induce compact structures that would prevent both sprawl and blight. Tolls that prevent congestion can be applied to the local streets and boulevards. Local planning, and the absence of property taxes on improvements, would better activate the city centers and avoid subsidizing the sprawling fringes.

Spontaneous planning works better with private contracts such as easements, liens, covenants, and community bylaws, rather than master-planned zoning, building codes, permits, public hearings, and development restrictions. Freehold planning can be kept beneficial by competition. The proprietors depend on voluntary tenants and customers, and they thus profit from pleasing satisfied users. Thus small-group democracy, spontaneous urban planning, rent-based public finance, and contractual rules, are complementary.

“Mass democracy” is defined here as “voting by groups so large that the typical voter has no personal knowledge of the candidate and little personal access to his representative” (Foldvary 1998, 203). The German sociologist Max Weber used the term in connection with bureaucracies. In the analysis of Max Weber (1946, 224), “bureaucracy inevitably accompanies modern *mass democracy* in contrast to the democratic self-government of small homogenous units.” In mass democracy, the *demos*, i.e. the people, “never ‘governs’ larger associations” (225). Mass democracy only changes, relative to other forms of governance, how the leaders are selected.

Weber also wrote (ibid.) that “the progress of bureaucratization in the state administration itself is a parallel phenomenon of democracy” Mass democracy generates, via bureaucracy, large-scale planning, centralized taxation, and centrally imposed rules. Cellular democracy is therefore necessary for a thorough implementation of spontaneous urban planning and order.

II. MODELS OF DEMOCRACY

Winston Churchill (1947) stated that democracy is the least effective form of government, except for all the others. This proposition recognizes that democracy is flawed but asserts that no other form of government is known to be superior. But this least-bad proposition fails to distinguish various structures of democracy, and the possibility that different variants of democracy have significant variation in typical outcomes.

As noted by Malinvaud (1989), two key issues concerning the degree of centralization of government are the information held by the agents and the incentives to behave in conformity with collective efficiency. Local council-based cellular democracy, as described here, would differ significantly from mass democracy on both variables.

The two basic models of mass democracy operating in contemporary countries are the geographic model and the party model. In the party model, voters choose among political parties. Each party selects a set of candidates, which are voted on as a package. The party model is often associated with the parliamentary system of governance and with proportionate representation, in which a governing coalition requires a majority of the representatives. A problem with the parliamentary system is the possibility of an unstable government dependent on the minor parties of a coalition.

In the geographic model, voters in a territorial district choose among candidates representing that district. In the case of U.S. presidential elections, the districts are the states, whose electoral-college votes are then added up as blocks. Other districts include states and smaller districts within states for federal and state representatives.

The geographical and party models have in common the election of representatives by a large mass of voters. These two models are thus variants of the more general mass-democracy model. In that model, a large number of voters elect an agent or set of agents whom they do not personally know, and whose characteristics (whether actual or concocted) are transmitted to the voters by the mass media. This informational method implies that substantial funds be raised to pay for the media exposure. The high cost of the media, the rational ignorance of voters (the typical voter not receiving a financial benefit from an investment in information), and the large volume of competing candidate-advertisers, implies that the message presented in the media be simple and compelling. Hence the messages tend to portray issues and images the voter already has sympathy for, so that this sympathy be transferred to the candidate as well. Negative advertisements are part of this strategy, inducing antipathy against other candidates and parties.

The model presented and analyzed below, small-group democracy, is an alternative to the mass democracy both of the party and the geographic type. Before analyzing how cellular democracy would affect outcomes, I will briefly examine traditional constitutional structures, and why they fail to constrain mass democracy and the power of special interests, including centrally-controlled urban planning.

III. THE FAILURE OF CONSTITUTIONAL CONSTRAINTS

In the *Calculus of Consent*, James Buchanan and Gordon Tullock (1965) analyze “the calculus of the rational individual when he is faced with questions of constitutional choice” (vi). A key problem in governance, recognized by James Madison and the other Founding Fathers of the U.S. Constitution, is the rise of factions or special interests, which, as stated by Buchanan and Tullock, “try to use the processes of government to further their own differential or partisan interests” (ibid., 25). These interests engage in seeking transfers or rents, which not only divert resources from the public, but, as Tullock (1967) demonstrates, is itself a waste of resources.

The three main methods used in the U.S. and state constitutions to limit the excessive power of factions have been federalism, the division of government into distinct branches, and constitutional restrictions. U.S. federalism divides government into federal and state governments (and also indigenous national or tribal governments), which in principle have separate parallel sovereignty. The division of governments at both federal and state levels into three branches (legislative, executive, and judicial) provides for separate, but interlinked, powers at each government level. Constitutional constraints on the branches and governmental divisions, and the recognition of individual rights, further limit the powers of government.

John Arthur (1989, 12) notes that the Federalists recognized that “majoritarian government (which the framers refer to as ‘democratic’) is unable to protect liberty or to promote the general welfare.” Despite the presence of three power-limiting methods, governance in America has become ever more centralized, and the trend has been for both federal and state governments to grow as a proportion of GDP (see, for example, Stansel

and Moore 1999). Concentrating taxation at the federal level, and then using conditional “revenue sharing” to mandate state law and expenditures have circumvented the federal structure. The division of powers has been undermined by political party politics, pitting Democrats of the executive and legislative branches against Republicans of both branches, hence unifying the branches. Also undermining the division of powers is the dependency of the courts on federal appointments (especially since the Great Depression, when president Roosevelt threatened to pack the court) and, as argued below, by the inherent structure of mass democracy which induces transfer seeking by factions and special interests.

Constitutional constraints have been continuously undermined by the exploitation of ambiguous and vague constitutional language, accommodated by a judiciary which for the most part has not sought to challenge legislation that pushes the constraints. A well-known example is the loose interpretation of the interstate-commerce clause into a rationale for any kind of regulation of commerce and consumer choice.

As Buchanan (1980) notes, rent seeking itself creates barriers to reform, and so its reform requires constitutional change, rather than just operational reforms under the status-quo constitution such as campaign-finance reform. The direction of the more effective fundamental constitutional reform was indicated by Buchanan and Tullock (1965, 114-5) in their conclusion that “where possible, collective activity should be organized in small rather than large political units.” Olson (1971, 63) also theorizes that in large groups, the incentive is lacking to avoid transfer seeking, but that incentives could be present with smaller groupings.

IV. PUBLIC CHOICE AND DEMOCRACY

A key principle of public choice theory is that concentrated benefits induce organizing for rent seeking, or the seeking of transfers such as subsidies, legal protection, and other favorable legislation (Olson 1971). In mass democracy, the voters in a district are numerous, hence the costs imposed by transfer-seeking are spread thinly among voters and consumers, and often the knowledge of such costs is opaque, not clearly evident to the taxpayer or voter. Special interests thus have the incentive to fund the media campaigns and provide subsequent favors in return for transfers (which may of course include the prevention of negative transfers). As Rowley (1993, 1) puts it, “majoritarian democracy generates a mercantilist economy.” Rent or transfer-seeking is thus the malady of democracy long recognized in public choice theory. As stated by Wagner (1988, 438), Wicksell long ago recognized “that a constitutional order grounded in parliamentary majorities was inconsistent with the liberal or consensual value premise.”

However, since the alternative is deemed to be dictatorship, the typical sentiment, as stated by Churchill, is that dysfunctional mass democracy is the best political alternative, since with dictatorship, a tyrant may extract even more rent and distribute it much less equally (empirical studies of mass democracy versus dictatorship have not, however, determined clear economic outcomes; cf. Nalin and Torstensson 1995).

This least-bad proposition ignores the possibility of forms of social choice other than mass democracy. An examination of the alternative presented in this paper, *cellular democracy*, is in the domain of constitutional economics. As defined by Buchanan (1990, 3), “constitutional economics directs analytical attention to the choice among constraints.” This analysis is thus a constitutional comparative study of the two alternative models of democracy.

V. CELLULAR DEMOCRACY

The term small-group democracy will refer to the generic structure of voting in small groups which are in some federated system, while “cellular” will refer to the specific small-group structure presented here which includes also a particular set of rules regarding the federal structure and voting rules.

The term “cell” originally meant a small room or hut. Biologically, a cell is the basic unit of an organism, all tissues and organism being composed of cells joined into various organs and structures. In what we term “cellular democracy,” a jurisdiction such as a county or city is divided into small cells, as neighborhood dis-

tracts. The lowest level of community in society is the individual (or household). The next highest level is the neighborhood cell or district. In some communities, the neighborhood boundary is clear from the institutional structure, such as a village, small township, a condominium association, or homeowners' association. In most cities, neighborhoods do not have official governance or established boundaries, but there are voting precincts and informal neighborhood names which could be adapted.

Cellular democracy sets boundaries for local neighborhoods of some 500-1000 persons, or 200 to 300 households. The tiny population size, such as 500, is a suggestion, based on having a community small enough so that the voters could personally know the candidates for the council, but large enough to have sufficient candidates. With a voting base that small, candidates can avoid the expense of mailings and media advertising. They can easily cover all the voters door to door and host local meetings. Those who wish to be candidates may do so at little cost. Once elected, the candidates are easily accessible, both because they are local and because the constituent base is small.

Many neighborhoods are already organized as contractual associations, which can serve as the neighborhood. Condominiums, residential or homeowners' associations, housing cooperatives, and democratically-run land trusts, often already have elected boards or councils. Quite likely, an association of about 1000 persons may wish to maintain separate elections for its board of directors and the council forming the base of cellular democracy. Large residential associations are often already decentralized into smaller subset communities. In dense urban neighborhoods with apartments and a landlord, the apartment complex, already a community, would serve as the neighborhood cell.

The councils would represent residents, not businesses. The owners of residences would already be represented in their residential communities. However, commercial real estate, such as shopping centers, could form councils and sit in on the residential council meetings, but without a vote.

In cellular democracy, each neighborhood community elects representatives and alternates to its council. The neighborhood shall be designated as the level-one community, level zero being the individual voter. A rule of cellular democracy is that any council member may be removed whenever a majority of the voters desire. The small size of the neighborhoods makes it feasible to circulate a petition to recall a council member and then hold an election to replace the representative. The neighborhood members and their council decide the length of the term of office and scheduled elections.

A region containing about twenty neighborhoods would then have a level-2 council. Each level-1 council elects a regular representative and an alternate to the level-2 council from its own regular council membership; the alternate may participate in the council but does not vote unless the regular representative is absent. The alternate at the level-1 council would then replace the regular member now representing level-1 at the level-2 council. The representative to the level-2 council may also be recalled at will by the level-1 council and replaced by another member.

The suggested number of level-1 councils represented at level-2, about twenty, is intended to be small enough so that the level-2 representatives could be personally known to the level-1 electors. Several level-2 districts would then belong to the next higher-level (regional) council. The level-2 district councils elect the council of level 3, each level-2 council again electing a regular and an alternate representative to level 3. The alternate from the level-1 neighborhood then replaces the level-2 representative elected to the regional council at level 2. By electing alternates, each lower level council thus retains representation at the next higher-level council when its member is elected to a higher-level council.

Ever higher-level councils are elected up to the highest-level council for that jurisdiction, designated as level h. Hence, in the U.S., Congress would be elected by the legislatures of the states, possibly preserving the equal representation in the Senate, while being represented proportional to population in the House. Note that prior to the 17th Amendment, the U.S. Senate was elected in exactly this way.

The level-h council elects from its membership an executive and other officers. Alternate representatives replace the executive and possibly other officers. The level-h council members have all been successively elected by lower-member councils down to level 1 and are in effect on leave from the lower-level councils. Hence, if any lower-level council removes its higher-level representative, that person is then removed from

their higher-level council. The level-1 council that originally elected a representative could thus remove a level-h individual.

Cellular democracy removes much of the demand by candidates for campaign financing, since the level-1 candidates have direct and inexpensive access to the voters. There is also less reward to suppliers, since they are less likely to obtain transfers. The lower-level councils are better able to monitor the higher-level ones, being a small group of electors. Moreover, the ability to recall any representative makes them vulnerable if they are seen to favor special interests at the expense of the public.

Voting in cellular democracy should be done with paper ballots, to avoid hacking. Since each election is small-group, and the counters would be volunteers, this transaction cost would be minor.

VI. ANARCHIST DEMOCRACY

The concept of bottom-up multi-level governance is not new, but the idea has not often been designed in detail, nor has it penetrated to academic or popular discussion. The concept was originated by anarchists before the Bolsheviks adopted it. For example, as stated by Marshall Shatz (1990, xxxiii) in his introduction to *Statism and Anarchy*, the Russian collectivist anarchist Michael Bakunin advocated “a new society organized ‘from below upward,’ composed of small voluntary communities federating into larger associations for larger purposes. This was the structure that was to replace the state, with its hierarchical form of organization ‘from above downward.’”

Bakunin (1990, 13) envisioned “a federal organization, from below upward, of workers’ associations, groups, communes, districts, and, ultimately, regions and nations.” He deplored representative democracy, i.e. the mass democracy of representatives directly elected by all the voting citizens, as “the pseudo-sovereignty of a sham popular will” because, in practice, it consists of state centralization and the subordination of the individually sovereign people “to the intellectual minority that governs them.”

For Bakunin, the abolition of the state would not result in atomistic individuals, as envisioned by some “anarcho-capitalists” or individualist anarchists. Rather, Bakunin’s (1990, 90) vision was that “on the ruins of political states there will be created, in complete freedom and organized from below upwards, a voluntary fraternal union of voluntary productive associations, communes, and provincial federations ... free of all state supervisors, taxes, tariffs, restrictions, regulations, prohibitions, permissions, and applications.” Bakunin’s peaceful anarchism is founded on voluntary association, and with most of the population belonging to the federated structure all the way to the continental or even global council, the system would preserve what John Hospers (1976) posited as the greatest benefit from a state: a uniform rule of law, both because the laws of the top level would be geographically large, and because the federation or network would provide mutual aid services, however different may be the local laws and cultures.

Anarchists such as Bakunin recognized that representative democracy, even with constitutional rights and governmental constraints and division of powers, does not inherently preserve liberty. The literature of public choice provides both the logic and the evidence of the transfer-seeking, tyrannous, debt-seeking dysfunctions of both special-interest minorities and median-voter majorities. As stated by Bakunin (1990, 114), “so-called constitutional forms, or forms of popular representation, do not impede state, military, political, and financial despotism. Instead, they have the effect of legitimizing it and giving it a false appearance of popular government, and they can significantly enhance its internal strength and vigor.”

The concept of a bottom-up federation of voluntary communities was also envisioned by free-market private-property anarchists. Heath (1957) envisions the replacement of government by proprietary communities, such as those existing today for hotels, shopping centers, and office buildings. A private community could replace the functions of government for a geographic neighborhood (Foldvary 1994). These communities or firms would then federate, creating a multi-level governance structure extending to a continent or the world made up of proprietary communities. However, Heath, like Bakunin, did not present any details on how lower levels would select representatives to the higher levels.

The Spanish anarchist movement was essentially Bakuninist in that it favored an organization of society into localized collectives which would federate (Peers 1938). Hence bottom-up democracy is an old anarchist idea in which society is not atomized into independently contracting individuals, but a hierarchy of small organizations, each in voluntary union with the others. The Bolsheviks adopted this anarchist multi-level concept and proposed to implement it in Russia after the revolution. The Union of Soviet Socialist Republics was conceived as having power centered in the local soviets, with the revolutionary slogan, “All power to the Soviets!” The councils were to represent the workers, soldiers, and peasants. Lenin (1917) states that “things are moving by fits and starts towards a point where power will be transferred to the Soviets, which is what our Party called for long ago.”

In practice, of course, we know that the Communist Party controlled the government with top-down authority. But that does not detract from the features of the original anarchist model. Mass-democracy politics presents a barrier to the implementation of cellular democracy, thus it would likely require a mass movement to become implemented. Once implemented, the incentives would be transformed, and thus could well be a stable equilibrium of constitutional choice.

VII. THE COMPARATIVE CONSTITUTIONAL SYSTEMS AND EXAMPLES

A comparative analysis of mass versus small-group democracy applies public-choice and constitutional economics to large versus small groups, plus some particular institutional rules to give the small-group structure greater specificity as cellular democracy. The comparative systems issue is whether cellular democracy provides a greater immunization against the dysfunctional features of democracy, the seeking and taking of transfers, rents, and privileges.

Mass advertising could still take place in small-group voting, such as by the political parties which candidates belong to, or by transfer-seeking interests, and so in addition to the local personal campaigning, the parties could try to sway voters to elect their candidates. But this does not detract from the face-to-face potential of the local election process. With mass democracy, the thousands and millions of voters do not personally know the candidates, and the candidates then must project an image over the mass media. The need to finance the media messages is met with a supply of funds from special interests, which are later rewarded with transfers and privileges. While with a small electorate, political parties might still find it worthwhile to have media messages, special interests would find much less reward in doing so, and personal campaigning could overcome the influence of party propaganda.

Such multi-level governance has been implemented in part by various organizations. In the U.S., the Republicans and Democrats have such a bottom-up multi-level structure; the county central committees or officers select the state-level committees. There are many governmental agencies whose boards are elected by lower-level governments; regional transportation agencies are a typical example. International organizations such as NATO and the UN have representatives from their constituent country members.

Bryan and McClaughry (1989) propose an electoral reform for Vermont, where many small towns still exist, which would partially implement this structure. In their system, much of state governance would devolve to a “shire” (derived from the old English shire) one level above the small town or city neighborhood. They emphasize that genuine representative democracy depends on having a vital direct democracy at its base. In their plan, however, the citizens still directly elect the state legislature, whereas with cellular democracy described here, the next-lower governance level, such as counties, would elect the state legislature.

While there are no complete empirical cases with which to test the rent-seeking nature of cellular democracy, partial tests could be made by comparing regional government agencies elected directly by voters with those elected by lower-level governing councils. But these limited results would not necessarily imply conclusions about the complete form of cellular democracy, that is, a bottom-to-top multi-level system.

Ebenezer Howard developed a theory of civic associations in *Tomorrow: A Peaceful Path to Real Reform* (1898), with the second edition entitled *Garden Cities of Tomorrow* (1902). The basic idea was a vol-

untary plan of public finance using leaseholds of land: “One essential feature of the plan is that all ground rents, which are to be based upon the annual value of the land, shall be paid to the trustees, who, after providing for interest and sinking fund, will hand the balance to the Central Council of the new municipality, to be employed by such Council in the creation and maintenance of all necessary public works - roads, schools, parks, etc.” (1902, 51). Howard credits Thomas Spence with having thought of the concept in 1775 of assembling landed property and letting it out on leaseholds (*ibid.*, 119-23).

VIII. PUBLIC FINANCE AND SECESSION

Additional constitutional rules would strengthen the decentralist tendencies of the bottom-up multi-level structure. Nelson (1999) proposes a policy for converting neighborhoods to residential associations, similar to the policy in St. Louis, where neighborhoods may privatize (Foldvary 1994). Under Nelson’s plan, state law would permit property owners to petition to form a neighborhood association within a proposed boundary. Approval would require an affirmative vote both of 90 percent of the total property value affected and 75 percent of the individual unit owners. All property owners in the privatized neighborhood would be required to be members of the association and pay assessments.

Foldvary’s (1994; 2005) proposal for a neighborhood conversion makes the membership in private communities strictly voluntary. Any person or organization having title to land would be able to partially secede, to withdraw property and services from governmental jurisdiction, and create its own governance. The government could require an exit fee or on-going rental payments to compensate for its services that still benefit the private community. If most of a neighborhood wishes to privatize but some do not, those wishing to remain directly under the government would continue to be under government jurisdiction, and there would then be agreements for the joint provision of services such as streets that service both members and non-members. While this may result in a more complicated arrangement than that of Nelson, it maintains the voluntary nature of civic associations.

On the expenditure side, service substitution would enable any level- n council to substitute its provision of a service for that provided by the level $n+1$ level and deduct the average expense from its tax liabilities to level $n+1$. For example, suppose that the level-3 governance, such as a city, provides schooling, and a level-2 district council found the educational level to be unsatisfactory. It could withdraw its schools from level 3 and create its own level-2 school district, deducting the average cost per student from the tax liabilities to level 3. This partial withdrawal or service substitution would be an alternative to an attempt to reform the level-3 service. The exit option would supplement the voice option to limit the power of the next higher level, as well as to provide a greater incentive for the higher level to serve the lower level more efficiently.

Such a secession possibility is practiced to a limited degree in St. Louis, where a local neighborhood is able to privatize the streets and take over the maintenance. With such local control, the neighborhood association can close off one end of a street as well as organize better surveillance. Condominiums and residential associations are other examples of local governance and provision of services that are more typically considered governmental public goods (Foldvary 1994).

The secession of governance itself could take place in the cellular structure by enabling any level- n council to secede from a level $n+1$ council (except for level h) and create an alternative level $n+1$. For example, a minority which felt itself to be discriminated against could create its own higher-level council from those level- n districts which chose to affiliate with it. Thus, the membership in the higher-level councils, other than the highest level, would be flexible and this broader exit option would act further to check inefficiency and favoritism.

On the revenue side, the bottom-up voting structure is reinforced if the public finances also flow from bottom to top, hence a level- n council obtains its general revenues from the council at level $n-1$. A level- n council has no authority to tax the councils at lower levels, and only the level-1 may directly tax the households and individuals at level zero. There can be some special higher-level sources of revenue, such as royalties from oil and mineral extraction rents, and pollution charges on the sources of pollution, but no general taxes such as those based on income or sales.

With each level-1 government being able to select its own source of public revenue, competition among the communities for enterprise and residents would discourage the imposition of taxes on mobile incomes or sales. Property taxes would be the most likely base for public revenue. But while existing buildings are rather immobile, new construction can avoid being located where it is highly taxed. Hence, with very localized competition, the property most amenable to taxation without flight or evasion or shrinkage is land sites, which are both immobile and incapable of being expanded (the use of the space can be changed, but the space itself is fixed by nature).

Community competition would thus in most places lead to site rents as the basic source of public revenues. These revenues would originate with the level-1 communities and be passed up to ever higher levels. There could be some inter-level institutional arrangement to assess sites so that localities do not have the incentive to under-assess.

Besides being suitable to local collection without an excess burden, evasion, or flight, the taxation of site rents has been recognized as an effective capture of the externalities of a community. The Austrian economist Friedrich von Wieser (1927, 340) stated that “urban rent is that part of the rental which is paid as a premium for the advantages of the better location.” The Swedish economist Knut Wicksell (1896, 113) noted that “the general economic development of the community” increased the value of its land, and he proposed taxing such increases (*ibid.*, 114). There is a literature on the “Henry George theorem” with the proposition that the land rent generated by an optimal provision of public goods is greater than the cost of the goods (Stiglitz 1977), since land rent is the most efficient and least intrusive source of public revenue. Buchanan and Goetz (1972, 35) show that externalities would be internalized if communities are proprietary and competitive: “Tax shares would have to be related to the size of the locational rent component in individual income receipts.”

Cellular democracy with selective secession or service substitution provides greater scope for competition among communities, a theory set forth by Tiebout (1956) and a subsequent large body of literature (Zodrow 1983). Excessive inefficiency and transfers at higher levels induce secession, where allowed. With the reduced opacity, if not near clarity, of cellular democracy due to the access at level zero and the monitoring at level i-1, residents have greater ability to judge the mix of fees and services in local communities. Competitive effects reinforce secession effects and voice effects.

VII. CONCLUSION

There are no examples of complete cellular democracy, thus the analysis necessarily remains theoretical. However, bottom-up multilevel voting is practiced by some labor unions. According to the Office of Labor-Management Standards, U.S. Department of Labor, “all officers of national or international unions and of intermediate bodies must be elected either directly by secret ballot among the members or indirectly through representatives elected by secret ballot,” thus “by officers of the constituent unions who represent the members and who have been elected by secret ballot.” Bottom-up voting is also implemented by regional governments, such as the Association of [San Francisco] Bay Area Governments.

The representatives to the United Nations are chosen by the members’ governments rather than directly by the citizens. Why are they not elected by the people? There would be a knowledge problem, the public being ignorant of the candidates and the issues, and moneyed interests could sway the voting. But does not the same problem emerge in domestic elections?

Cellular democracy is compatible with “polycentric democracy,” which Andersson (2014, 23) regards as “the mixed systemic resources of votes and flows of mobile human or physical capital” and “a spontaneous-order reinterpretation of inter-jurisdictional competition” (*ibid.*, p. 35, note 2). Communities offer choice by both voting and by mobility, as people move, along with their possessions, to communities which best matches their preferences for public goods, locations, and cultures.

Hardin (1993, 130) notes that “the real magic of liberal democracy often lies in its tendency—sometimes overcome—to decentralize decisions.” Mass democracy, however, has tended to centralize power due to the

lack of individual political power by the lowest unit, the voter. Cellular democracy offers the structural incentives to maintain decentralist governance. Such a result is consistent with public-choice analysis, going back to the conclusion by Buchanan and Tullock (1965, 114-5) that “where possible, collective activity should be organized in small rather than large political units.”

Rent or transfer-seeking is likely to be reduced with a governance structure with small electorates at the lowest-level voting districts and has a bottom-up multi-level election of higher-level governments. Cellular democracy is combinable with other governmental structures such as enterprise zones and privately owned communities (such as residential associations) that can form the lowest-level neighborhood communities. Devolving electorates and fiscal powers to local communities could have far-reaching consequences for the resolution of the democratic pathology of transfer-seeking.

Since most state legislatures in the USA are bicameral, a transition from mass democracy to cellular democracy could be done with one of the houses. The state would create neighborhood district boundaries, and then the bottom-up voting process would generate the representatives up to the legislature level. If the voters favor cellular democracy, the house elected by the old mass democracy would be abolished, and the now-unicameral legislature would elect the new governor.

REFERENCES

- Andersson, David Emanuel. 2014. Cities and planning: the role of system constraints. In: David Emanuel Andersson and Stefano Moroni (eds.), *Cities and Private Planning: Property Rights, Entrepreneurship, and Transaction Costs*. Cheltenham: Edward Elgar Publishing, pp. 19-37.
- Arthur, John. 1989. *The Unfinished Constitution*. Belmont, California: Wadsworth Publishing.
- Bakunin, Michael. 1990 [1873]. *Statism and Anarchy*. Ed. and trans. Marshall Shatz. Cambridge University Press.
- Bryan, Frank M., and John McClaughry. 1989. *The Vermont Papers: Recreating Democracy on a Human Scale*. Chelsea, Vermont: Chelsea Green Publishing.
- Buchanan, James. 1980. Reform in the Rent-Seeking Society. In: *Towards a Theory of the Rent-Seeking Society*. Eds. James Buchanan, Robert Tollison, and Gordon Tullock. College Station: Texas A & M University Press, pp. 359-67.
- _____. 1990. The Domain of Constitutional Economics. *Constitutional Political Economy* I:1, 1990, 1-18.
- Buchanan, James M., and Charles J. Goetz. 1972. Efficiency Limits of Fiscal Mobility. *Journal of Public Economics* 1: 25-43.
- Buchanan, James M., and Tullock, Gordon. 1965 [1962]. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press.
- Churchill, Winston. 1947. Speech in the House of Commons on 11 November 1947. <http://hansard.millbanksystems.com/commons/1947/nov/11/parliament-bill>.
- Crain, Mark; William Shughart II; Robert Tollison. 1988. Voters as Investors: A Rent-Seeking Resolution of the Paradox of Voting. In: *The Political Economy of Rent-Seeking*. Charles Rowley, Robert Tollison, and Gordon Tullock, eds., Kluwer Academic Publishers, Boston, pp. 241-9.
- Foldvary, Fred. 1994. *Public Goods and Private Communities*. Aldershot: Edward Elgar Publishing.
- _____. 1998. *Dictionary of Free-Market Economics*. Cheltenham: Edward Elgar Publishing.
- _____. 2005. Geo-Rent: A Plea to Public Economists. *Econ Journal Watch* 2 (1) (April): 106-132.
- George, Henry. 1879 [1975]. *Progress and Poverty*. New York: Robert Schalkenbach.
- Hardin, Russell. 1993. Liberalism: Political and Economic. In: *Liberalism and the Economic Order*. Eds. Ellen Frankel Paul, Fred D. Miller, Jr., and Jeffrey Paul. Cambridge: Cambridge University Press, pp. 121-44.
- Heath, Spencer. 1957. *Citadel, Market and Altar*. Baltimore: Science of Society Foundation.
- Hospers, John. 1976. *Anarchy or Limited Government?* Rpt. 1982. Berkeley: The Gutenberg Press.
- Howard, Ebenezer. 1965 [1902]. *Garden Cities of To-Morrow*. Cambridge, MA: The M.I.T. Press.
- Lenin, V. I. 1917. All Power to the Soviets! *Pravda* 99 (July 18). *Lenin Collected Works*. Moscow: Progress Publishers. <http://www.marxists.org/archive/lenin/works/1917/jul/18.htm>
- MacCallum, Spencer. 1965. The Social Nature of Ownership.” *Modern Age* 9, no. 1 (Winter 1964/5): 49-61.
- _____. 1970. *The Art of Community*. Menlo Park: Institute for Humane Studies.
- Malinvaud, E. 1989 [1987]. Decentralization. In: *The New Palgrave: Allocation, Information, and Markets*, John Eatwell, Murray Millgate, and Peter Newman, eds., New York: W.W. Norton, pp. 71-6.
- Nalin, Evald, and Johan Torstensson. 1995. Political Systems and Distortions: An Empirical Study. *Public Choice* 84:1-2: 163-80.
- Nelson, Robert. 1999. Privatizing the Neighborhood: A Proposal to Replace Zoning with Private Collective Property Rights to Existing Neighborhoods. *George Mason Law Review* 7(4): 827-880.

- Olson, Mancur. 1971. *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.
- Peers, E. Allison. 1938. Bakunin and Spanish Anarchism. *Studies: An Irish Quarterly Review* 27 (105) (March): 136-41.
- Rowley, Charles K. 1993. *Liberty and the State*. Aldershot: Edward Elgar Publishing.
- Shatz, Marshall. 1990. Introduction to *Statism and Anarchy* by Michael Bakunin. Cambridge: Cambridge University Press.
- Staley, Samuel R. 2002. Zoning, Smart Growth, and Regulatory Taxation. In: *Politics, Taxation, and the Rule of Law*. Eds. Donald Racheter and Richard Wagner. Boston: Kluwer Academic Publishers, pp. 203-224
- Stansel, Dean, and Stephen Moore. 1999. The State Spending Spree of the 1990s. *Policy Analysis* 343 (May 13), Cato Institute.
- Stiglitz, Joseph E. 1977. The Theory of Local Public Goods. In: *Economics of Public Services*. M. S. Feldstein and R. P. Inman, eds. London: Macmillan, pp. 274-333.
- Tiebout, Charles M. 1956. A Pure Theory of Local Expenditure. *Journal of Political Economy* 64: 416-24.
- Tullock, Gordon. 1967. The Welfare Costs of Tariffs, Monopolies, and Theft. *Western Economic Journal* 5 (June): 224-32.
- _____. 1994. *The New Federalist*. Fraser Institute: Vancouver, B.C.
- U.S. Department of Labor. 2019. Office of Labor-Management Standards. <https://www.dol.gov/olms/regs/compliance/elecofficer/elecofficer.htm>
- Weber, Max. 1946 [1922]. Bureaucracy. *Wirtschaft und Gesellschaft*, part III, Chapt. 6. In: *From Max Weber: Essays in Sociology*. Trans. and Ed. H. H. Gerth and C. Wright Mills. New York: Oxford University Press.
- Wicksell, Knut. 1896 [1958]. A New Principle of Just Taxation. In: *Classics in the Theory of Public Finance*. Eds. R. A. Musgrave and Alan T. Peacock. London: Macmillan & Co., pp. 72-116.
- Wagner, Richard. 1988. Agency, Economic Calculation, and Constitutional Construction. In: *The Political Economy of Rent-Seeking*. Charles Rowley, Robert Tollison, and Gordon Tullock, eds. Boston: Kluwer Academic Publishers, pp. 423-45.
- Wieser, Friedrich von. 1927 [1967]. *Social Economics*. Trans. A. Ford Hinrichs. New York: Augustus Kelley Publishers.
- Zodrow, George, ed. 1983. *Local Provision of Public Services: The Tiebout Model after Twenty-Five Years*. New York: Academic Press.